• 6 Disk

Working with disks provides you with a means of building a library of Sounds, Samples, Presets, Styles and Songs that you can load into the **P\$1500** RAM Memory at any time. As you become more familiar with your **P\$1500**, you'll discover the practical uses of working with disks, because of the flexibility and power that they offer.

This chapter introduces you to the concepts of Files, Disks and RAM Memory, explains the principal Disk functions by showing you how load and save Songs, Styles, Presets, Samples and MIDI Files. You'll also learn how to format floppy disks and cancel unwanted files from disks.

For first time Disk users

Those who are using floppy disks for the first time are recommended to read through the preliminaries, right up to page 4, and to refer to the pages at the end of this chapter which discuss disk handling precautions, how to insert and extract disks and other general information.

To skip the preliminaries

If you want to skip the preliminary information, go straight to page 5 which starts with details about how to load files into memory.

FLOPPY DISK FORMATS

P51500 recognizes the following formats: standard Ms-Dos (1.44 Mb) and the Atari ST/Falcon format (720 Kb): both types are also used for MIDI file exchanges. PS1500 is able to initialize disks for both formats. It is also possible to load Styles and Songs from WS and CD Series disks and Samples from CD Series disks. **P5/GP52500** Songs disks are recognized if the data conforms to the GMX format, a General MIDI eXtended format which renders the first three banks of **P51500** and **P5/GP52500** fully compatible.

P51500 cannot read Song, Style and Sound data in non-Baldwin instrument formats. The exclusive format of musical instruments adopted by one manufacturer is incompatible with instruments of other manufacturers. To exchange Songs with instruments of other manufacturers, the Song must be saved as MIDI file format data to an MS_DOS formatted disk.

FILES

Data is stored on disks in the form of **FILES**. A File can be a Song, a Song/Style, a Preset (containing Sounds), a Style or a Sample. The contents of a **P51500** format disk comprises a set of files which reflects the structure of the instrument's internal memory (RAM), as illustrated below.

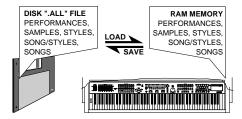


Illustration showing how data is organized in RAM and Disks.

File Types and extensions

The types of File encountered when working in the **P51500** Disk environment are identified by a name and extension attached after the file name. The table opposite summarizes the file types encountered and the extensions. Files sets that relate to entire groups, such as the Presets or the Styles, do not show extensions.

THE DISK PAGES

Pressing DISK enters the «Disk» environment where all the DISK operations are performed. The Disk commands are spread across four pages, each identifying the principal Disk operations:

1. Load	Loads data to RAM
2. Load WS, CD	Loads compatible files to RAM
3. Save	Saves data from RAM to disk
4. Utility	Disk Formatting procedures and File Erase function (erase data from disk).

Incorporated functions

In addition to the principal functions described above, **P51500** incorporates four functions: **Preload**, **Play direct from disk**, **Slow/Fast load**, **Autoname**.

Preload (background loading): Preload allows you to load data to the **P51500** memory while the sequencer is in playback without locking the instrument. The data is loaded to the first available free destination. If all destinations are occupied, Preload selects the fist destination in memory corresponding to F1 which you can either confirm of "refuse" by selecting a different one. If you load to a destination currently in use

File type	Extens	sion	
All		The entire RAM or DISK con- tents (P51500 file types only).	
Preset		All the Presets of the PRESET GROUPS (including Style-Pre- sets of ROM Styles) .	
Style	.UXX	(where XX = 01-16). Single User Style and relative Style-Presets of the USER GROUPS.	
Styles		All the User Styles of the USER GROUPS.	
Song	.wk3	Single P51500 Song of the SONG GROUPS.	
Sample		All the Samples of the Sample RAM.*	
MidiFile	.MID	Standard MIDI files (SMF0 and 1) loaded to the Song Groups A converted MidiFile can be saved as a P51500 Song file.**	
WS	.ALL	Compatible WS Song files.*** WS files converted with the "WS Play" function cannot be edited or saved as P51500 files; those converted using the "WS Load function can be modified and saved as P51500 Song files.	
CD	.SNG .STY .SCD .ALL	Compatible CD Real/Songs Compatible CD Styles Compatible CD Samples (Real/Songs, Styles, Samples All) can be loaded into P51501 memory. The converted files car be saved as P51500 files.	

*Samples from PS Samples kits can be loaded to the first 6 positions of the Samples bank. A Sample captured using the **P51500** Sampling function loads to location 8. CD samples load to location 7.

** MidiFiles are not included in ".ALL' file sets.

*** WS Song/Styles are not recognized by **P51500**.

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(a Song in playback), «Preload» temporarily "parks" data in memory in order to allow the Song to play to its end. As soon as the Song stops, it is automatically replaced by the new data.

Play direct from Disk: this function allows you to play a Song or MidiFile directly from disk without loading the data to RAM, useful for Songs or MidiFiles that are larger than the available space in the instrument's memory.

Slow/Fast Load option: two loading speeds which you can set as required. The SLOW option (set by default) allows background song loading and does not lock the machine during loading operations. The FAST option allows faster loading times but does not permit background loading. All the instrument's functions are temporarily disabled during the Fast load procedure.

Autoname: if you save a single file to disk (Song, Style, MIDIFile), the original name of the file is copied to RAM and then to floppy disk. This provides you with two possibilities:

a) you can save the file to disk with its original name (avoiding the additional step of writing a name for the file) or,

b) save the file with a different name.

Loading MIDI files

P51500 reads MIDI files in formats 0 and 1, and it saves MIDI files in format 1.

Refer to the Song & MIDI Files chaper 7 for information regarding MIDI Files.

LOADING SONGS AND MIDI FILES

Up to 7 locations are available in RAM to load Songs and MidiFiles. The locations correspond to the SONG button of the Style/Song Groups.

Song/MidiFile #	Style/Song Groups
1-7	Song

Location 8 of the SONG Group corresponds to the CHAIN function that allows you to playback two or more Songs as a medley. Chain loops (repeats) a single Song indefinitely until stopped.

LOADING STYLES

Up to 16 locations, divided into 2 User Groups of 8, are available in RAM to load programmable Styles (User). The User Style locations correspond to buttons USER1, USER2.

User Style #	Style/Song Groups
1-8	USER1-8
9-16	USER9-16

LOADING PRESETS

Up to 64 locations, divided into 8 Preset Groups of 8, are available in RAM to load programmable Presets (including Style-Presets).

Preset #	Preset Group	
1-8	1	
9-16	2	
17-24	3	

 25-32
 4

 33-40
 5

 41-48
 6

 49-56
 7

 57-64
 8

LOADING SAMPLES

Samples are loaded to the Samples bank (which corresponds to the backed Sample-RAM).

Sample #	Sample-RAM	
1-8	SAMPLES	

Samples Kits are distributed automatically among the first 6 locations (1-6) of the Samples bank. CD Samples are loaded to location 7 and automatically assigned to the Pads. A user-captured Sample loads directly to location 8 and cancels any samples currently occupying the first 7 locations.

Samples load directly to the Sample-RAM without displaying the destinations.

 Note: The Sampling function is enabled only if
 P51500 is fitted with the Baldwin optional Audio/ Video Interface kit. Without this kit, it is only possible to load Samples into memory.

LOADING SONG/STYLES

Song/Styles can only be loaded into memory using the «Load All» procedure, as this kind of file exploits various different sections of the instrument at the same time.

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Load operations - Play direct from disk

Disk data can be loaded into the **P51500** RAM using one of the following methods:

- as single elements (Load Song, Load Style, Load MidiFile, Load Sample);
- as a set of files belonging to entire Groups (Load Styles [User 1-8 and User 9-16 Groups], Load Presets (Programmable Presets]);
- as an "ALL" data set containing all data present on disk.

Play direct from disk

P51500 Songs and MidiFiles can also be played directly from disk without loading to memory.

SLOW/FAST OPTION

Set this option before choosing the required Disk operation. Slow is set by default.

Fast is set by pressing function button F1 in the Load display.

F1 toggles between the Slow and Fast options.

LOADING SINGLE ELEMENTS (SONG, SMF FILE, STYLE, SAMPLE)

You can load a single Song, Style, MidiFile or Sample using the respective commands; «Load Song», «Load Style», «Load MidiFile» and «Load Sample». The «Load Song» and «Load MidiFile» operations allow you to choose between loading the file or playing it directly from disk.

The steps taken to load a single Song, SMF File or Style are identical in all respects except the extension that identifies the file. The «Load Sample» procedure shows a slight variation.

P51500 loads single elements (Song, MidiFile, Style) to the first available free destination in RAM (Free01, Free02, etc.). If the instrument's memory is full, **P51500** chooses the first position in memory corresponding to location 1 (F1). You can either confirm the selected destination, or select a different one; in either case, the file currently occupying the location will be erased by the incoming file.

Theoretically, up to 7 Songs, 7 Song/Styles and 16 User Styles can reside in their respective Group locations, the actual number depending on their total capacity.

► Note: If a disk does not contain the specified file type, an appropriate message is displayed: "FILE NOT FOUND - press ESCAPE and retry or change disk".

▶ Note: If a disk is not inserted in the drive, the display will prompt you with the message "INSERT DISK please" when you select the required Disk operation. Press ESCAPE, insert the floppy disk and press DISK again.

LOAD SONG, SMF, STYLE PROCEDURE

This procedure also incorporates the "Play direct from Disk" function.

- Use «Load Song» to load a single Song to the Song Group. Press Start to play the selected file directly from disk.
- Use «Load MidiFile» to load a Standard MIDI File to the Song Group. Press Start to play the selected file directly from disk.
- Use «Load Style» to load a User Style to the User Groups.
- To load a Sample see page 10.

Have a disk ready containing the data you wish to load. These can be PS format disks, disks of previous formats, such as WS or CD Series, and MIDI File disks.

1. Insert the disk into the drive.

The «Demo» disk supplied with the instrument contains various Songs, or use disk containing SMF data files. **P51500** Styles disks are also available from your local Baldwin store.

2. Press DISK.

The first «Load» page appears.

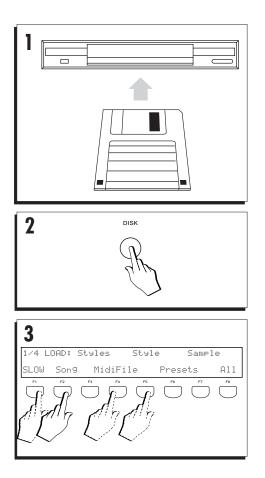
 Select FAST for the Fast procedure, SONG to load a single Song, MidiFile to load a MIDIFile or STYLE to load a single Style.

Press F1 to toggle between Fast and Slow. Press F2 to load a Song.

Press F4 to load a Standard MIDI File.

Press F5 to load a Style.

According to the file type being loaded, the display shows the first available file on disk.



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4. Rotate the DIAL to select the file to load.

Rotating the dial scrolls through all the files on disk.

P51500 song files are identified by the «.wk3» extension.

MidiFiles are identified by the «.MID» extension. The file is converted into a **P51500** Song by the load procedure.

P51500 Styles are identified by the «.UXX» extension where XX = 1...16.

At this point, you can choose to load the file to memory or, if the file is a Song or MIDI File, play it directly from disk.

A. To load to memory

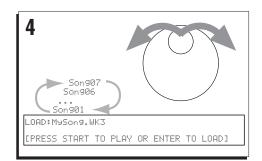
Press ENTER once to select the destination in RAM, or twice to load to the preselected location.

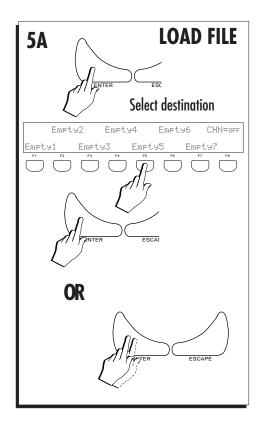
Press ENTER once if you want to select a destination in memory. Select the destination and confirm with ENTER. If all destinations are occupied, **P51500** selects the first location corresponding to function button F1. You can confirm the selection or choose a different one.

Press ENTER twice to load directly to the first available free destination.

The drive starts running and the display flashes the phrase "Loading". When the file is in memory, the "Loading" message stops flashing.

If you selected the FAST load option, the instrument's panel and keyboard is temporarily disabled until the file is loaded to memory.



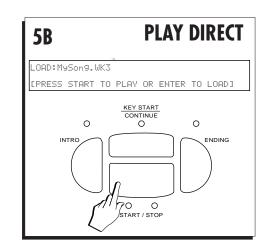


B. To play directly from disk

5B. Press PLAY or START/STOP to play a Song or MidiFile directly from disk.

The message "Wait" appears for a short period while the instrument prepares to play the Song or MidiFile. (During this period, you can abort the process by pressing ESCAPE).

Shortly after, the Song or MidiFile starts to play; the display flashes the message "Playing"



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LOAD STYLES, LOAD PRESETS

This procedure loads all **P51500** User Styles or user-programmed Presets present on disk and distributes them among the available slots of the respective Groups (User or Prog. Presets).

The procedure is identical to the Load single file operations of the previous pages, but without showing the destination. In practice, «Load Styles» and «Load Presets» loads directly to memory and cancels whatever is present in the respective Groups.

► Warning: Even if the disk contains only 1 User Style or 1 Preset, this procedure clears all data currently occupying the respective Group. Be sure that your User Styles or programmed Presets are safely saved to Disk before proceeding.

 Insert the disk containing the data to load into the drive and press DISK.



Use F1 to toggle between the Slow and Fast options.

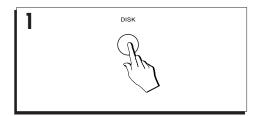
Use F3 to select Load Styles.

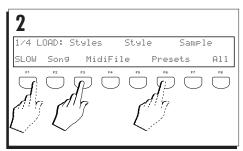
Use F6 to select Load Presets.

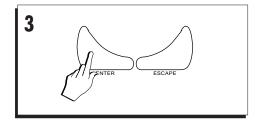
3. Press ENTER to confirm the selection.

The data starts to load to RAM (User or Preset Groups).

The drive starts running and the display flashes the phrase "Loading". When the Styles are in memory, the "Loading" message stops flashing.





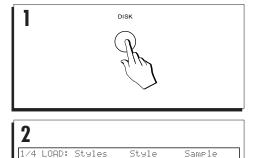


LOAD SAMPLE

The procedure is identical to the Load Styles and Load Presets procedures explained on the previous pages. In practice, Samples are loaded directly to the battery backed Sample-RAM (the Samples bank).

▶ Note: The Load Sample procedure clears the Sample-RAM of current data. Make sure, therefore, that you save your Samples to disk before carrying out the Load Sample procedure.

1. Insert the disk containing the data to load into the drive and press DISK.



2. Select Sample.

Use F1 to toggle between the Slow and Fast options.

Use F7 to select Load Sample.

3. Press ENTER to confirm the selection.

The data starts to load to the Sample-RAM.

The drive starts running and the display flashes the phrase "Loading". When the Sample is in memory, the "Loading" message stops flashing.

«Load Sample» performs a test to determine the origin of the Sample. If the source corresponds to Baldwin **P51500** Samples kits, these are loaded automatically to locations 1-6 of the Samples bank. CD series Samples load to location 7. A Sample captured with the **P51500** Mic/Line Sampling feature loads to location 8.

MidiFile

Presets

All

5LOW

Son9

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LOAD ALL

The «Load All» procedure loads:

- All Songs and Song/Styles;
- All User Styles;
- All Presets (including user-programmed Style-Presets);
- A **P51500** Sample.

MidiFiles are not loaded with this procedure. Use Load MidiFile for this file type.

«Load All» loads directly to RAM. The RAM will be completely rewritten by the data contained in the "ALL" file.

► Warning: «Load All» cancels all userprogrammed data in RAM, including Programmable Styles, Song/Styles and Presets. Be absolutely sure that any user-programmed data that you do not want to lose has been saved to disk before carrying out the Load All procedure.

If a Song make use of a Sample, this will be carried into memory together with the Song, provided that the original Sample is also on the same disk.

If a Song is currently in playback, the "ALL" data set is "parked" in a temporary location of the instrument's RAM in order to allow the Song to play to its end. As soon as the song stops, it is erased automatically by the "ALL" data set which automatically transferred to RAM.

Disk 6•11

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. . .

- 1. Insert the disk containing the data to load into the drive and press DISK.
- 2. Select All.

Use F1 to toggle between the Slow and Fast options.

Use F8 to select Load All.



1/4 LOAD: Styles

SLOW Song

1

2

DISK

Style

MidiFile

Sample

All

Presets

3. Press ENTER to confirm the selection.

The data starts to load to memory.

The drive starts running and the display flashes the phrase "Loading". When all the data has been loaded to memory, the "Loading" message stops flashing.

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Loading WS and CD compatible files

P51500 is able to read Songs created with the previous WS Series instruments, and Real/Songs, Styles and Samples of the CD Series instruments.

WS Songs and CD Real/Songs are loaded to the Song Groups (1-8). CD Styles are loaded to the User Groups (1-16).

The procedures are identical to those used for **P51500** Songs, Presets and Styles, with the difference that WS files show the ".ALL" extension while CD files are identified by ".SNG" for Real/Songs, ".STY" for Styles and ".SCD" for PCM Samples. CD files can also be loaded as an "ALL" set. The Fast and Slow options are also valid for these file types.

The Load WS and CD functions are on Page 2/2 of the Disk pages. Use PAGE+ to move to Page 2/2 after pressing DISK.

► Note: **P51500** is compatible with CD Series Songs disks contain REAL/ SONG files.

LOAD WS SONG FILES

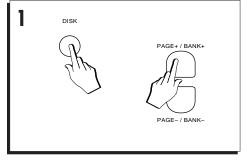
As the WS Series instruments are not perfectly compatible with **P51500**, two load modes are available for WS Song files: **Play** and **Load**.

Play mode: this mode converts the WS file and optimizes it for playback purposes only. The loaded file cannot be edited or saved to disk as a **P51500** file.

Load mode: this mode converts the file without the optimization process. Although the converted file might not play perfectly, it can be edited and saved as a perfect **P51500** file.

1. Insert the WS Song disk into the drive, press DISK and press PAGE+ to move to page 2.

The display passes to the Load WS/CD file page.



2. Select the Load WS mode required as well as the SLOW/FAST option if necessary.

Use F1 to toggle between the Slow and Fast option.

Use F2 to select PLAY MODE. Use F3 to select LOAD MODE.

3. Rotate the DIAL to select a WS file and press ENTER to load to memory.

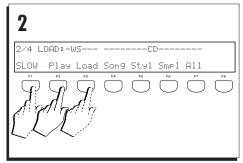
WS Song files are identified by the ".ALL" extension.

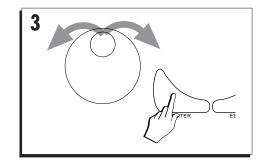
Both methods load the file to the first available free destination in memory without allowing you to select a preferred destination. If all locations are currently occupied, the WS File will load to the first location (corresponding to Function button F1) and erase the Song occupying the destination.

If you loaded using the PLAY option, you can only listen to the playback.

If, instead, you loaded using the LOAD option, you can modify the Song tracks and save to disk as a **P51500** Song.

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LOAD CD FILES

CD Real/Songs can be loaded into **P51500** memory and saved as a **P51500** Song. The procedure is identical to «Load WS»; the file is loaded into the first available free location without allowing you to select the destination.

 Insert the CD data file disk into the drive, press DISK and press PAGE+ to pass to page 2.

DISK PAGE+ / BANK+ PAGE- / BANK-

CD

Play Load Song Styl Smpl All

2

SLOW

2/4 LOAD:-WS---

2. Select the CD option required.

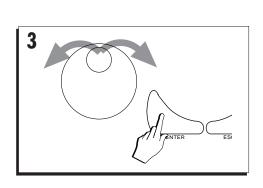
- Use F1 to toggle between the Slow and Fast loading options.
- Use Load CD Song (F4) to load a CD Real/ Song to the Song Groups.
- Use Load CD Style (F5) to load a CD Style to the User Groups.
- Use Load CD Sample to load CD PCM Samples to the Samples bank (slot 7).

CD PCM Samples are automatically assigned to the Pads (track 9). If you assign CD Samples to a track, it is possible that no sound will be heard when you play. In this case, try transposing the track down one or two octaves, as the original samples may have been assigned to an out of range portion of the original CD keyboard.

• Use Load CD All to load all CD files from disk.

3. Rotate the DIAL to select a CD file and press EN-TER to load to memory.

• To gain access to the data originating from CD, press Song to select a Song, press User 1 or User 2 to select a Style, press Samples to select a Sample.



Disk 6•15

Save operations

The **P51500** RAM is backed by a rechargeable battery to safeguard the data when the instrument is turned off. For security reasons, however, it is necessary to store your data to floppy disk with the Save command. The RAM should be considered as a work area which can be constantly updated, not as a data storage device.

Have a new or used disk ready to save data to. These can be 1.44 Mb or 720 Kb disks, both suitable fort PS data as well as Standard MIDI Files.

Check that the floppy disk is not write protected if so, remove the protection beforehand. If you forget to do this, the instrument will prompt you with an appropriate message when you attempt to save to the disk.

► Warning: Do not save to the original disks supplied with the instrument. As a precautionary measure against data loss, always check that your original disks are write protected.

P51500 data can be saved to disk using one of the following methods:

- as single elements (Save Song, Save Style, Save MidiFile, Save Sample);
- as a set of files corresponding to Groups (Save Styles [User 1-8 and User 9-16 Groups], Save Presets (Programmable Presets]);
- as an "ALL" data set containing all data present in RAM.

File names

When saving single elements, you will be allowed to choose between saving the file with its original name, or changing the name.

The "All" data set does not require a name.

SAVING SONGS

Save your **P51500** Songs to disk in order build a library. **P51500** Songs can originate from MidiFiles loaded into memory, from WS Songs files loaded using the "Load mode" option, from CD Real/Songs, or your own recordings.

Songs can be saved as a single element (Save Song) or as a, "ALL" data set together with all other data in memory.

Songs carry their associated Song-Presets and relative settings to disk in order that they play correctly when loaded into memory again.

PS1500 Song extension

Single songs are identified by the ".WK3" extension (**P51500** derives from the WK3 keyboard).

SAVING MIDI FILES

If you want your **P51500** Songs to be read by another musical instrument or computer, save them to disk as MIDI Files (SMF 1 format).

To save GM compatible MIDI Files, set the General MIDI parameter to ON (see Edit MIDI, parameter «SET»). The Song-Presets are converted into track data (Bank Select MSB and LSB, Program Change, Volume, Pan, CC91 and CC93 for the effects depths).

If the Song contains Lyrics, the text is converted into Lyric events.

All **P51500** Songs saved as MidiFiles will also conform the GMX format in order to be played on other instruments of the **P5** Series (**P5**/ **GP52500** - **P51500**).

MIDI File extension

P51500 Songs, when converted to Standard MIDI Files, are identified by the ".MID" extension.

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Save operations

SAVING STYLES

The User Styles correspond to the two User Groups of the Style/Song Groups.

User Styles can be saved as single elements (Save Style), or as a group of User Styles (Save Styles). Up to 16 User Styles can be loaded to the User Groups in a single step.

User Styles carry their Style-Presets to Disk.

PS1500 User Style extension

The single elements are identified by the extension ".UXX" where XX is any number from 1 ... 16.

SAVING PRESETS

Up to 64 Presets, divided into 8 Programmable Preset banks of 8, can be saved to Disk (including Style-Presets). Presets are saved in a single step using the Save Preset procedure.

SAVING A SAMPLE

Samples are saved from the Samples bank (which corresponds to the backed Sample-RAM) to disk using the Save Sample procedure.

P51500 Samples Kits occupy the first 6 locations of the Samples bank. A user-captured Sample occupies location 8. Both types of samples cannot reside in the Sample Ram at the same time, therefore, only one Sample type can be saved to disk.

► Note: The Sampling function is enabled only if **P51500** is fitted with the optional Baldwin Audio/ Video Interface. Without this kit, it is only possible to load Samples into memory.

SAVING SONG/STYLES

Song/Styles can only be saved to disk using the «Save All» procedure, as this kind of file exploits various different sections of the instrument at the same time.

SAVING WS OR CD COMPATIBLE FILES

If you have loaded WS Songs using the «Load mode» option, or CD Songs or Styles, these can be saved as **P51500** data files.

SAVING SINGLE ELEMENTS (SONG, SMF FILE, STYLE, SAMPLE)

You can save a single Song, Style, MidiFile or Sample using the respective commands «Save Song», «Save Style», «Save MidiFile» and «Save Sample».

The steps taken to save a single Song, SMF File or Style are identical in all respects except the extension that identifies the file.

The «Save Sample» procedure shows a slight variation.

SAVE SONG, SMF, STYLE PROCEDURE

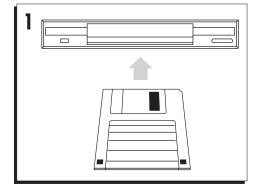
- Use «Save Song» to save Songs to disk one at a time.
- Use «Save MidiFile» to save a **P51500** Song to disk as a Standard MIDI File to disk.
- Use «Save Style» to save a User Style to disk.
- To save a Sample see page 22.

The Save procedure can be carried out regardless of the current mode (for example, you can save a Song while you are playing a Style).

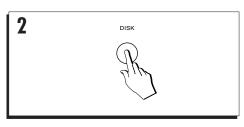
1. Insert a 1.44 Mb or 720 Kb disk into the drive.

Both types of disk are suitable for MIDI files.

You can prepare a new **P51500** disk with the "Format" operation in the "Utility" page.



2. Press DISK.



 Press PAGE + twice to advance to the "Save" page.

N.B. If you wish to exit the «Disk mode» press ESCAPE or DISK.

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Save Song, Save MidiFile File, Save Style

4. Select the file type to save.

Use F2 to save a Song. Use F4 to save a Standard MIDI File. Use F5 to save a Style.

5. Select the single element to save to disk.

The display shows the names of the selected items present in RAM.

► Note: If the disk is not inserted in the drive, the display will prompt you with the message "INSERT DISK please". Press ESCAPE, insert the floppy disk and press DISK again.

6. Press ENTER.

You are prompted with a request to save the file with the original name, or to write a new name for the file.

Press ENTER twice to safe the Song with its original name.

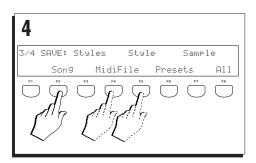
Pressing ENTER the first time displays a request to reconfirm the operation (Are you sure?). Pressing ENTER a second time starts the save procedure. (To cancel the operation, press ESCAPE).

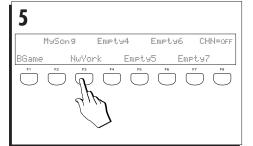
The drive starts running and the display flashes the phrase "Saving" during the save procedure. When the file is saved to disk the message ceases to appear.

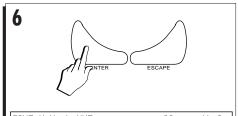
To change the name:

If, instead, you opt to save with a new name, use the keys of the keyboard to enter the name (up to 8 characters). The extension is provided automatically. Press ENTER twice to confirm the procedure.

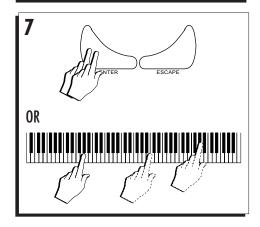
Remember: If you use a name that already exists on disk, the file on disk with the same name will be cancelled.







SAVE:NwYork.WK3 [Overwrite] [WRITE NAME AND PRESS ENTER]



SAVE STYLES, SAVE PRESETS

This procedure saves all User Styles or all userprogrammed Presets present in memory to disk.

The procedure is almost identical to that used to save single elements (Save Song, Save MidiFile, Save Style) but without showing the file directory. In practice, «Save Styles» and «Save Preset» saves directly to disk.

► Warning: Even if the memory contains only 1 User Style or 1 Preset, this procedure clears all Styles or Presets currently on disk. Be sure that your User Styles or programmed Presets are safely saved to a back-up Disk before proceeding.

- 1. Insert a floppy disk into the drive and press DISK
- Press PAGE + twice to advance to the "Save" page.

▶ *N.B.* If you wish to exit the «Disk mode» press ESCAPE or DISK.

3. Select «Save Styles» or «Save Presets".

Use F3 to save the Styles.

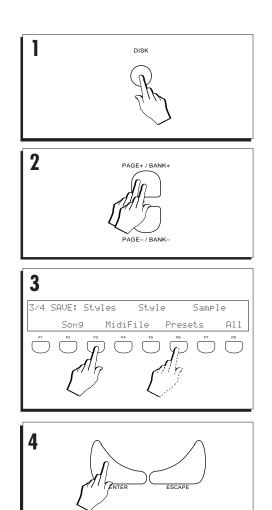
Use F6 to save the Presets.

You are prompted with a request to confirm your selection.

4. Press ENTER to confirm.

The drive starts running and the display flashes the phrase "Saving" during the save procedure.

When the messages ceases to appear, the Styles or Presets are saved to disk.

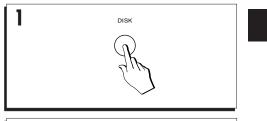


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SAVE SAMPLE

Use Save Sample to save your Samples to disk. The procedure is identical to the Save Styles and Save Presets procedures explained on the previous pages.

- ► Note: The Save Sample procedure clears the Sample(s) currently present on disk. Make sure, therefore, that your Disk Sample is safely saved to a back-up copy before carrying out the Save Sample procedure.
- 1. Insert a floppy disk into the drive and press DISK.
- Press PAGE + twice to advance to the "Save" page.





Style

MidiFile

Sample

Presets

All

3

3/4 SAVE: Styles

Son9

3. Select Sample.

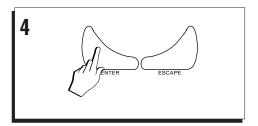
Use F7 to save the Sample.

You are prompted with a request to confirm your selection.

4. Press ENTER to confirm.

The drive starts running and the display flashes the phrase "Saving" during the save procedure.

When the messages ceases to appear, the Sample is saved to disk.



SAVE ALL

The «Save All» procedure saves:

- All Songs and Song/Styles;
- All User Styles;
- All Presets (including user-programmed Style-Presets);
- A **P51500** Sample.
 MidiFiles are not saved with this procedure.
 Use Save MidiFile for this file type.

If a Song make use of a Sample, this will be carried into disk together with the Song.

The disk contents will be completely rewritten by the data contained in the "ALL" file from **P51500**.

- ► Warning: «Save All» cancels all userprogrammed data currently on disk, including Programmable Styles, Song/Styles and Presets. Be absolutely sure that any user-programmed data that you do not want to lose is safely saved to a back-up copy of the disk before carrying out the Save All procedure.
- 1. Insert a floppy disk into the drive and press DISK.
- Press PAGE + twice to advance to the "Save" page.
- 3. Select All.

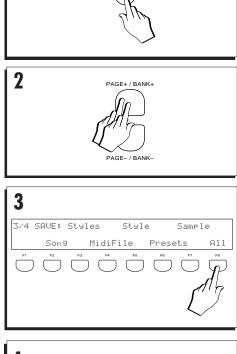
Use F8 to save All memory data to disk.

You are prompted with a request to confirm your selection.

4. Press ENTER to confirm.

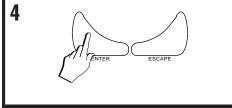
The drive starts running and the display flashes the phrase "Saving" during the save procedure.

When the messages ceases to appear, the entire contents of memory is saved to disk.



DISK

1



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Utility functions

The last page of the Disk function offers some useful operations: Format (1.44 Mb and 720 Kb disks) and File Erase.

FORMATTING YOUR DISKS

In order that **P51500** can read and write data to disks, they must be of a recognizable format before being used. If you try to use a disk formatted for a non-Baldwin instrument, the drive prompts you with an appropriate message and invites you to abort the operation and try with another disk.

Two formatting operations are available.

Format 720 Kb

This operation formats a 3.5" DD floppy disk in MS-DOS/Atari ST format (capacity 720 kilobytes).

Format 1.44 Mb

This operation formats a 3.5" HD floppy disk for **P51500** use with a capacity of 1.44 Megabytes. The format is completely compatible with the standard MS-DOS format to permit the exchange of files with the PS Series instruments, with computers running MS-DOS, Windows, OS/2, Macintosh, Atari and Amiga.

The formatting process can be carried out regardless of the current mode. For example, you can format a disk while you are playing a user-Style.

Format disk

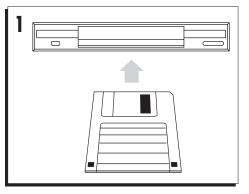
FORMATTING PROCEDURE

1. Insert a new (or used) floppy disk into the drive.

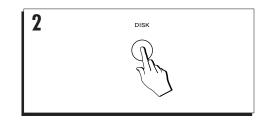
Use 720 Kb DD or 1.44 Mb HD disks as required. If the disk is write protected, remove the protection.

WARNING - Do not use the original disks supplied with the instrument for saving data.
 WARNING - If you use a used disk, make absolutely sure that you are not interested in keeping the data contained in it as the formatting process irretrievably destroys all data on disk.

2. Press DISK



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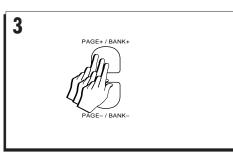
 Press PAGE + three times to advance to the "Utility" page.

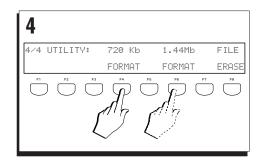
► N.B. If you wish to exit the «Disk mode» press ESCAPE or DISK.

4. Select «720 Kb Format» or «1.44 Mb Format. Use F4 to format a 720 Kb DD disk.

Use F6 to format a 1.44 Mb HD disk.

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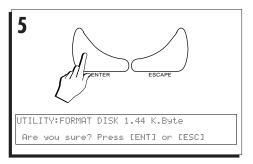




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5. Press ENTER.

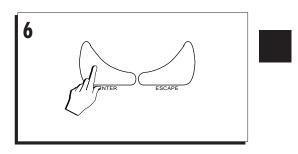
You are prompted with a request to reconfirm your selection.



6. Press ENTER again.

The drive starts running and the display flashes the phrase "Formatting" during the procedure.

When the message ceases to appear, the disk is ready to be used.



FILE ERASE

The File Erase function cancels files from disks. Use this function to create space in a disk that may not have sufficient room for a file.

«Erase File» cancels any type of recognizable file from a **P51500** disk, WS or CD disk as well as a disk containing MIDI Files.

If you attempt to erase a file from a disk that **P51500** is not able to recognize, you are prompted with the message: "FILE NOT FOUND, Press Escape and retry, or change disk".

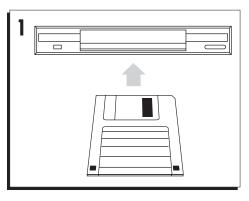
It is possible to erase files from disks regardless of the current operating mode. For example, you can erase a file while you a playing back a Song.

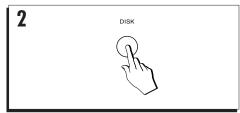
1. Insert a floppy disk that contains the file to erase into the drive.

If the disk is write protected, remove the protection.

► WARNING - Do not use the original disks supplied with the instrument for saving data.

2. Press DISK

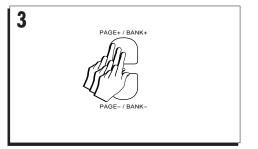




 Press PAGE + three time to advance to the "Utility" page.

► N.B. If you wish to exit the «Disk mode» press ESCAPE or DISK.

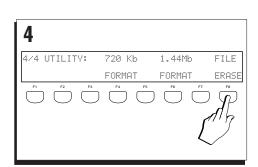
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4. Select «File Erase».

Use F8.



5. Rotate the DIAL to select the file to erase.

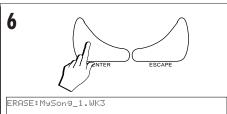
Rotating the DIAL scrolls through all the files present on Disk. Each file type is identified by an appropriate extension: .PWK = Programmable Presets; .SWK = Sample; .UXX = User Style (XX=1...16); .WK3=Song; .MID = MIDI File

6. Press ENTER.

You are prompted with a request to reconfirm your selection.



ERASE:MySong_1.WK3 LUSE DIAL TO SELECT AND PRESS ENTER]

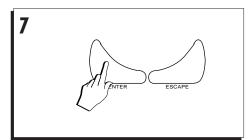


Are you sure ? Press [ENT] or [ESC]

7. Press ENTER again.

The drive starts running and the display flashes the phrase "Erasing" for a short period.

When the message ceases to appear, the file on disk is cancelled.

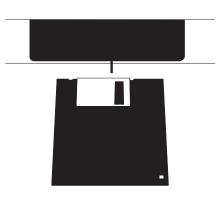


General disk handling information

If you're new to working with floppy disks, please read this section for some useful information.

INSERTING A DISK INTO THE DISK DRIVE

Floppy disks must be inserted into the disk drive label side up and shutter first. Push the disk firmly in until it "clicks" into place.



Avoid forcing a disk into the drive and hold the disk straight while inserting it.

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EJECTING A FLOPPY DISK

Before ejecting a disk, make sure that the disk drive operating LED is off and that the **P51500** LCD display is not currently showing a "Loading" or "Saving" message.

To extract the disk, press the eject button and remove the disk.

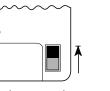


THE WRITE PROTECT TAB

Floppy disks contain a write protect tab which allows you to protect valuable data from being accidentally overwritten.

To prevent writing data to disk and so avoid accidental erasure, slide the tab fully down to "open" the window.

To permit writing data to disk, slide the tab fully up to "close" the window.





Disk not protected

Use a pen or other pointed object to set the tab as shown.

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HANDLING FLOPPY DISKS

When handling floppy disks, certain precautions should be taken to avoid damage and/or data loss.

- Do not open the metal protection shutter or touch the surface of a disk
- If your **P51500** has to be transported, make sure that a floppy disk is not inserted in the disk drive. Vibration may cause the disk drive head to scratch the disk, rendering it unusable.
- Do not store or place floppy disks in close proximity of television sets, computer monitors, loudspeakers, power transformers, or other devices that are potential sources of magnetic fields. Doing so may render the disk unusable.
- Do not store or place floppy disks in locations subject to extremes of temperature and humidity, direct sunlight, or excessive dust and dirt.
- Do not place objects on top of a floppy disk.
- Return disks to their protective cases after use.

BACK-UP COPIES

At the end of a work session, always remember to copy all elaborated data present in RAM to Floppy Disks.

Should you accidentally erase some files from RAM, you will always be able to recuperate the data from your disks.

It is advisable to keep back-up copies of all your disk data. "Back-up" is technical jargon for "a second copy" of a disk. Back-up copies stored in a safe place are extremely important. Disks can become damaged or lost, so please backup your work.

DISK DRIVE HEAD CLEANING

After a prolonged period of use, disk save and load errors may become frequent due mainly to dirty disk drive heads, indicating that the disk drive head may need cleaning. This can be done using a good-quality fluid-type head cleaning kit for 3.5 inch (double-sided) disk drives. Do not use a cleaning kit intended for single-sided disk drives.

- 1. Moisten the cleaning disk with cleaning fluid.
- 2. Insert the cleaning disk into the disk drive.
- Execute a load function. An error message will appear. This is normal.
- 4. After approximately 10 seconds, eject the disk.

Do not use the disk drive for about 5 minutes.

Precautions to observe when using PS disks with a computer

As occurs with the compatible MS-DOS and Windows 3.1 systems, PS1500 assigns file names not longer than 8 characters, plus an extension of three characters separated by a dot (e.g.: «MYSONG_1•wk3»).

In the Macintosh, OS/2 and Windows 95 systems, a file name can be longer. When a name is modified on a computer, the following rules should be remembered:

- do not change the file extension because it identifies the file type and therefore, the relative structure.
- do not write names longer that 8 characters (excluding the extension).

Furthermore, owing to some limitations of MS-DOS, Windows 3.1, Atari (with other systems these problems are non existent), it is essential to bear in mind the following advice:

 do not insert spaces within a file name (e.g.: «MY FILE.wk3»). MS-DOS is not able to handle file names containing spaces. To separate a name into two parts while retaining the MS-DOS compatibility, you must:

1) separate two parts by the "underscore" symbol (e.g.: MY_FILE.wk3»).

2) Use Uppercase (capital) letters for the first letters of both parts of the name, lowercase for the others (e.g.: «MyFile.wk3»).

 do not assign two files the same name, one with uppercase letters and the other with lowercase (e.g. «MYFILE» and «myfile»).
 MS-DOS, Windows 3.1 and Atari make no distinctions between uppercase and lowercase character.

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7 Songs & MIDI Files

This chapter discusses how to playback Songs and MIDIFiles. Song recording is discussed in the relevant chapter further ahead.

WHAT IS A SONG

A Song is a multitrack recording of several instrumental parts, each corresponding to a track. Up to 16 tracks can be engaged by the Sequencer to record a Song.

P51500 can load Songs from disk in its own format (Song), in previous formats (WS, CD Real/ Songs) and in Standard MIDI File format (SMF 0 or 1).

P51500 Songs are 'free', that is, tracks can be recorded starting from any point, without start or end segment limitations, which characterize most sequencers.

The sequencer's editing functions (16 Track Recording Studio) allow you to modify a recorded Song by copying or cancelling parts and correcting timing errors, etc..

Tracks contain "MIDI events", that is, notes and control data. Control data can include PitchBend and Aftertouch messages, ProgramChange and BankSelect messages for sound changes, ControlChange messages to control the effects sends, Sustain pedal and other control parameters.

MIDI events recorded on tracks are not actual sounds, but messages which activate the **P\$1500** internal sound generator, or an expander controlled by **P\$1500**. A Song is a MIDI event list – a list for each track.

General control messages are recorded in the Master Track. These messages relate to the instrument in general, such as effects change or Preset selections.

WHAT IS A STANDARD MIDI FILE

A Standard MIDI File is a storage format created to maintain data compatibility among different devices complying with the Standard MIDI File format. This format allows Songs to be exchanged between different instruments and computers. If a Song is saved as a MIDI file on an MS-DOS disk, you can be certain that all the most recent generation of instruments and any computers will be able to load and read that Song.

General MIDI

To facilitate compatibility between different makes of instruments, MIDI files should be in General MIDI standard, a common platform for sounds and they way they are selected.

General MIDI stipulates common standards regarding the listing of sounds, Program Change numbers for sound selection, the percussive sound configuration in the Drumkits, the assignment of MIDI channel 10 to the Drumkits, a minimum polyphony (24) and a maximum number of tracks (16).

In **P51500**, Sound Banks 1 and Drumkit Bank 2 are fully GM compatible. **P51500** recognises GM compatible MIDI Files, thanks to a messages contained in the MIDI File (General MIDI ON flag). If this message is not detected, sounds that differ to a Drumkit may be assigned to MIDI channel 10.

To ensure correct loading of GM compatible MIDI files that do not contain the General MIDI ON flag, set the General MIDI parameter to ON in the "SET" parameter of «Edit MIDI» (see *MIDI* in the *Edit Preset* chapter of the Reference Guide). **P51500** can save GM compatible MIDI Files when the General MIDI parameter is set to ON.

Songs 7-1

GMX format

GMX refers to the "General MIDI eXtended" format, specifically created by the **P51500** manufacturers which renders the first three sound banks of all the **P5** Series instruments completely compatible.

To program **P5/GP5** Songs that are perfectly compatible with all the **P5** Series instruments (e.g. **P5/GP52500** and **P51500**), use the Sounds of the first three Sounds banks in the **P5/GP52500** and recorded with 16 tracks only (MIDI channels A1...A16).

SONG PRESETS

A Song is governed by its associated Song-Preset which determines how it plays. Song recording is also greatly simplified because the Song-Preset contains all the information necessary to record without having to set parameters while recording. When you record a Song, it is best to program the associated Song Preset beforehand.

A **P51500** Song is associated to a single Preset. When a Song is saved as a MIDI file, the associated Preset is converted to track data (ProgramChange, Pan, Volume, effects send).

Programming the Song-Presets

The method used to program Song-Presets is almost identical to that used for Programmable Presets, with the difference that Song-Presets are not accessed from the Programmable Preset buttons, but directly from the PRESET button of the EDIT PRESET section. A programmed Song-Preset can be copied to all other Songs in memory. A Song has a maximum of 16 tracks.

After having programmed or modified a Song-Preset, press STORE PRESET to save it to the Song memory. The selection of another Song or the same Song will erase all modifications.

THE METRONOME

P51500 incorporates an independent Metronome which can be activated regardless of the current status of the instrument.

For example, if you want to play the Grand Piano Preset with the metronome, or you want to practice playing with an acoustic guitar or other instrument, or you want to playback a song with the metronome, simply press the METRONOME button located in the SONG EDIT section on the right hand side of the control panel.

The display shows the symbol "MT" to indicate that the metronome is active and the Metronome plays with the sound of "Drumsticks".

120	ΜT	88	3tStd
GPia	ino	8	BEAT

Display showing the active Metronome symbol "MT" after the Tempo setting.

The Metronome tempo can be controlled by rotating the DIAL.

In Song Record mode, the Metronome activates automatically. If you prefer to record without the Metronome, simply deactivate it by pressing the METRONOME button. The symbol "MT" is cleared from the display.

7•2 User Guide

Selecting and playing back Songs

P51500 can store up to 7 Songs. Press the SONG button of the STYLE/SONG GROUPS to select a Song and pass to Song mode.

Pressing the SONG button opens the selection window showing up to 7 memorized songs. Once a Song has been selected with the corresponding function button, the Song is active and can be played.

Location 8 of the Song memory corresponds to the Chain function which loops a single Song indefinitely until stopped, or chains several Songs to play as a medley. A chained medley stops automatically when the end of the last song in the chain is reached.

TO SELECT A SONG

(Refer to the DISK chapter 6 for details on how to load disk based Songs and MIDI Files to memory).

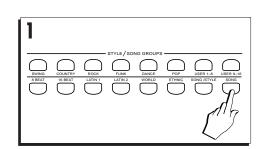
1. Press the SONG button.

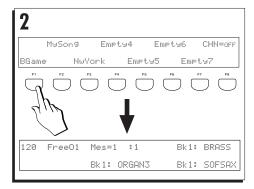
The display shows 7 locations. Recorded Songs are identified by a name of 6 characters. Empty locations are shown as "Free01", "Free02" etc.

2. Select a Song with the corresponding Function button.

The Song is selected and you pass automatically to Song mode. The Song name appears on the top line of the display ("Free" or a name).

If you select a Free location, refer to the Song Recording chapter for details of how to record the Song.



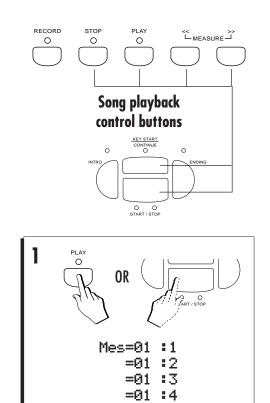


Songs 7-3

PLAYBACK CONTROL BUTTONS

The buttons which control the playback of Songs in memory are in the 16 TRACK SEQUENCER section.

The START/STOP and CONTINUE buttons also control Song playback.



PLAY

 After selecting the Song, press PLAY to start the playback. You can also use the START/STOP button.

The PLAY button starts the Song playback.

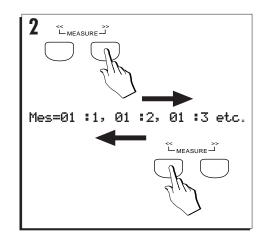
During the playback, the LED on the PLAY button is on. The measure counter in the display shows the current position of the Song. The LEDs on the Start/Stop buttons also monitor the measures by flashing in time with the beat.

If the Song is not playing, pressing PLAY starts the Song from the current position.

<< and >>

Press << to 'rewind' the Song and >> to advance.

The << and >> buttons rewind or advance one measure at a time. If you hold these buttons pressed, the Song rewinds or advances at high speed. These buttons are active either in Song play or stop status.



7•4 User Guide

Measure

Pressing both << and >> buttons at the same time activates the MEASURE function which allows you to specify a measure to pass to directly. This function is only available in Song play or stop status.

3. Press both << and >> buttons at the same time.

The measure counter shows an active zone with a flashing cursor.

 Specify the measure required using the black keys of the keyboard corresponding to numbers 1-9 and 0 and press ENTER to confirm.

The Song goes directly to the specified measure.

Rotate the DIAL (TEMPO/DATA) to change the tempo.

During playback, the DIAL is active to change the Song's playing speed.

STOP

6. Press STOP to stop the playback.

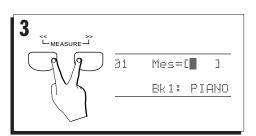
This button stops the Song playback (or recording) at a precise point.

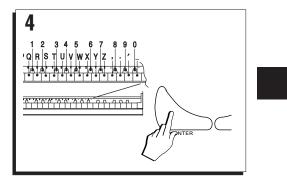
You can also stop the song playback with the Start/Stop button.

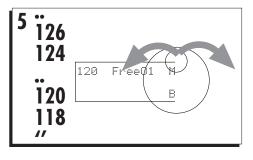
When the Song has been stopped at a position that differs to the initial Song start position, the LED on the STOP button flashes.

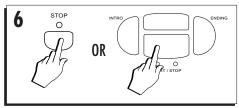
Press PLAY or (KEY START)/CONTINUE to start the Song from the point it was stopped, or,

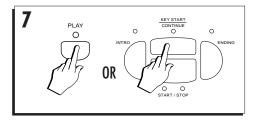
Press STOP again to return to the starting position of the Song, or rewind with the << button. When the Song is not playing and at its initial starting position, the LED on the STOP button remains on.











Songs 7.5

PLAY SONGS USING CHAIN

The CHAIN function chains all the Songs currently in memory and plays them back as a medley with a single command. If only one Song is currently in memory, Chain loops the playback continually until stopped.

1. Press the SONG button.

The display shows 7 Song locations and CHAIN=off at location F8.

► Note: If there are no Songs in memory, use the supplied Demo disk to load some into RAM («Load Song» for a single Song, «Load All» to load all the Songs on disk).

Enable CHAIN (on) by pressing the corresponding Function button.

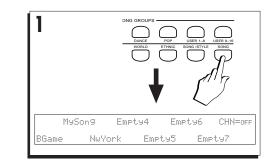
Press Function button F8 to enable CHAIN=on. The setting remains memorized after power down or until changed again.

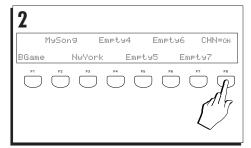
3. Press PLAY or START/STOP to start the playback.

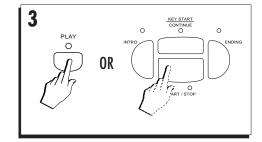
Playback begins with the first Song in memory.

If 2 or more Songs are in memory, they play one after the other as a medley.

If only 1 Song is present, playback begins and when the end is reached, the Song loops back to the beginning and repeats indefinitely until stopped.





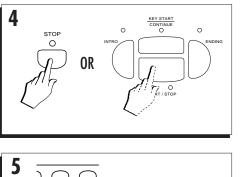


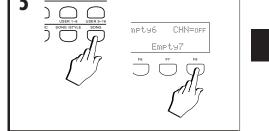
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7•6 User Guide

4. To stop the medley or looping Song, press STOP or START/STOP at any moment during playback.

5. Press SONG and F8 to disable CHAIN (=off).





Songs 7•7

PLAY AN ENGAGED SONG TRACK IN REAL TIME

The Songs that you load into your **P51500** will undoubtedly have all the tracks engaged by the sequencer.

You can check the status of the sequencer tracks at a glance by looking at the corresponding LEDs (1-8). Press TRACK SELECT to see the status of tracks 9-16. If the LEDs of all the tracks are all on you'll find that you cannot play along with the Song in playback.

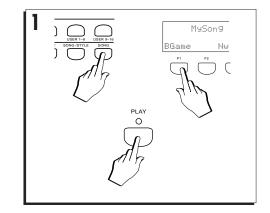
The status of the track LEDs can show one of the following situations:

 LED on 	= Track engaged by the
	sequencer and not avail
	able for real time play.
LED off	 Track not engaged and not active for play.
LED flashing	 Track not engaged and active for real time play.

If you want to play along with your Song in playback, you can either disengage one of the tracks used by the Song, or activate or use one of the tracks not used by the Song.

1. Select a Song and press PLAY or START/STOP to start the playback.

Check the sequencer tracks and note which tracks are engaged for the Song (LED on).



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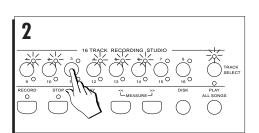
2. Disengage an active track by pressing the corresponding button.

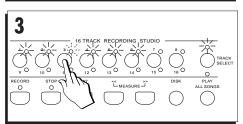
The LED of the button goes off and the track is deactivated. The assigned sound does not playback.

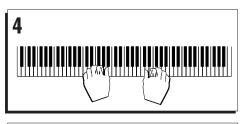
3. Press the same button again.

The LED starts to flash. The corresponding track is disengaged from the sequencer and is active to play in real time.

4. Play along with the Song in playback with the disengaged track.







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5. To re-engage the track to the sequencer, press the same track button again.

The LED remains on, the track is re-engaged by the sequencer and starts to play the recorded notes of the Song.

Songs 7-9

Displaying lyrics

If your Song contains a Lyrics track, while the Sequencer is playing the Song, the display or an external monitor or television can show the lyrics.

It is possible to see the lyrics while the Song is playing. In public venues, the lyrics can be projected in large type and in different colors on an external monitor or television for the audience to sing (in karaoke style).

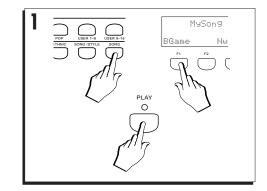
TO DISPLAY LYRICS

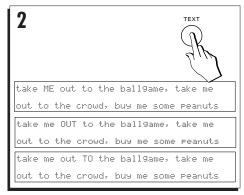
- Select the Song and start the playback as described on the previous pages.
- 2. Press the TEXT button in the EDIT section.

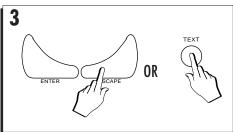
The Lyrics start to scroll across the display in synchronization with the music. The current syllable is shown in capital letters while all other lyrics remain in small type.

If the Song does not contain Lyrics, a message will appear in the display saying, "Pianovelle PS1500 Karaoke System by Baldwin" display. Press ESCAPE to close the display and return to the previous situation.

3. Press ESCAPE or TEXT to return to the main Song Playback page.







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TO DISPLAY LYRICS ON AN EXTERNAL MONITOR

1 Connect one of the video outputs to a domestic TV or to a monitor.

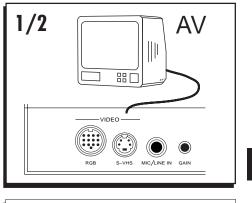
The dedicated cable to connect an RCA connector is supplied with the instrument.

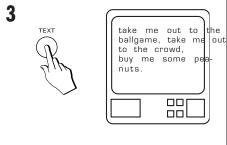
2 Tune the TV to the AV channel.

To select the AV channel, consult the owner's manual of the television set. Computer monitors or televisions normally operate in AV mode.

3 In Song mode, press TEXT to display the lyrics.

The Song lyrics are displayed on the monitor.

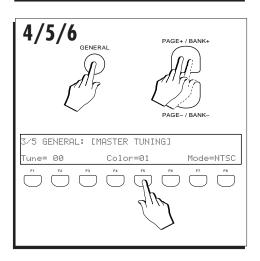




To change the viewing color on the external monitor

- 4 Press the GENERAL button.
- 5. Press PAGE+ twice to advance to page 3.
- 6. Select the COLOR parameter.

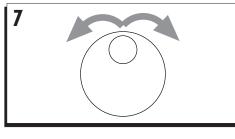
Use function button F4 or F5.

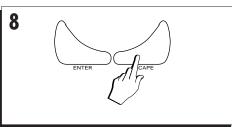




To display lyrics on an external monitor

- 7. Rotate the DIAL to select one or 4 colours.
- 8. Press ESCAPE to close the GENERAL edit page and return to the Song display.





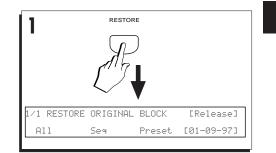
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RESTORING THE SONGS MEMORY

If you have loaded disk-based Songs and used up all the memory dedicated to the storage of Songs, there is a quick and easy way of clearing sequencer memory to make room for other Songs using the Restore Sequencer operation.

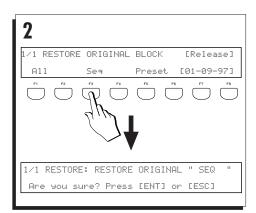
Naturally, you must remember to save all your sequencer data (User Styles, Song/Styles and Songs) to disk before proceeding with the restore procedure.

Press RESTORE in the SYSTEM section to gain access to the «Restore Original Block» function.



Press F3/F4 («Restore Seq») to cancel all sequencer data in RAM.

You are prompted with a request to reconfirm your choice.

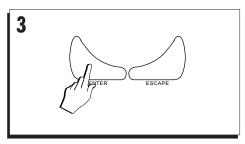


3. Press ENTER to confirm, or ESCAPE to cancel.

With ENTER, the Songs (and all other sequencer data) are cancelled from memory.

With ESCAPE, the Songs are retained.

► Hint: To cancel the entire contents of RAM in a single operation, use the «Restore All» command.



Songs 7-13

7•14 User Guide

8 Song/Styles

This chapter discusses how to playback Song/ Styles. How to load Song/Styles into your **P51500** is detailed in the Disk chapter 6. Song/ Style recording is discussed in the relevant chapter further ahead.

WHAT IS A SONG/STYLE

A Song/Style is an 8-track Song created by recording existing Styles (Rom or User) with the keyboard tracks (Upper 1, Upper 2, Lower).

Song/Styles record the chords that trigger the Style auto-accompaniment in a "Chords track". You can choose to record one or more keyboard tracks with the auto accompaniments and during the recording, you can activate the Intro, Fill and Ending patterns and change Style at will. In practice, what you normally do in real time with a Style is captured by the sequencer in Song/Style Record mode to create a Song/Style. Song/ Styles are excellent providers of backings for solo instruments or vocalists.

Up to 8 tracks are engaged by the Sequencer to record a Song/Style: 5 associated to the accompaniment patterns and 3 to the keyboard tracks.

Song/Styles can be loaded from disk in **P51500** format only using the LOAD ALL procedure.

In many other respects, a Song/Style is similar to a Song. Song/Styles, however, do not contain a Lyrics track.

The Song Edit functions allow you to modify a recorded Song/Style by copying or cancelling parts and correcting timing errors, etc..

General control messages are recorded in the Master Track. These messages relate to the instrument in general, such as effects change or Style selections.

SONG/STYLE PRESETS

A Song/Style is governed by its associated Song/ Style-Preset which determines how the Song/ Style plays. Song/Style recording is also greatly simplified because the Song/Style-Preset contains all the information necessary to record with without having to set parameters while recording. When you record a Song/Style, it is best to program the associated Song Preset beforehand.

A **P51500** Song/Style is associated to a single Preset. A Song/Style cannot be saved as a MIDI file.

Programming the Song/Style-Presets

The method used to program Song/Style-Presets is almost identical to that used for Programmable Presets, with the difference that Song/Style-Presets are not accessed from the Programmable Preset buttons, but directly from the PRESET button of the EDIT PRESET section. A programmed Song/Style-Preset can be copied to all other Song/Styles in memory.

► Note: After having programmed or modified a Song/Style-Preset, press STORE PRESET to save it to the Song/Style memory. The selection of another Song/Style or the same one will erase all modifications.

Song/Styles 8•1

Selecting and playing back Song/Styles

P51500 can store up to 7 Song/Styles. Press the SONG/STYLE button of the STYLE/SONG GROUPS to select a Song/Style and pass to Song/Style mode.

Pressing the SONG/STYLE button the first time opens the selection window showing 7 empty locations which can store Song/Styles. If no Song/ Style are shown, you can load some disk-based Song/Styles to memory, or refer to the Song/Style Record chapter for explanations about how to record one.

Once a Song/Style has been selected with the corresponding function button, the Song/Style is active and can be played.

Location 8 of the Song/Style memory corresponds to the Chain function which loops a single Song/Style indefinitely until stopped, or chains several Song/Styles to play as a medley. A chained medley stops automatically when the end of the last Song/Style in the chain is reached.

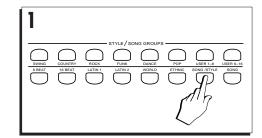
TO SELECT A SONG/STYLE

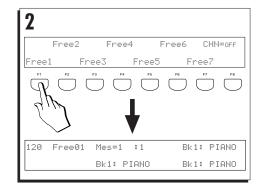
1. Press the SONG/STYLE button.

The display shows 7 locations. Recorded Song/Styles are identified by a name of 6 characters. Empty locations are shown as "Free01", "Free02" etc.

Select a Song/Style with the corresponding Function button.

The Song/Style is selected and you pass automatically to Song/Style mode. The Song/ Style name appears on the top line of the display ("Free" or a name).



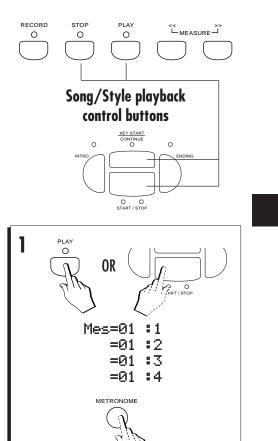


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PLAYBACK CONTROL BUTTONS

The buttons which control the playback of Song/ Styles in memory are in the 16 TRACK SEQUENCER section.

The START/STOP and CONTINUE buttons also control Song/Style playback.



PLAY

 After selecting the Song/Style, press PLAY to start the playback. You can also use the START/STOP button.

The PLAY button starts the Song/Style playback.

During the playback, the LED on the PLAY button is on. The measure counter in the display shows the current position of the Song/ Style. The LEDs on the Start/Stop buttons also monitor the measures by flashing in time with the beat.

If one of the keyboard tracks are not engaged by the sequencer, you can play along with the Song/Style.

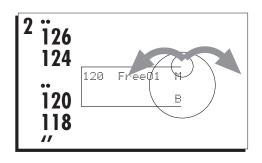
If the Song/Style is not playing, pressing PLAY starts the Song/Style from the current position.

To play with the Metronome:

If you want to playback the Song/Style with the metronome, simply press the METRO-NOME button located in SONG EDIT.

2. Rotate the DIAL to change the tempo.

During playback, the DIAL is active to change the Song/Style's playing speed.



Song/Styles 8•3

STOP

3. Press STOP or START/STOP to stop the playback.

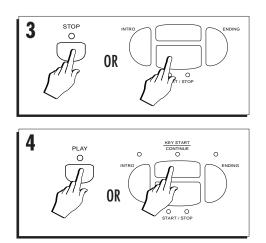
This button stops the Song/Style playback (or recording) at a precise point.

When the Song/Style has been stopped at a position that differs to the initial start position, the LED on the STOP button flashes.

 Press PLAY or (KEY START)/CONTINUE to start the Song/Style from the point it was stopped, or,

Press STOP or START/STOP again to return to the starting position of the Song/Style.

When the Song/Style is not playing and at its initial starting position, the LED on the STOP button remains on.



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Chain

PLAY SONG/STYLES USING CHAIN

The CHAIN function chains all the Song/Styles currently in memory and plays them back as a medley with a single command. If only one Song/ Style is currently in memory, Chain loops the playback continually until stopped.

1. Press the SONG/STYLE button.

The display shows 7 Song/Style locations and CHAIN=off at location F8.

▶ Note: If there are no Song/Styles in memory, use the supplied Demo disk to load some into RAM («Load All»).

Enable CHAIN (on) by pressing the corresponding Function button.

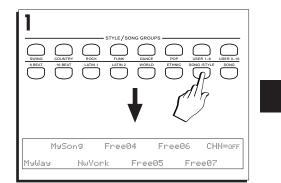
Press Function button F8 to enable CHAIN=on. The setting remains memorised after power down or until changed again.

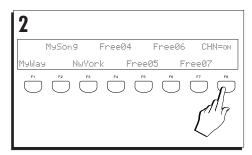
3. Press PLAY or START/STOP to start the playback.

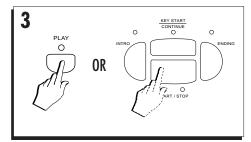
Playback begins with the first Song/Style in memory.

If 2 or more Song/Styles are in memory, they play one after the other as a medley.

If only 1 Song/Style is present, playback begins and when the end is reached, the Song/ Style loops back to the beginning and repeats indefinitely until stopped.

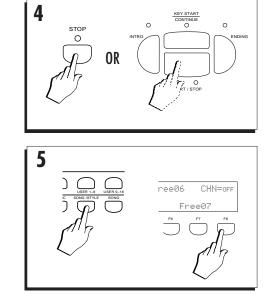








- 4. To stop the medley or looping Song/Style, press STOP or START/STOP at any moment during playback.
- 5. Press SONG/STYLE and F8 to disable CHAIN (=off).



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PLAY A SONG/STYLE TRACK IN REAL TIME

The Song/Styles that you load into your **P51500**, or record yourself can have up to 8 tracks engaged by the sequencer, 5 corresponding to the accompaniment, 3 to the keyboard tracks.

The accompaniment tracks cannot be played in real time, they can only be muted. Keyboard tracks, however, can be disengaged and used to play along with the Song/Style.

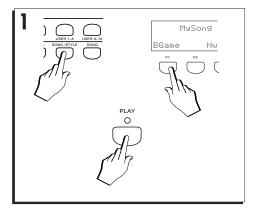
You can check the status of the sequencer tracks at a glance by looking at the corresponding LEDs (1-8). If they are all on, you'll find that you cannot play along with the Song/Style in playback with a keyboard track.

If any of the LEDs of tracks 1-5 are off, this indicates that the accompaniment is not exploiting the relative tracks.

If one or more LEDs of tracks 6-8 are off, this means that they have not been used in the recording and can be played in real time. If all LEDs of tracks 6-8 are on, you can disengage one of the Upper tracks and use it to play along with your Song/Style.

1. Select a Song/Style and press PLAY or START/ STOP to start the playback.

Check the sequencer tracks and note which keyboard tracks are engaged (LED on).



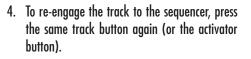
Song/Styles 8•7

2. Disengage the keyboard track from the sequencer by pressing the relative button, or the corresponding keyboard activator button.

The LED in the sequencer button goes off and the corresponding keyboard activator button turns on, allowing you to play the track in real time.

If you press one of the active Style track button (1-5), the relative track will be muted.

3. Play along with the Song/Style.

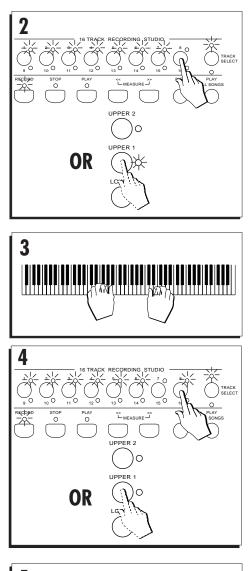


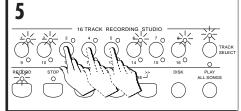
The LED remains on, the track is re-engaged by the sequencer and starts to play the recorded notes of the Song/Style. The corresponding keyboard activator button also goes off.

5. Press one or more of the accompaniment track buttons to mute the corresponding tracks.

The LED of the button pressed goes of to indicate that the track has been muted.

Press the same button again to activate the track.





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[Release]

[Release]

[01-09-97]

[01-09-97]

RESTORING THE SONG/STYLE MEMORY

If you have loaded disk-based Song/Style and used up all the memory dedicated to the storage of Song/Styles, there is a quick and easy way of clearing memory to make room for other Song/ Style using the Restore Sequencer operation.

Naturally, you must remember to save your Song/ Styles to disk before proceeding with the restore procedure.

1. Press RESTORE in the SYSTEM section to gain access to the «Edit Restore» environment.

 Press F3/F4 («Restore Seq») to cancel all the Song/Styles in RAM.

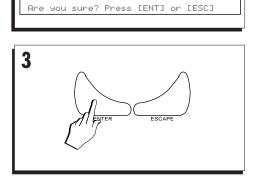
You are prompted with a request to reconfirm your choice.



With ENTER, the Song/Styles are cancelled from memory.

With ESCAPE, the Song/Style data are retained.

► Hint: To cancel the entire contents of RAM in a single operation, use the «Restore All» command.



1/1 RESTORE: RESTORE ORIGINAL " SEQ

RESTORE

Preset

Preset

1/1 RESTORE ORIGINAL BLOCK

Seq

1∕1 RESTORE ORIGINAL BLOCK

1

All

A11

2

Song/Styles 8.9

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• 9 Digital Effects

P51500 allows you to route the Presets (Style/ Preset, Song/Style-Presets and Song Presets) to the on-board Digital Signal Processor (DSP) which renders the overall sound more realistic.

The Digital Effects section consists of two units which process the Presets with Reverbs and Delay/Modulation effects.

Each processor has an Effect Send control to independently regulate the amount of effect to apply to the current Preset.

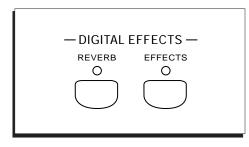
Also available is an effects editor which allows you to modify the preset effects and save them to the Presets.

The DSP section consists of two buttons:

Reverb When active (LED on), the current Preset is routed to the Reverberation DSP to be processed by the currently assigned effect type. The overall sound is emitted "wet" from the internal speakers and the stereo Audio Outputs (Right/M-Left). When off, the DSP is bypassed and the Preset is emitted "dry".

- Effects When active (LED on), the current Preset is routed to the Delays/ Modulations DSP to be processed by the currently assigned effect type. The overall sound is emitted "wet" from the internal speakers and the stereo Audio Outputs (Right/M-Left). When off, the DSP is bypassed and the Preset is emitted "dry".
- Effect Selection and editing Holding either button pressed for an instant gains access to the selection of the effect types from both DSP units (Reverbs, Effects) as well as the controls for the effect sends (Rev Send, Eff Send). The selection window also shows the editor of the current effect. The user-programmed Reverb or Effect can be saved to the current Preset.

General effects modifications that affect the instrument as a whole (Reverb volume, Effects volume) are found in the «Edit General» environment (edit page 2).



Effects 9-1

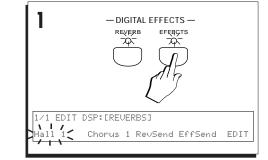
Selecting the effect types

Regardless of the current mode (Style/Preset, Song/Style, Song mode), the method used to select and assign the effects to the current Preset is identical.

HOW TO SELECT THE EFFECT TYPES

1. Press and hold either effect button to enter the effect selection page.

The display shows the effect types assigned to the current Preset and other parameters of the DSP units.



2. Select the effect type that you wish to change.

The selected type is shown flashing.

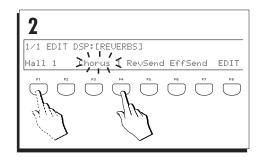
Press Function button F1, F2 to select the Reverb type.

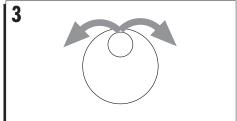
Press Function button F3, F4 to select the Effect type.

3. Rotate the DIAL to select a different effect type.

The DIAL scrolls through the available effects of the selected DSP. Each DSP provides a selection of 22 different effect types.

You can select a different effect from both DSP units.

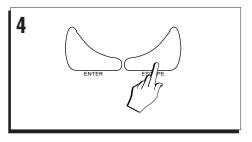




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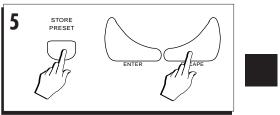
4. Press ESCAPE to exit the Edit DSP page.

The selected effect type(s) is now assigned to the current Preset.



5. Press STORE PRESET and ENTER to save the changes to the current Preset.

If you select a different Preset, or reselect the same Preset without saving the changes, the newly assigned effects will be lost and the original settings will be restored.



Effects 9•3

Bypassing the effects

While playing, you can bypass one or both effect types assigned to the current Preset.

The status of the Reverb and Effects buttons of the DSP section shows at a glance whether the effects are inserted or bypassed.

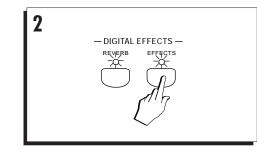
- LED on = current effect type inserted.
- LED off = current effect type bypassed.
- 1. Press an active button (LED on) to bypass the relative effect type.

The LED goes off and the current Preset is not routed to the relative DSP.

2. Press the same button to reactivate the effect.

The LED goes on and the Preset is routed to the relative DSP.

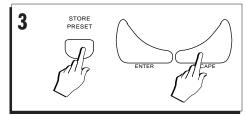
-DIGITAL EFFECTS -



3. Press STORE PRESET and ENTER to save the changes to the current Preset.

If you select a different Preset, or reselect the same Preset without saving the changes, the newly assigned effects will be lost and the original settings will be restored.

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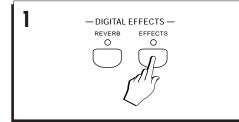
9•4 User Guide

Regulating the Send levels

Each track of the current Preset can be independently adjusted for the amount of Reverb or Effect applied.

- RevSend Controls the Reverb level for each track of the current Preset. Level zero corresponds to the deactivated effect.
- EffSend Controls the Effect level for each track of the current Preset. Level zero corresponds to the deactivated effect.
- Hold either button pressed to enter the selection page.

The display shows the effect types assigned to the current Preset and the effect send controls of each DSP.



Chorus 1 RevSend EffSend

EDIT

F8

[Tk08]

04 04

2

Hall 1

04

04 04

1/1 EDIT DSP:[REVERBS]

EDIT DSP:EFFECT SEND LEVEL

04 04 04

2. Select the Send that you wish to regulate.

Press F5 to select RevSend, F6 (F7) to select EffSend.

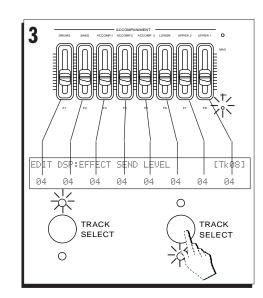
The display shows the current send level settings for tracks 01...08.



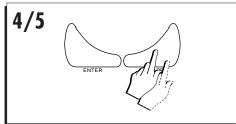
Adjust the Send levels with the corresponding sliders.

The sliders control the Send levels directly. Press TRACK SELECT to access tracks 09...16 if you are working in multi-track mode.

Alternatively, you can select a track with the Function buttons and rotate the DIAL to change the parameter value.



- 4. Press ESCAPE to close the Send level window.
- 5. Press ESCAPE again to exit the effect page.

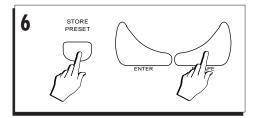


6. Press STORE PRESET and ENTER to save the changes to the current Preset.

If you select a different Preset, or reselect the same Preset without saving the changes, the newly assigned effects will be lost and the original settings will be restored.



Effect editing procedures are discussed in the relevant chapter of the Reference Guide.



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• 10 MIDI

WHAT IS MIDI?

MIDI (Musical Instrument Digital Interface) is a system of communication between electronic musical instruments and computers.

With MIDI it is possible to:

- control another musical instrument with P51500;
- control **P51500** with a master keyboard or other controlling device (guitar controller, wind controller, drum pads...);
- connect **P51500** to an external sequencer to program Songs and Styles.

WHAT TRAVELS VIA MIDI?

The MIDI ports do not emit sounds, but transmit instructions on how the instrument being controlled (slave) must emit the sounds.

For example, when a note is played on the **P51500** keyboard, the MIDI OUT port transmits a Note On message which plays the sounds of the instrument whose MIDI IN is connected to the **P51500** MIDI OUT.

There are several different types of MIDI messages:

- Note On, Note Off, Velocity messages generated by the notes played.
- Program Change (abbreviated: PC) messages which select Sounds, Styles, Presets and Songs (normally coupled with a BankSelect message).
- Control Change (abbreviated: CC) messages which activate MIDI Controllers. The list of MIDI messages is in the Appendix.

CONNECTION RULES

- An instrument which controls another instrument is called the *master*, while an instrument that is controlled by a controlling device is called the *slave*.
- The MIDI OUT of the master instrument is connected to the MIDI IN of the slave instrument.
- To program Songs on an external sequencer, the MIDI OUT of **P51500** is connected to the MIDI IN of the sequencer; the MIDI OUT of the sequencer is connected to the MIDI IN of **P51500**.

THE MIDI THRU PORT

The MIDI THRU port permits the connection of several slave instruments in series (as shown in Figure 1 on the next page).

In the example, Slave 1 and Slave 2 are controlled by the single Master. Slave 2 does not receive Slave 1 data, which only acts as a through device.

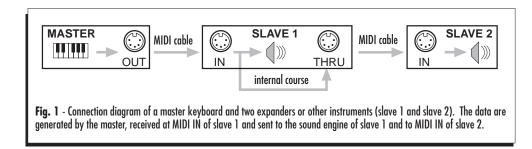
THE COMPUTER PORT

The COMPUTER port can simultaneously act as a MIDI IN and MIDI OUT port and allows the connection of the instrument to a computer by means of a single serial cable.

When the COMPUTER port is in use, the **P51500** MIDI ports are disabled.

If you have a computer capable of directing MIDI data to the serial port (specified as RS232 in IBM PCs and compatibles, MODEM in Macintosh),

MIDI 10•1



you can substitute the two MIDI cables with the single serial cable.

The connection via the COMPUTER port allows the control of 16 MIDI channels, as for the standard MIDI interface.

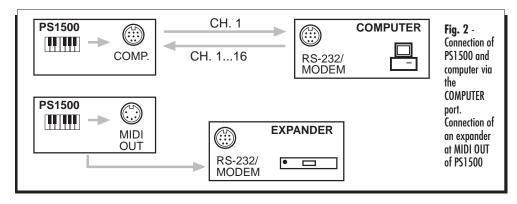
TRACKS AND MIDI CHANNELS

In Song mode, **P51500** can transmit and receive data via 16 MIDI channels (Song mode). In reception, **P51500** receives MIDI on 16 Channels regardless of the current mode.

You can assign a MIDI channel from 1...16 to each **P51500** track from the 16 channels available in «Edit Preset». A track can also be excluded from MIDI by assigning the "Off" status..

The factory set MIDI configuration of all **P51500** tracks for all modes is as follows:

PS Tracks	MIDI channels
1	10
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	1
11	11
12	12
13	13
14	14
15	15
16	16



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When you connect external MIDI devices, the corresponding tracks must be tuned to the same MIDI channels as the **P51500** tracks. Some examples follow, with **P51500** programmed as shown in the previous table:

- If a single **P51500** track (Upper 1, track 8) controls an expander, the expander must be programmed to receive on MIDI channel 8.
- If **P51500** controls a multi-timbral expander, the instrumental parts of the expander must be tuned to the same MIDI channels as the **P51500**. Assign channel 10 to the drum track, channel 9 to the Bass, etc..
- If **P\$1500** is controlled by an external controlling device, you must program the parts (tracks) of the controlling device to the same channels as the **P\$1500**. Alternatively, program the **P\$1500** accordingly to react with the master.

ASSIGNING MIDI CHANNELS

The MIDI channel configurations of the Presets of all Songs, Song/Styles, Styles and Presets are freely programmable.

The procedure for channel assignments is explained in the section entitled «Edit MIDI» of the EDIT PRESET chapter 12 (Reference Guide).

All Presets are independently programmable for MIDI assignments and any change can be saved with Store Preset.

► Note: Via MIDI, **P51500** is recognized as a 16 part multi-timbral instrument, regardless of the current playing mode.

MIDI LOCK

If you program the MIDI configuration of a Preset then activate MIDI LOCK (in «Edit MIDI»), the configuration will be valid for all **P51500** Presets. All other configurations relating to other Presets are overridden.

THE COMMON CHANNEL

The Common Channel is used to:

- simulate the **P51500** keyboard with a master keyboard. The master keyboard must transmit on the same channel as the **P51500** Common Channel.
- dedicate a special track in a sequencer or other instrument for the selection and control of Styles, Presets, Songs & Song/Styles and Effects. In the external sequencer, a track is reserved for the transmission of control data which travels on the same MIDI channel as the **P51500** Common Channel.

The track assigned to the Common Channel cannot be used for the normal tracks.

NUMERATION

The numeration of MIDI data usually adopts the system 0-127. Some instruments adopt the system 1-128. When devices are used that adopt a different numeric system, it is necessary to apply the conversion between one system and the other.

In **P51500** the Control Changes and relative values follow the system 0-127. For example, the Bank Select values range from 0 to 127.

The Program Change values, instead, follow the numeration 1-128.

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Playing PS1500 with a master keyboard

ACTIVATE THE COMMON CHANNEL

The Master keyboard must transmit on the same MIDI channel as the Common channel assigned to **P51500**. The **P51500** Common channel must be active.

By transmitting across the Common Channel, the master keyboard simulates the **P51500** keyboard.

- Program the **P51500** Common Channel. Press MIDI in the EDIT PRESET section to enter «Edit MIDI».
- 2. Press F1 («Channel») to pass to the Channel assignments page.
- 3. Press PAGE + to pass to page 2 of the Channels page.

The display shows the Common parameter selected (flashing).

The Common Channel is off by default.

4. Assign a Common Channel.

Rotate the DIAL or use sliders F1, F2 or F3 to change the value of the parameter. Assign any value from 1-16. The Common channel assignment is a Preset parameter which can be stored to a Preset.

- 4. Press ESCAPE twice to exit «Edit MIDI».
- 5. Program the master keyboard to transmit on the same channel as the **P51500** Common Channel.

Consult the owner's manual of the master keyboard for information regarding the assignment of the transmission channel.

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SELECTING SOUNDS AND PRESETS

If you are not able to select single **P51500** sounds from a master keyboard connected via the Common Channel, you can use the BankSelect (CC00) and ProgramChange (PC) messages to select the Presets.

These messages travel on the Common Channel only.

Values CC00 / PC	Preset	
48 / 1-8	1-8	
48 / 9-16	9-16	
48 / 17-24	17-24	
48 / 25-32	25-32	
48 / 33-40	33-40	
48 / 41-48	41-48	
48 / 49-56	49-56	
48 / 57-64	57-64	

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SELECTING THE STYLES

To select a Style, send a Bank Select (CC00) and Program Change (PC) message from the master keyboard with the values shown in the following table.

These messages travel on the Common Channel only.

Values CC00 / PC	Style
32 / 1-8	1-8 (SWING)
32 / 9-16	9-16 (COUNTRY)
32 / 17-24	17-24 (ROCK)
32 / 25-32	25-32 (FUNK)
32 / 33-40	33-40 (DANCE)
32 / 41-48	41-48 (POP)
32 / 49-56	49-56 (8 BEAT)
32 / 57-64	57-64 (16 BEAT)
32 / 65-72	65-72 (LATIN 1)
32 / 73-80	73-80 (LATIN 2)
32 / 81-88	81-88 (WORLD)
32 / 89-96	89-96 (ETHNIC)
44 / 1-8	1-8 (USER 1)
44 / 9-16	9-16 (USER 2)

▶ Note: If SINGLE TOUCH PLAY is active, selecting a Style will also change the keyboard sounds and effects.

CONTROLLING THE STYLES

The Style controls can be simulated by sending a Control Change 50 message to **P51500** with the values shown in the following table.

These messages travel on the Common Channel only.

Style control	Value CC50
Fill ><	00
Fill <	01
Fill >	02
Intro	08
Ending	16
Var 1-2-3-4	24 - 27
Harmony ON/OFF	32
Easy Play ON/OFF	33
Memory ON/OFF	37
Lower Memory ON/OFF	38
Key Start ON/OFF	40
Single Touch Play ON/OFF	48
Style Lock ON/OFF	49
Mixer Lock ON/OFF	50
Tempo Lock ON/OFF	51
Fade In/Out ON/OFF	59
Rotary ON/OFF	61
Start/Stop	64
Tempo increment	66
Tempo decrement	67
Next Preset	68
Previous Preset	69

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SELECTING SONGS & SONG/STYLES

To select a Song or Song/Style, send a Bank Select (CC00) and Program Change (PC) message to **P51500** with the values shown in the following table:

These messages travel on the Common Channel only.

Values CC00 / PC	Song
56 / 1-7	1-7

Values CC00 / PC	Song/Style
62 / 1-7	1-7

CONTROLLING A SONG

To control a Song via remote control, the **P51500** MIDI Clock must be set to External.

- 1. Press MIDI in the EDIT PRESET section to enter «Edit MIDI».
- 2. Press F7 («Clock») to access the «MIDI Clock» parameter.

The display shows the MIDI Clock parameter flashing, indicating that it is ready for a change of status.

3. Set the «Clock» parameter to External.

Use the DIAL or toggle with Function button F1, F2 or F3.

4. Press ESCAPE twice to exit «Edit MIDI».

The clock setting does not rest in memory after power down. Turning **P51500** on again resets the MIDI Clock to Internal.

The START/STOP (or PLAY/STOP) command is a standard MIDI message. Press START/STOP on the master keyboard to start or stop the **P51500** sequencer (when **P51500** is set to MIDI External).

The **P51500** sequencer receives and transmits the Song Position Pointer. From the master keyboard, it is possible to control the song advance and rewind precisely (with a MIDI resolution of one 'tick' = 1/24th of a quarter).

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PS1500 in Song mode used as a controlling device

LOCAL OFF - PS1500 AS A MUTE MAS-TER KEYBOARD

In Song mode, **P51500** renders one track available for real time use. When **P51500** in Song mode is set for Local Off operation (i.e. track 8 [Upper 1] set to Local Off), the keyboard is disconnected from the internal sound generator. The keyboard transmits MIDI OUT on the MIDI channel assigned to the track set for Local Off operation. The sound generator receives MIDI IN on all tracks of the Preset.

Local Off operation simplifies the connection of **P51500** with an external sequencer, allowing the keyboard to be used as a controlling device and the internal sound engine as an expander at the disposition of the sequencer.

- 1. Connect the **P51500** MIDI OUT to the expander's MIDI IN.
- Select an empty Song and program the Song Preset as required. Press STORE PRESET to memorize the modifications.

Selecting a Song activates track 8 for real time play. You can select any of the 16 tracks available for Local Off operation.

- Press MIDI in the EDIT PRESET section to enter «Edit MIDI».
- 4. Select the LOCAL parameter with Function button F4.
- 5. Set the track being used as the controller for Local Off operation.

Press ESCAPE to return to the main «Edit MIDI» menu.

6. Select the SET parameter with Function button F8.

- Select the LOCK parameter and set the status to OFF to lock the MIDI settings for all Presets.
- Press ESCAPE twice to exit «Edit MIDI» then store the changes to the Preset with STORE PRESET.

The keyboard and on-board controllers now act as those of a mute master keyboard which transmits on the channel assigned to the track set for Local Off operation.

9. At the end of the work session, remember to reset the track for normal Local on operation.

SUBSTITUTION OF THE PS1500 SOUNDS WITH THOSE OF AN EXPANDER

The **P51500** keyboard tracks can be set to control an external expander instead of the internal sound.

If you want to play only the expander's sounds and exclude the **P51500** sounds, you can take the **P51500** track volumes to zero level with the track sliders.

Alternatively, you can set all three tracks for Local Off operation.

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Programming Songs on an external sequencer

Consult the owner's manual of the sequencer for instructions regarding Song recording.

In Song mode, **P51500** sets track 8 for real time play. Any of the 16 tracks available can be used. You can use **P51500** in Song mode to record sequences, and playback Songs and Standard MIDI File sequences. If you prefer to use a computer software sequencer to record your compositions in order to exploit some of the advanced editing functions, set the Song track for Local Off operation.

LOCAL OFF

To program Songs with an external sequencer, the **P51500** track being used must be set for Local Off operation. The procedure is described in this chapter on the previous page (**"P51500** *as a mute master keyboard*").

Local Off operation disconnects the **P51500** keyboard from the instrument's internal sound generator and sends data to the external sequencer. The sequencer then returns the data to all the **P51500** tracks; in practice, the **P51500** keyboard acts as the computer's source of note data.

The tracks to record are selected in the external sequencer. The notes played on the keyboard are captured by the track currently in record, regardless of the assigned MIDI channel.

To listen to what is being played on the keyboard, the external sequencer must be set for MIDI THRU operation and the track corresponding to the **P51500** track to listen to must be selected.

With the sequencer's echoing function turned on and the **P51500** Local Off parameter also set to ON, two notes will be played by the **P51500** sound generator for every single note generated by its keyboard.

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PREPARATION

1. Connect the **P51500** MIDI OUT to the external sequencer's MIDI IN. Connect the external sequencer's MIDI OUT to the **P51500** MIDI IN ("closed MIDI Loop").

Consult the sequencer's owner's manual for additional information regarding MIDI communications.

 Press SONG and select an empty Song (EMPTY).
 One of the tracks will be active to play in real

One of the tracks will be active to play in real time (track LED flashing).

3. Select the track you wish to record with.

Press the corresponding button in the Sequencer.

- Program the Song-Preset accordingly. Assign sounds, set volumes and pan, change or modify the effects, etc.
- 5. Press MIDI in the EDIT PRESET section to enter «Edit MIDI».
- Press F4 («Local») to activate the Local Off parameter.
- Set the currently selected Song track for LOCAL OFF operation.
 Press the corresponding Function button. The Local Off track will be shown flashing.
- 8. Press ESCAPE twice to exit «Edit MIDI».
- 9. Press STORE PRESET and ENTER to save the modified Song-Preset to memory.
- 10. Set the Sequencer's ECHO function to on.
- 11. Start the external sequencer and play on the **P51500** keyboard.

P51500 sends data to the external sequencer which then sends it back to **P51500**.

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ADDITIONAL DEVICES

If you want to use additional keyboards or expanders, connect the equipment as described below:

- **P51500** MIDI OUT connected to the computer's MIDI IN.
- Computer's MIDI OUT connected to the expander's MIDI IN.
- **P51500** MIDI IN connected to the expander's MIDI THRU.

In this setup, **P51500** keyboard data is sent via the **P51500** MIDI OUT and is received by the computer's MIDI IN port. When you play back a sequence, MIDI data from the computer is sent via MIDI OUT, and is received by the expander's MIDI IN. This data then passes on from the expander's MIDI THRU to the **P51500** MIDI IN.

If the expander has no MIDI THRU, connect the computer's MIDI OUT to the **P51500** MIDI IN, and the **P51500** MIDI THRU to the expander's MIDI IN.

THE COMPUTER PORT

You can use the COMPUTER port via a single serial cable instead of the MIDI IN and MIDI OUT ports. The COMPUTER port disables the MIDI ports if connected.

Apple Macintosh

The Macintosh (or compatible) must communicate at the velocity of 1 MHz. Consult the manual of the sequencer for relevant information.

Use the standard Macintosh serial cable. Connect one end of the cable to the **P51500** and the other to the MODEM port of the Macintosh.

Set the COMPUTER parameter in «Edit General» to MAC.

IBM PC

The IBM-PC (or compatible) can communicate at the velocity of 31250 baud (PC1) or 38400 baud (PC2).

Use a DB9-DP25 PC serial cable. Insert the small connector (DB9) to the **P51500** COMPUTER port and the larger connector (DP25) to the RS-232 port of the computer.

Set the COMPUTER parameter in «Edit General» to PC1 or PC2 as required.

ADDITIONAL MIDI PARAMETERS

P51500 offers a set of additional MIDI parameters which render the instrument more flexible. The parameters are accessed by entering the MIDI SET function in «Edit MIDI»:

- General MIDI
- Channel Lock
- · Dynamic Keyboard
- · MIDI In Transpose
- System Exclusive
- System Exclusive Identification Number
- WS MIDI Status mode.

These additional MIDI parameters are detailed in the MIDI section of the EDIT PRESET chapter 12.

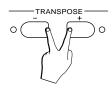
MIDI PANIC

MIDI communications can sometimes "lock" the instrument due to the transmission of an excessive quantity of data, or an incorrect MIDI message.

The MIDI PANIC function sends the "All Notes Off" and "Reset all Controllers" messages to all external MIDI devices connected to the **P51500** MIDI OUT port.

How to activate MIDI PANIC

 If your instrument locks up while working with MIDI, press the two TRANPOSE+ and TRANSPOSE- buttons at the same time.



P51500 sends the "All Notes Off" and "Reset all Controllers" messages to all connected MIDI devices.

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- •11 Selection/Display Hold/Metronome
- •12 Edit Preset Preset MIDI Mixer Sound (& Drumkit)
- •13 Edit General
- •14 Edit Effect
- •15 User Style Recording
- •16 Song/Style Recording
- •17 Song Recording
- •18 Edit Sequencer
- •19 Sample/Record
- •20 Play All Songs/Restore





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• 11 Selection/Display Hold/Metronome

Selection

SELECTING PROGRAMMABLE PRESETS

Panel selection

Panel selection is preferable when playing live. If the STYLE LOCK button is off, selecting Programmable Presets also changes the Style, the Variation and Tempo.

- Press one of the PROGRAMMABLE PRE-SETS buttons to open a Preset selection window.
- 2. Select a Preset with the corresponding Function button.

► Note: When selecting Presets, **P51500** does not transmit Preset data via the Common Channel. The BankSelect, ProgramChange, Volume and Pan messages of the tracks are sent on the normal MIDI channels.

► Note: You can also select Preset directly with the Page+/Page - buttons.

Selection via MIDI

P51500 must receive the relative selection messages on the Common Channel. Send Control Change 00 (value = 48) and Program Change messages in rapid succession to **P51500**.

Message	selects		
CC00 [48] - PC [18]	Preset 18		
CC00 [48] - PC [916]	Preset 916		
CC00 [48] - PC [5764]	Preset 5764		

Selection 11•1

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SELECTING STYLES

Panel Selection

- 1. Press one of the STYLE GROUPS buttons to open a Style selection window.
- 2. Select a Style with the corresponding Function button.

▶ Note: When you select a Preset, Preset data is not transmitted via the Common Channel. The BankSelect, ProgramChange, Volume and Pan messages of the tracks are sent on the normal MIDI channels.

Recalling Styles by selecting the Programmable Presets

If the LED of the STYLE LOCK button is ON when you select a Programmable Preset, the current Style rests unchanged. If STYLE LOCK is OFF, selecting a Programmable Preset also recalls a Style, Variation and Tempo.

As well as track data (Bank Select, Program Change, Volume, Pan) the Programmable Presets memorize (a) the selection of a Style, (b) the selection of a Variation of the Style, (c) the Tempo.

- 1. Deactivate the STYLE LOCK button.
- Press one of the PROGRAMMABLE PRE-SET buttons to open a Preset selection window.
- Select a Preset with the corresponding Function button.

The memorized Style and Variation will be selected.

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Selection via MIDI

P51500 must receive the relative selection messages on the Common Channel. The Common Channel is set in «Edit MIDI »

To select ROM Styles, send Control Change 00 (value = 32) and a Program Change.

To select USER Styles, send Control Change 00 (value = 44) and a Program Change.

SWING - Style 18
ETHNIC - Style 8996
USER1-8 Style 18
USER9-16 Style 916

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SELECTING SOUNDS

Recall Sounds by selecting Programmable Presets or Styles

Refer to the previous sections relating to the selection of Programmable Presets or Styles.

While playing, Sounds are instantly recalled by selecting Presets or Styles. Program your Presets or Style-Presets before you play.

Panel selection

- 1. Press one of the SOUND GROUPS buttons to open a Sound selection window.
- 2. Scroll through the three Banks with the Sound Bank button.
- Select a Sound with the corresponding Function button..

► Note: When you select a Sound, **P51500** sends CC00-CC32-PC messages in rapid succession on the MIDI channel assigned to the track.

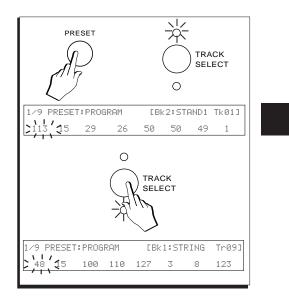
Selection via MIDI

The Sound selection message must be received on the MIDI channel assigned to the track to which the Sound is assigned.

To select a **P51500** Sound, you must send a Control Change 00 (CC00/BankSelect MSB) and Program Change (PC) message.

The relative PC numbers are also displayed in the Edit Preset: Program Change page that appears when you press PRESET in the EDIT PRESET section. Use TRACK SELECT to toggle between track sets 01-08 and 09-16.

The Sound table in the Appendix lists all the **P51500** Sounds and corresponding MIDI selection messages.



Selection 11•3

SELECTING SAMPLES

Panel Selection

- 1. Press the SAMPLES button to open the Sample selection window.
- 2. Select a Sample with the corresponding Function button.

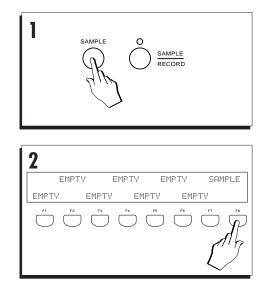
► Note: When you select a Sample, **P51500** sends CC00-CC32-PC messages in rapid succession on the MIDI channel assigned to the track.

Selection via MIDI

The Sample selection message must be received on the MIDI channel assigned to the track to which the Sample is assigned.

To select a **P51500** Sample, you must send a Control Change 00 (CC00/BankSelect MSB) and Program Change (PC) message. Samples occupy Bank5.

The relative PC numbers are also displayed in the Edit Preset: Program Change page that appears when you press PRESET in the EDIT PRESET section.



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SELECTING SONGS & SONG/STYLES

Panel Selection

Selecting a Song sets **P51500** to Song mode.

Selecting a Song/Style sets **P51500** to Song/ Style mode.

- Press the SONG button to open the Song selection window, or the SONG/STYLE button to open the Song/Style selection window.
- 2. Select a Song or Song/Style with the corresponding Function button.

▶ Note: When you select a Song or Song/Style, BankSelect and ProgramChange data, Volume and Pan messages of the tracks are sent on the normal MIDI channels. **P51500** does not transmit data via MIDI common.

Selection via MIDI

P51500 must receive the relative selection messages on the Common Channel. Send Control Change 00 (value = 56 or 62) and Program Change messages in rapid succession to **P51500**.

Message	selects
CC00 [56] - PC [17]	Song 17
	1 1-

Message	selects				
CC00 [62] - PC [17]	Song/Style 17				

Selection 11•5

Display Hold/Metronome

Display Hold

You can select items from a selection display without closing the selection window by pressing the DISPLAY HOLD button.

The LED of the button turns on to indicate the activation of the function.

DISPLAY HOLD

DISPLAY HOLD remains active (LED on) until the button is pressed again.

Use ESCAPE to close the current selection window without deactivating DISPLAY HOLD.

Use Display Hold when selecting Sounds, Styles, Programmable Presets, Songs and Song/Styles.

The Metronome

The Metronome allows you to play live or play Styles, Song/Style or Songs with a metronome, a must for those who need to practice their timing. The metronome can also be used on its own; for example, an acoustic guitar player or drummer may want to practice using the **P51500** metronome.

Press the METRONOME button in the SONG EDIT section to activate the Metronome. The Metronome plays with the sound of "Drumsticks", the tempo can be controlled by rotating the DIAL and its volume is controlled by the M. Volume panel slider.

The display shows the symbol "MT" to indicate that the metronome is active.



Display showing the active Metronome symbol "MT" after the Tempo setting.

In User Style, Song/Style and Song Record modes, the Metronome activates automatically. If you prefer to record without the Metronome, simply deactivate it by pressing the METRO-NOME button. The symbol "MT" is cleared from the display.

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• 12 Edit Preset section

OVERVIEW

The buttons of the EDIT PRESET section gain access to a series of functions which determine how the PRESETS affect the way you play when using Programmable Presets, Style-Presets, Song/Style and Song Presets.

The functions are:

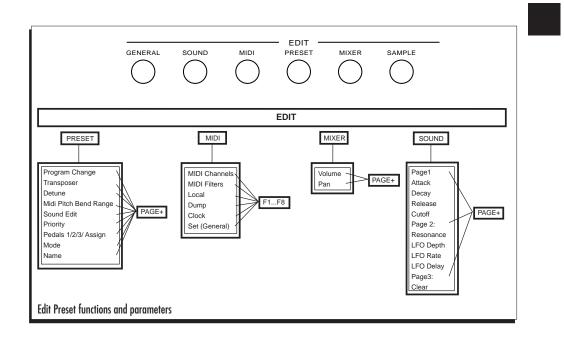
- PRESET
- MIDI
- MIXER
- SOUND

Each button provides a set of related parameters and most of the modifications that you apply can be saved to the current Preset. Some parameters are general settings which relate the instrument as a whole.

PASSING FROM ONE FUNCTION IN EDIT TO ANOTHER

While you are editing a function, it is possible to pass to a different one by pressing the corresponding button in the EDIT PRESET section.

It is not necessary to escape from a function in edit to pass into another.



Edit Preset 12•1

STANDARD EDIT PROCEDURE

The edit procedure is identical for all situations, unless otherwise indicated in the detailed explanations which follow afterwards.

- To modify the parameters of the current Preset, press the button corresponding to the function that you wish to edit in the Edit Preset section.
- 2. If necessary, use the PAGE+ and PAGE buttons to advance to the page required.
- 3. Select the parameter to edit with the corresponding Function button.
- 4. Use the DIAL to modify the parameter value.

In some situations, the Sliders F1...F8 are active for parameter changes; in this case, the parameter does not require selection..

On/Off type parameters can be toggled with the corresponding Function button.

- 5. Press ESCAPE, or the button corresponding to the function in edit to return to the main display of the current operating mode.
- 6. Save the modifications to the current Preset by pressing STORE PRESET followed by ENTER.

ESCAPE THE FUNCTION IN EDIT

There are three ways of escaping from a function in edit:

- press ESCAPE as many times as necessary, depending on the currently selected edit level, until you reach the main display.
- press the button corresponding to the function in edit. This action exits from the function completely and moves directly to the main display.
- press another button of the EDIT section to advance to a different function.

MEMORIZING MODIFICATIONS TO A PRESET

When you have completed your edit tasks, press STORE PRESET to save the modifications to the current Preset. If you fail to store your modifications, they will be irremediably lost when you select another Preset, or reselect the same one.

▶ Note: If your Preset programming involves many parameters of all the Edit Preset functions (Preset, MIDI, Mixer, Sound, Effects), it is wise to save periodically to store the modifications to RAM. This will safeguard your editing in case of an unexpected power failure. If, instead, you leave the saving task till last, a sudden power failure will cause the total loss of all your edited data and you will have to start again.

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Preset

The Preset functions

Press the PRESET button of the EDIT PRESET section to modify the parameters that affect the tracks of the current Preset.

The procedures explained in this section are valid for Presets associated to the 64 Programmable Presets, the Song/Style and Song-Presets.

NOTE: User Style Presets, although using identical programming methods, require a slightly different approach to enter the associated Preset before modifying the parameters. Refer to the User Style Recording chapter for information regarding programming User-Style Presets.

Each track of a Preset can be independently programmed and the overall edited configuration can be saved to the current Preset.

• The PRESET section consists of 9 pages of functions.

• Use the PAGE+ button to select the pages in increasing order of appearance and the PAGE – button to select the pages in reverse order.

• Use TRACK SELECT in the 16 Track Recording Studio to view tracks 09-16.

1/9 PROGRAM

This function allows you to assign a Program Change to each track. Pressing PRESET activates the display for tracks 01-08. Use Track Select to view tracks 09-16.

The currently selected track is shown by the flashing Program Change and the top right hand corner also shows the name of the Sound assigned to the selected track.

1	179 PF	RESE	T:PROG	RAM	ΓBł	:2:STA	ND1	Tk01]
	113	15	29	26	50	50	49	1
~								

Preset: Program change

Assignable values: 0 ... 127.

To assign a different Program Change (Sound):

- 1. Select the track.
- 2. Select one of the Sounds Group buttons.
- 3. Enter a different Sound Bank if necessary with the Page+Bank+/Page-Bank- buttons.
- Select a Sound shown in the display with the corresponding Function button. The display will return to the previous status automatically.
- Repeat the assignment procedure for other tracks. Use Track Select to view tracks 09-16.
- Press STORE PRESET and ENTER to save to the current Preset, or advance to another page to continue programming.

See also the Sounds & Presets chapter 4 (User Guide) for more details.

Edit Preset 12•3

2/9 TRANSPOSER

This is a track transposer which transposes in steps of one semitone.

Use Track Select to view tracks 09-16.

Use the standard edit procedure.

	PRESET: TRANSPOSER							
00 00 00 00	00	00	+04	00				

Preset: Transposer

Assignable values: -24 ... 0 ... +24 semitones.

3/9 DETUNE

A fine tune function for single tracks.

Use Track Select to view tracks 09-16.

Each fine tune step is equivalent to 1/64th semitone.

Use the standard edit procedure.

379	3/9 PRESET:DETUNE								
00	00	00	00	00	00	+04	00		
n .	Determ								

Preset: Detune

Assignable values: - 63 ... 0 ... +63.

4/9 MIDI PITCH BEND RANGE

This function independently enables or disables the tracks for the Pitch Bend message received via MIDI and determines the maximum amount of Pitch Bend that will affect each track.

Use Track Select to view tracks 09-16.

Use the standard edit procedure.

4/9 PRESET:MIDI PITCH BEND RANGE [Tk06] 02 02 02 02 02 02 02 02 02 02

Preset: MIDI Pitch Bend Range

Assignable values: - 12 ... 0 ... +12.

.

5/9 SOUND EDIT

This function assigns an edited version of the Sound currently assigned to the selected track, provided that an edited version is currently in memory.

The "On" status assigns the edited version, identified by the letter "E" attached before the name of the Sound.

Use Track Select to view tracks 09-16.

Use the standard edit procedure.

OFF On OFF OFF OFF OFF OFF OFF	579 F	PRESE	T:SOU	ND ED	IT EN	ABLE		ETkØ1
	Off	On	Off	Off	Off	Off	Off	Off

Preset: Sound Edit

Assignable values: On, Off.

6/9 PRIORITY

Priority guarantees a minimum polyphony to a track with respect to others and avoids "note-stealing".

In complex arrangements, a melody track will require a priority setting to avoid "losing" notes "stolen" by other tracks to maintain the maximum permitted polyphony of the current sound configuration.

The Priority=Off setting implements a dynamic allocation of polyphony in order to maintain the maximum permitted polyphony. In practice, in situations where the maximum polyphony is exceeded, notes are eliminated accordingly to maintain the correct polyphonic value.

Tracks set with a Priority value from 1...28 (or less according to how many tracks have been assigned a value) are reserved a minimum polyphony equal to the value assigned".

Use the standard edit procedure.

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6/9 PRESET:PRIORITY [Tk01] Off 02 Off 04 Off 03 Off 04

Preset: Priority

Options: Off, 1...28.

7/9 PEDALS 1/2/3 ASSIGN

This function enables/disables the action of the three switch pedals (1, 2, Damper) for the keyboard tracks (Upper 1, Upper 2, Lower) of a Style or Preset. (The pedal functions are assigned in Edit General).

In Song/Style and Song modes, all tracks of the associated Preset are active for the action of the switch-action pedals by default.

Use the standard edit procedure.

7/9 PRESET:PEDALS 1/2/3 ASSIGN Lower=On Upper2=On Upper1=On

Preset: Pedal 1/2/3/ Assign

Assignable values: On, Off.

8/9 MODE

Each track can be monophonic (plays one note at a time) or polyphonic (two or more simultaneous notes). Mono R gives priority to the right note, Mono L to the left note, Mono T to the last note played. *Options: Poly, Mono L, Mono R, Mono T.*

This function determines whether a keyboard track (Upper 1, Upper 2, Lower) is Monophonic or Polyphonic.

A Polyphonic track plays two or more notes simultaneously.

A Monophonic track plays one note at a time. Mono Mode offers three options to choose from: • Mono L: Priority is given to the extreme left note when two or more notes are played at the same time.

• Mono R: Priority is given to the extreme right note when two or more notes are played at the same time.

• Mono T: Priority is given to the last note played when two or more notes are played at the same time.

In Song/Style and Song modes, all tracks of the associated Preset are set for the polyphonic mode by default.

Use the standard edit procedure.

8/9 PRESET:MODE Lower=Poly Upper2=Poly Upper1=Poly

Preset: Mode

Assignable values: Poly, Mono L, Mono R, Mono T.

► Note: It is important to bear in mind that the overall polyphony of the instrument is determined by a) the number of tracks active to play and b) the type of sound assigned to the tracks. Dual oscillator sounds halve the polyphony of the track to which this type of sound is assigned.

Edit Preset 12•5

9/9 PRESET NAME

This function allows you to assign a different name to the current Preset.

979	PRESET:GrandP	>		[OverWrite]
Old	name=GrandP	>	New	name=

Preset: new name

Use the keys of the Keyboard to enter the characters (letters or numbers).

The lower end of the keyboard offers some test editing functions.

Refer to the section entitled "Inserting Alphanumeric Data" on page 15 of the Basic Concepts chapter 3 (User Guide) for detailed instructions.

Up to 6 characters can be entered.

Use the same procedure for Song and Song/Style names. The method used for User Style names is explained in the Song Edit chapter.

After escaping the edit, save the new name with STORE PRESET and ENTER.

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• MIDI

The MIDI function of the Edit Preset section contains general parameters and parameters pertaining to single tracks. General parameters do not require storing, as they are automatically memorized in RAM. Parameters pertaining to single Tracks must be stored to the current Preset with STORE PRESET.

If you use **P51500** alone, you do not need to set the parameters of this function.

Program the parameters of this section if you intend using **P51500** in MIDI setups.

Via MIDI, **P51500** operates as a 16 part multitimbral unit, regardless of the current operating mode. For example, if you are currently playing in real time with the Presets (with combinations of up to 3 sounds only), all 16 tracks of the current Preset can be controlled via MIDI.

THE MIDI EDIT STRUCTURE

The structure of the MIDI Edit section shows a slight variation compared to the Preset Edit section of the previous chapter.

All the MIDI functions are set out on a main "menu" and the relative parameters are on a first or second level page.

Selecting a function from the main menu enters a first level page.

Use PAGE+ to enter the second level page where applicable.

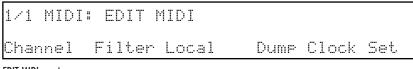
To escape from a level and return to the previous one press PAGE- as many times as necessary.

To return to the main menu, press ESCAPE

To escape from the edit of a MIDI function and return to normal operation, press the MIDI button in the Edit Preset section.

THE STANDARD MIDI EDIT PROCEDURE

- 1. Press MIDI to open the main menu of MIDI functions.
- Select a function with the corresponding Function button.
 A first level of related parameters is displayed.
- Select the parameter required and modify it using the standard procedures already described.
- 4. Press PAGE + open the second level page where indicated.
- Press ESCAPE to return to the previous level or to the main menu and select another MIDI function to edit.
- 6. Press MIDI to escape the MIDI edit.
- Press STORE PRESET followed by ENTER to save the modifications to the Preset where applicable. General parameters do not require storing to the Presets.



EDIT MIDI: main menu

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The MIDI Edit functions

CHANNEL (F1, F2) - MAIN DISPLAY

1∕1 MIDI: EDIT MIDI

Channel Filter Local Dump Clock Set

This function gains access to two levels of Preset parameters.

First level: Midi channel.

· Second level: Common and Chord channels.

1/2 Midi Channel

Pressing CHANNEL in the main menu opens the first level MIDI CHANNEL page where you can assign a MIDI channel (1...16) to tracks 01-08.

Use TRACK SELECT to gain access to tracks 09-16.

If you assign "Off", the track is disabled for the transmission and reception of MIDI data.

All **P51500** Presets are independently programmable for a MIDI configuration.

Use the standard Edit procedure to assign the channel. Press ESCAPE to return to the main display.

1/2 MIDI CHANNEL: [CHANNEL] [TK08] 10 02 03 04 05 06 07 08 MIDI: Channel

Press STORE PRESET + ENTER to store the MIDI configuration to the current Preset.

Assignable values: 1 ... 16, Off.

► Hint: MIDI LOCK: You can lock the current configuration and override the individual configurations of other Presets. See MIDI LOCK afterwards.

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2/2 Common & Chord Channel

Press PAGE + to enter the second level page of Preset parameters.

The Common and Chord Channels are MIDI channels dedicated to special operations:

- simulation of the keyboard and on-board controllers (pedals) [Common].
- transmission of Effects, Preset, Style, Song/ Style and Song select messages to **P51500** [Common].
- transmission of chord data for the automatic accompaniments [Chord].

Common Channel (F2, F3)

Use this parameter to assign a Common channel to a track. Once assigned, the track can no longer be used to receive note information.

ProgramChange and ControlChange data received on the Common Channel select Style, Song, Preset, Effects and other parameters (listed in the Appendix at the back of the manual).

The track assigned a Common channel is enabled for reception only; data transmission via Common is disabled.

In default conditions, the Common channel is assigned the "Off" status.

Use the standard Edit procedure to assign the channel. Press ESCAPE to return to the main display.

2/2 MIDI CHANNEL: [COMMON CHANNEL] Common=Off Chord=Off

MIDI: Common

Press STORE PRESET + ENTER to store the assignment to the current Preset.

Assignable values 1 ... 16, Off.

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Chord Channel (F5, F6)

Conceived principally for the connection of a MIDI accordion, the Chord channel can be used to receive Chord information via MIDI to control the auto-accompaniments of the Styles.

An accordionist, for example, can send notes to the **P51500** automatic accompaniments from the accordion's chord section via the Chord channel.

Use the standard Edit procedure to assign the channel. Press ESCAPE to return to the main display.

M	וחוא	· Chard	1		
		Com	non=Off	Cho	ord=Off
2	/2	MIDI	CHANNEL:	ECHORD	CHANNEL]

MIDI: Chord

Press STORE PRESET + ENTER to store the assignment to the current Preset.

Assignable values: 1...16, Off.

► Note: The combined setting of the Common channel and Chord channel is essential for the compatibility with MIDI accordions.

FILTER (F3) - MAIN DISPLAY

1/1 MIDI: EDIT MIDI Channel Filter Local Dump Clock Set

This function consists of one level of general parameters: MIDI Filters In, MIDI Filters Out.

Filters In (F2, F3, F4) Filters Out (F6, F7, F8)

Pressing FILTER in the main menu opens one level of MIDI IN and OUT Filters.

It is possible to independently programme up to 12 MIDI IN filters and 12 MIDI OUT filters for each Preset.

For detailed information on the MIDI messages recognized by **P51500**, refer to the tables in the Appendix at the back of the manual.

When a Filter is set to "Off", the specified MIDI message passes with the MIDI data stream.

When a Filter is set to "On", the specified MIDI message is excluded (filtered) from the MIDI data stream.

Activate the In or Out Filter with the corresponding Function button. Select the required Filter with the DIAL and toggle between the On and Off status with the corresponding Function button.

Press ESCAPE to return to the main display.

Assignable values: Off, Program Change, Control Change, Damper, Bender, Aftertouch, Style Controls, General Purpose, Modulation, NRPN [Non Registered Parameter Number], RPN [Registered Parameter Number], System Exclusive.

LOCAL (F4) - MAIN DISPLAY

This function activates a Preset parameter on one level: Section Local (On/Off).

1/1 MIDI: EDIT MIDI Channel Filter Local Dump Clock Set

Section Local (On/Off)

Press LOCAL in the main menu to open the SEC-TION LOCAL (ON/OFF) parameter.

For normal operations, all tracks are assigned to the Local On setting. This permits the keyboard data generated by the tracks to be directed to the internal sound generator.

Assigning Local Off to a track breaks the connection directed to the internal sound generator. The keyboard data generated by the Local Off

Edit MIDI 12•9

track is sent to the MIDI OUT destination on the MIDI channel assigned to the track. In this condition, the internal sound engine responds only to data received by the track via MIDI IN. The track cannot play **P51500**'s internal sounds directly.

The Local Off setting is particularly useful in Song mode where **P51500** permits the use of one track only. Therefore, to record a Song on an external sequencer, set the track for Local Off operation and set the sequencer to echo back the data to **P51500** across all MIDI channels. With this setup, **P51500** acts as a separate MIDI keyboard and independent sound generator. The sequencer's echoing function allows you to play the **P51500** sound generator from the **P51500** keyboard.

If the track being used to send keyboard data to the sequencer is set for Local control (On), two notes will play for every one note sent from the **P51500** track.

Use the standard Edit procedure to assign the required status.

Use Track Select to gain access to tracks 09-16. Press ESCAPE to return to the main display.

1/1 MIDI:SECTION LOCAL (On/Off) [Tk08] On On On On On On On On MIDI: Section Local

WIDI: Section Focal

Press STORE PRESET + ENTER to store the assignment to the current Preset.

Assignable values: On, Off.

DUMP (F6) - MAIN DISPLAY



This function consists of one level of parameters: MIDI Dump: Save All, Save Preset, Save Seq..

MIDI Dump Save All (F1), Save Preset (F3), Save Sequencer (F5)

Pressing DUMP in the main menu opens one level of parameters for Data Dumping procedures.

MIDI: Dump											
[A]	1]	Ľ	Prese	t]	C	Seq.]		
1/1		MID	Ι	DUMP:		EMID	Ι	DUMP	SAVE	ALLI	

You can dump **P51500** Preset or sequence data from internal memory to another **P51500**, or a data storage device (Computer or MIDI data filer) connected via MIDI.

• Save All is a bulk dump command which sends all data currently in the instrument's RAM to the connected storage device. The data includes: User-programmed Presets (comprising stored Edited Sounds and Drumkits), User-Styles, Song/ Styles, Songs, user-programmed Effects.

• Save Preset sends all Preset data pertaining to the 64 Programmable Presets to the external storage device.

• Save Sequencer sends all sequence data to the connected storage device.

To Dump data into the PS1500

To dump data from one **P51500** to another, the receiving instrument sets automatically for a MIDI Dump Load operation.

Data Dump procedure:

- Connect the **P51500** MIDI OUT to the MIDI IN port of the external device (Computer, MIDI data filer, **P51500**).
- 2. Select the MIDI DUMP page.
- 3. Select the parameter according to the data you wish to dump.
- 4. Once selected, press the corresponding button again to gain access to the parameter.

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The display prompts you with a request to give the data dump a name.

5. Insert a name of up to 8 characters.

An identifying extension will be automatically attached to the inserted name (.ALL, .PWK, .SEQ).

6. Press ENTER to execute the dump, or ES-CAPE to cancel the operation.

Confirming the operation starts the Dump Save procedure, during which time the keyboard is disabled. A bar graph monitors the progress of the dumping process.

When the data has been transferred to the external device, transmission stops and **P51500** is restored to normal playing conditions.

7. Press ESCAPE to return to the main menu, or press MIDI to exit from MIDI Edit.

CLOCK (F7) - MAIN DISPLAY

1∕1 MIDI: EDIT MIDI Channel Filter Local Dum⊳ Clock Set

This function opens a single level consisting of two general parameters: MIDI Clock, MIDI Start/ Stop.

MIDI Clock (F1, F2, F3)

Press CLOCK in the main menu to enter the single level of parameters.

The MIDI Clock corresponds to the MIDI synchronizer which synchronizes **P51500** with external clock based devices (rhythm units and sequencers).

Internal renders **P51500** independent from the Clock of other MIDI devices.

External places **P51500** on stand-by, waiting to receive a START/STOP command from the external MIDI device connected to **P51500**'s the MIDI IN. The external device also controls the **P51500** Tempo (the **P51500** Tempo setting sets to 0 automatically when External is selected).

The Song Position Pointer is received and transmitted with the same precision as MIDI (1 tick = 1/24th of a beat). This parameter allows a Song to be stopped at a precise point.

Use the standard Edit procedure. Press ESCAPE to return to the main display.

1/1 MIDI CLOCK: [MIDI CLOCK] Clock=Internal Start/Stop=Off MIDI: Clock

Assignable values: Internal, External.

MIDI Start/Stop (F4, F5, F6)

This parameter determines whether or not the **P\$1500** receives the Start/Stop command from external MIDI devices.

Start/Stop is a System Real Time message which is used to start or stop clock based MIDI equipment.

If MIDI Start/Stop is set to On, **P51500** cannot receive a Start/Stop command from an external MIDI controlling device.

• For example, if you want to pilot the **P51500** sounds from a master keyboard without fear of triggering the sequencer from the Start/Stop command of the controlling device, set the MIDI Start/Stop parameter to On. In this way, if you inadvertently press the master keyboard's Start command, **P51500** ignores the message.

When MIDI Start/Stop is set to Off, **P51500** receives the Start/Stop command from an external MIDI device.

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MIDI Edit functions

Use the standard Edit procedure. Press ESCAPE to return to the main display.

MIDI: Start/Stop	
Clock=Internal	Start/Stop=Off
1∕1 MIDI CLOCK:	[MIDI START/STOP]

Assignable values: Off, On.

SET (F8) - MAIN DISPLAY

1/1 MIDI: EDIT MIDI Channel Filter Local Dump Clock Set

This function gains access to two levels of general parameters.

- First level: General MIDI, Channel Lock, Dynamic Keyboard, MIDI In Transpose.
- Second level: System Exclusive, System Exclusive I.D. number, WS Mode.

1/2 General MIDI (F1, F2)

This parameter enables General MIDI compatibility for the MIDI File load and save processes.

General MIDI compatibility is ON by default.

Check that this parameter is set to ON in the following situations:

- before loading a GM compatible MIDI file which does not contain the GENERAL MIDI ON flag.
- to save a Song as a perfectly GM compatible MIDI file (the General MIDI On flag is inserted in the file and the Program Changes of the drumkits are converted to Program Changes compatible with General MIDI).
- while working with an external sequencer and wish to use the standard General MIDI Program Changes.

The table below shows the drumkit Program Changes according to the status of the parameter.

When General MIDI is off, **P51500** becomes a non GM compatible instrument, rendering it more flexible by allowing communication with non-GM instruments.

MIDI channel 10, General MIDI On - automatic conversion						
PC GM	PC-BS P51500	Drumkit GM	Drumkit P51500			
18	113-2	Standard	STAND.1			
918	114-2	Room	ROOM			
1724	115-2	Power	POWER			
25	116-2	Electronic	ELECTR			
2632	117-2	TR-808	HOUSE			
3340	118-2	Jazz	JAZZ1			
4148	119-2	Brush	BRUSH			
49128	120-2	Orchestra	ORCHES			

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MIDI Edit functions

Use the standard Edit procedure. Press ESCAPE to return to the main display.

1/2 MIDI SET: [GENERAL MIDI] G.Midi=On Lock=Off DynKb=On TrsIn=Off MIDI SET: General MIDI

Assignable values: Off, On.

1/2 Channel Lock (F3, F4)

When selected, this option locks the MIDI configuration of the tracks of the current Preset for all Presets, both in transmission as well as reception. The individual Preset MIDI configurations are overridden.

MIDI Lock is useful to conserve a MIDI configuration in cases when, for example, you load a Song containing a complex Preset which could alter your MIDI setup.

When Channel Lock is off, you can configure the MIDI channels of each Preset independently.

Use the standard Edit procedure. Press ESCAPE to return to the main display.

1∕2 MIDI SE	T: [CHANNEL LOCK]	
G.Midi=On	Lock=Off DynKb=On	TrsIn=Off

MIDI SET: Channel Lock

Assignable values: Off, On.

1/2 Dynamic Keyboard (F5, F6)

This parameter enables or disables the reception of velocity data via MIDI.

The default setting is ON.

Set this parameter to Off if you use **P51500** as a slave device and prefer to play on the controlling device without velocity.

Use the standard Edit procedure. Press ESCAPE to return to the main display.

1/2 MIDI SET: [DYNAMIC KEYBOARD] G.Midi=On Lock=Off DynKb=On TrsIn=Off MIDI SET: Dynamic Keyboard

Assignable values: Off, On.

1/2 Transpose In

This parameter enables/disables the reception via MIDI of transposition data.

Deactivating this parameter can be useful to avoid unwanted transpositions when you programme Songs with a computer.

A computer operates as a THRU device. After receiving data by a **P51500** track which has been transposed, the computer can return the notes to the same track which will transpose them further. This will not occur if MIDI IN Transpose is deactivated.

The default setting is Off.

Set this parameter to On if **P51500** is to receive Transpose data from an external controlling device.

Use the standard Edit procedure. Press ESCAPE to return to the main display.

1/2 MIDI SET: [MIDI IN TRANSPOSE] G.Midi=On Lock=Off DynKb=On TrsIn=Off MIDI SET: MIDI In Transpose

Assignable values: On, Off.

2/2 System Exclusive (F1, F2)

Press PAGE+ to enter the second level of MIDI SET parameters.

This parameter enables/disables the transmission and reception of system exclusive messages.

At the time of writing, **P51500** has been implemented with the following Sys Ex possibilities:

Edit MIDI 12•13

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Data Dump transmission/reception;

General MIDI On/Off compatibility

Master Volume

Use the standard Edit procedure. Press ESCAPE to return to the main display.

2/2 MIDI SET: CSYSTEM EXCLUSIVE] Sys.Ex=Off Sys.Ex.Id=00 WS Mode=Off MIDI SET: System Exclusive

Assignable values: On, Off

Note: Future P51500 Software updates will implement additional Sys. Ex possibilities. System Exclusive data can control the editing parameters of the instrument, and can cause radical changes in the way P51500 operates. These messages are widely used in the most recent MIDI files, to send editing messages before the start of a Song.
 Note: To transmit and receive system exclusive messages, connect both MIDI IN and MIDI OUT of P51500 to the MIDI OUT and MIDI IN respectively of the external sequencer (commonly known as the «Closed MIDI Loop» connection).

2/2 System Exclusive ID # (F3, F4, F5)

Specifies the **P51500** Identification number for the reception of system exclusive messages. The ID number permits the identification of instruments of other manufacturers in a MIDI chain.

Use the standard Edit procedure. Press ESCAPE to return to the main display.



Assignable values: 00 ... 127

2/2 WS Mode (F6, F7, F8)

This parameter, when On, configures **P51500** in order to be able to interface with the previous Series WS instruments.

In order to communicate correctly with WS Series instruments, set this parameter to ON.

If WS Mode is set to Off, **P51500** will not be able to communicate correctly with WS Series instruments.

Use the standard Edit procedure. Press ESCAPE to return to the main display.

2/2 MIDI SET: [WS MIDI STATUS MODE] Sys.Ex=Off Sys.Ex.Id=00 WS Mode=Off MIDI SET: WS MIDI Status Mode

Assignable values: On, Off

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Mixer

Press MIXER in the Edit Preset section to enter «Edit Mixer» where you can balance the volumes and pan settings of the tracks of a Preset.

► Note: Save changes applied to the Preset parameters of Edit Mixer to the current Preset with STORE PRESET. + ENTER.

1/2 VOLUME

This function allows you to balance the individual volumes of tracks 01-08 of the current Preset. Use Track Select to access tracks 09-16.

Use the SLIDERS or the DIAL to change the parameter value.

To use the DIAL, first select the track with the corresponding Function button.

1/2 MIXER: UOLUME [Tk08] 127 117 99 88 77 62 84 86 MIXER: Volume

Assignable values: 0 ... 127.

Press ESCAPE or MIXER to exit Edit Mixer.

Press STORE PRESET + ENTER to store the settings to the current Preset.

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Edit Mixer 12•15

2/2 PAN

Press PAGE + to advance to page 2.

This function allows you to modify the individual track positions in the stereo panorama of tracks 01-08 of the current Preset. Use Track Select to access tracks 09-16.

Use the Sliders or the DIAL to change the parameter value.

To use the DIAL, first select the track with the corresponding Function button.

Move the sound to the left (L), to the right (R), set it to the centre (C) or mute the track (Mute).

By moving the Pan all to the left or all to the right, you can direct the sound assigned to the selected track to one audio output instead of both stereo outputs.

If a Drumkit is assigned to a track, the Pan sets automatically to LOCK and cannot be modified. A Drumkit is automatically locked at the centre.



MIXER: Pan

Assignable values: L=31 (all to the left) ... $\emptyset\emptyset$ (center) ... R= 31 (all to the right), Mute.

Press ESCAPE or MIXER to exit Edit Mixer.

Press STORE PRESET + ENTER to store the settings to the current Preset.

To Lock the programmed Mixer settings

Use the front panel MIXER LOCK button to lock your MIXER settings. Refer to the Styles chapter 5 for information regarding MIXER LOCK.

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Pan

Sound

The **P51500** «Edit Sound» section is a 'macro edit' facility which permits the rapid modification of several Sound parameters.

The modifications relate to the Sound, therefore, by means of the Sound Edit parameter in Edit Preset, you can choose to assign the original Rom sound or the edited version to a track of a Preset, Style, Song/Style or Song.

A Preset can memorize only one edited version of the same Sound. It is possible, however, to memorize a different edited version of the same Sound to a different Preset. Up to 8 edited Sounds (including a Drumkit) can be stored to a Preset.

If you change the status of the Sound parameters of a previously edited Sound assigned to the current Preset, the new values will cancel the old, but a different version of the same Sound stored in a different Preset will remain intact.

SINGLE AND LAYERED SOUNDS

P51500's 32 oscillators are exploited in two different ways to generate "Single" and "Layered" Sounds.

"Single" Sounds are characterized by the use of a single oscillator. The instrument's 32 oscillators are, therefore, fully exploited and the resulting sounds have a maximum polyphony of 32 notes when played alone.

"Layered" Sounds are generated by two oscillators. **P51500**'s 32 oscillators are, therefore, exploited at half their maximum capacity with the result that the maximum polyphony of a Layered sounds is halved (16) when played alone.

SWITCH SOUNDS

The **P51500** Rom-Sounds include "Switch" Sounds which incorporate a "dynamic switch". These type of sounds trigger a different sound by playing harder.

DRUMKITS

The **P51500** Rom Sounds also include the Drumkits. Although billed as a single Sound, a Drumkit is a percussive sound map consisting of a different percussive instrument assigned to each note of the keyboard. This type of Sound occupies Banks 2 and 3 of the Percussive Sound Groups.

The Drumkit parameters are not those of Rom Sounds and the editing methods differ slightly, therefore, Drumkit editing is discussed separately in the next chapter.

HOW EDITED SOUNDS ARE IDENTIFIED

Edited Sounds are displayed with the letter "E" as a prefix before the name or Program Change number.

If **P51500** is currently set to normal conditions, the Upper 1, Upper 2 or Lower tracks will display an assigned edited Sound with the prefix **a**.

Bk	1	:	S	Т	R	Ι	NG	
Bk	1	:[P	Ι	A	N	0	

In the first page of Edit Preset, any tracks assigned an edited Sound are shown with the prefix "E" before the Program Change.

1/9	PR	E	S	E	Т	:	P
= 48		1	5				2

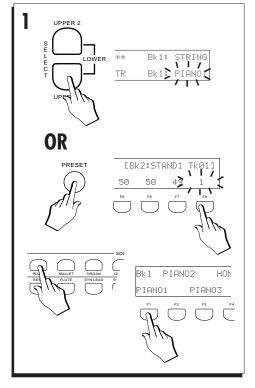
Edit Sound 12•17

THE STANDARD SOUND EDIT PROCE-DURE:

1. Assign the Sound you wish to edit to a selected track.

If you are in Style/Preset mode, select either Upper 1, Upper 2 or Lower with the selection buttons.

If you are in Style, Song/Style or Song mode, enter Edit Preset and select a track with the corresponding Function button.

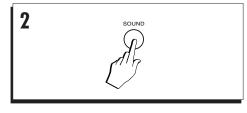


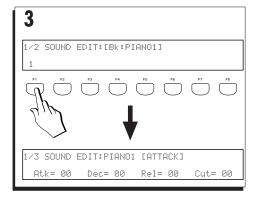
2. Press SOUND in the EDIT PRESET section to enter «Edit Sound».

The display opens the first Sound Edit page showing the Program Change number relating to the selected Sound.

3. Select the Program Change number with the corresponding Function button.

The display enters into the first page of Sound parameters.



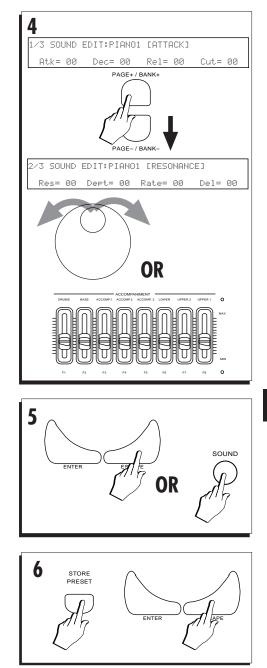


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4. Modify the parameters as required.

Use the Function button to select the parameter and the Dial or corresponding slider to modify the parameter value.

Press PAGE + to enter the second level page of parameters.



5. Press ESCAPE to return to the previous level or

SOUND to escape from «Edit Sound».

6. Save the modifications to the current Preset by pressing STORE PRESET and the ENTER button.

STORE PRESET can also be used while you are still in edit.

► Note: If you fail to store your modifications, they will be irremediably lost when you select another Preset, or reselect the same one.

Edit Sound 12-19

The Sound parameters

Once you enter Sound Edit with the selected Sound, press the Function button corresponding to the °Programù change number (Sound in edit) to enter the Sound parameters.

The parameters reside on two levels.

The Sound Edit parameters also include the Clear All and Clear "Sound in Edit" functions, discussed afterwards.

1/2 ATTACK (F1, F2)

Represents the attack phase of the sound.

This parameter modifies the time taken (rate) for the sound to pass from the silent state to maximum volume when a note is pressed. The modifications are expressed in relative values, subtracting or adding them to the normal attack of the Sound.

Use the standard Sound edit procedure. Press ESCAPE to return to the previous page, or SOUND to exit Edit Sound.

```
1/3 SOUND EDIT:PIANO1 [ATTACK]
```

Atk= 00 Dec= 00 Rel= 00

SOUND EDIT: Attack

Assignable values: -63 (maximum rate) ... 0 (unchanged) ... +63 (minimum rate).

Cut= 00

Press STORE PRESET + ENTER to store the modifications to the current Preset.

1/2 Decay (F3, F4)

Represents the decay phase of the Sound.

This parameter modifies the time taken (rate) for the sound to pass from its maximum volume level to silence after the attack phase. The modifica-

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tions are expressed in relative values, subtracting or adding them to the normal decay of the Sound.

Use the standard Sound edit procedure. Press ESCAPE to return to the previous page, or SOUND to exit Edit Sound.

1/3 SOUND	EDIT:PIAN01	[DECAY]	
Atk= 00	Dec= 00	Rel= 00	Cut= 00
SOUND EDIT:	Decay		

noond Edit. Dollay

Assignable values: -63 (maximum rate) ... 0 (unchanged) ... +63 (minimum rate).

Press STORE PRESET + ENTER to store the modifications to the current Preset.

1/2 Release (F5, F6)

Represents the release phase of the Sound. This parameter modifies the time taken (rate) for the sound to pass to total silence after note release. The modifications are expressed in relative values, subtracting or adding them to the normal release of the Sound.

Use the standard Sound edit procedure. Press ESCAPE to return to the previous page, or SOUND to exit Edit Sound.

1∕3 SOUND EDIT:PIANO1 [RELEASE] Atk= 00 Dec= 00 Rel= 00 Cut= 00

SOUND EDIT: Release

Assignable values: -63 (maximum rate) ... 0 (unchanged) ... +63 (minimum rate).

Press STORE PRESET + ENTER to store the modifications to the current Preset.

1/2 Filter Cutoff (F7, F8)

Modifies the cutoff frequency.

Changes the frequency at which the filter intervenes on the sound. The action of the filter varies according to the filter incorporated in the Sound.

Use the standard Sound edit procedure. Press ESCAPE to return to the previous page, or SOUND to exit Edit Sound.

1/3 SOUND	EDIT:PIAN01	EFILTER	CUTOFF]
Atk= 00	Dec= 00	Rel= 00	Cut= 00

SOUND EDIT: Filter Cutoff

Assignable values: -63 (maximum decrease of the cutoff frequency) ... 0 (unchanged) ... +63 (maximum increase of the cutoff frequency).

Press STORE PRESET + ENTER to store the modifications to the current Preset.

2/2 Resonance (F1, F2)

Press PAGE + to enter level 2.

Resonance creates a peak of emphasis at the cutoff frequency to the point of sending it in "auto-oscillation".

The higher values of resonance produce effects that were common in the analog synths.

Use the standard Sound edit procedure. Press ESCAPE to return to the previous page, or SOUND to exit Edit Sound.

			EDIT:PI					
Re	es=	00	Dept=	00	Rate=	00	Del=	00

SOUND EDIT: Resonance

Assignable values: -63 (least intensity) ... 0 (unchanged) ... +63 (highest intensity).

► Note: The higher values of resonance causes the filter to enter into "auto-oscillation". If used wisely, the auto-oscillation can create very suggestive synthetic sounds, but can also increase the output level excessively causing disturbing distortion.

Press STORE PRESET + ENTER to store the modifications to the current Preset.

2/2 LFO Depth (F3, F4)

«LFO Depth» determines the depth of the action of the Low Frequency Oscillator, and, therefore, its audibility.

Use the standard Sound edit procedure. Press ESCAPE to return to the previous page, or SOUND to exit Edit Sound.

2/3 SOUND	EDIT: PIANO:	1 ELFO	DEPTH	-13			
Res= 00	Dept= 00	Rate=	00	Del=	00		
SOUND EDIT: LFO Depth							

Assignable values: -63 (minimum rate) ... 0 (unchanged) ... +63 (maximum rate).

Press STORE PRESET + ENTER to store the modifications to the current Preset.

2.2 LFO Rate (F5, F6)

The Low Frequency Oscillator is normally used to produce vibrato.

The «LFO Rate» parameter determines the velocity of the oscillation.

Use the standard Sound edit procedure. Press ESCAPE to return to the previous page, or SOUND to exit Edit Sound.

2/3 SOUND EDIT:PIANO1 [LFO RATE] Res= 00 Dept= 00 Rate= 00 Del= 00

SOUND EDIT: LFO Rate

Assignable values: -63 (minimum rate) ... 0 (unchanged) ... +63 (maximum rate).

Press STORE PRESET + ENTER to store the modifications to the current Preset.

Edit Sound 12-21

Sound parameters

2/2 LFO Delay (F7, F8)

Determines the delay of the entry of the LFO.

In acoustic instruments, vibrato generally enters after the attack phase, and mainly forms part of the sustain phase of the sound.

Use the standard Sound edit procedure. Press ESCAPE to return to the previous page, or SOUND to exit Edit Sound.

2/3 SOUND EDIT:PIANO1 [LFO DELAY] Res= 00 Dept= 00 Rate= 00 Del= 00

SOUND EDIT: LFO Delay

Assignable values: -63 (minimum rate) ... 0 (unchanged) ... +63 (maximum rate)..

Press STORE PRESET + ENTER to store the modifications to the current Preset.

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SOUND EDIT FULL

Once you have edited 8 Sounds (or 7 + 1 Drumkit), an attempt to edit another Sound activates a message which permits you to enter into edit of the new Sound by cancelling one of the existing edited ones.

EDIT SOUND FULL! PRESS F1 AND SELECT SOUND TO CLEAR

1. Press F1

The display shows the Program Changes of the 8 edited Sounds currently stored to the Preset.

2. Select the edited Sound that you wish to clear.

Use the corresponding Function button.

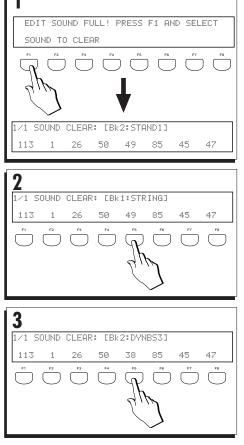
The display shows the name of the edited Sound that you are about to substitute. If you chage your mind, you can select a different one.

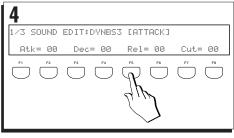
3. Press the same Function button again to assign the new Sound to edit.

The edited Sound is cancelled and the new Sound that you wish to edit is inserted.

4. Press the same Function button once more to enter into the Sound parameters.

Edit the sound as already described.





Edit Sound 12•23

Clear Sound and Clear All

The Sound Edit parameters incorporate two options that allow you to restore edited Sounds memorized to a Preset to their original Rom status:

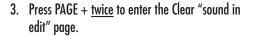
- Clear "name of sound" to restore the Rom parameter status of a Single sound assigned to a track of the current Preset.
- Clear All to restore all edited Sounds stored in the current Preset to their original status in a single step.

In both cases, all other edited Sounds memorized to other Presets remain unchanged.

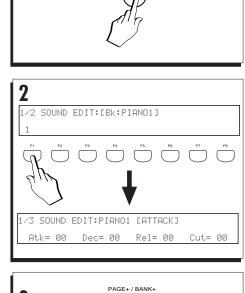
3/3 CLEAR "SOUND" (F3, F4, F5, F6)

This page is accessed from the second level page of the Sound parameters.

- 1. Press SOUND to enter Edit Sound.
- 2. Select the Sound in edit to enter the Sound Parameters on the first level.



The CLEAR display shows the name of the Sound currently in edit.



SOUND

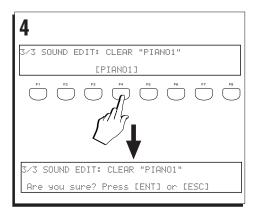
1



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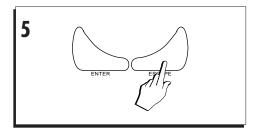
 Select the Sound with the corresponding Function button.

You are prompted with a request to confirm or abort the operation.



 Press ENTER to confirm the cancellation of the edited Sound and restore the original Rom parameter status.

Press ESCAPE to abort the operation and maintain the edited Sound to the current Preset.



ENTER

6

STORE PRESET

6. Store the modified status to the current Preset.

If you fail to save the new situation to the current Preset, the edited Sound will be restored if you turn **P51500** off then on again, or if you reselect the same Preset or a different one. Remember, whatever changes you make to a Preset must be stored to the same Preset.



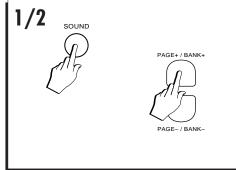
.

Clear All

2/2 CLEAR ALL (F3, F4, F5, F6)

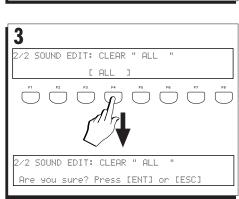
This page is accessed from the main Sound Edit page which opens after pressing SOUND.

- 1. Press SOUND to enter Edit Sound.
- 2. Press PAGE + once to enter the CLEAR ALL page.



3. Select [ALL] with the corresponding function buttons.

You are prompted with a request to confirm or abort the operation.

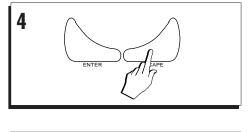


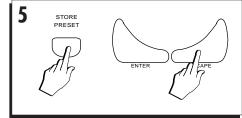
4. Press ENTER to confirm the cancellation of the edited Sounds to restore their original Rom parameter status.

Press ESCAPE to abort the operation and maintain the edited Sounds memorized to the current Preset.

5. Store the modified status to the current Preset.

If you fail to save the new situation to the current Preset, the edited Sound will be restored if you turn **P51500** off then on again, or if you reselect the same Preset or a different one. Remember, whatever changes you make to a Preset must be stored to the same Preset.





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• Drumkit editing

The **P51500** «Edit Sound» section includes facilities to edit the **P51500** Drumkits using 'macro edit' methods which permit the rapid modification of up to four Percussive instrument sounds. Each Preset can store one modified Drumkit among the 8 permitted edited Sounds.

As for the Edit Sound facility, the modifications relate to the Drumkit, therefore, by means of the Sound Edit parameter in Edit Preset, you can choose to assign the original Rom Drumkit or the edited version to a track. Up to a maximum of four percussive instrument sounds of a Drumkit can be edited and only one edited Drumkit can be memorized to a Preset.

It is possible, however, to memorize a different edited version of the same Drumkit to a different Preset.

You can change the parameter status of an edited Drumkit or replace the Drumkit with a completely different edited Sound, but the same edited Drumkit stored in a different Preset will remain intact.

Presets which contain a modified Drumkit are identified by the prefix " " " before the Drumkit Program Change shown in the Edit Preset Program page:

1/9	PF	RESE	T:P
E 11	3	15	2

DRUMKITS

In a Drumkit, a percussive instrument is assigned to each note of the keyboard. This allows a Drumkit to be controlled across a single MIDI channel.

This type of Sound occupies Banks 2 and 3 of the Sound Groups.

Dynamic switch

Some Percussive sounds incorporate a second sound on a higher dynamic level. The second sound is triggered by playing the relative note harder.

The Edit Drumkit facility is not able to edit separately the drum sounds containing a dynamic switch. The parameters affect both sounds simultaneously.

Edit Drumkit 12•27

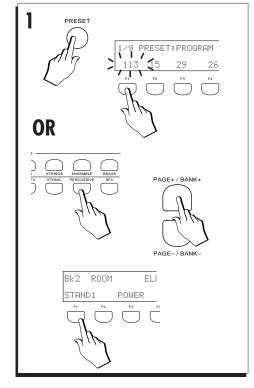
.

THE EDIT DRUMKIT PROCEDURE

The procedure varies slightly with respect to the Edit Sound method and the relative parameters are completely different.

1. Select the Drum track.

Enter Edit Preset and select the Drum track with the corresponding Function button. If a Drumkit is not assigned to one of the tracks, assign one using the assignment methods already described.

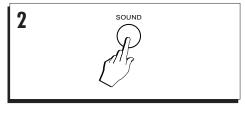


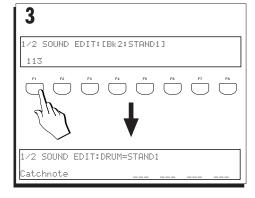
2. Press SOUND in the EDIT PRESET section to enter «Sound Edit» of the assigned Drumkit.

The display opens the first Sound Edit page showing the Program Change number relating to the selected Drumkit.

3. Select the displayed Drumkit Program Change number with the corresponding Function button.

The display enters the first level page showing the "CATCHNOTE" function.





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4. Select CATCHNOTE

Use either F1 or F2.

You are prompted to "PRESS A KEY" corresponding to the percussive instrument you wish to edit.

Refer to the Drumkit tables in the Appendix for a map of the percussive sounds assigned to the keyboard.

5. Press a key.

The note pressed is displayed.

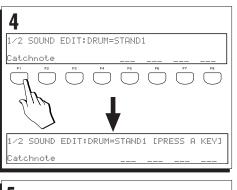
6. Select the displayed note.

The display enters the first level of drumkit parameters.

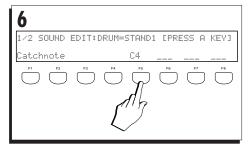
7. Modify the parameters as required.

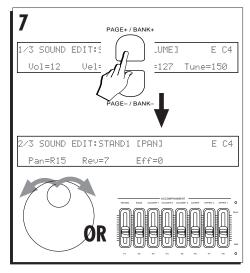
Use the Function button to select the parameter and the Dial or corresponding slider to modify the parameter value.

Press PAGE + to enter the second level page of parameters.



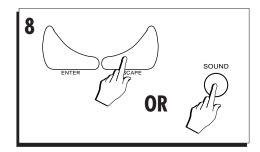






Edit Drumkit 12•29

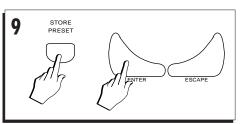
8. Press ESCAPE to return to the previous level or SOUND to escape from «Edit Sound».



9. Save the modifications to the current Preset with STORE PRESET. + ENTER

STORE PRESET can also be used while you are still in edit.

Note: If you fail to store your modifications, they will be irremediably lost when you select another Preset, or reselect the same one. The modifications will also be lost if you press the START/STOP, PLAY or STOP buttons.



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The Drumkit parameters

1/2 CATCHNOTE (F1, F2)

Activates the "PRESSAKEY" function with which you can capture the note to place in edit by playing it on the keyboard.

1/2 SOUND	EDIT:DRUM=STAND1		
Catchnote		 	

1. Press Catchnote. The message «Press a key» appears.

1/2	SOUND	EDIT:DRUM=STAN	ID1 EPRE	SS A	KEY]
Cat	chnote				

2. Play the note to place in edit.

The note is assigned to one of the four available slots.

1/2 SOUND EDIT:DRUM=STAND1 [PRESS A KEY] Catchnote C4 ___ ___

The «Press a key» message remains. If you want to change note, simply press another.

3. Select the assigned note to enter the edit of the percussive sound.

The display enters the first page of drumkit parameters.

1/3 VOLUME (F1, F2)

Determines the volume of the note in edit.

This parameter can be useful to balance Sounds which differ greatly in volume.

The values are expressed as relative values, subtracting or adding them to the normal value of the parameter. Use the standard Drumkit edit procedure.

1/3 SOUND	EDIT: STAN	D1 [VOLUME]	E C4	
Vol=12	Vel=7	Bril=127	Tune=150	
SOUND EDIT: Stand1 [Volume]				

Assignable values: 0 ... 16

Press ESCAPE to return to the previous page, or SOUND to exit Edit Sound.

Press STORE PRESET + ENTER to store the modifications to the current Preset.

1/3 VELOCITY (F3, F4)

Determines how the volume of the percussive sound responds to velocity changes (changes in the keystrike velocity).

The higher values render the percussive sound more sensitive to velocity changes, therefore, the harder you play, the louder the sound.

The value 0 is equivalent to no response to changes in the keystrike velocity. The sound plays with the maximum assigned volume regardless of the keystrike velocity used.

Use the standard Drumkit edit procedure.

1/3 SOUND EDIT: STAND1 [VELOCITY] E C4 Vol=12 Vel=7 Bril=127 Tune=150 SOUND EDIT: Stand1 [Velocity]

Assignable values: 0 . . . 7.

Press ESCAPE to return to the previous page, or SOUND to exit Edit Sound.

Press STORE PRESET + ENTER to store the modifications to the current Preset.

Edit Drumkit 12•31

1/3 BRILLIANCE (F5, F6)

Affects the Brilliance of the sounds, causing an increase in the brightness or rendering the sound more mellow.

Use the standard Drumkit edit procedure.

Vol=12	Vel=7	Bril=127	Tune=	150
SOUND EDIT: 1			rune-	100

Assignable values: 0 . .. 127

Press ESCAPE to return to the previous page, or SOUND to exit Edit Sound.

Press STORE PRESET + ENTER to store the modifications to the current Preset.

1/3 TUNE (F7, F8)

A high resolution fine tune parameter.

Fine tine a percussive sound to render the sound more natural.

Use the standard Drumkit edit procedure.



Assignable values: 0 . .. 255

Press ESCAPE to return to the previous page, or SOUND to exit Edit Sound.

Press STORE PRESET + ENTER to store the modifications to the current Preset.

2/3 PAN (F1, F2)

Press PAGE+ to enter level 2.

Determines the position of the percussive sound within the stereo panorama.

Move the sound to the left (L), to the right (R), set it to the centre (C) or mute the sound (Mute).

Use the standard Drumkit edit procedure.



SOUND EDIT: Stand1 [Pan]

Assignable values: L31 (all to the left) ... 00 (centre) ... R31 (all to the right), Mute.

Press ESCAPE to return to the previous page, or SOUND to exit Edit Sound.

Press STORE PRESET + ENTER to store the modifications to the current Preset.

2/3 REVERB (F3, F4)

Reverb send which controls the amount of Reverb applied to the percussive sound. The Reverb applied corresponds to the type currently selected in the Reverbs DSP.

Zero level corresponds to the pure percussive sound (Dry).

Increasing the parameter value increases the amount of Reverb applied, altering the Wet/Dry ratio until the percussive sound is fully effected (Wet).

Check that the Reverbs button in the DSP section is active (led on) to hear the changes applied to the parameter.

Use the standard Drumkit edit procedure.



SOUND EDIT: Stand1 [Reverb]

Assignable values: 0 ... 15.

Press ESCAPE to return to the previous page, or SOUND to exit Edit Sound.

Press STORE PRESET + ENTER to store the modifications to the current Preset.

2/3 EFFECT (F5, F6)

Effect send which controls the amount of Effect (modulated effects) applied to the percussive

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sound. The Effect applied corresponds to the type currently selected in the Effects DSP.

Zero level corresponds to the pure percussive sound (Dry).

Increasing the parameter value increases the amount of Effect applied, altering the Wet/Dry ratio until the percussive sound is fully effected (Wet).

Check that the Effects button in the DSP section is active (led on) to hear the changes applied to the parameter.

Use the standard Drumkit edit procedure.



SOUND EDIT: Stand1 [Effect]

Assignable values: 0 ... 15.

Press ESCAPE to return to the previous page, or SOUND to exit Edit Sound.

Press STORE PRESET + ENTER to store the modifications to the current Preset.

DRUMKIT EXISTS

Once you have edited 4 percussive Sounds of your Drumkit, you cannot edit other notes. Attempting to do so produces no results.

If you attempt to edit another Drumkit assigned to the current Preset, the display warns you that the edited Sounds memorized to the current Preset already contains a Drumkit.

DRUMKIT EXISTS : REPLACE (ENT) OR EXIT (ESC)

If the current Preset already contains 8 edited Sounds, and you to attempt to edit a Drumkit, a warning activates informing you that the Sound Edit is full. At this point, you can replace one of the edited Sounds with the Drumkit that you wish to edit.

```
EDIT SOUND FULL! PRESS F1 AND SELECT
```

See page 23 of the Sound Edit chapter for full details.

Edit Drumkit 12•33

Erase "Drumkit" and Clear "Drumkit"

The Drumkit Edit parameters incorporate two options that allow you to restore the edited Drumkit memorized to a Preset to the original Rom status:

- Erase "Drumkit" to restore the Rom parameter status of a single percussive sound of the Drumkit assigned to the current Preset.
- Clear "Drumkit" to restore the Rom parameters status of all the edited percussive sounds (4) of the Drumkit assigned to a Preset.

In both cases, all other edited Drumkit memorized to other Presets remain unchanged.

3/3 ERASE "DRUMKIT" [KEY=XX] (F3, F4, F5, F6)

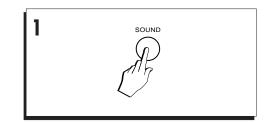
This page is accessed from the second level page of the Drumkit parameters for the note in edit.

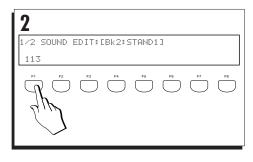
- 1. Press SOUND to enter the Edit of the Drumkit.
- 2. Select the displayed Drumkit Program Change with the corresponding Function button.

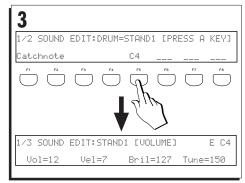
The display enters the first level page showing the "CATCHNOTE" function.

Select the note you wish to erase to enter the edit of the percussive sound.

The display enters the first level of drumkit parameters.







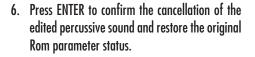
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 Press PAGE + twice to enter the Erase "Key= [note]" page.

The ERASE display shows the name of the Note corresponding to the percussive sound in edit.

 Select the [Key=] parameter with the corresponding Function button.

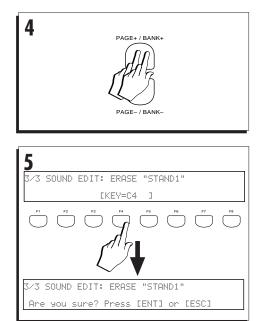
You are prompted with a request to confirm or abort the operation.

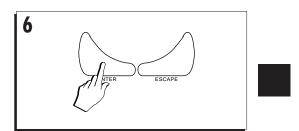


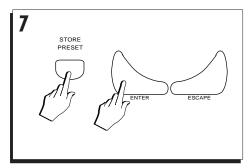
Press ESCAPE to abort the operation and maintain the edited percussive sound to the current Preset.

7. Store the modified status to the current Preset by pressing STORE PRESET + ENTER.

If you fail to save the new situation to the current Preset, the edited percussive will be restored if you turn **P51500** off then on again, or if you reselect the same Preset or a different one. Remember, whatever changes you make to a Preset must be stored to the same Preset.









Clear Drumkit

2/2 CLEAR "DRUMKIT" (F3, F4, F5, F6)

This page is accessed from the main Drumkit Edit page which opens after pressing SOUND.

- 1. Press SOUND to enter Edit Drumkit.
- 2. Select the displayed Drumkit Program Change with the corresponding Function button.

The display enters the first level page showing the "CATCHNOTE" function.

 Press PAGE + once to enter the CLEAR 'Drumkit" page.

The name of the Drumkit in edit is shown.

 Select the name of the Drumkit with the corresponding function buttons.

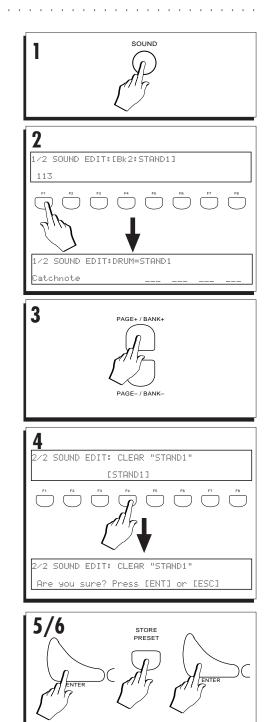
You are prompted with a request to confirm or abort the operation.

 Press ENTER to confirm the cancellation of the edited percussive sounds and restore the original Rom Drumkit.

Press ESCAPE to abort the operation and maintain the edited percussive sounds of the Drumkit memorized to the current Preset.

6. Store the modified status to the current Preset by pressing STORE PRESET + ENTER.

If you fail to save the new situation to the current Preset, the edited Drumkit will be restored if you turn **P51500** off then on again, or if you reselect the same Preset or a different one. Remember, whatever changes you make to a Preset must be stored to the same Preset.



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• 13 General

In «Edit General» you can modify global parameters that affect the instrument as a whole. The status of the general parameter settings are conserved in RAM.

EDITING THE GENERAL PARAMETERS

The procedure required to change the General parameters is analogous to all other parameter selecting procedures and data entry methods.

The «Edit General» parameters are spread across 5 Edit pages.

1. Press GENERAL to enter «Edit General».

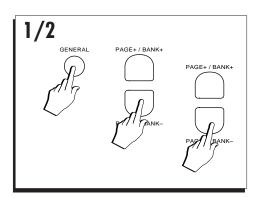
The currently selected parameter is shown flashing.

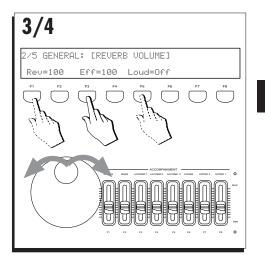
- Scroll through the edit pages with the PAGE+/ PAGE- buttons.
- 3. Select the parameters with the corresponding Function buttons.
- 4. Modify the parameter value or status.

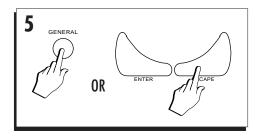
Use the DIAL or, where enabled, the corresponding Slider.

On/Off parameters can be toggled with the corresponding Function button.

5. Press ESCAPE to close the Edit General window.







Edit General 13•1

Page 1/5 - MIC/LINE

These parameters allow you to control the signals fed into the Mic/Line Input, applied to the Sampling function available with the Audio/Video Interface.

INPUT... (F1, F2)

Enables or disables the reception of the signal fed into the Mic/Line Input. Use the Function button F1 or F2 to toggle between the On and Off status. The setting is memorized to RAM after turning off the instrument.

Assignable values: On, Off

BRILLIANCE... (F3, F4)

Regulates the timbric quality of the signal fed into the Mic/Line Input, making the signal brighter or mellower.

Rotate the DIAL or use sliders F3 or F4 to change the parameter value.

Assignable values: 00 ... 127

REVERB... (F5, F6)

Routes the signal fed into the Mic/Line Input to the Reverb DSP.

Rotate the DIAL or use sliders F5 or F6 to change the parameter value.

Assignable values: 00 ... 15

EFFECT... (F7, F8)

Routes the signal fed into the Mic/Line Input to the Effect DSP.

Rotate the DIAL or use sliders F7 or F8 to change the parameter value.

Assignable values: 00 ... 15

1/5 GENERAL:	EMIC/LINE	INPUTI	
Input=Off	Bril=127	Rev=08	Eff=11

Edit General - Mic/Line controls

13•2 Reference Guide

Page 2/5 - General Reverb, Effect and Loudness

These parameters allow you to regulate the general level of the Reverbs and Effects volumes and activate the Loudness function.

REVERB VOLUME... (F1, F2)

Renders the overall Reverb volume of the instrument more or less intense.

Rotate the DIAL or use sliders F1 or F2 to change the parameter value.

Assignable values: 00 ... 127

EFFECT VOLUME... (F3, F4)

Renders the overall Effect volume (modulated effects) of the instrument more or less intense.

Rotate the DIAL or use sliders F3 or F4 to change the parameter value.

Assignable values: 00 ... 127

LOUDNESS.. (F5, F6)

Similar to the function of the same name found on home stereo units. When ON, it favours certain frequencies at low volume.

Toggle between the On and Off status with Function buttons F5 or F6 or use the DIAL.

Assignable values: On, Off

275 GENERAL		EREVERB	VOLUME]
Rev=100	Εf	`f=100	_oud=Off

Edit General - Reverb Volume

Edit General 13•3

Page 3/5 - Keyboard and Video controls

MASTER TUNING... (F1, F2)

Fine tunes the instrument as a whole in fractions of 1/64 of a semitone.

Rotate the DIAL to change the parameter value.

Assignable values: -63 ... 0 ... +63

VIDEO COLOR SETUP.. (F4, F5)

Allows the selection of a background color when viewing Song Lyrics on an external monitor connected to the Video Interface.

Rotate the DIAL to change the parameter value.

Assignable values: 01, 02, 03, 04

VIDEO SELECT.. (F7, F8)

Allows you to select from two Video communication standards: USA - NTSC system and Europe - PAL system. For U.S.A. video systems, **P51500** is set to NTSC be default. If **P51500** is to be used in Europe, change this parameter to PAL.

Rotate the DIAL to change the parameter status.

Assignable values: PAL, NTSC

3/5 GENERAL:	EMASTER TUNING]	
Tune= 00	Color=01	Mode=NTSC

.

Edit General - Master Tuning

13•4 Reference Guide

Page 4/5 - Parameters for the assignable pedals

The cable running from the Pedal assembly consisting of 3 pedals (Soft, Sostenuto, Damper) should be properly connected to the Pedals jack on the back of the instrument.

PEDAL 1... (F3, F4)

Assigns a switch-action function to the Soft pedal (the pedal on the left of the group).

Rotate the DIAL to select the pedalswitch function.

Assignable values: Soft, Start/Stop, Fill<, Fill><, Fill>, Intro, End, Key Start, Fade In/Out, Preset +, Preset –, min, 7th, Punch, Rotary.

DAMPER... (F7, F8)

Assigns a switch-action function to the "Damper" pedal (the pedal on the right of the group).

Rotate the DIAL to select the pedalswitch function.

Assignable values: Damper, Start/Stop, Fill<, Fill><, Fill>, Intro, End, Key Start, Fade In/Out, Preset +, Preset –, min, 7th, Punch, Rotary.

PEDAL 2... (F5, F6)

Assigns a switch-action function to the Sostenuto pedal (the central pedal of the group).

Rotate the DIAL to select the pedalswitch function.

Assignable values: Sostenuto, Start/Stop, Fill<, Fill><, Fill>, Intro, End, Key Start, Fade In/Out, Preset +, Preset –, min, 7th, Punch, Rotary.

4/5 GENERAL:	[PEDAL 1]	
P1=Soft	P2=Sosten	P3=Damper

Edit General - Pedal

Edit General 13•5

Page 5/5 - MIDI Connection enable

COMPUTER... (F1, F2, F3)

Enables or disables the Computer port for MIDI transmission via a serial cable.

When this parameter is set to OFF, the instrument's MIDI Interface is operative.

When set to ON, the MIDI interface is disabled and the instrument is enabled for connectoin to a computer, using one of the transmission parameters (PC1, PC2 or MAC).

Rotate the DIAL or toggle between the On and Off status with the corresponding Function button.

Assignable values: Off (MIDI Connection Enable), On (Computer connection enable).

PC1 (F4, F5) PC2 (F6, F7) MAC (F8)

Depending on the type of computer **P51500** connects to, the correct parameter must be set.

For IBM PC and compatibles, set either PC1 or PC2 according to the transmission velocity required.

For a Macintosh connection, select MAC.

Any of these settings for computer use disables the MIDI ports for transmission and reception.

5/5 GENERAL:	EMII	DI	CONNECTION	ENABLEJ
i 'manama sé maneni		PC1	PC2	MAC

Edit General - MIDI Connection Enable

.

13.6 Reference Guide

• 14 Edit DSP

Edit DSP (Digital Signal Processor) allows you to create user-programmed effects which can be saved to the Presets.

The tables at the end of this chapter list the values for each effect type of both Diginal Signal Processors (DSPs).

In chapter 9 ("The Digital Effects), you'll find detailed explanations regarding the selection of an Effect Type from each DSP.

This chapter discusses how to edit the effects.

HOW TO EDIT AN EFFECT

The method used is identical for both DSP types (Reverbs, Effects).

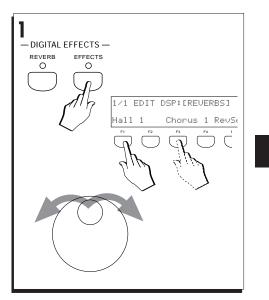
The parameter configurations differ depending on the effect type selected.

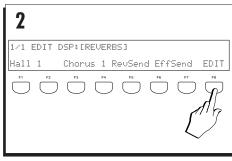
 Hold either the Reverb or Effects button pressed and select the effect that you wish to edit from the Edit DSP display.

Use the method already described in chapter 9.

2. Select EDIT in the display (F7/F8) to activate the Effects Editor.

This enters the edit of the currently selected effect type.





Edit Effects 14-1

3. Select the parameter to edit.

Use the corresponding Function buttons to select the parameters. The selected parameter is shown flashing.

The Reverb type shows a different set of parameters with respect to the Effects type.

4. Rotate the DIAL to modify the parameter value.

As you change value, play on the keyboard and listen to the change.

Note: If a change of sound is not heard, the relative DSP button is not selected (led off). Select it (led on).

5. Check that the current effect type is selected in the DSP section.

Press either REVERB or EFFECTS to activate the relative DSP that you are editing.

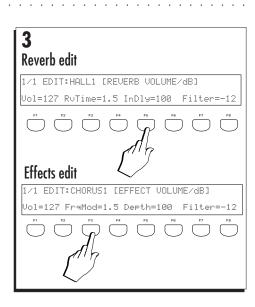
If the current effect type if off, you will not be able to listen to the applied changes by playing on the keyboard as you edit.

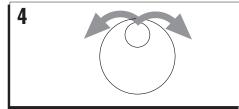
6. Press ESCAPE to exit the edit of the effect type.

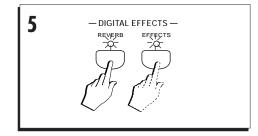
The display returns to the effect type selection page.

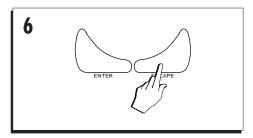
If you wish to edit the other effect type, repeat the procedure as described above.

.



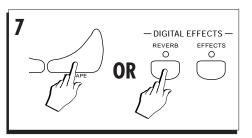






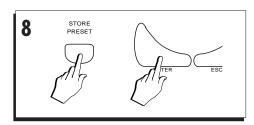
14•2 Reference Guide

7. Press ESCAPE or EDIT to exit the Edit DSP page.



8. Press STORE PRESET and ENTER to save the changes to the current Preset.

If you select a different Preset, or reselect the same Preset without saving the changes, the newly assigned effects will be lost and the original settings will be restored.



Edit Effects 14•3

THE REVERB PARAMETERS

Vol (Volume)

The level of the reverb signal. Assignable values: 0 (dry) ... 127 (wet).

Rev.Time (Reverb Time in seconds)

Decay time of the reverb.

Assignable values: 0.2 ... 11.2 Secs.

Init. Delay (Initial delay)

Initial delay between the emission of the original sound (dry signal) and the reverb (wet signal).

Assignable values: 0 ... 99 mSec.

Filt. (High or Low pass filter)

Determines the cutoff frequency of the filter.

Assignable values: 1 ... 16 KHz (H.P.), Off, 1 ... 16 (L.P.).

Room Size

Dimensions of the simulated room. The time lapse between the first reflection and the remainder of the reverb.

Assignable values: 0 ... 63 mSec.

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THE EFFECTS PARAMETERS

Vol (Volume)

The level of the effect signal. Assignable values: 0 (dry) ... 127 (wet)

L.P.Filter (Low Pass Filter)

Determines the cutoff frequency of the filter.

Assignable values: Off, 1 ... 16 (L.P.).

Delay (delays)

Velocity of the delay repetition. Assignable values: 0 ... 500 mSec.

Feedback (delays)

Interaction of the delay with itself. Determines the number of repetitions of the delay.

Assignable values: 0 ... 99 %.

Feedback (phasers and flangers)

Interaction of the phaser or flanger with itself. Determines the harmonic amount of the effect.

Assignable values: 0 ... 99 %.

Freq.Modul. (Frequency Modulation)

Modulation velocity of chorus and flanger effects.

Assignable values: 0 ... 6..0 Hz

Depth

Depth of the action of the effect. *Assignable values: 0 ... 100%.*

Speed (rotary)

Time required to pass from slow to fast or vice versa.

Assignable values: 0 ... 8 Sec.

Rotary

Slow/fast velocity. Assignable values: Slow, Fast.

Edit Effects 14•5

Effects Tables

Effect 1 - Reverbs				
1 Hall 1	Volume	Rev.Time [0 -	Delay [0 ms 99	H.F.Decay [1-16kHz]
	(0=dry, 127=Wet)	0.1s 99-10s]	ms]	
2 Hall 2	"	"		66
3 Hall 3	"	"		**
4 Warm Hall	**	"		66
5 Long Hall	"	**		**
6 Stereo Concert	"	"		56
7 Chamber	"	"		66
8 Studio Room 1	"	**	**	66
9 Studio Room 2	"	**		55
10 Studio Room 3	**	**		66
11 Club Room 1	**	**	55	**
12 Club Room 2	**	**		**
13 Club Room 3	**	**		**
14 Vocal	**	**		55
15 Metal Vocal	**	**		66
16 Plate 1	**	**	s s	66
17 Plate 2	"	**		**
18 Church	**	**	55	**
19 Mountains	**	**		66
20 Falling	**	**		66
21 Early 1	**	Room Size [0		L.P.Filter [0ff-bypass
		63]		1-16kHz]
22 Early 2	"	Room Size [0		L.P.Filter [0ff-bypass
		63]		1-16kHz]

1 Mono Delay 1	Volume	Delay [0-0ms	Feedback	L.P.Filter [0-bypass
	(0=Dry,	125-500ms]	(0%99%)	10-16kHz]
	127=Wet)	-	, ,	-
2 Mono Delay 2	"	"	"	"
3 Stereo Delay 1	"	"	"	"
4 Stereo Delay 2	"	"	"	"
5 Multitap Delay 1	"	"	"	"
6 Multitap Delay 2	"	"	"	"
7 Ping-pong	"	"	"	"
8 Panmix	"	Delay [0-0ms	Freq.Mod. [0 -	Feedback [0%
		125-500ms]	bypass 30-6kHz]	99%]
9 Chorus 1	"	Freq.Mod. [0-0kHz	Depth [0 100]	L.P.Filter [0-bypass
		30-6kHz]		10-16kHz]
10 Chorus 2	"	"	"	"
11 Ensemble 1	"	"	"	u
12 Ensemble 2	"	**	"	"
13 Phaser 1	"	Freq.Mod. [0-0Hz	Depth [0 100]	Feedback [0%
		30-6kHz]		99%]
14 Phaser 2	"	"	"	"
15 Flanger 1	"	Freq.Mod. [0-0kHz	Depth [0 100]	Feedback [0%
		30-6kHz]		99%]
16 Flanger 2	"	"	"	ű
17 ChorusDelay 1	"	Delay [0-0ms	Freq.Mod. [0-0Hz	Depth [0 100]
		125-500ms]	30-6kHz]	
18 ChorusDelay 2	"	"	"	"
19 FlangerDelay 1	"	Delay [0-0ms	Freq.Mod. [0-0Hz	Depth [0 100]
		125-500ms]	30-6kHz]	_
20 FlangerDelay 2	"	"	"	"
21 Dubbing	"	Delay [0-0ms	Feedback [0%	L.P.Filter [0-bypass
		125-500ms]	99%]	10-16kHz]
22 Rotary	"	Speed [1s 11s]	Rotary [slow/fast]	L.P.Filter [0-bypass
				10-16kHz]

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15 User Style recording

The USER 1-8 and USER 9-16 buttons of the STYLE/SONG GROUPS section recall User-programmable Styles, free locations that allow you to record your own Style arrangement patterns. Up to 16 User Styles can reside in memory, 8 in each User Group.

A new Style can be created by recording every part yourself, or by modifying a copy of an existing Style. This second option is discussed further ahead in the chapter.

User Styles can be loaded into memory from disk and saved to disk, as already explained in the Disk chapter 6 of the User Guide.

THE BASIC STRUCTURE OF A STYLE

Styles provide automatic accompaniments based on the system of chords. In particular, the Major, Minor and Seventh chords trigger three completely different arrangement patterns.

There are 4 Variations of the Major, minor and 7th and each Variation breaks down into several different elements: basic, Intro, Fill, Ending. These four elements form the basis of a structure consisting of 44 short sequences, or "Riffs", for each Style.

WHAT IS A RIFF?

A Riff is a musical motif capable of repetition (looping). It can also be expressed as a "phrase" or "lick", but it is important to understand that the Riff must be capable of repetition. In fact, when you play with Styles, you will note that the patterns are short repeating sequences. The table shown below lists all the Riffs that make up a Style.

The basic Riff is the principal pattern of the Style which repeats continually until stopped, or until it is "broken" by a Fill, Intro or Ending pattern.

The Fills, Intros and Endings are triggered by pressing the relative FILL, INTRO, or ENDING buttons.

A Riff can vary in length from one to sixteen measures (bars) long.

Each Riff consists of up to 5 Style tracks: Drum, Bass, Acc1, Acc2, Acc3.

Var1	Var2	Var3	Var4
Major1 basic	Major2 basic	Major3 basic	Major4 basic
Minor1 basic	Minor2 basic	Minor3 basic	Minor4 basic
7th1 basic	7th2 basic	7th3 basic	7th 4 basic
Fill1	Fill2	Fill3	Fill4
IntroMajor1	IntroMajor2	IntroMajor3	IntroMajor4
IntroMinor1	IntroMinor2	IntroMinor3	IntroMinor4
Intro7th1	Intro7th2	Intro7th3	Intro7th4
EndMajor1	EndMajor2	EndMajor3	EndMajor4
EndMinor1	EndMinor2	EndMinor3	EndMinor4
End7th1	End7th2	End7th3	End7th4

The Style Riffs

User Style recording 15•1

CREATING A USER STYLE

A User Style is created by recording the short sequences (Riffs). The idea is to "build" the Style by recording one or more variations of each Riff for one or more chord types.

For example, the complete Major Variation 1 arrangement pattern consists of the basic MajorVar1, Var1MajIntro, Var1MajEnding and Var1Fill riffs.

To create a new User Style, the **P51500** arranger is sufficiently flexible not to compel you to record all the riffs, since it is capable of reconstructing them starting from a few fundamental riffs. Nevertheless, the more riffs you record, the more sophisticated your Style becomes.

ENTERING STYLE RECORDING

When you enter User Style Record mode for the first time, the instrument sets to record 2 measures (bars) of the Drum track of the Major Variation 1 riff with a time signature of 4/4 and Tempo of 120 beats per second.

You can choose to change the number of measures in record from 1 to 16, you can change the Time Signature, deactivate the metronome and countdown bar and choose to set the machine to record tempo changes.

For a quicker method, you can choose to copy, partially or entirely, a Rom Style and apply modifications to the copied patterns to create a modified User Style.

These preliminary selections, and others, are explained in detail in the Master Track and Copy functions in the Song Edit chapter 18.

The User Style Record mode is in "Overdub" which means that you can add new events to the old. The recording loops back to the beginning and repeats continually, allowing you to add new events to those already captured.

USER STYLE OR SONG/STYLE RECORDING

If you select an empty User Style (shown as "User01", "User02", etc.), pressing RECORD enters directly into User Style Record mode.

If you select an existing User Style (shown with a name), pressing RECORD offers the option of entering record mode with the User Style or recording a Song/Style by exploiting the User Style as the provider of backings for your recording. Song/Styles are created by recording the keyboard tracks together with Style arrangements (explained in detail in the Song/Style chapter 8 [User Guide] and chapter 16 [Reference Guide]).

THE USER STYLE PRESET

All empty User Styles activate a default Style Preset consisting of the following Sounds assigned to the accompaniment tracks:

Default User Style Preset configuration

Track	Sound	MIDI channel	
Drum	Stand1	10	
Bass	Finger	2	
Acc1	Piano1	3	
Acc2	St-Guitar	4	
Acc3	String	5	

You can program the User Style Preset before starting the recording. How to program the Preset is discussed towards the end of this chapter.

The Metronome

Entering User Style record mode activates the Metronome automatically. The display shows the symbol "MT" in the top left hand corner, next to the tempo setting. If you want to record without the Metronome, press METRONOME (in the Song Edit section) to deactivate the function.

Recording User Styles

ENTER USER STYLE RECORD MODE

If you select an empty User Styles (User01, User02, etc.), pressing RECORD in the sequencer enters directly into User Style Record mode.

If you select an existing User Style, pressing RECORD provides the option of selecting User Style recording or Song/Style recording with the current User Style. See page 10.

Select an empty User Style

- 1. Press a USER button in the Style/Song Groups to enter the User Style bank.
- 2. Select a free location.

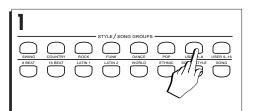
Select one of the locations User01, User02, etc., with the corresponding Function buttons.

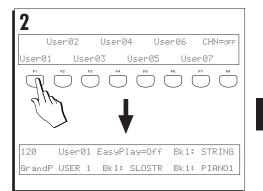
3. Press the RECORD button.

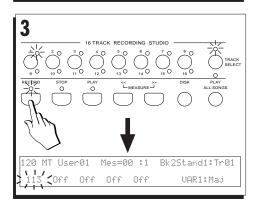
P51500 enters the user Style "record pending" mode directly with the Drum track of the User Style ready to record the Major Variation 1 riff.

The Drum Track in the 16 Track Recording Studio (sequencer) is shown flashing as well as the relative Program change in the display.

The Metronome activates automatically.







User Style recording 15•3

START RECORDING YOUR NEW USER STYLE

1. Press START/STOP to start the recording.

A one measure (bar) countdown (lead-in) starts. During this phase, any notes you play will not be captured by the sequencer. The "measure" counter monitors the recording by counting the measures and beats as the recording proceeds. "00" corresponds to the countdown measure.

2. Start playing after the lead-in.

The sequencer starts to capture the notes played. When the end of the riff is reached, the recording loops back to the beginning and repeats. This is particularly useful for the Drum track because it allows you to build the pattern by adding new drum sounds to those already recorded.

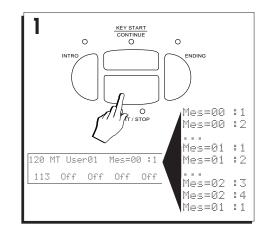
3. When you have finished recording the track, select the next track (e.g. Bass) to record in the Sequencer.

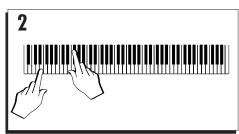
The sequencer stops recording, the Drum track is confirmed (LED remains on) and sets to "Play" and the next track is activated for recording. The display shows the Drum track in "play" mode.

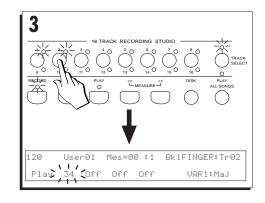
► Note: If you stop the recording with Start/Stop before selecting the next track to record, to proceed you must confirm the recorded track by pressing the respective button in the sequencer, then activate the next track to record - use this method when you need to edit the recorded track.

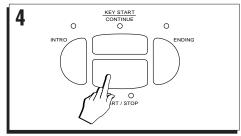
4. Press START/STOP to record the next track.

The Drum track starts to playback exactly as recorded. At this point, you can deactivate the Metronome if necessary.









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- 5. Start to record the Bass accompaniment pattern.
- 6. When you have finished recording the track, select the next one to record, e.g. Acc1.

The Bass track is confirmed and sets to "Play".

Record the new track as required. You can choose to record up to 5 accompaniment tracks one after the other.

7. Press Start/Stop to stop the recording.

When you have finished recording all the tracks of your first Riff, you have several options to choose from:

- select another Riff (e.g. Var1 Minor, or Var1MajIntro, etc.);
- select another Variation;
- exploit the Copy function.

The overall effect of your Style will depend on how you exploit the options at your disposal. For example, for the Variation 1 Riff, record the Drum, Bass and Acc1 tracks only. For Variation 2, copy Var1 to Var2 and record Acc2 in addition to Acc1. For Variation 3, copy Var2 to Var3 and add other events to Acc1 and/or Acc2 to "fill" the patterns with more notes. For Variation 4, copy Var3 to Var4 and record Acc3 to complete the Style. See "Copy" in the Sequencer Edit chapter.

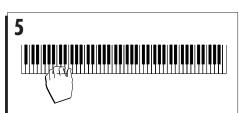
8. Select Variation 2 and/or select another Riff.

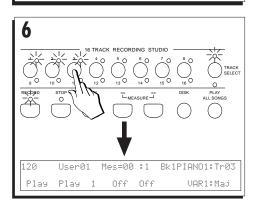
Activate the Riff selection zone with the corresponding Function button (F7 or F8) and rotate the DIAL to select the Riff.

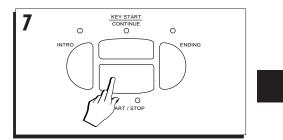
Press the VAR 2 button if you want to select Variation 2.

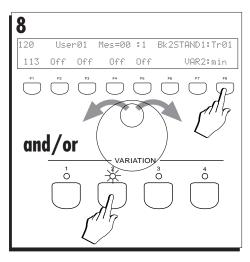
The sequencer sets to record the Drum track of the selected Variation.

 At this point, repeat the procedures for all tracks as required.









User Style recording 15•5

ESCAPE USER STYLE RECORD MODE AND LISTEN TO THE PLAYBACK

- 1. When you have finished recording the User Style, press RECORD or ESCAPE to exit the Sequencer.
- 2. Enable the new User Style arrangements by activating EasyPlay On/Off.
- 3. Press Start/Stop to start the User Style.
- Play with the User Style as you would play a Rom Style.

If the User Style is not to your satisfaction, press RECORD to enter Record pending status and modify the recording.

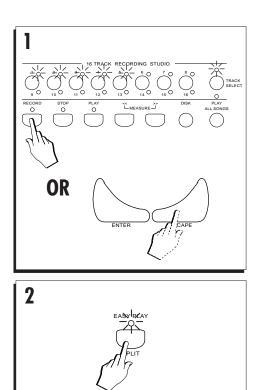
You can clear one or more tracks, erase one or more events, correct one or more tracks by using Quantize or "punching in" a correction and perform other operations to optimize the recording. These and other Style editing operations are discussed in the Master Track, Copy, Quantize and Clear functions of the Song Edit chapter 18, Reference Guide.

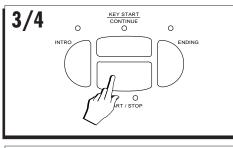
Save your user Styles to disk

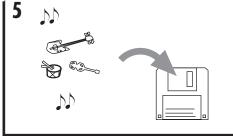
5. Save the User Style to disk

Use the Save Style or Save Styles procedures explained in the Disk Chapter 6, User Guide.

User Styles remain intact in memory after power down. It is always safer, however, to save your user Styles to disk to avoid unpleasant cancellations due to an incorrect operation.







15•6 Reference Guide

Programming the User Style Preset

Unlike the Presets for Preset, Song/Style and Song modes, the User Style Preset cannot be accessed directly from the Edit Preset button. Each User Style is associated to a single Style Preset which is stored to the current User Style location only and not to other locations as is the case for the other play modes.

A User Style Preset can be programmed when **P51500** is set to User Style Record mode. Once you enter "record pending" status, activate all the accompaniment tracks in the Sequencer and modify them using the Preset editing procedures: Preset Edit, MIDI Edit, Mixer Edit.

Refer to the Edit Preset chapter for details of each edit function. The exception is Sound Edit which can be carried out only with a single track in record mode.

The modifications are memorized directly to the User Style location either by using STORE PRE-SET + ENTER, or by pressing START/STOP.

EDIT USER STYLE PRESET

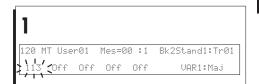
 Enter User Style Record mode as already explained on pages 3 and 4.

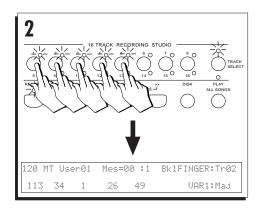
P51500 enters "record pending" status with the Drum track.

 Activate all the Style accompaniment tracks in the 16 Track Recording Studio.

Press the corresponding track buttons in the Sequencer to set the tracks in record mode. The corresponding LEDs start to flash.

► Note: if at this point, you press Start/Stop to start the recording, all tracks will be heard but only the Drum track will capture events.





User Style recording 15•7

3. Press PRESET, or MIDI, or MIXER in the Edit Preset Section and proceed to edit your User Style Preset.

While all the Style accompaniment tracks are active, you can modify the parameters and pass from one edit function to another directly without pressing Escape.

Be careful when using the Escape button! If you escape from the Style record pending status, you will lose all your modifications.

Warning: it is not possible to edit a Sound while all Style tracks are in record mode. An attempt to enter Edit Sound activates an appropriate warning.

* * MORE THAN ONE TRACK IN RECORD * * * * * YOU CANNOT EDIT SOUND * * *

A Sound can be edited only when the corresponding track is active for recording.

 When you have finished editing the Preset, save the modifications by pressing STORE PRESET + ENTER, or START/STOP (without pressing Escape).

STORE PRESET saves the modifications directly to the User Style Preset. Press EN-TER to confirm.

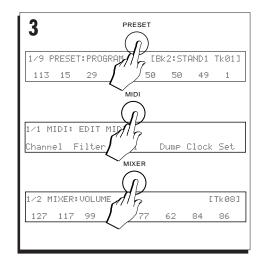
START/STOP also saves the modifications directly to the User Style Preset and starts the recording. DO NOT PLAY but stop the recording immediately.

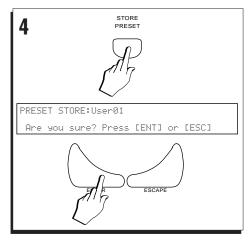
Deactivate all the tracks except the one you want to record.

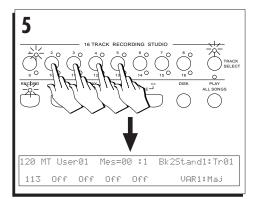
Press the corresponding track buttons in the sequencer to deactivate the flashing buttons.

• Start to record the User Style.

Use the method already described on the previous pages.







15•8 Reference Guide

RECORDING PROGRAM CHANGE DATA

If you change a Sound during your recording, the relative Program Change data is captured in the track.

Bear in mind, however, that when you playback your Style, the track(s) containing a change of sound will play the first cycle of the riff with the correct starting sound and proceed as recorded with the change of sound. On the second and all subsequent cycles of the riff, playback proceeds with the last recorded Program Change, therefore, the starting Sound will no longer be heard, unless you stop the Style and start again.

To avoid this situation, you must remember to record a change back to the starting Sound an instant before the end of the first Riff cycle. In this way, all subsequent riff cycles that follow will start with the original starting sound.

RECORDING CONTROL DATA

Control data generated by the on-board controllers (pedals) and any Control messages received via MIDI are captured in the track.

To record Section Volume events, use the Sliders.

RECORDING TEMPO DATA

Any changes applied to the playing speed during the recording are captured in the Tempo track automatically. If you do not want to record changes of tempo during the recording, you must first deactivate the Tempo Rec option in the Master Track (see Song Edit chapter) and set it to Tempo Play.

THE COMMON TRACK

When you record User Styles, any panel button selections that you make during the recording are captured in the Common track (a "ghost" track that cannot be "physically" selected).

For example, you can exploit the Fade In/Out function for an Intro or End Riff and the corresponding events will be recorded in the Common track. The relative events can be erased in the ERASE function (see Song Edit - Erase, chapter 18).

TEXT, <<, >>

In User Style Record mode, these three buttons are disabled.

In User Style playback mode, pressing the >> and << buttons has no action.

Pressing TEXT activates a user message:

* * LYRICS TRACK (TEXT) DISABLED * * ENABLED IN SONG MODE ONLY

Cancel the display with TEXT or ESCAPE.

User Style recording 15•9

USER STYLE EDITING

The Song Edit section incorporates several edit functions which help to optimize your recorded User Styles: Quantize, Erase, Master Track, Copy.

The Song Edit functions are operational in Record mode only, i.e. when the LED of the RECORD button is flashing. If you press one of the sequencer editing buttons when **P51500** is not in record mode, the display will flash the message:

*	* *	EDIT	DISABLED) * * *	
	Ente	· REC	MODE to	Edit	

The display cancels automatically to return to the previous status after a few seconds.

TO MODIFY AN EXISTING USER STYLE

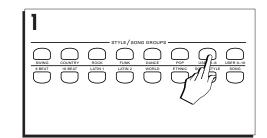
When you confirm the copy of a Style (partially of entirely) to a User Style, the instrument sets automatically to User Style Record mode with the Drums track ready to record, and all other tracks in Play.

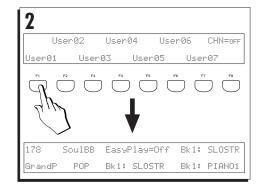
If you are recording a new User Style, the Song Edit functions can be exploited directly during the recording. If you want to edit an existing User Style, enter the User Style edit using the following method.

Select an existing User Style

- 1. Press a USER button in the Style/Song Groups to enter the User Style bank.
- 2. Select a User Style.

Recorded User Styles are shown with a name. Select one with the corresponding Function button.





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Press the RECORD button in the 16 Track Recording Studio.

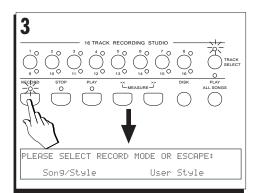
The LED on the RECORD button starts to flash and the display prompts you with a request to select Song/Style or User Style Record mode.

Ignore the Song/Style record mode for the time being.

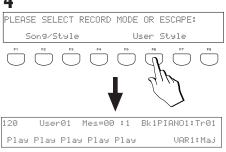
4. Select the User Style Rec mode.

Use function buttons F6 or F7.

The user Style enters Record mode with all the recorded tracks set to Play and the RECORD LED flashing.



4



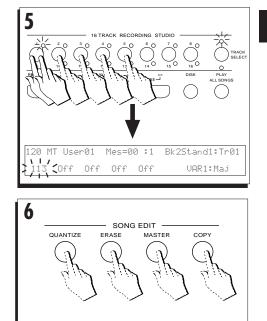
5. Set a track to Record mode by pressing the relative button TWICE.

The corresponding LED starts to flash.

If you want to cancel the tracks in PLAY in order to listen to the track in record alone, press the corresponding buttons ONCE to mute them.

Now, edit the User Style by means of the edit functions.

Refer to the Song Edit chapter 18, Reference Guide, for detailed explanations of each function.



User Style recording 15•11

RESTORING THE SEQUENCER MEMORY

If you have loaded disk-based User Styles or recorded User Styles and used up all the memory dedicated to the storage of User Styles, a quick and easy way of clearing sequencer memory and making room for other User Styles is to use the Restore Sequencer operation.

Naturally, you must remember to save all sequencer data (User Styles, Song/Styles and Songs) that you don't want to lose to disk before proceeding with the restore procedure.

- Press RESTORE in the SYSTEM section to gain access to the «Restore Original Block» function.
- Press F3 or F4 («Restore Seq») to cancel all the sequence data (User Styles, Song/Styles and Songs in RAM memory.

You are prompted with a request to reconfirm your choice.

Press ENTER to confirm, or ESCAPE to cancel.

With ENTER, the sequencer data is cancelled from memory.

With ESCAPE, the User Styles are retained.

► Hint: To cancel the entire contents of RAM in a single operation, use the «Restore All» command.

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• 16 Song/Style Recording

If you record what you play when you play with Styles, the result is a Song/Style.

The notes generated by the keyboard sections are recorded in the respective tracks (Upper 1 = track 8, Upper 2 = Track 7, Lower = Track 6). The Chords that trigger the auto accompaniments are recorded in the CHORDS track and all panel button selections (Intro, Fill, Ending, change of Style, etc.) are recorded in the COMMON track. The COMMON and CHORD tracks are automatically activated when you enter Song/Style Record mode. If you use the Pads, the events are recorded in the Pads track.

Song/Styles offer an excellent means of preparing backings for a soloist. For example, you can record two keyboard tracks (Upper2 & Lower) with accompaniments, then use Upper 1 to play the melody in real time with the Song/Style in playback.

Song/Styles can be recorded, or loaded from Disk using the Load All procedure. There is room in the SONG/STYLE memory for up to 7 Song/ Styles. Saving to disk requires the Save All method. Song/Styles cannot be saved as MIDI Files and they do not contain a Lyrics track.

The Metronome

Entering Song/Style record mode activates the Metronome automatically. The display shows the symbol "MT" in the top left hand corner, next to the tempo setting. If you want to record without the Metronome, press METRONOME (in the Song Edit section) to deactivate the function.

THE SONG/STYLE PRESET

The Song/Style Preset corresponds exactly to the Preset recalled by the Style (Rom or User) that is exploited to create the Song/Style.

If you select a Free location in the Song/Style button, the Preset recalled corresponds to the current default Style Preset which is configured as follows:

Default Song/Style Preset configuration

Track	Sound	MIDI channel
Drum	Stand2	10
Bass	Finger	2
Acc1	Piano1	3
Acc2	St-Guitar	4
Acc3	SloStr	5
Lower	WarmPad	6
Upper 2	El_Pno1	7
Upper 1	SofSax	8

You can program the Song/Style Preset before starting the recording as you would a Programmable Preset or Song Preset. A Song/Preset can be copied to any of the 7 Song/Style locations in the Song/Style Group. This is a useful feature because it allows you to program a single Song/ Style Preset which can be the basis of up to 6 other Presets, each of which can be independently modified with respect to the original.

How to program the Song/Style Preset is discussed towards the end of this chapter.

Song/Style Recording 16•1

Recording Song/Styles

ENTER SONG/STYLE RECORD MODE WITH A ROM STYLE

This is the quickest and most direct method.

- 1. Press a STYLE button in the Style/Song Groups to enter the relative Style bank (Swing, Country, Rock, etc.).
- 2. Select the Style that you want to record.

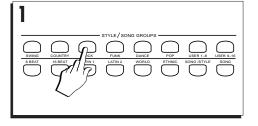
Use the corresponding Function button.

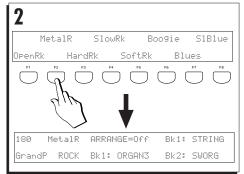


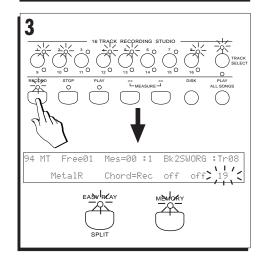
P51500 enters the Song/Style "record pending" status directly with the keyboard track(s) recalled by the Style ready to record (LEDs flashing). The Metronome activates automatically (the display shows "MT").

The LED on the RECORD buttons also starts to flash. If currently off, the EASY PLAY and MEMORY buttons activate (LEDs on) automatically to enable the Style auto accompaniment.

The CHORD track is shown in the main Song/ Style display as 'CHORD=REC", indicating that the Chord track is active to record chord events. If you want to record the keyboard tracks only using the accompaniment in playback, set the chord track to "Chord=Play" by pressing F4 or F5.







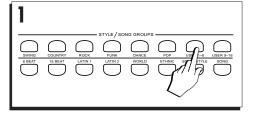
16•2 Reference Guide

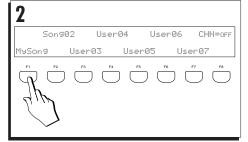
ENTER SONG/STYLE RECORD MODE WITH A USER STYLE

Use this method if you prefer to use a previously recorded User Style.

- Press a USER button in the Style/Song Groups to enter the User Style bank.
- 2. Select a User Style.

Use the corresponding Function button.





3

3. Press RECORD in the 16 Track Recording Studio.

The LED on the RECORD button starts to flash and the display prompts you to select Song/Style or User Style Record mode.

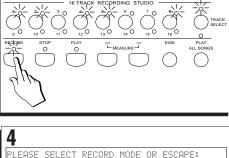
4. Select the Song/Style Record mode.

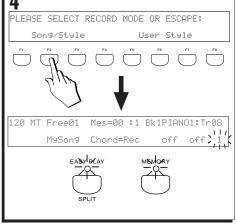
Use function buttons F2 or F3.

P51500 enters the Song/Style "record pending" status directly with the keyboard track(s) recalled by the Style ready to record (LEDs flashing). The Metronome activates automatically (the display shows "MT").

The LED on the RECORD buttons also starts to flash. If currently off, the EASY PLAY and MEMORY buttons activate (LEDs on) automatically to enable the Style auto accompaniment.

The CHORD track is shown in the main Song/ Style display as 'CHORD=REC", indicating that the Chord track is active to record chord events. If you want to record the keyboard tracks only using the accompaniment in playback, set the chord track to "Chord=Play" by pressing F4 or F5. .





Song/Style Recording 16•3

START THE RECORDING

1. Press INTRO if you want to start with an Intro. (This step is optional)

You can preset either Intro, Fill or Ending for an introduction. You can also use Fade In to enter with a gradual increase of volume.

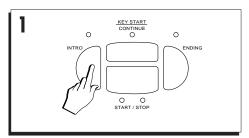
Press PLAY or START/STOP to start the recording. Press KEY START if you want to start the recording by playing on the keyboard.

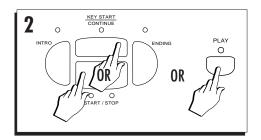
PLAY starts the recording of the keyboard tracks only. START/STOP starts the recording of the accompaniment tracks only. In both cases, the initial countdown measure will be available. "00" corresponds to the countdown measure.

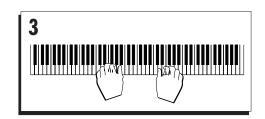
KEY START allows you to synchronize the start of the recording of the accompaniment and keyboard tracks by playing on the keyboard with both hands. In this case, the initial countdown measure will not be available. If you want to record keyboard tracks only with the accompaniment in playback, set the Chord track to "Chord=Play" by pressing F4 or F5.

3. Start playing the Style after the lead-in or Intro.

While you play, the "measure" counter monitors the recording by counting the measures and beats as the recording proceeds.







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- 4. Now proceed as you would with a normal Style.
 - Use the Fills;
 - Change Variation;
 - Change Style (even with a different Time Signature e.g. from 4/4 to 3/4);
 - Play the Pads;
 - Adjust the Volume Sliders;
 - Use the Volume and/or Damper pedal or other switch pedal;
 - Change Effects;
 - Add harmony with HARMONY ON/OFF;
 - · Select a different Harmony Type;
 - The limits are endless.....

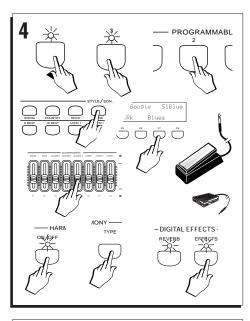
5. Stop the recording with STOP or START/STOP.

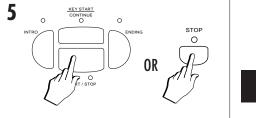
STOP stops the recording of the Song/Style.

START/STOP stops the recording of the accompaniment tracks but not the keyboard tracks. You can continue recording the keyboard tracks at will then finish with STOP.

You can also stop the recording with the END-ING or FADE IN/OUT buttons.

In the 16 Track Recording Studio, as well as the LEDs of the recorded tracks, the LED of track 9 turns on to indicate that the PADS track has been recorded (regardless of whether or not you played on the pads during the recording).





Song/Style Recording 16•5

ESCAPE SONG/STYLE RECORD MODE AND LISTEN TO THE PLAYBACK

- When you have finished recording the Song/ Style, press RECORD or ESCAPE to exit the Sequencer.
- 2. Press PLAY or START/STOP to start the playback.

If a keyboard track is not engaged by the sequencer, play along with the Song/Style playback. You can disengage a keyboard track used by the sequencer by activating the corresponding activator button.

If the Song/Style is not to your satisfaction, press RECORD to enter Record mode and modify the recording with the Song Edit functions.

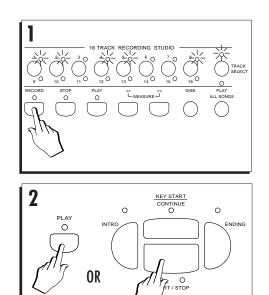
You can edit your Song/Style by exploiting various editing functions of the Song Edit section. The Song/Style editing operations (Master Track, Copy, Quantize, Clear) are discussed ion the Song Edit chapter 18, Reference Guide.

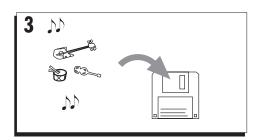
Save your Song/Styles to disk

3. Save the Song/Style to disk.

Use the Save All procedure explained in the Disk Chapter 6, User Guide.

Song/Styles remain intact in memory after power down. It is always safer, however, to save your Song/Styles to disk to avoid unpleasant cancellations due to an incorrect operation.





16•6 Reference Guide

Programming the Song/Style Preset

The Song/Style Preset is accessed directly from the Edit Preset button and programmed using the standard methods described in the Sounds & Preset chapter 4 (User Guide) and Edit Preset chapter 12 (Reference Guide).

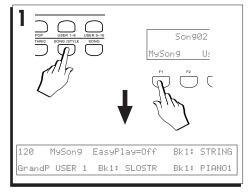
A Song/Style is associated to a single Preset which can be copied to any of the 7 Song/Style locations using the standard STORE PRESET procedure. The Song/Style Presets are numbered from 65 to 71 (location 72 corresponds to the Chain function).

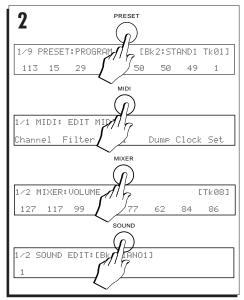
All the Edit Preset functions can be programmed and stored to the current Song/Style Preset. Refer to the Edit Preset chapter for details of each edit function.

EDIT SONG/STYLE PRESET

- 1. Select an existing Song/Style or select a Free location from the Song/Style Group.
- Press PRESET, or MIDI, or MIXER or SOUND in the Edit Preset Section and proceed to edit your Song/Style Preset.

You can modify the parameters and pass from one edit function to another directly.





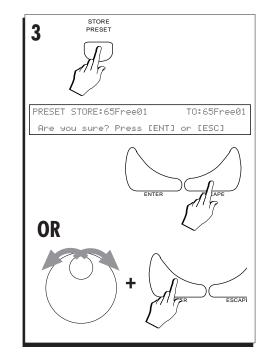
Song/Style Recording 16•7

3. When you have finished the editing tasks, save the Preset by pressing STORE PRESET.

The PRESET STORE window opens showing the same source and destination Song/ Style Preset.

To save the Preset to the current Song/Style, the parameters need not be changed.

To save the Preset to a different Song/Style destination, rotate the Dial to select the destination and press ENTER to confirm.



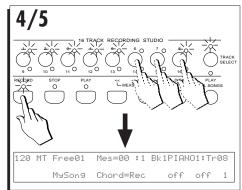
Enter Record mode with the modified Preset

- 4. Press the RECORD button to enter Record mode.
- Activate/deactivate the keyboard tracks to record with by pressing the corresponding buttons.

Check the status of the Easy Play and Memory buttons and activate them if off you may have saved the Preset with these two buttons off.

• Start to record the Song/Style.

Use the method already described on the previous pages.



16•8 Reference Guide

RECORDING PROGRAM CHANGE DATA

If you change Sound in one of the tracks, the relative Program Change is recorded in the track.

RECORDING PADS DATA

If you use the Programmable Pads during the recording phase, the events generated are captured by the Pads track.

RECORDING STYLE CHANGE DATA

If you change Style during your recording, the relative Style Change data is recorded in the Common track, one of the options that constitutes the Master track.

RECORDING CONTROL DATA

Control data generated by the on-board controllers (pedals) and any Control messages received via MIDI are captured in the tracks.

To record Section Volume events, use the Sliders.

RECORDING TEMPO DATA

Tempo Changes effected during the recording are captured in the Tempo track. Entering Song/Style Rec mode activates the Tempo Rec option in the Master Track automatically. If you prefer not to record Tempo change events, set the Tempo track to "Tempo=Play" in the Master track (see Song Edit chapter 18).

THE COMMON TRACK

When you record Song/Styles, all events relating to panel button selections (fills, intro, ending, style change, fade in/out, etc.) are recorded in the Common track (a "Ghost" track that cannot be "physically" selected).

The panel intervention events can be erased in the ERASE function (see Song Edit - Erase, chapter 18).

THE CHORD TRACK

The Chord track captures all the chord changes made during the recording. The parameter for this track is shown in the main Song/Style record window as "CHORD=REC". If you chooose to record only the keyboard tracks, or you want to add additional events without recording new Chord events, set the Chord track to "Chord=Play" by pressing the corresponding funciotn buttons under the display (F4, F5).

TEXT, <<, >>

In Song/Style Record mode and playback mode, the >> and << buttons are disabled.

Pressing TEXT activates a user message:

* * LYRICS TRACK (TEXT) DISABLED * * ENABLED IN SONG MODE ONLY

Cancel the display with TEXT or ESCAPE.

Song/Style Recording 16•9

SONG/STYLE EDITING

The Song Edit section incorporates several edit functions which help to optimize your recorded Song/Styles: Quantize, Clear, Master Track, Copy.

The Song Edit functions are operational in Record mode only, i.e., when the RECORD button is flashing. If you press one of the Song Edit buttons when **P51500** is not in record mode, the display will flash the message:

*	*	*	EDI	T DI	SABL	.ED	*	*	*
	En	tei	n RE	EC M	ODE	to	Ed	it	

The display cancels automatically to returns to the previous status after a few seconds.

Refer to the Song Edit chapter 18 in the Reference Guide for full details on the Edit functions.

RESTORING THE SEQUENCER MEMORY

If you have loaded disk-based Song/Styles or recorded Song/Styles and used up all the memory dedicated to the storage of Song/Styles, a quick and easy way of clearing sequencer memory and making room for other Song/Styles is to use the Restore Sequencer operation.

Naturally, you must remember to save all sequencer data (User Styles, Song/Styles and Songs) that you don't want to lose to disk before proceeding with the restore procedure.

- Press RESTORE in the SYSTEM section to gain access to the «Restore Original Block» function.
- Press F3 or F4 («Restore Seq») to cancel all the sequence data (User Styles, Song/Styles and Songs in RAM memory.

You are prompted with a request to reconfirm your choice.

3. Press ENTER to confirm, or ESCAPE to cancel.

With ENTER, the sequencer data is cancelled from memory.

With ESCAPE, the song data are retained.

► Hint: To cancel the entire contents of RAM in a single operation, use the «Restore All» command.

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17 Song Recording

The SONG button of the STYLE/SONG GROUPS section recalls Songs and sets **P51500** to multitrack mode, the only playing mode that permits access to 16 tracks to record and play back. Via MIDI, **P51500** is recognized as a 16 part multitimbral unit, regardless of the current playing mode.

P51500 allows you to record Songs one track at a time using a real time recording method and does not exploit existing structures.

Songs containing a Lyrics track can also be loaded into memory and the lyrics can be scrolled across the display by activating the TEXT function. If the optional Audio/Video board is installed, the lyrics can be projected onto an external monitor (computer or domestic TV - refer to the Songs chapter 7, User Guide).

There is room in the SONGS memory for up to 7 Songs. Songs can be recorded, or loaded from disk (Load Song, Load MidiFile or Load All operations) and saved as **P51500** format Songs, or as Standard MIDI Files. Disk-based SMF files can be loaded into memory and saved as PS1500 format Songs.

THE SONG PRESET

The Song Preset is programmable for up to 16 tracks and determines how the Song plays.

To record a Song, it is best to prepare a Song Preset before starting. Unlike User Styles and Song/Styles which exploit existing Preset structures, the Song requires some preliminary work before entering Record mode to ensure that the recording can proceed smoothly without wasting time assigning Sounds, etc.

If you select an 'Empty' location in the SONG Group, the default Preset recalled corresponds to the following configuration:

HUGK	Jouna	
1	Stand1	10
2	Finger	2
3	String	3
4	Flute	4
5	Steel	5
6	Organ3	6
7	Brass	7
8	SoftSax	8
9	SynSt1	9
10	Piano1	1
11	FrHorn	11
12	Choir	12
13	Taiko	13
14	Fantsy	14
15	Vibes	15
16	BassLd	16

Default Song/Style Preset configuration Sound

MIDI channel

Track

You can program the Song Preset before starting the recording using the standard Preset editing methods. A Song/Preset can be copied to any of the 7 Song locations in the Song Group.

How to program the Song Preset is discussed towards the end of this chapter.

The Metronome

Entering Song record mode activates the Metronome automatically. The display shows the symbol "MT" in the top left hand corner, next to the tempo setting. If you want to record without the Metronome, press METRONOME (in the Song Edit section) to deactivate the function.

Song Recording 17-1

Enter Song Record mode

Recording Songs

Follow the steps outlined below to record a multitrack Song.

PREPARE THE SONG FOR RECORDING AND ENTER RECORD MODE

1. Press the SONG button in the Style/Song Groups to enter the relative Song bank.

Recorded songs are shown with a name while songs that do not contain recorded events are shown as 'Empty1", "Empty2", etc..

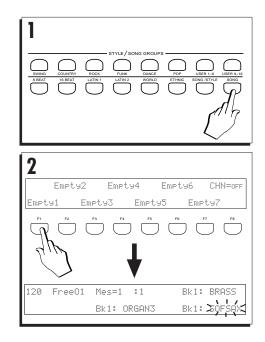
2. Select an Empty location.

Use the corresponding Function button.

Track 8 is automatically activated for play. You can activate the other tracks in the 16 Track Recording Studio one by one to listen to the sounds of each track. Activating a track deactivates the one currently selected. Use TRACK SELECT to access tracks 09-16.

At this point, you can also program the Song Preset. A brief explanation follows on page 6, or you can refer to the Edit Preset chapter 12 for detailed information. Press STORE PRESET + ENTER to store the modifications to the current Song location.

You can also store to other Song locations using the standard method of selecting a different destination.



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3. Press RECORD in the 16 Track Recording Studio.

P51500 enters the Song "record pending" mode directly with track 1 ready to record (LED flashing). The LED on the RECORD button starts to flash.

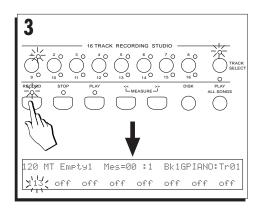
The Metronome activates automatically (the display shows "MT"). To deactivate it, press METRONOME in the SONG EDIT section.

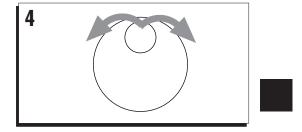
At this point, if you want to set some starting parameters, press MASTER TRACK to set the Time Signature, deactivate the Countdown option, activate or deactivate the recording of the Tempo events.

Refer to the Song Edit Chapter 18, Reference Guide for information regarding the starting parameters. Press ESCAPE once only to close the MASTER TRACK.

4. Set the TEMPO by rotating the DIAL.

The Tempo setting is stored to memory automatically.





Song Recording 17•3

START TO RECORD THE SONG

 Press PLAY or START/STOP to start the recording.

If Countdown (in the Master Track) is set to "Play", wait for the countdown to finish before playing (events are not recorded during the countdown phase). If yo want to deactivate the metronome, press the METRO-NOME button (the symbol "MT" is cleared from the display).

The measure counter (song pointer) starts to monitor the recording by displaying the measures and beats as the sequencer proceeds.

2. Start to play after the countdown.

Events will be recorded in the track active for recording.

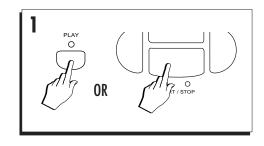
3. When you have finished, stop the recording with STOP or START/STOP.

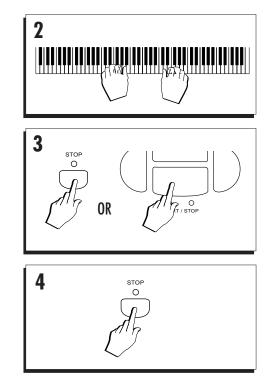
The Song stops at a precise point and the LED on the PLAY button will flash. If you press PLAY, recording will continue from the point the Song was stopped.

► Note: Press STOP twice rewinds the Song back to the beginning.

 To add additonal events to the same track, press STOP again to take the song pointer to the starting point and repeat points 1 - 3.

► Note: The record mode is "Overdub', meaning that new notes are added to existing ones. To substitute existing notes in a recorded track with new ones, use the Punch function explained in the Song Edit chapter.



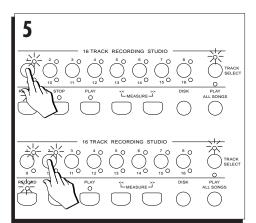


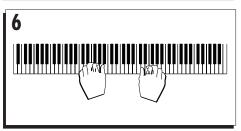
17•4 Reference Guide

 If you are satisfied with the recording, confirm the recorded track by pressing the corresponding track button. The recording will be confirmed and the track will be set to "Play". Select the next track to record.

► Note: As an alternative, you can select the next track to record without pressing STOP. The recorded track is confirmed and the track enters record mode automatically. Press STOP to take the Song to the beginning and press PLAY to start recording.

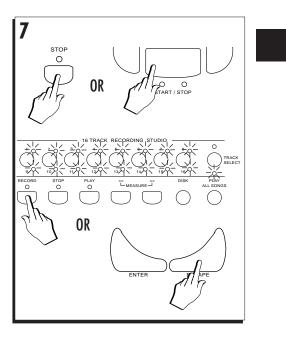
6. Repeat the recording procedures for other tracks.





 When you have finished recording the last track, stop the recording with STOP or START/STOP and press RECORD or ESCAPE to escape «Song Record» mode.

The LED of the RECORD button goes off and the display returns to normal.



Song Recording 17•5

Song playback

8. Press PLAY or START/STOP to listen to the playback.

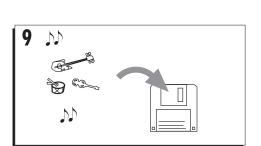
Refer to the Song chapter 7, User Guide, for detailed information regarding how to playu back a Song Playback, how to use the Chain function, and how to disengage a track from the sequencer to play it in real time.

Save your Song to disk

9. Save the Song to disk.

Use the Save Song or Save All procedures explained in the Disk Chapter 6, User Guide.

Songs remain intact in memory after power down. It is always safer, however, to save your Songs to disk to avoid unpleasant cancellations due to incorrect operations.



O

8

PLAY

0

OR

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Programming the Song Preset

The Song Preset is accessed directly from the Edit Preset button and programmed using the standard methods described in the Sounds & Preset chapter 4 (User Guide) and Edit Preset chapter 12 (Reference Guide).

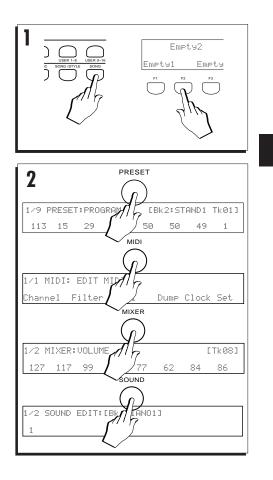
A Song is associated to a single Preset which can be copied to any of the 7 Song locations using the standard STORE PRESET procedure. The Song Presets are numbered from 73 to 78. Song 79 corresponds to the Chain function.

All the Edit Preset functions can be programmed and stored to the current Song Preset. Refer to the Edit Preset chapter for details of each edit function.

EDIT SONG PRESET

- 1. Select an existing Song or select an Empty location from the Song Group.
- Press PRESET, or MIDI, or MIXER or SOUND in the Edit Preset Section and proceed to edit your Song Preset.

You can modify the parameters and pass from one edit function to another directly.



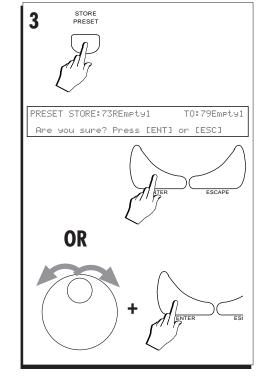
Song Recording 17•7

3. When you have finished the editing tasks, save the Preset by pressing STORE PRESET.

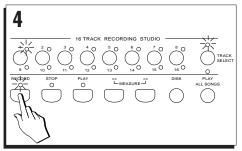
The PRESET STORE window opens showing the same source and destination Song Preset.

To save the Preset to the current Song, the parameters need not be changed. Press ENTER to confirm.

To save the Preset to a different Song destination, rotate the Dial to select the destination and press ENTER to confirm.



 Press the RECORD button to enter Record mode and record the Song as described on the previous pages.



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RECORDING PROGRAM CHANGE DATA

If you change Sound in one of the tracks, the relative Program Change is recorded in the track.

RECORDING CONTROL DATA

Control data generated by the on-board controllers (pedals) and any Control messages received via MIDI are captured in the tracks.

To record Section Volume events, use the Sliders.

RECORDING TEMPO DATA

Tempo Changes made during the recording are captured in the Tempo track. Entering Song Rec mode activates the Tempo Rec option in the Master Track automatically. If you prefer not to record Tempo changes, you must deactivate the Tempo rec option in the Master track by setting the parameter to Tempo=Play. Refer to the Song Edit chapter 18 for more details.

THE COMMON TRACK

When you record Songs, the events generated by panel button selections, or events received via MIDI, are recorded in the Common track (a "ghost" track that cannot be "physically" selected).

The panel intervention events can be erased from the Common track in the Erase function (see Song Edit - Erase, chapter 18).

TEXT, >>, <<

In Song Record mode and playback mode, the >> and << buttons are enabled.

Measure function

Pressing both buttons at the same time activates the MEASURE function which allows you to specify a measure.

Press ENTER to confirm and the Song passes directly to the specified measure.

If the current Song contains a Lyrics track, the TEXT button activates the track and scrolls the Song lyrics across the display in Song playback mode.

If **P51500** is fitted with the optional Audio/Video Interface, the lyrics can be projected onto an external monitor or domestic TV connected to one of the rear panel Video sockets. See the Songs chapter 7, User Guide for detailed information.

Pressing TEXT in playback mode displays the Song lyrics:

take ME out to the ballgame, take me out to the crowd, buy me some peanuts

Cancel the display with TEXT or ESCAPE.

Song Recording 17•9

SONG EDITING

The Song Edit section incorporates several edit functions which help to optimize your recorded Songs: Quantize, Clear, Master Track, Copy.

The Song Edit functions are operational in Record mode only, i.e. when the RECORD button is flashing.

In playback mode (Record off), editing is not permitted. If you press one of the Song Edit buttons when **P51500** is not in record mode, the display will flash the message:

*	*	* EI	DIT	DISABL	.ED	*	*	*	
	Ent	ter	REC	MODE	to	Ed	it		

The display cancels automatically to returns to the previous status after a few seconds.

Refer to the Song Edit chapter 18 for detailed information of each edit function.

RESTORING THE SEQUENCER MEMORY

If you have loaded disk-based Songs or recorded Songs and used up all the memory dedicated to the storage of Songs, a quick and easy way of clearing sequencer memory and making room for other Songs is to use the Restore Sequencer operation.

Naturally, you must remember to save all sequencer data (User Styles, Song/Styles and Songs) that you don't want to lose to disk before proceeding with the restore procedure.

- Press RESTORE in the SYSTEM section to gain access to the «Restore Original Block» function.
- Press F3 or F4 («Restore Seq») to cancel all the sequence data (User Styles, Song/Styles and Songs in RAM memory.

You are prompted with a request to reconfirm your choice.

3. Press ENTER to confirm, or ESCAPE to cancel.

With ENTER, the sequencer data is cancelled from memory.

With ESCAPE, the Songs are retained.

► Hint: To cancel the entire contents of RAM in a single operation, use the «Restore All» comman

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• 18 Song Edit

Your recordings (User Styles, Song/Styles, Songs) may require some post-record editing operations to correct errors, to change sounds, to cancel unwanted events, etc.. Before recording, you may want to exploit existing structures by copying them before applying some minor modifications to create variations of the original.

THE SONG EDIT FUNCTIONS

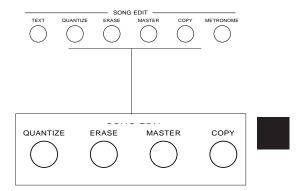
The SONG EDIT section consists of 4 principal edit functions which optimize your recorded User Styles, Song/Styles and Songs: Quantize, Erase, Master Track, Copy.

Although the functions are identical for all three record modes, each individual record mode activates specific parameters. The procedures applied, however, are identical in all cases.

All Song Edit functions operate in Record mode only (RECORD led flashing). In playback mode (Record off), sequencer editing is not permitted. If you press one of the Song Edit buttons when **P51500** is set in any operating mode other than record, the display will flash the message:

* * * EDIT DISABLED * * * Enter REC MODE to Edit

The display cancels and returns to the previous status automatically after a few seconds.



Song Edit 18•1

Quantize function

QUANTIZE

Quantize is an auto-corrector of timing errors made during the recording. Quantize "shifts" recorded events automatically to the nearest fraction of a measure (bar) according to a resolution determined by the current quantize value.

Value	Quantization	
1/8	J	
1/12	♪ triplet	
1/16	A	
1/24	♪ triplet	
1/32	A	
1/48	♪ triplet	
1/96		

THE QUANTIZE DISPLAY

The Quantize display varies slightly for each record mode:

QUANTIZE in User Style Rec mode:

1∕1 QUANT	IZE:TRACK SELECT	User01
Drum Bass	Acc1 Acc2 Acc3	VAR1=MAJOR
·		

Tracks to be quantized: Drum, Bass, Acc1, Acc2, Acc3

QUANTIZE in Song/Style Rec mode:

1/1 QUANTIZE:	TRACK SE	LECT	Free1			
Chord Pads	Lower	Upper2	Upper1			

Tracks to be quantized: Chords, Pads, Lower, Upper 1

QUANTIZE in Song Rec mode:

1∕1 QUANT:	ZE:TRACK SE	ELECT	MySon9
TkØ1 TkØ2	Tk03 Tk04 1	Tk05 Tk06	Tk07 Tk08
- I . I			

Tracks to be quantized: the Song Tracks

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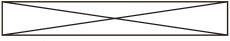
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TO QUANTIZE A RECORDED TRACK

Recording events in a sequencer is not as easy as it sounds, especially if you're new to the game. When you record data, you are in fact dealing with the precision of a high tech. computer which is quite hard to compete with at first. At the beginning, you'll find that the Quantize function can work wonders to smooth out your recordings. With practice, however, your recordings will be better and you'll use Quantize less every time.

If you decide that a track playing back in record mode needs correcting, press QUANTIZE.

The sequencer stops and the display shows a Quantize setting for the track in record.



Example of User/Style quantize

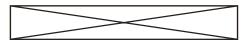
2. Rotate the DIAL to set a different value and press PLAY or START/STOP to listen to the playback.

For a 4/4 beat recording, 16 or 8 should be sufficient to correct your recording. If you have recorded triplets, you'll need quantize values such as 24 or 12 to correct your timing errors.

If the playback is not satisfactory, select a different setting and listen to the playback. Continue in this way until you obtain a satisfactory result.

When you are satisfied with the result, press ENTER to confirm.

Pressing ENTER the first time prompts you to reconfirm the setting.



4. Press ENTER again to return to the Record page.

Press Play or Start/Stop to listen to the playback of the track.

If the playback timing is still incorrect, press QUANTIZE again, select another Quantize value and repeat the procedure until the playback sounds perfect.

► Note: Quantize does not destroy recorded note data unless you press ENTER. Once you have confirmed a quantize value with ENTER, you will not be able to return to the original recording.

Song Edit 18•3

Erase function

ERASE

This function provides several options to cancel data from single tracks or from all tracks, to cancel events such as Program Change and Control Change data, Tempo data and Common events and to delete single note events from a track.

THE ERASE DISPLAY

All three record modes activate the same ERASE display:

1/1 ERASE	SELECT FUNCTION	User01
Track All	Ctrl Temp Comm	ERASE

The possible options are:

- Erase Track data
- Erase All track data
- Erase Control data
- Erase Tempo data
- Erase Common data
- Delete Note data

The ERASE TRACK option is specific for each record mode while the ERASE ALL, CTRL, TEMPO, COMMON and the DELETE options are general and give rise to identical situations for each record mode. Particular attention is paid to the Erase Track option for User Styles, owing to their complex structure consisting of several individual Riff elements.

GENERAL ERASE PROCEDURE

1 While the sequencer is in record pending status, press the ERASE button.

1 ERASE:SELECT FUNCTION	UserØ1
Track All Ctrl Temp Comm	ERASE

Erase User Style display - Song/Style and Song identical

2. Select the option required.

The Erase Track and Erase Ctrl options open a second level display of related parameters. Erase All, Erase Tempo and Erase Common pass directly to a request for confirmation.

- 3. For the Erase Track and Erase Ctrl situations, select the parameter required and press ENTER.
- 4. Press ENTER to confirm, or Escape to cancel the operation.

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ERASE TRACK FOR USER STYLES (F1)

Erase Track for User Styles permits the cancellation of a single style track of a Riff, all the style tracks of a Riff or all Riffs. All three options can be applied to a selected Variation.

1∕1 E	RASE:	TRACK	VUAR.	/RIFF	SEL.	User01
Drum	Bass	Acc1	Acc2	Acc3	VAR	L-MAJOR

To erase a single track from a Riff :

Use this option to cancel a single track (Drum, Bass, Acc1, Acc2, Acc3) from a selected Riff and Variation.

 Rotate the DIAL to select the Riff of the current Variation.

The Dial scrolls through all the Riffs of the current Variation.



- Select the VARIATION to cancel from using the VAR buttons.
- Select the Track to cancel data from with the corresponding Function button.

ERASE:[TRACK DRUM] User01 Are you sure? Press [ENT] or [ESC]

4. Press ENTER to confirm the cancellation.

The track returns to record mode.

To erase all tracks of a Riff :

Use this option to cancel all tracks (Drum+Bass+Acc1+Acc2+Acc3) from a selected Riff and Variation.

1. Rotate the DIAL to select the RIFF to cancel.

1/1 ERASE: TRACK/VAR./RIFF SEL. User01 Drum Bass Acc1 Acc2 Acc3 VAR = MINOR

- 2. Select a Variation with the VAR buttons.
- 3. Press F8 to cancel the selected Riff.

ERASE:[MINOR VARIATION 1] User01 Are you sure? Press [ENT] or [ESC]

4. Press ENTER to confirm the cancellation.

To erase All Riffs of the selected Variation :

1/1 ERASE:TRACK/VAR.∕RIFF SEL. User01 Drum Bass Acc1 Acc2 Acc3 VAR⊫MAJOR

1. Rotate the DIAL to select All_R (All Riffs).

1/1 ERASE: VAR. /RIFF SELECT User01 VARL-ALL_R

- 2. Select a Variation with the VAR buttons.
- 3. Press F8 to activate the All Riff option:

1/1 ERASE:[ALL RIFF VARIATION 1] User01 Are you sure? Press [ENT] or [ESC]

4. Press ENTER to confirm the cancellation.

Song Edit 18•5

ERASE TRACK FOR SONG/STYLES AND SONGS (F1)

Erase Track for Song/Styles permits the cancellation of the Chord, Pads, Lower, Upper2 and Upper1 tracks.

1/1 ERASE:TRAC	K SELEC	Т	Free1
Chord Pads	Lower	Upper2	Upper1

Erase Track for Song/Style

The Chord track records the Style chords played during the recording.

The Pads records the events generated by playing the Programmable Pads.

Erase Track for Songs permits the cancellation of any of the 16 Tracks.

 1/1
 ERASE: TRACK
 SELECT
 MySon9

 Tk01
 Tk02
 Tk03
 Tk04
 Tk05
 Tk06
 Tk07
 Tk08

 Erase Track for Song
 <th

1. Select the Track to cancel data from with the corresponding Function button.

You are prompted to reconfirm the operation.

2. Press ENTER to confirm or Escape to cancel the operation.

ERASE ALL (F2)

Use ERASE ALL to cancel a complete User Style, Song/Style or Song and restore the "empty" status.

ERASE:STYLE INITIALIZE						User01
Are	чоч	sure?	Press	[ENT]	on	EESC]
Erase all User Style						

ERASE:SONG/STYLE INITIALIZE Free1 Are you sure? Press [ENT] or [ESC]

Erase all Song/Style

ERASE:SONG INITIALIZE MySong Are you sure? Press [ENT] or [ESC]

Erase all Song

1. Press ENTER.

You are prompted to reconfirm the operation.

Press ENTER to confirm or Escape to cancel the operation.

The User/Style, Song/Style or Song returns to record mode.

ERASE CONTROL (F3)

This function is common to all three record modes.

Use ERASE CONTROL to cancel specific Control events from a single track or from all tracks.

Erase control events from a single track :



User Style example

1. Rotate the DIAL to select the track from which the specified events are to be cancelled.

User Styles permit the selection of tracks: Drum, Bass, Acc1, Acc2, Acc3.

Song/Styles permit the selection of tracks: Upper1, Upper2, Lower, Pads, All

Select the event to cancel with the corresponding Function button.

ERASE:PROGRAM Ch. [TRACK DRUM]User01 Are you sure? Press [ENT] or [ESC]

3. Press ENTER to confirm the cancellation.

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Erase

Erase Control events from all Tracks :

 Rotate the DIAL until TRACK=ALL is selected on the top line.

ERASE:	TR	ACK=AL	<				User01
Progr	Vol	Pitch	Mod	Pan	Expr	Eff	Damper
lleer Ctu		mula					

User Style example

Select the event to cancel with the corresponding Function button.

ERAS	E:PR(OGRAM (Ch.	ETRA	ЯСК	ALL]User01
Are	уоч	sure?	Press	[ENT]	or	[ESC]

3. Press ENTER to confirm the cancellation.

The Erase Control options :

• ERASE PROGRAM CHANGE (F1): cancels program change data generated by changing Sound during the recording.

• ERASE VOLUME (F2): cancels volume data generated by the sliders.

• ERASE Ритсн (F3): cancels Pitch Bend events received via MIDI.

• ERASE Mod (F4): cancels Modulation events received via MIDI.

• ERASE PAN (F5): cancels Pan events.

• ERASE EXPRESSION (F6): cancels expression events received via MIDI.

• ERASE EFFECT [REVERB/EFFECTS] (F7): cancels DSP effect events generated by selecting the effects during the recording.

• ERASE DAMPER (F8): cancels Damper events generated by the Damper pedal.

ERASE TEMPO (F4)

The Erase Tempo option is common to all three record modes.

Press TEMPO to cancel Tempo data generated by rotating the Dial during the recording. These events are captured when the Tempo Rec function is active in the Master Track.

ERASE:TRACK TEMPO User01 Are you sure? Press [ENT] or [ESC]

Press ENTER to confirm, or Escape to cancel the operation and retain the Tempo data.

ERASE COMMON (F5)

The Erase Common option is available for all three record modes.

Press COMMON to cancel events generated by panel interventions while recording.

ERASE:TRACK COMMON User01 Are you sure? Press [ENT] or [ESC]

Press ENTER to confirm, or Escape to cancel the operation and retain the Common events.

Song Edit 18•7

Delete

DELETE NOTE (F8)

The Delete Note option is available for all three record modes.

Press DELETE to cancel note information from a track. In the case of User Styles, Delete Note is more specific and allows you to cencel notes from a single track of a Riff of the current Variation.

This function cancels single notes at precise points of the recording.

Pressing DELETE opens a display where you can select the track.



User Style Delete note

1/1 DELETE:NOTE [PRESS START]Free1 Pads Lower Upper2 Upper1

Song/Style Delete note

1/1 DELETE:NOTE EPRESS STARTJMySong Tk01 Tk02 Tk03 Tk04 Tk05 Tk06 Tk07 Tk08

Song Delete note

- In the case of a User Style only, first select the Riff with the Dial and select a different Variation with the VAR buttons.
- Select the displayed track to intervene on with the corresponding <u>Function button</u>.
- Press Start/Stop to start the playback of the track.
- An instant before you reach the point of the recorded sequence which corresponds to the note you wish to delete, play the same note on the keyboard.

The specified note will be eliminated from the recorded sequence (you can check in playback mode).

In the case of User Styles, while the Riff continues repeating, you can delete other notes in the same manner.

For Song/Style and Songs, stop the playback then start it again to start from the beginning to cancel other single events in the same manner.

- 5. Press Start/Stop to stop the recording.
- 6. Press ESCAPE twice to escape from the Delete Note page and return to record page.

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Master Track function

THE MASTER TRACK

A "ghost track" which determines the initial status of the recording, fixing such parameters as the Time Signature, the recording key (User Style only), the number of bars for the recording (User Styles and Songs), disable/enable the metronome and countdown bar, and set other parameters.

The Master Track is common for all three record modes with minor variations for each.

Before starting your recording, enter the Master Track to set your initial recording conditions.

STANDARD EDIT PROCEDURE

The Master Track edit procedure is simple and direct.

1. While the sequencer is in record pending status with the first track (no events recorded), press the MASTER TRACK button.

1/1 MASTER TRACK:[TIME SIGNATURE]

K=C T= 4/4 Bars=02 Name Off Off Play

User Style Master Track

1/1 MASTER TRACK:[TRACK TEMPO] Off Off Rec Rec

Song/Style Master Track

1/1 MASTER TRACK:[TIME SIGNATURE]

Time= 4/4 Bars=00 Off Off Play

Song Master Track

- Select the Master Track parameter that you wish to edit or change status.
- Rotate the DIAL to change the setting or use the corresponding Function button to toggle between two different parameter states (Play/Off, or Rec/Play).
- Press ESCAPE to close the Master Track and return to the record display.

Song Edit 18•9

TIME SIGNATURE

This option is not available for Song/Styles.

Entering Record mode for User Styles and Songs sets the time signature to 4/4 by default. If you want to record with a different Time Signature, you must change this parameter before starting to record events.

If you attempt to change this parameter when the track contains events, of if you recordeed without playing any notes, the display activates an appropriate warning.

```
1/1 MASTER TRACK:[TIME SIGNATURE
Recorded events exist - cannot chan9e !!
```

The display cancels automatically to return to the Maser Track.

The Time Signature parameter is divided into two parts.

 If necessary, activate the first part of the parameter with F2 and rotate the DIAL to set the required value.

1/1 MASTER TRACK:[TIME SIGNATURE] K=C T≑JJA Bars=02 Name Off Off Play

Master Track User Style

Press F2 again to activate the second part of the parameter.

F2 toggles between the first and second part of the Time signature parameter.

3. Rotate the Dial to set the value.

```
1/1 MASTER TRACK:[TIME SIGNATURE]
K=C T= 3γ8βars=02 Name Off Off Play
```

Assignable Time Signatures: 1/2, 2/2, 3/2, 4/2, 1/4, 2/4, 3/4, 4/4, 5/4, 6/4, 7/4, 8/4, 1/8, 2/8, 3/8, 4/8, 5/8, 6/8, 7/8, 8/8, 9/8, 10/8, 11/8, 12/8, 13/8, 14/8, 15/8, 16/8.

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▶ Note: To assign Time Signatures with a numerator grater than 8, first set the denominator to 8 then return to the numerator and set the value

NUMBER OF BARS

This option is not available for Song/Styles.

This parameter sets the number of bars (measures) for a User Style Riff or a Song.

For User Styles, The default setting is 2. You can record up to 16 bars for a Style Riff.

For Songs, set a value to this parameter only to specify a record stop bar. With a value of $\emptyset\emptyset$, recording proceeds until you stop, or until you have recorded 250 measures (bars).

Do not set this parameter unless you want to record a specified number of bars for the Song.

1/1 M	ASTER	TRACK:	ENUMBER	OF BAI	RSI	
K=C	T= 4/4	Bars=	02 ' N ame	Off	Off	Play

Master Track: User Styles example - number of Bars

Assignable values: 1 ... 16 (User Styles), 250 (Songs)

NAME

This option is valid for User Styles only.

Activate NAME to give your User Style a name. To insert a name, use the standard method described on page 15 under the section entitled "Inserting Alphanumeric Data" of the Basic Concepts chapter 3.

- 1. Select NAME with Function button F5.
- Press F5 again to gain access to the Name writing function.

1/1 RENAME STYLE 00 [OverWrite] Old name=User01 ----> New name=

3. Write a name for your User Style.

4. Press ESCAPE to return to the Master Track

The name is memorized directly to the User Style Preset.

KEY FUNCTION

This option is available for User Styles only.

You can choose to record your User Style in a preferred key. Your arrangements will achieve musical uniformity with the Key function because it guarantees the correct transposition of your chords when you change key in Style playback mode.

Generally, it is recommended that you record your Major riffs in the key of C, minor riffs in the key of D and 7th riffs in the key of G.

	1/1	MAST	TER	TRACK: EKE	Y]			
>	≀ ¦ / К=С ′	(T=	4/4	Bars=02	Name	Off	Off	Play
	$\tau \tau$							

Assignable values: C, C#, D, Eb, E, F, F#, G, Ab, A, Bb, B

PUNCH

This option is available for all three record modes.

Activate the Punch function if you want to exploit this means of inserting corrections into your recorded tracks to avoid repeating the recording. The "Punch In" procedure is explained separately afterwards.

You are also recommended assign the Punch function to a switch pedal, preferably before entering Record mode. This operation is carried out in the Edit General section, and explained in the Edit General Chapter 13, Reference Guide.



user Style Punch alsplay example

Assignable values: Play, Off

COUNTDOWN

This option is available for all three record modes.

You can choose to record with or without the initial Countdown measure (bar) before recording actually starts.

The Countdown can be turned on or off at will.

1/1 MASTER TRACK:[COUNTDOWN] K=C T= 4/4 Bars=02 Name Off≻Off(_Play

User/Style Countdown

Assignable values: Play, Off

TEMPO REC

This option is available for all three record modes.

Activate the Tempo Rec function to record Tempo changes during the recording. The tempo changes are recorded in a Tempo Track.

1/1	MASTER	TRACK: [TR	ACK TEMPO]	
K=C	T= 4/4	Bars=02	Name Off	Off > Play

User Style Tempo Rec

Assignable values: Play, Rec

Song Edit 18•11

HOW TO "PUNCH IN" A CORRECTION

If you have opted to set the PUNCH function in the Master Track to On and have assigned the PUNCH function to one of the pedals (Soft, Sostenuto or Damper), here's how to correct a track containing a part with mistakes to avoid repeating the recording.

User Style and Song/Style method

 While you are still in record mode (Record flashing) with the track containing the wrong events, press Start/Stop to start the playback of the recorded track.

The track plays back exactly as recorded.

DO NOT PLAY ANY NOTES to avoid adding new events to those already recorded.

 An instant before playback reaches the point containing the wrong events, press and hold the switch pedal programmed for Punch operation.

The record mode changes from Overdub to Replace, allowing you to record new events and cancel existing ones at the same time.

- 3. Start to play the correct sequence of notes.
- When you have finished playing the correct sequence of notes, release the switch pedal to deactivate Replace recording.

If you continue pressing the pedal, notes will be cancelled even without playing.

- 5. Press START/STOP to stop the recording.
- 6. Listen to the playback to check the correction.

Song method

To punch a correction into a Song track:

- 1. Enter Song Record mode and select the track to correct.
- Use the MEASURE function to specify a measure one or two measures before the one where the corrections are to be applied.

Press both >> and << buttons together to activate an entry zone.

Specify the required measure using the numeric keys of the keyboard (the black notes of octaves C5-C7).

Press ENTER to confirm. The Measure counter passes directly to the specified measure.

- Press PLAY to start the Song at the specified measure.
- Proceed as described from point 2 of the instructions for User Styles and Song/Styles..

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Copy function

COPY

This option is common to all three record modes.

Copy provides options to copy a Song/Style to another Song/Style, or a Song to another Song.

For User Styles, the function allows the whole or partial copy of a Style (Rom or User) to a User Style. Individual Riffs can be copied from a Rom or User Style to another Riff of the destination Style. This option is a great time saver. For example, you might want to use your own recording of a basic variation but prefer to copy the Major 1 Intro of a Rock Style, the Minor 2 Ending of a 16 Beat Style and the Var4 Fill of a Funk Style.

Partial copy (User Styles only):

 Press COPY to open a display where you can select the various style parts.

1/1 COPY:[SELECT PART AND PRESS ENTER]

This display represents the source Style on the left and the destination Style on the right.

 The source Style is active upon entry to the display. Rotate the DIAL to select the source Style. This part of the display activates with F1.

The Dial scrolls all the Rom Styles then proceeds with existing User Styles.

 Press Function button F2, F3 or F4 to activate the Style part that you want to copy to the User Style.

1 > 1	COPY:[SELECT PART AND PRESS ENTER]
Rap	Major_1> User01 Major_1
	· · · · ·

4. Rotate the DIAL to select a Riff.

The Dial scrolls through the Riffs of the currently selected Variation (Major1, Minor1, 7th-1, IntMaj1, etc.).

To select a part from a different Variation, press the corresponding VAR button.

5. Select the destination User Style by activating the part with F5, F6 or F7 and rotate the Dial.



 Select the destination Riff by activating the relative zone with Function button F8 and rotate the DIAL.

1/1 COPV:[SELECT PART AND PRESS ENTER] Rap Major_1 ---> User01 Minor_C

Use the VAR buttons to select a different Variation.

For example, to copy the Major_3 Riff (Var3) from the source Style to the 7th_1 Riff (Var1) of the destination Style, the display should look like this:

1/1 COPY:ISELECT PART AND PRESS ENTER] Rap Major_3 ---> User01 7th___1

8. Press ENTER once.

You are prompted to confirm the operation again with ENTER.

1/1 COPY:[Rap /IntMaj1] Are you sure? Press [ENT] or [ESC]

9. Press ENTER to confirm or Escape to cancel.

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Song Edit 18•13

All Style copy :

1. Activate the source Style Riff.



2. Rotate the DIAL to select ALL_STY.

This option copies the entire source Style (all variations) to the User Style.



3. Press ENTER once.

1/1 COPY:[Rap /All_Sty] Are you sure? Press [ENT] or [ESC]

- Press ENTER to confirm, or Escape to cancel the operation.
- 5. Press ESCAPE to close the COPY display.

COPY SONG/STYLE, COPY SONG :

 Rotate the DIAL to select the source copy (Song/ Style or Song).

1/1	COPY: [SELECT	SONG	AND	PRESS	ENTERJ
	Free1	>		Free	2
Cong	/Stule All Com				

Song/Style All Copy

Empty1

1/1 COPY: [SELECT SONG AND PRESS ENTER]

Empty2

Song All Copy

- 2. Press F5, F6, F7, F8 and rotate the DIAL to select the destination Song/Style, or Song.
- 3. Press ENTER once.

COPY:[Empty1] Empty2 Are you sure? Press [ENT] or [ESC]

 Press ENTER to confirm, or Escape to cancel the operation.

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• 19 SAMPLE / RECORD

SAMPLING AND PROGRAMMABLE PADS ASSIGNMENT

Pianovelle P51500 is fitted with an Audio/Video Interface which allows multimedia facilities, access to a digital audio sampler and a function to reconfigure the Programmable Pads. The Sample Record button gains access to the Sampler and the Pads Assignment function.

DIGITAL AUDIO SAMP£LER

P51500 is able to sample two types of signal:

• Line signals (audio signals fed in the Mic/ Line Input from a musical instrument, tape recorder, etc.);

• MIC signals (signals fed into the Mic/Line Input from a microphone).

GENERAL INFORMATION

To skip this preliminary - go straight to page 3 to learn how to use the **P51500** Sampler.

When you feed a Sound into a microphone, the sound causes changes in pressure which the microphone senses then converts into voltage change. If you plug the microphone into a tape deck to record the sounds, the voltage changes are converted into magnetic field and when the tape plays back, the changes in magnetic field are converted back to voltage changes. This type of recording is called **Analog** recording, because the magnetic fields that correspond to the recorded voltage changes are an almost exact analogy of the sound waves that were fed into the microphone.

If you play the tape back at half the speed, the voltage changes will take place at half the speed, causing the sound to play one octave lower than the original recording. Similarly, playing back at double the speed causes the sound to play one octave higher.

This is the basic concept behind digital samplers, including the "scratch pad" sampler provided by the **P51500** Audio/Video Interface. Digital samplers "sample" (record) sounds and play them back at different rates, depending on which key is pressed.

A Sampler converts the voltage changes referred to above into numbers in order that the sampling computer can recognize the signal. This is **Analog to Digital** (A/D) conversion.

When the sampler plays back the sound, it uses a **Digital to Analog** (D/A) converter to convert the numbers back to voltage changes many times per second, giving rise to the **Sampling Rate**. If the sample is played back at its originally recorded pitch, the D/A conversion will take place at exactly the same rate as when the sound was sampled. If you play a higher note, the sample is converted at a higher rate, causing a rise in the pitch and a shortening of the sound's length.

Very simply, the **P51500** sampler operates exactly as described above.

If you want to know more about Sampling and the techniques used, there is a great deal of specialised literature available on the subject.

Sample/Record 19•1

ABOUT THE **P51500** SAMPLER

P51500 incorporates a Sampler with the following technical characteristics:

Sampling resolution	12 bit
High Frequency sampling	3 seconds (approx)
Low Frequency sampling	6 seconds (approx)

The sampling resolution is a measure of the accuracy of the device, expressed in BITS, which is a computer term meaning "power of 2". The resolution measures the number of different voltage levels that the device is capable of resolving.

The **P51500** 12 Bit sampler is able to resolve 2^{12} different voltage levels = 4096.

High Frequency sampling for short, accurate samples lasting approximately 3 seconds.

Low Frequency sampling for longer samples (approx. 6 seconds) with a reduced quality with respect to High.

The **P51500** Sampler is capable of sampling signals (line or microphone) over a preselected range of the keyboard (Split). Up to 4 Splits can be sampled. **P51500** samples on any note C, depending on the Split being edited. The sampling note is the note which gives optimum playback results of the sample. The sample is mapped across the assigned split starting from a note C, but you can assign a different mapping note with respect to the sample note after capturing the sample. You can regulate the sampling level of the signal and set a dynamic trigger which applies a dynamic threshold below which the sampler does not record.

The Mic/Line input signal can be fed to the main mix, regulated with the Mic/Line panel control and processed by the on-board Digital Effects processor.

The sample can be edited using macro-edit parameters similar to those used to edit sounds and can be processed by the on-board Digital Effect processor (Reverb and Effects).

You can assign the Sample to the pads and/or any track. You cannot, however, edit a sample further with the Sound Edit facilities.

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Regulating the Mic/Line signal

A singer or musical instrument can exploit **P51500**'s internal amplification system by plugging into the Mic/Line input. The signals are fed to the instrument's main mix, regulated with specific controls and sent to the stereo outputs.

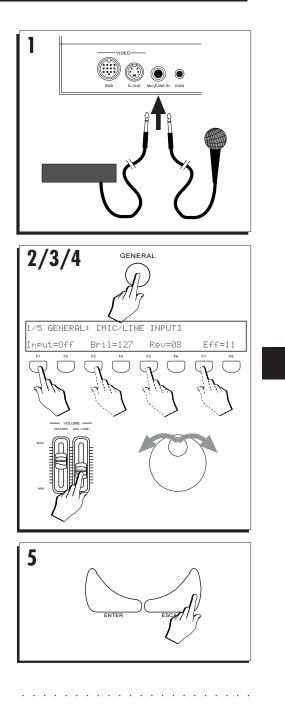
- Plug a Microphone or audio cable into the Mic/ Line socket.
- Go into Edit General (press GENERAL in the EDIT section) and set the Mic/Line Input parameter to ON to enable the input.
- Regulate the level of the signal with the Mic/ Line panel slider.

If you hear a great deal of noise (feedback), regulate the GAIN trimmer located next to the Mic/Line input jack of the Audio/Video Interface.

 Use the Edit General Mic/Line parameters to regulate the signal.

Use the Brilliance, Reverb and Effects send controls as explained in the Edit General Chapter 13, Reference Guide.

5. Press ESCAPE to close the GENERAL display.



Sample/Record 19•3

Preparing to sample - select the Splits

Before recording a sample, you must decide how many Splits are required. Up to 4 Splits are available: Split A, Split B; Split C, Split D. The range of each Split varies according to how many Splits are selected.

If you activate and sample on the first Split available (Split A) before selecting others, you will not be able to gain access to the other Splits.

If you sample on Split A only, your sample will be mapped across the entire keyboard with good quality reproduction at the centre of the keyboard but, at the extreme ends, the quality will degenerate considerably. Generally, the more splits you use, the better your sample will sound across the keyboard.

The use of several splits is particularly recommended if you are sampling a musical instrument.

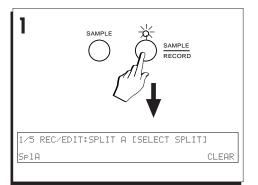
The more splits you activate, the shorter they become, each one having a specific reference note C as the sample note. When all 4 splits are active, the relative ranges and sample note C are as follows:

Split	Range	Sample note C
Split A	A0 - B3	C2
Split B	C4 - B4	C4
Split C	C5 - B5	C5
Split D	C6 - C8	C6

1. Press SAMPLE/RECORD.

The first page opens showing Split A.

Split A corresponds to an 88 note keyboard range (A0 - C8). If you decide to assign your sample to the entire keyboard, go straight to point 3 on the next page.



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- Activate other Splits by pressing the PAGE+/ BANK+ button as many times as necessary.
 - PAGE+/BANK+ once for 2 splits (A and B);

• PAGE+/BANK+ twice for 3 splits (A, B and C);

• PAGE+/BANK+ three times for 4 splits (A, B, C and D).

3. Select a Split.

F1 for Split A, F2 for Split B, F3 for Split C, F4 for Split D.

The display changes to page showing a set of parameters and two options: (REC) [F8] to activate the sampler for recording, (EDIT) [F7] to edit the sample.

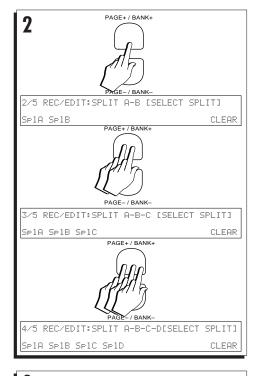
4. Select the LEV (Sampling Level) parameter to regulate the Sampling level.

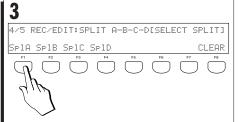
Use Function button F2.

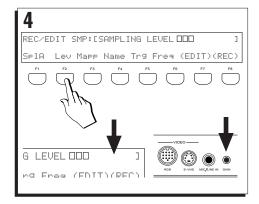
Use the GAIN control on the Audio/Video Interface to regulate the input level of the signal.

Tap on the microphone or play on the connected instrument to hear the sound over the instrument's internal speakers and regulate the GAIN trimmer to control the sampling level. If the signal input level is too high, you'll produce feedback noise.

The level is monitored by a bar graph in the top right hand corner of the display. When the signal reaches "clipping" level, the bar graph changes color.







Sample/Record 19•5

If you're using a microphone, check for noises other than the one you are sampling. Some low pitch background sounds may be inaudible when the sample is played back at normal speed, but it will be noticeable at higher pitches.

5. Select the NAME parameter to assign a name to the Split.

Use Function button F4.

Use the keyboard as the source of Alphanumeric data and enter up to 4 characters. The name is memorised directly to the Split and to memory.

6. Select the Trigger parameter if you want to set a dynamic threshold.

Use Function button F5 to activate the parameter and rotate the DIAL to set a value.

With Trigger=Off, Sample Recording will start as soon as the REC function is selected. This give you little or no change of "getting ready" before start.

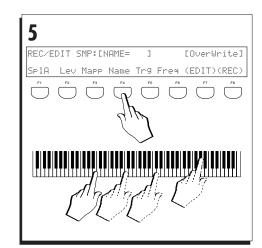
With Trigger = 1 - 8, you set a dynamic threshold below which the sampler cannot capture the sound. The higher the value, the louder you will have to play on the instrument, or speak into the microphone to trigger the Recording phase. When you set a Trigger value, entering Sample Rec gives you time to prepare yourself while the display shows the message "Ready to Sample".

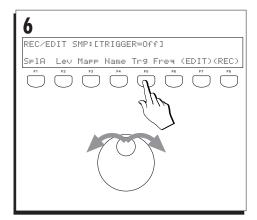
7. Select the FREQ parameter to choose between the High and Low Frequency filter.

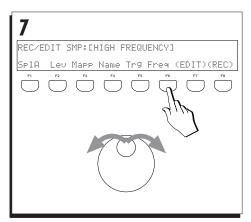
Use Function button F6 to activate the parameter. Use the DIAL to set HIGH or LOW.

Set HIGH for short, high quality samples.

Set LOW for longer samples with reduced quality.







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START TO SAMPLE

1. Press REC (F8) to start sampling.

The display shows "Ready to Sample" only if you have set a Trigger value. If not, you go directly to point 2.

2. Activate the source to sample.

Speak into the microphone, play the instrument sound, start the tape or whatever sound source you are sampling.

The display will show "Sampling!!!" for the recording period (a few seconds).

If you fail to emit the sound during the "Sampling!!!" phase, press REC again and repeat the operation.

3. Play on the keyboard to listen to your sample.

Play a note that falls within the range of the selected Split. If you play outside the range, you will not hear the sample.

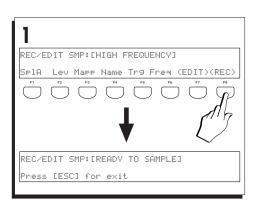
If you sampled on SplitA only (range A0-C8), note C4 will be the sample reference note.

If you are sampling with all splits active, each split will have its own reference note C from which the sample is mapped across the respective split range.

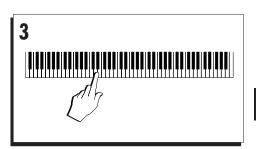
4. Press the SAMPLE button.

Your Sample is shown memorised to location 8 of the SAMPLES bank.

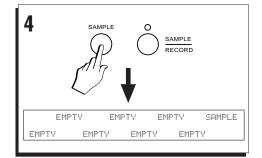
The SAMPLES bank corresponds to battery backed Sample-RAM which maintains data intact after turning off. To safeguard your sample against cancellation due to incorrect operations, save your Sample to disk using the Save Sample operation, explained in the Disk chapter 6, User Guide.



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REC/EDIT SMP:[SAMPLING !!!]



Sample/Record 19•7

Sample Edit

EDITING THE SAMPLE

Once captured, the Sample can be edited by means of specific editing parameters.

You can also edit a Disk based Sample loaded into memory. Note, however, that you cannot edit Samples that occupy locations 1 - 7 of the Samples Bank.

Enter the Sample Edit parameters to edit your sample as explained below.

• Press EDIT (F7).

Edit your sample by means of the parameters spread across the display.

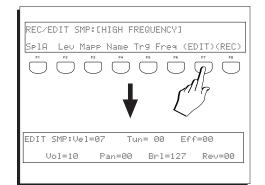
Use the function buttons to select the parameters.

Use the DIAL to assign a value to the selected parameter.

Press ESCAPE to close the Sample Edit parameters.

Press ESCAPE or SAMPLE/RECORD to exit the Sampling function.

The Sample Edit parameters are discussed overleaf.



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THE SAMPLE EDIT PARAMETERS

Volume (F2)

Determines the general volume of the sample assigned to the split.

Assignable values: 0 ... 16

Velocity (F3)

Determines how the volume of the sample responds to velocity changes.

The higher values render the sample more sensitive to velocity changes, therefore, the harder you play, the louder the sample.

The value 0 is equivalent to no response to changes in the keystrike velocity. The sample plays with the maximum assigned volume regardless of the keystrike velocity used.

Assignable values: 0 . .. 7.

Pan (F4)

Determines the position of the sample within the stereo panorama.

Move the sample to the left (L), to the right (R), set it to the centre (C) or mute the sample (Mute).

Assignable values: L31 (all to the left) ... 00 (centre) ... R31 (all to the right), Mute.

Tune (F5)

Applies a fine tune to the sample, up to one semitone above or below the actual pitch.

Assignable values: -8 ... 0 ... +8

Brilliance (F6)

Affects the Brilliance of the sample, causing an increase in the brightness or rendering the sample more mellow.

Assignable values: 0 . .. 127

Reverb (F7)

Reverb send control which regulates the amount of Reverb applied to the sample.

The Reverb applied corresponds to the type currently selected in the Reverb processor.

Zero level corresponds to the pure sample with no effect (dry) while increases in the level correspond to higher percentages of the Wet (effected sample) with respect to the Dry.

Check that the Reverbs button in the DSP section is active (led on) to hear the changes applied to the parameter.

Assignable values: 0 ... 15.

Effect (F8)

Effect send control which regulates the amount of Effect (modulations/delays) applied to the sample.

The Effect applied corresponds to the type currently selected in the Effects processor.

Zero level corresponds to the pure sample with no effect (dry) while increases in the level correspond to higher percentages of the Wet (effected sample) with respect to the Dry.

Assignable values: 0 ... 15.

Sample/Record 19•9

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MAPPING THE SAMPLE

Your Sample covers an area of the keyboard defined by the assigned Split for the Sample. In all Splits (A, B, C and D), the sample is mapped across the relative keyboard area starting at a note C of the area.

If the Split range covers one octave (C4-B4), (C5-B6), the Sample starts its lowest pitched note at the note C of the said ranges. If the split corresponds to ranges greater than one octave (A0-C8), (A0-B3), (C6-C8), the reference note is the central C of the said ranges.

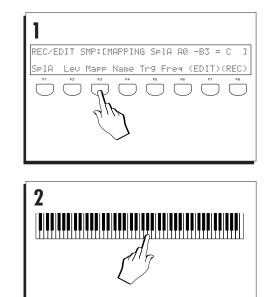
If you want to change the reference note of a Split, use the Mapping parameter as follows.

1. With the Split parameters showing, select the MAPP option.

The display shows the range of the Split and the current reference note C flashing.

2. Press a note on the keyboard corresponding to your new reference note.

The sample is now mapped across the split range starting from the new reference note.



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CLEAR ALL SAMPLES

You can clear the Sample-RAM of all Samples with the SAMPLE CLEAR option.

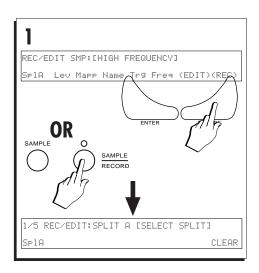
If you have loaded Samples kits to locations 1-6, clear them in a single step before using the Sampler.

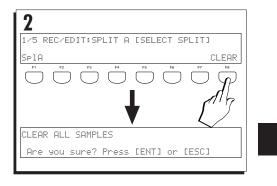
- If you are in SAMPLE/RECORD, press ESCAPE to enter the Select Split page, or press SAMPLE/ RECORD if you currently set to another mode.
- 2. Press CLEAR

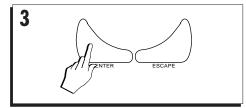
Use Function button F8

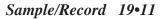
3. Press ENTER to confirm.

Escape cancels the operation and retains the data in memory.









Programmable Pads Assign

THE PADS AND TRACK 9

The Programmable Pads are an extension of Track 9, therefore, when you enter the Programmable Pads Assign function, the sound you will hear on the keyboard will correspond to that assigned to Track 9 of the current playing mode, regardless of whether it is Preset mode, Style mode, Song/Style or Song mode.

Although Real Time Presets, Styles and Song/ Styles do not exploit tracks 9 - 16, it is, nevertheless, always possible to gain access to them via the Edit Preset function and the Track Select button.

This idea, therefore, is to set track 9 of the current operating mode with an appropriate sound BEFORE entering the Programmable Pads Assign function.

Limitation:

You can assign any sound (including Drumkit or Sample) to the Pads but cannot assign two or more different sounds from different banks or sound groups.

During the assignment procedure, YOU CANNOT HEAR THE SOUND ASSIGNED TO THE PADS, only the note played on the keyboard. You must escape the Pads Assign function with ESCAPE or SAMPLE/RECORD to listen to the assigned sound.

If you load PCM Samples from the CD Series, you 'll find that these are assigned automatically to the Pads.

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TO ASSIGN THE PROGRAMMABLE PADS

1. Press PRESET in the EDIT section.

You enter the Program Change page for tracks 1-8 of the current Preset.

- Press TRACK SELECT to gain access to tracks 9-16.
- 3. Programme Track 9 of the current Preset with the Sound you wish to assign to the Pads.

Use the standard sound assignment procedure explained on page 11 of the Sounds & Presets Chapter 4, User Guide.

- Save the changes to the Preset with STORE PRE-SET + ENTER.
- 5. Press SAMPLE/RECORD

The first page of the Sampling function appears which you can ignore.

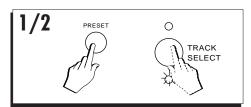
6. Press PAGE+/BANK+ as many times as necessary to open the PADS ASSIGN display.

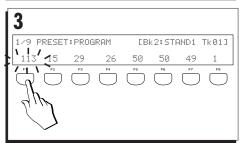
The number of times that PAGE+/BANK+ has to be pressed depends on how many Splits have already been sampled.

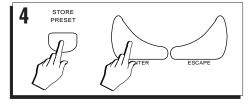
For example, if you have already sampled Split A alone, the Pads Assign page is accessed by pressing PAGE+/BANK+ once only.

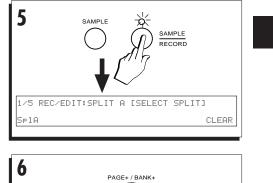
If you have not carried out any Sampling operations, you must press PAGE+/BANK+ four times.

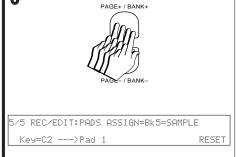
Now you are ready to assign the pads.











Sample/Record 19•13

Press and HOLD the Pad to which you want to assign a Sound.

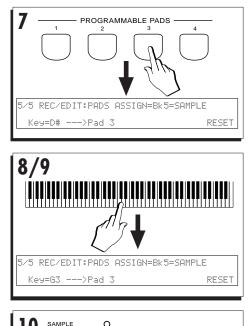
The display shows the corresponding pad pressed on the right and the keyboard note currently assigned to the pad.

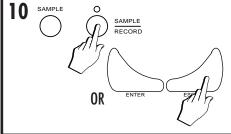
8. Play any note on the keyboard corresponding to the one to assign to the selected Pad.

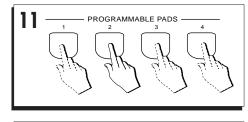
The note pressed on the keyboard is assigned to the Pad. You will hear the keyboard note but not the Pad sound.

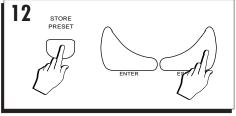
If you want to change note while still holding the Pad button, simply play another note on the keyboard.

- 9. Repeat the procedure for other Pads.
- 10. Press ESCAPE or SAMPLE/RECORD to exit the Pads Assign function.
- 11. Press each Pad to listen to the assigned sounds.
- 12. Press STORE PRESET + ENTER to store to the current Preset.









19-14 Reference Guide

20 Play All Songs - Restore

Play all Songs

The Play All Songs function is a background loading facility which allows you to playback all the Songs or MIDI Files contained in a floppy disk with a single command, without having to load all the data to memory beforehand. No need to enter Disk mode; just insert the disk and press PLAY ALL SONG.

Playback all the songs or MIDI files on disk

If you have a **P51500** Songs disk, or have purchased a MIDI File data disk, you can playback all the files with a single command, without having to load them to memory beforehand.

Play All Songs plays back up to 8 Songs or MIDI files one after the other.

1. Insert a PS Songs disk or MidiFile data disk into the drive.

Check the disk label for the type of data contained in the disk.

2. Press PLAY ALL SONG.

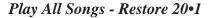
P51500 starts to scan the disk contents and, shortly after, a Song starts to play back.

When the first Song or MidiFile ends, a second sequence begins. Playback continues no-stop until all the Songs or MidiFiles on disk have been played. When the last Song or MidiFile reaches the end, playback stops automatically.

You can stop the playback at any time by pressing PLAY ALL SONGS.

 Image: Constrained state stat

Playback stops instantly.



Restore

User-programmed data (Programmable Presets, User Styles, Song/Styles, Songs, Samples) can be cancelled, either as an individual block (Presets, Sequencer) or entirely (All) by means of a single command. Cancelling user programmed data from memory restores the instrument's original default parameter statuts.

For example, if you use the Restore Presets command, you will cancel all user-programmed Programmable Presets and restore the original factory settings.

► WARNING: use the RESTORE commands with caution because user-programmed data is irremmediably lost. Make sure that you have saved any data you so not wish to cancel to disk before proceeding with a restore operation.

The RESTORE command is in the SYSTEM section located on the extreme right of the command panel.

Press RESTORE to gain access to the Restore options.

1. Press RESTORE in the SYSTEM section.

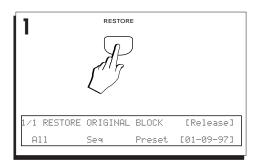
The RESTORE ORIGINAL BLOCK display activates showing three options.

Restore All... (F1, F2)

This operation cancels the entire contents of the RAM, restoring the original contents contained in ROM.

Restore Sequencer (F3, F4)

This operation cancels all Sequencer data, User Styles, Song/Styles and Songs.

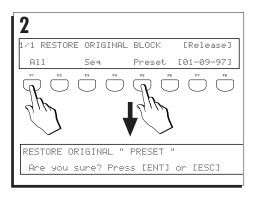


20•2 Reference Guide

Restore Presets (F5, F6)

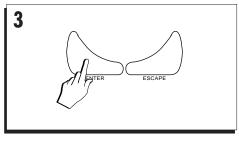
This operation cancels all modified Presets stored to the PROGRAMMABLE PRESETS section and restores the original Presets in ROM.

2. Press the function button corresponding to the Restore procedure required.



3. Press ENTER to confirm the selected Restore procedure.

You are prompted with a second confirmation request. Press ENTER to confirm the operation or ESCAPE to cancel the operation.



SOFTWARE RELEASE DATE

The Restore Original Block display shows the date of the latest release of the operating system.

<	[Release]
≥t	[01-09-97]

Play All Songs - Restore 20•3

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20•4 Reference Guide

Appendix

- Sound tables
- Style tables,
- Preset tables Sample table Song table Sng/Style table
- Effects tables
- Programmable Preset configurations
- MIDI Implementation Chart





Appendix

	1	2	3
PIANO g	roup		
1	Piano1	PianoMk1	PickPiano ²
2	Piano2	PianoW2	Pianoctave ²
3	Piano3 ²	E.G.Piano1 ²	E.G.Piano2 ²
4	HonkyTonk ²	DetPiano ²	Western ²
5	E.Piano1*	ThinRhodx ²	E.Piano4
6	E.Piano2*	E.Piano3 ²	E.Piano5
7	Harpsichor	Harpsich2 ²	Harpsich3
8	Clavinet	SynClav	WowClav
ALLET	group (Chromat	ic percussion)	
9	Celesta ²	CelestaPlk ²	ToyPiano ²
10	Glockenspl ²	GlockVibes ²	GlockChoir ²
11	MusicBox ²	WineGls1 ²	MusicBell
12	Vibraphone	Vibes2	SynVibes
13	Marimba	Marimba2 ²	Mallet
14	Xylophone	Xylophone2	XyloTribal ²
15	TubularBel2	SoftBell ²	Oohlalaa
16	Santur	BarChimes	Climbing ²
ORGAN	group		
17	Organ12	16'1'Draw ²	Organ1WX ²
18	Organ2	16'8'5'Drw	JazzOrgan3 ²
19	Organ3 ²	SwOrgan*	SynOrg1 ²
20	ChurchOrg1 ²	Church2 ²	Organ3WX ²
21	ReedOrgan	PipeOrgan ²	Organ4 ²
22	Musette ²	Accord1	Accord2 ²
23	Harmonica	Blusette	WestHarmon
24	Bandoneon	Cassotto	OrganLfo ²
GUITAR	group		
25	NylonGtr	SoloGtr	VocalGtr ²
26	SteelGtr	12StrGtr ²	SteelGtr1
27	JazzGtr1	OctJzGtr ²	Hawaiian
28	CleanGtr	ElGuitar1	ChorusGtr ²
29	MutedGtr	Muted2	Dyn.Muted*
30	Overdrive	WhaGtr1	5thOverdr ²
31	DistGtr	FuzzGtr	HeavyGt ²
32	HarmonxGtr	SlowHarmx ²	HarmGtr3 ²
BASS gr	oup		
33	AcoustcBs1	AcoustcBs2	AcousticBs3
34	FingeredBs	Dyn.Fingrd [*]	Dyn.Bass1*
35	PickBass	Dyn.Bass2*	PckBass2 ²
36	Fretless	AcidBass1	Flanged
37	SlapBass1	Dyn.Bass3*	SlapSynBs ²
38	SlapBass2	WXBass ²	StopBass
39	SynBass1	SynBass3	TecknoBass ²
40	SynBass2	SynBass4	RaveBass ²

	1	2	3
STRING	S group		
41	Violin	SlowViolin	ViolinOrch ²
42	Viola	BowedViola	ViolaPad ²
43	Cello	SlowCello	CelloEns ²
44	Contrabass	BowedBass	Staccato
45	TremoloStr	OctTremolo ²	Plectra
46	Pizzicato	OctPizz ²	EchoPizz
47	Harp	HarpDelay ²	Spacehar ²
48	Timpani	TimpaniEFX ²	Dyn.Orch I'l*
ENSEME	3LE group		
49	Strings	StereoStrg ²	StrgGlock ²
50	SlwStrings	StrgOrch ²	St.SlwStrg
51	SynStrg1 ²	SynStrg3 ²	SynStrg5 ²
52	SynStrg2 ²	SynStrg4 ²	Strings3
53	Choir	VoiceUuh ²	SlowUuh
54	VoiceOohs ²	VoiceAah ²	SlowAah ²
55	SynVox	SkatVoices*	Vocoder ²
56	OrchHits ²	Rave ²	Dyn.St.Hit ² HitsRev
BRASS	group		
57	Trumpet	FlugelAttk	FlugelHorn
58	Trombone	Trombone3	WowTromb2
59	Tuba ²	ShortTuba	WowTuba
60	MutedTrp1	MutedTrp2	Dyn.MtTrp*
61	FrenchHorn	Dyn.FrHorn [*]	TotoHorns ²
62	Brass	Brass2 ²	BrassRips
63	SynBrass1 ²	SynBras2 ²	SyntHorn ²
64	SynBrass2 ²	SlowHorn ²	AttkHorn ²
REED gr	oup		
65	Soprano	Soprano2	SoprFilter
66	SoftSax	SaxNoise ²	SoftFilt
67	TenorSax	OctaveSax ²	TenFilter
68	BaritonSax	BaritDet ²	BariFilter
69	Oboe	OboeChiff ²	OboeFilter
70	EnglisHorn ²	EngHorn2 ²	HornFilter
71	Bassoon	Bassoon2	BassoonFlt
72	Clarinet	ClarSolo	ClarFilter
FLUTE g	Iroup		
73	Piccolo	HardFlute1 ²	HardFlt2 ²
74	Flute	Dyn.Flute1*	DynHiFlute ²
75	Recorder ²	HardFlute2 ²	Bubbler
76	PanFlute	PanFlute2	Dyn.Pan
77	BottleBlow ²	BottleNois	Tube
78	Shakuhachi ²	Shakupad ²	ShakuVoice ²
79	Whistle	Whistle1WX	Whistle3WX ²
80	Ocarina ²	OcarinaPan ²	OcarinaSyn ²

Tables A•i

ROM-Sounds

	1	2	3
SYNTH L	EAD group		
81	SquareWave ²	Pulse1 ²	Pulse2 ²
82	SawWave ²	ObxFilter ²	Lyle ²
83	SynCalliop ²	Azimut ²	SynLead1 ²
84	ChiffLead ²	Chopper ²	Digital ²
85	Charang ²	Jump ²	SoundTrk ²
86	SoloVox ²	FiltRes1 ²	FiltRes2 ²
87	5thSawWave ²	Decay1 ²	Decay2 ²
88	BassLead ²	Obx2 ²	Obx3 ²
SYNTH F	PAD group		
89	Fantasia ²	NewAge ²	PPG ²
90	WarmPad2	Obx1 ²	AnlgPad ²
91	Polysynth ²	Fantasy2 ²	Fantasy3 ²
92	SpaceVoice	VocBells ²	Angels ²
93	BowedGlass ²	Prophet1 ²	Prophet2 ²
94	MetalPad ²	Bright2 ²	Analogic ²
95	HaloPad ²	Slave ²	Atmosphere ²
96	SweepPad ²	Machiner ²	Decay3 ²
SYN SFX	(group		
97	IceRain ²	Noiseres	BigRoom
98	Soundtrack ²	MoonWind ²	Slope ²
99	Crystal ²	Wind ²	SynLead2 ²
100	Atmosphere ²	Arp26000	GlockAthm ²
101	Brightness	WithGas ²	PopUp ²
102	Goblin ²	Resonance ²	NoGravity ²
103	EchoDrops	Synthex1 ²	Synthex22
104	StarTheme ²	StarTheme2 ²	PowerBad ²
THNIC	group		
105	Sitar ²	SitarDet ²	SynSitar ²
106	Banjo	BanjoOct ²	EthnicGtr ²
107	Shamisen	ShamSitar ²	SynSham
108	Koto	Kanoun ²	TrpClarin
109	Kalimba	ShrtKalimb	SaxTrumpt
110	Bagpipe	BagpipeEns ²	BrassEns ²
111	Fiddle	Hukin	FiddleBell ²
112	Shanai	BacktoWS ²	VoiceSpect
PERCUS	SIVE group		
113	TinkleBell ²	DK_STAND.1 ^D	DK_STAND.2 ^D
114	Agogo	DK_ROOM ^D	DK_WS ^D
115	SteelDrums	DK_POWER ^D	DK_STD.1WX ^E
116	Woodblock	DK_ELECT. ^D	DK_DANCE ^D
117	Taiko	DK_HOUSE ^D	DK_TECHNO ^D
118	Melo.Tom1	DK_JAZZ1 ^D	DK_JAZZ2 ^D
119	SynthDrum	DK_BRUSH ^D	DK_M1 ^D
120	ReverseCym	DK_ORCH ^D	DK_SY77 ^D

	1	2	3
SFX gro	up		
121	GtFretNois	Gtr.WhaWha	GtrNoise
122	BreathNois ²	Zapp	KeyClick
123	Seashore ²	TickTack	Drop
124	Bird ²	Scratch1	Water
125	Telephone1	Telephone2	Door
126	Helicopter ²	SynPerc3 ²	Clackson ²
127	Applause	HeartBeat	PickScrape
128	GunShot	Explosion ²	Bomb

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sounds without suffix	=	Single.
sounds with suffix ²	=	Layer;
sounds with suffix *	=	Switch;

The GRAND PIANO PRESET does not respend to MIDI, either in reception or transmission. If yo save the GRAND PIANO PRESET as recalled to PROIGRAMMABLE PRESET 1, the Grand Piano can be recalled by selecting the relative Preset via MIDI (Common).

A•ii Appendix

CC00	PC	Style
SWIN	G	
32	1	Swing
	2	Mid Swing
	3	Slow Swing
	4	Big Band 1
	5	Big Band 2
	6	Dixieland
	7	Broadway
	8	Foxtrot
COUN	ITRY	
32	9	Line Dance
	10	6/4 Gospel
	11	Gospel
	12	Western
	13	Bluegrass1
	14	Bluegrass2
	15	Country
	16	Country Ballad
ROCK	(
32	17	Open Rock
	18	Metal Rock
	19	Hard Rock
	20	Slow Rock
	21	Soft Rock
	22	Boogie W.
	23	Blues
	24	Slow Blues
FUNK	,	
32	25	Funky Fun
	26	FunkyElect
	27	Funky Pop
	28	Funky Std
	29	Acid Funk
	30	New Age
	31	Funky Soul
	32	FunkySwing
DANC	ΈE	
32	33	HeavyDance
	34	Disco Hit
	35	Dance Pop
	36	Down Beat
	37	Disco Pop
	38	Disco Fun
	39	Techno
	40	House

CC00 POP	PC	Style
32	41	Miami
	42	70' Disco
	43	80' Disco
	44	Soul B.B.
	45	SynthDance
	46	Rap
	47	Euro Pop
	48	Party Pop
8 BEA	T	
32	49	8bt Std
	50	8bt Ballad
	51	8bt Folk
	52	8bt Hit
	53	8bt Medium
	54	8bt Funky
	55	8bt Modern
	56	8bt Swing
16 BE	AT	
32	57	16bt Std
	58	16bt Ballad
	59	16bt Folk
	60	16bt Pop
	60	16bt Funky
	62	16bt Hit
	63	16btMedium
	64	16bt Swing
CC00	PC	Style
LATIN	11	
32	65	Bossa Nova
	66	Samba
	67	Cha Cha
	68	Rhumba 1
	69	Tango
	70	Bolero T.
	71	Rhumba 2
	72	Beguine
LATIN	12	
32	73	Mambo
	74	Salsa
	75	Merengue
	76	Meneito
	77	Cumbia
	78	Gipsy
	79	Guaracha
	80	Calypso

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WORI	D	
32	81	Slow Waltz
	82	Wien Waltz
	83	Waltz
	84	Romagna
	85	Mazurka
	86	Folk 2_4
	87	Polka 6_8
	88	ItalyMarch
ETHN	IC	
32	89	Paso Doble
	90	Germ.Polka
	91	Tarantella
	92	Bajon
	93	HullyGully
	94	Twist
	95	Charleston
	96	Reggae
USER	1 - 8	
14	1	
	2	
	3	
	4	
	5	
	6	
	6 7	
USER	7 8	6
USER 14	7 8	6
	7 8 2 - 1 9 10	6
	7 8 2 - 1 9 10 11	6
	7 8 2 - 1 9 10	6
	7 8 2 - 1 9 10 11	6
	7 8 2 2 - 1 9 10 11 12	6
	7 8 9 10 11 12 13	6
	7 8 9 10 11 12 13 14	6
	7 8 9 10 11 12 13 14 15	6
	7 8 9 10 11 12 13 14 15	6

Styles

Tables A•iii

Presets, Samples, Songs, Song/Style

CC0	0 PC	Preset†	CC00	PC (Pr
Gro	up 1		Grou	p 5	
48	1	GrandPiano	48	33	
	2	PnoStr		34	
	3	SloSax		35	
	4	Theme		36	
	5	St.Guitar		37	
	6	Jazzed		38	
	7	MStone		39	
	8	KeyPAd		40	
Gro	up 2		Grou	p 6	
48	9	Oldies	48	41	
	10	Party		42	
	11	Shout		43	
	12	Bossa		44	
	13	Miami		45	
	14	T.Funky		46	
	15	Ravers		47	
	16	Mr.Pad		48	
Gro	ир З		Grou	р 7	
48	17	BigStr	48	49	
	18	BigBrs		50	
	19	BIBnd		51	
	20	Epad1		52	
	21	Benson		53	
	22	Ronnie		54	
	23	BigOrg		55	
	24	Analog		56	
Gro	up 4		Grou	p 8	
48	25	Mallet	48	57	
	26	Gospel		58	
	27	S.Horn		59	
	28	GtSplt		60	
	29	Barque		61	
	30	PanPad		62	
	31	Baries		63	
	32	EcoPno		64	

Preset†	CC00	PC
	Bank	5 =
	5	1
	5	2
	5	3
	5	4
	5	5
	5	6
	5	7
	5	8
	CC00	PC
	Song	
	56	1
		2
		3
		4
		5
		6
		7
		8
	CC00	PC
	Song	
	62	1
		2
		3
		4
		5
		6
		7
		8
		-

CC00		Sample
Bank	5 = S	amples group
5	1	
5	2	
5	3	
5	4	
5 5 5 5 5 5 5 5	5	
5	6	
5	7	
5	8	
CC00	PC	Song
Song	Grou	p†
56	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
CC00	PC	Song/Style
Song	Style/	Group†
62	1	
	2	
	3	
	4	
	5	
	6	

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t = Common channel selection only

A•iv Appendix

Effects

CC1	5 PC	Digital Effects		CC1
0 =R	everb:	s†	-	64=E
48	1	Hall 1		48
	2	Hall 2		
	3	Hall 3		
	4	Warm Hall		
	5	Long Hall		
	6	Stereo Concert		
	7	Chamber		
	8	Studio Room 1		
	9	Studio Room 2		
	10	Studio Room 3		
	11	Club Room 1		
	12	Club Room 2		
	13	Club Room 3		
	14	Vocal		
	15	Metal Vocal		
	16	Plate 1		
	17	Plate 2		
	18	Church		
	19	Mountains		
	20	Falling		
	21	Early 1		
	22	Early 2		

CC16	PC	Digital Effects
64=E1	fects	†
48	1	Mono Delay 1
	2	Mono Delay 2
	3	Stereo Delay 1
	4	Stereo Delay 2
	5	Multitap Delay 1
	6	Multitap Delay 2
	7	Ping-pong
	8	Panmix
	9	Chorus 1
	10	Chorus 2
	11	Ensemble 1
	12	Ensemble 2
	13	Phaser 1
	14	Phaser 2
	15	Flanger 1
	16	Flanger 2
	17	ChorusDelay 1
	18	ChorusDelay 2
	19	FlangerDelay 1
	20	FlangerDelay 2
	21	Dubbing
	22	Rotary

† = Common channel selection only

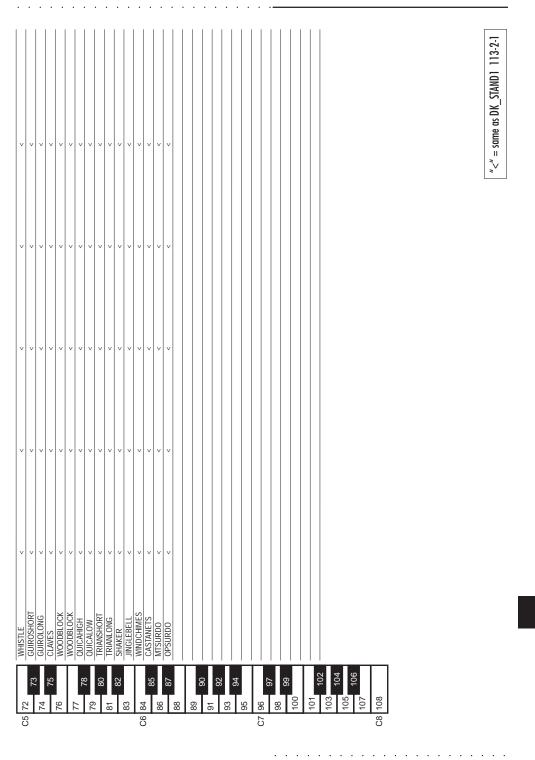
Tables A•v

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Z FINGERS Z ZAP Z GarShd GarShd SCRATCI 30 SCRATCI SCRATCI SCRATCI 31 SCRATCI BDSTD1 37 RISHD1 38 ADUUSER BDSTD1 31 BDSTD1 32 HOUSER						
	FINGERSNAD	、			``	`
					//	
	11	v	v	v	v	v
	GunShot	v	v	~	~	~
	SCRATCH2	v	v	v	v	v
	SCRATCH1	v	v	v	~	~
	ICK	~	~	~	~	~
		,	, .		, .	
		~	~	~	~	~
	HOUSERIM	v	v	~	~	~
	MUTBELL	v	v	~	~	~
	RDSTD2	RDROOM1	RDFLECT1	RDFLECT1	RDHOLISE2	~
	CTD1			DUCI CT1		01 17 07 10
	100				UDI IOUOL	71-11 TTVCCC
	KIMSHUT	~	~	~	HOUSERIM	~
	SDSTD1	SDROOM1	SDROOM2	SDELECT	~	SDJAZZ3
	HOUSECLAP	~	v	v	~	~
G	CTD4	CINDOMO	CDCTD3	CDDOOM1	UNICECN)	CUCTD3
3	303104	SURVOUNT	CUICUC	20 KOOIWI	FIOUSE 3UZ	501505
10	TOMLOW	TOMROOM	~	TOMELEC	HOUSETCON	TOMJAZZ
40 HH	HHCL01S	HHTGHT1	HHTGHT1	v	HOUSEHH	HHTGHT1
	TOMI OW	TOMROOM	v	TOMFLEC	HOLISETCON	TOMIAZZ
			· .)	NUISEN	
ŕ		TOMPOON		TOMFLED		TOMIA77
	IOMIFOW		~	IOMELEC	HOUSELCON	I UIVIDAZZ
	HHOPEN2	v	v	HHOPEN1	HOUSERIDE	HHOPEN1
TO	TOMLOW	TOMROOM	v	TOMELEC	HOUSETCON	TOMJAZZ
F	TOMHIGH	TOMBOOM	~	TOMELEC	HOLISETCON	TOM IA77
Ϊ)	HULISEDINE	
49			/	011104	IIOU3LNIDL	
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R	RIDECUP	v	v	v	v	v
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Ϊ		/	/	/		/
00	COWBELL	v	v	~	HOUSECOWB	~
	CRASH	~	~	~	~	~
58 VIB	VIBRASLAP	v	v	v	v	v
RIC	RIDECYM	~	~	~	~	~
		, · ·	· · ·			
İ	INGASLAF	~	~	~	~	~
61 BU	BONGOLOW	v	v	v	×	~
Π	CONGAHSLAP	v	v	v	HOUSETCON	~
63	CONGAHIGH	~	v	~	HOLISETCON	~
Ċ	CONCALOW				HOLISETCON	
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=	IIIVIBALES	v	v	~	~	~
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68 AG	AGOGO	v	v	v	v	~
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70 07	MADACAS		· · ·		VUXHHCI	
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A•vi Appendix

Drumkits



Tables A•vii

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58 58	HHPEDAL	v	~
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66 <	SPLASH	v	~
67 • • • • • • •	TOMROOM	v	v
~ ~	CRASH	v	v
~			
2	VIDRAGLAF	~	~
/	CHINA	~ ~	~ \
	CHINA	v v	v v

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	/	v	v	v	v	v	v	v	v	v	v	v	v	v	v																									
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		CONGASLAP	CONGAHIGH	CONGALOW	GUIROLONG	QUICALOW	TIMBALES	TIMBALES	AGOGO	TRIANLONG	WHISTLE	BDHOUSE1	NOISEPERC	HOUSSD1	VOICES1	VOICES 3	VOICES2	VOXHHCL	VOICES2	VOXHHCL	VOXTIP	VOXTAP	CLAKSON	DOLLYVOX	TAMBSLP	ROLLSNARE	SDORCH	HHCL01S	CLAVES	CONGALOW	QUICAHIGH	AGOGO	STICK	STICK	STICK	STICK				
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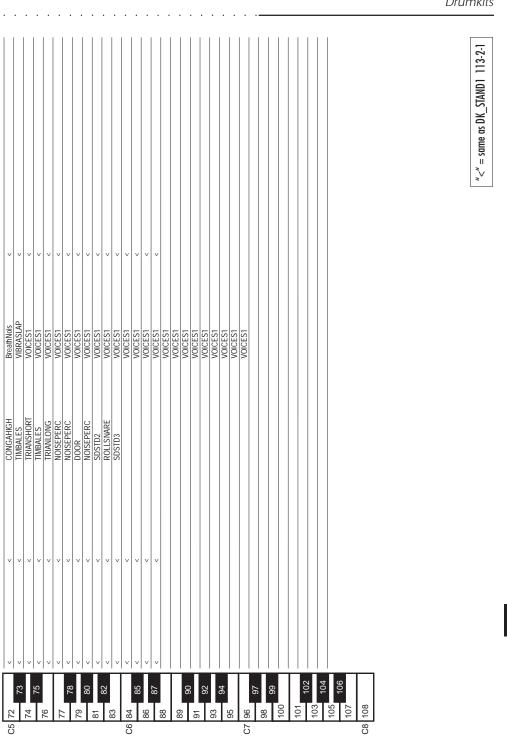
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Tables A•ix

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BDTEKNO	~			BDSTD1
BDJAZZ	BDJAZZ	v	BDSTD2	BDSTD2
HOUSERIM	RIMSHOT2	BDROOM1	BDROOM1	RIMSHOT1
HOUSSD1	SDJAZZ3	BDELECT1	BDELECT1	SDORCH
	~	BDHOUSE1	BDPOWER	~
HOUSESD2	DYNSDJAZZ	BDPOWER	TOMLOW	SDJAZZ3
HOUSETCON	TOMJAZZ	SDSTD1	TOMLOW	~
HHCL02	HHTGHT1	SDORCH	TOMHIGH	HHTGHT1
HOUSETCON	TOMJAZZ	SDSTD3	TOMHIGH	~
HHTGHT1	v	HOUSSD1	BDHOUSE1	~
HOUSETCON	TOMJAZZ	SDROOM2	BDSTD2	~
HOUSERIDE	HHOPEN1	RIMSHOT1	SDSTD1	HHOPEN1
HOUSETCON	TOMJAZZ	SDROOM2	TOMROOM	~
HOUSETCON	TOMJAZZ	TOMLOW	TOMROOM	~
HHOPEN2	v	TOMROOM	SDSTD3	v
HOUSETCON	TOMJAZZ	TOMLOW	TOMROOM	~
ReverseCym	v	TOMROOM	RIMSHOT1	~
	v	TOMHIGH	SDELECT	~
	~	HHCL01S	TOMROOM	~
	v	HOUSEHH	HOUSECLAP	~
	v	HHPEDAL	COWBELL	~
HOUSECOWB	v	HOUSERIDE	CABASA	~
	v	HHOPEN2	HHCL01S	~
	v	TAMBOURINE	TAMBOURINE	×
	v	HOUSEHH	HHOPEN2	~
	v	CRASH	CRASH	~
	v	CHINA	ROLLSNARE	v
HOUSETCON	v	RIDECYM	RIDECYM	~
HOUSETCON	v	RIDECUP	RIDECUP	~
HOUSETCON	v	CABASA	TubularBel	~
DY NSDJAZZ	v	VOXHHCL 114-12	TubularBel	~
SDJAZZ2	v	HOUSCLAP	TubularBel	×
	v	BONGOLOW	KITCHEN	~
	v	BONGOLOW	KITCHEN	~
	v	DARBKLOW	DARBKLOW <	
VOXHHCL	~	DARBKHIGH	DARBKHIGH	~
	v	CONGALOW	BreathMois	· · · ·

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Drumkits

Tables A•xi

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Preset	No.	Sound Upp.1	Sound Upp. 2	Sound Lower	Mode
GPiano	1	Piano1	String	Organ3	Full
PnoStr	2	Piano1	SloStr	DynBas	Split
SloSax	3	SaxNoi	JazzGt	WarmPd	Split
Theme	4	Fantsy	PanFlu	Fantsy	Split
StGuit	5	12StGt	Steel1	WarmPd	Split
Jazzed	6	Vibes	Piano2	AcBas2	Split
MStone	7	PianW2	BassLd	AcBas2	Split
KeyPad	8	WarmPd	Piano2	harps2	Split
Oldies	9	OctPia	SloStr	FrHorn	Split
Party	10	Oboe	String	TinRod	Split
Shout	11	TenSax	Organ3	Organ3	Split
Bossa	12	SaxNoi	String	S-Stri	Split
Miami	13	Trmbn	Fantsy	String	Split
T.Funk	14	Clavin	El-Pn1	PkBass	Split
Ravers	15	Digital	Record	Resona	Split
Mr.Pad	16	WarmPd	Piano1	El-Pn2	Split
BigStr	17	S.Str1	S.Str1	El-Pn2	Split
BigBrs	18	Brass	BrassR	El-Pn1	Split
BIBnd	19	Clarin	TenSax	PnoMk1	Split
Epad1	20	El-Pn1	I.Rain	I.Rain	Split
Benson	21	JazzGt	Vibes	AcBas2	Split
Ronnie	22	S.Str2	Piano1	AcBas2	Split
BigOrg	23	Organ3	Organ2	Brass	Split
Analog	24	SynLd1	Fants2	Strin3	Split
Mallet	25	Kalimb	Marimb	Choir	Split
Gospel	26	Organ3	Piano1	Organ2	Split
S.Horn	27	FrHorn	S.Str1	JazOr3	Split
GtSplt	28	S-Str1	SoloGt	WarmPd	Split
Barque	29	Harpsi	Flute	Fantsy	Split
PanPad	30	PanFlu	El-Pn2	S.Str1	Split
Baries	31	Sopran	Baritn	SynSt1	Split
EcoPno	32	Piano2	Clarin	Halo-P	Split

Preset	No.	Sound Upp.1 Sound Upp. 2 Sound Lower Mode
	33	
	34	
	35	
	36	
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Programmable Preset (Blank)

Preset	No.	Sound Upp.1 Sound Upp. 2 Sound Lower	Mode
	1		
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	7		
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	11		
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Preset	No.	Sound Upp.1 Sound Upp. 2 Sound Lower	Mode
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Monufecturise: Canand Interio C n A	FUNCTION	Basic Default Channel Changed	Mode Default Messages Altered	Note Number True voice	Velocity Note ON Note OFF	After Key's Touch Ch's	Pitch Bender	Control Change		
×	Transmitted	1-16 1-16	Mode 3 X *****	0-127 *****	0 0	x	0	0,32Bank change1Modulation4Foot controller6,38Data Entry7Volume10Pan11Expression Contr.18,50†Oriental control66Sustain67Soft pedal91Reveb depth93Chorus depth98,99NRPN100,101RPN		
MIDI Implementation Chart	Recognised	1-16 1-16	Mode 3 X X	0-127	0 0	× o	0	0.32 Bank change 1 Modulation 4 Foot controller 6.38 Data Entry 7 Volume 10 Pan 11 Expression Controller 16,48† Effects selection 16,48† Effects selection 11 Expression Controller 13,50† Oriental control 66 Sustain 66 Sustain 67 Release time 73 Attack time 74 Filter 1 cut-off freq. 91 Reverb depth 98,99 NRPN 100,101 RPN	Cntrl 50 (ONE SHOT): 0.1.2† Fill Equal-Minus-Plus 8† Intro 16† End	
Voweicon 1 00	Remarks	1 MIDI IN; 1 THRU; OUT EXTRA COMMON/CHORD CH.		true voice on banks 1-2-3 depend on selected sound				Bank change recognised on common channel, only in reception: Bank P.change 32-43† 0-95 Internal styles. 44-47† 0-15 Prog.Styles 48-55† 0-63 Real time Perf. 56-61† 0-6 Songs 62† 0-6 Songstyles		

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True number ****** O xclusive 0 0 Song Position x x Song Position x x Song Select x x Tune x x Tune x x Clock 0 0 Active sensing 0 0 Active sensing 0 0 Active sensing 0 0 All Sound Off 0 0 All Note Off 0 0 All Note Off 0 0 These messages travel on the Common channel only 0	Prooram		0-127	 24-27† Variations 0-1-2-3 24-27† Variations 0-1-2-3 40† Touch start 59† Fade 61† Rotary slow/fast 66,67† Tempo inc. dec. 68,69† Preset inc. dec. 68,69† Preset inc. dec. 00 N [0,63] OFF[64,127] 01.1,2† Fill Equal-Minus-Plus 8† Intro 01.2† Fill Equal-Minus-Plus 8† Intro 01.2† Fill Equal-Minus-Plus 32† Harmony 33† Easy Play 33† Lower Memory 40† Key Start 49† Single Touch play 40† Key Start 49† Single Touch play 50¢ Mixer Lock 51† Tempo Lock 59,60 Fade in-out 61† Rotary (OFF=slow) 	0-121
Exclusive 0 0 Exclusive 0 0 Song Position x x In Tune x Song Select x x X x x Song Select x Song Select x	_	lber	0-127 *****	0-127	0-127
Song Position x x n Tune x x n Tune x x n Tune x x n Clock o o ne Conmands o o a Ative sensing o o s All Sound Off o o as All Sound Off o o All Note Off o o All Note Off o o All Note Off o o Add 1 OMM ON MONO	System Exclusive		0	0	
In Tune x x In Clock 0 0 ime Commands 0 0 East All Contr 0 0 Reset All Contr. 0 0 Local ON OFF 0 0 All Note Off 0 0 All Note Off 0 0 Mode 1 OMMI ON DOI V Mode 2 OMMI ON		ition	x	××	
n Clock 0 0 ime Commands 0 0 Active sensing 0 0 ges All Sound Off 0 Reset All Contr. 0 0 Local ON OFF 0 0 All Note Off 0 0 All Note Off 0 0 Mode 1 OMMI ON DOI V MODE 2 OMMI ON		2	××	×	
ime Commands 0 0 ges Active sensing 0 0 Active sensing 0 0 Reset All Contr. 0 0 Local ON OFF 0 0 All Note Off 0 0 All Note Off 0 0 All Note Off 0 0 All Note Off 0 0			0	0	Start, Stop
Active sensing 0 0 ges All Sound Off 0 0 Reset All Contr. 0 0 Local ON OFF 0 0 All Note Off 0 0 All Note Off 0 0 All Note Off 0 0 All Note Off 0 0 All Note Off 0 0		ds	0	0	Continue
Reset All Contr. 0 0 Local ON OFF 0 0 All Note Off 0 0 † These messages travel on the Common channel only Mode 2 OMMLON MONO	ages	nsing 1 Off	0 0	0 0	
Local ON OFF 0 0 All Note Off 0 0 † These messages travel on the Common channel only 0		Contr.	0	0	
* These messages travel on the Common channel only Mode 1 OMMI ON DOLV Mode 2 OMMI ON MONO	Local ON All Note	t OFF Off	0 0	0 0	
Mode 1 CMAILON DOL V Mode 2 CMAILON MODE			travel on the Common channel o		o. VFS v: NO
		nessages	travel on the Common channel o	nly	o: YES x: NO
>		22	Mode 1 OMNI ON - POLY	Mode 2 OMNI ON - MONO	

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Glossary

After Touch: MIDI message normally activated by applying pressure after a note on event. The **P51500** keyboard does not generate this message but the relative events can be received via MIDI. Can be used to control modulation or volume in an external MIDI device.

Bypass: To ignore, "go around". 'Effect bypass' refers to the deactivation of the effects. When the LED of the REVERB or EFFECTS button is off, the sounds bypass the DSPs and are emitted without reverb and/or modulation effect.

Common Channel: A programmed MIDI channel to, (1) simulate the **P51500** keyboard on a connected Master Keyboard, (2) send control messages (Bank change, Preset change, Style change, Effect change...) from a **P51500**-Series instrument to another instrument of the same series.

Control Change: See MIDI Controllers.

Controllers: Controlling devices (Pedals), which control the values of various Control Change messages.

Cutoff Frequency: Central Frequency of the intervention band of a Filter. Around the vicinity of the Cutoff Frequency, the action of a Filter gradually becomes less marked, creating a "bell" in the audio band.

Data Entry: Groups of controls used to insert or specify data and for editing. The Data Entry controls include: Dial, Sliders, Enter & Escape and the Keyboard (name writing).

Dial: The Data Entry wheel located under the Display, active for Tempo changes in normal playing conditions.

Directory: "Catalogue" of the contents of a floppy disk or RAM.

Disk Drive: Device that "reads" a floppy disk. The **P51500** disk drive reads 3.5" HD and DD disks. Recognizes the following formats: **P51500** [MS-Dos] (1.44 Mb), Ms-Dos/Atari ST (720 kb). **Display:** The 2x40 LiquidCrystal Display incorporated in the front panel of **P51500**. Permits you view parameters and lyrics as well as all information relating to the instrument's operation

Drum Kit: Refers to the layout of the percussive sounds across the keyboard. A Drum Kit permits you to use a single Track for all the drum sounds. Each note of the scale corresponds to a percussive instrument sound. The **P51500** ROM Drum Kits are in banks 2 and 3 of the Percussive Group. Each Preset can contain a user-programmed RAM Drum kit created in «Edit Sound».

Dry: commonly used expression related to a sound not processed by the DSPs.

DSP: (Digital Signal Processor). The effects processor - **P51500** includes 2 DSPs: one reverbs and one modulations or chorus/delay. **Dynamic:** *See* Velocity.

Edit: Modify. A section of the operating system capable of modifying the instrument's parameters. Each button of the EDIT section gains access to an edit environment.

Envelope: Term that represents (graphically) the change in the characteristics and quality of a Sound with time. In Edit Sound, it is possible to modify the Attack, Decay and Release envelopes.

Filter: A device used to modify a sound by intervening on the harmonic content. In «Edit Sound», it is possible to modify the filter's cutoff frequency and resonance.

Flash ROM: Up-dateable ROM ("Read only memory") which contains the instrument's operating system and the factory-programmed data which cannot be destroyed, other than by updating the contents with data contained in special OS disks.

Floppy Disk: A magnetic Data support, protected by a plastic container, in which **P51500** data can be memorized. The data handling operations are in «Edit Disk». **Footswitch**: A "physical" switch-action controlling device. *The* **P51500** pedal group consists of 3 function assignable pedals. All are switch action pedals.

Headphones: Stereo listening devices used for private listening.

Loop: Cyclic repetition. The essential requisite for all Style patterns (riffs) which are short repeating sequences.

Master Keyboard: A controlling device (keyboard). Usually, a MK is a generator of MIDI events, incapable of generating Sounds. It is connected to the MIDI IN of an Expander, or another MIDI compatible musical instrument. **P51500** can operate as a Master Keyboard.

MIDI: (Musical Instrument Digital Interface). A system of communication between different digital musical instruments. MIDI is based on the connection via three types of ports: IN, OUT, THRU. The MIDI system renders all electronic digital instruments completely programmable at a distance (e.g. from a computer).

MIDI data provides the receiving instrument with all information necessary to produce sounds. **MIDI Common:** *See* Common channel.

MIDI Controllers: MIDI messages which transmit information relating to performance parameters (Modulation, Main Volume, Damper Pedal...). MIOS: (Musical Instrument Operating System). Refers to the **P51500** Operating System, the program that makes the instrument work. MIOS is resident in FLASH ROM which can be updated with newer versions of the operating

Modulation: Dynamic modification over time. Can be received via MIDI.

Multitasking: The operating system's ability of running several different operating modes at the same time.

Oscillator: The fundamental element that produces the sound. **P51500** utilizes one or two oscillators per polyphonic voice, reads a Waveform which then modifies with the Sound Edit pa-

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rameters.

Pan: Abbreviation for Panorama. The Pan is the position of the Sound between the Stereo audio channels.

Pedal: A physical switch controlling device which can be assigned a controlling function (start/stop, fill, damper, etc.). *The* **P51500** group of three pedals consists of switch action pedals which can be programmed to operate as switch control pedals.

Preset: A configuration of tracks used to recall a sound combination for the keyboard (Programmable Preset), a sound combination for the accompaniments (Style-Preset) and a sound combination for the Songs and Song/Styles (Song-Preset, Song/Style-Preset).

Pitch: Intonation, frequency.

Pitch Bend: Dynamic modification of the pitch. Activated by an appropriately programmed pedal, or a MIDI message.

Playback: The term that describes the Sequencer's capability of reproducing a Song.

Preload: "Background" Song loading while the Sequencer is playing another Song.

Program Change: A MIDI Message used to change a Sound, Performance, Style, Song/ Style or Song. Frequently used in combination with the BankSelect (ControlChange 00) message.

Quantize: Correction of imperfect timing errors committed during Song, Song/Style and Style recordings (including Rhythm patterns). **RGB:** (Red, Green, Blue) The signal emitted by the output of the same name and generated by **P51500** for the purpose of projecting the display images and Song lyrics to an external monitor (a colour computer or domestic TV).

ROM: (Read Only Memory). A part of the **P51500** memory which cannot be modified, and in which factory programmed data is conserved, including the Operating System MIOS. In **P51500**, the ROM is a flash-ROM, up-dateable with OS-disks containing later versions of the

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system via floppy disks.

operating system. ROM memory is not cancelled when the instrument is switched off.

Sample: Refers to a portion of the sound recorded in numeric form. The combination of several samples along the music scale is called a multi-sample. In **P51500** samples are the principal element of the Sound. PS1500 is also able to sample Sounds, provided the instrument is fitted with the optional Audio/Video Interface.

Scart: The connector through which a domestic TV or colour computer monitor can receive the **P51500** display data, including the Lyrics of the **P51500** Songs.

Sequencer: A system of recording MIDI data. The Sequencer (16 Track Recording Studio) permits you to record a polyphonic song track by track, and reproduce the song after applying eventual corrections. The quality of a sequencer recording is maintained and does not decay, even after many recordings and modifications. The Sequencer does not record sounds, it records MIDI data (events).

P51500 incorporates a powerful 16-track sequencer with several edit functions.

Song: A piece of music, recorded or reproduced (played back) by the Sequencer.

Sound: In **P51500**, the Sound is the basic sonoric material, based on samples elaborated by envelopes and filters. The Sounds, assigned to Tracks, make up the Presets.

Text: The **P51500** function which permits you to see the Lyrics across the display. **P51500** can also transmit the data to an externally connected domestic TV or color computer monitor. **Track:** A single timbre part of a Preset or single instrumental part of a Song, Song/Style or Style. Each Track is individually programmable for the assigned Sound, volume settings, pan, MIDI channel, etc..

Transpose: The change in pitch of a note with respect to a standard value.

Tweak: A term that describes the slight modi-

fication of one or more of a Sound's parameters.

User Interface: All that which appears within the Display. The means with which the user communicates with the musical instrument that is, the availability of information relating to the status of the data - and in general with all computers.

User: Generally, this term indicates all that can be programmed by the operator.

Velocity: MIDI message always coupled to the activation of a note. Velocity controls the sound's intensity, proportionally to the velocity with which the keys are struck.

Wet: commonly used expression related to a sound processed by the DSPs.

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