

# CLUB Series SPEAKER SYSTEM/ SUBWOOFER

## SERVICE MANUAL



S112IVS



S115IVS



SM12IVS



SW118IVS

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This document is printed on chlorine free (ECF) paper with soy ink.

### **IMPORTANT NOTICE**

This manual has been provided for the use of authorized Yamaha Retailers and their service personnel. It has been assumed that basic service procedures inherent to the industry, and more specifically Yamaha Products, are already known and understood by the users, and have therefore not been restated.

**WARNING :** Failure to follow appropriate service and safety procedures when servicing this product may result in personal injury, destruction of expensive components and failure of the product to perform as specified. For these reasons, we advise all Yamaha product owners that all service required should be performed by an authorized Yamaha Retailer or the appointed service representative.

**IMPORTANT :** This presentation or sale of this manual to any individual or firm does not constitute authorization certification, recognition of any applicable technical capabilities, or establish a principal-agent relationship of any form.

The data provided is believed to be accurate and applicable to the unit(s) indicated on the cover. The research engineering, and service departments of Yamaha are continually striving to improve Yamaha products. Modifications are, therefore, inevitable and changes in specification are subject to change without notice or obligation to retrofit. Should any discrepancy appear to exist, please contact the distributor's Service Division.

**WARNING :** Static discharges can destroy expensive components. Discharge any static electricity your body may have accumulated by grounding yourself to the ground buss in the unit (heavy gauge black wires connect to this buss.)

**IMPORTANT :** Turn the unit OFF during disassembly and parts replacement. Recheck all work before you apply power to the unit.

### **WARNING: CHEMICAL CONTENT NOTICE!**


The solder used in the production of this product contains LEAD. In addition, other electrical/electronic and/or plastic (Where applicable) components may also contain traces of chemicals found by the California Health and Welfare Agency (and possibly other entities) to cause cancer and/or birth defects or other reproductive harm.

**DO NOT PLACE SOLDER, ELECTRICAL/ELECTRONIC OR PLASTIC COMPONENTS IN YOUR MOUTH FOR ANY REASON WHATSOEVER SO EVER!**

Avoid prolonged, unprotected contact between solder and your skin! When soldering, do not inhale solder fumes or expose eyes to solder/flux vapor!

If you come in contact with solder or components located inside the enclosure of this product, wash your hands before handling food.

## **WARNING**

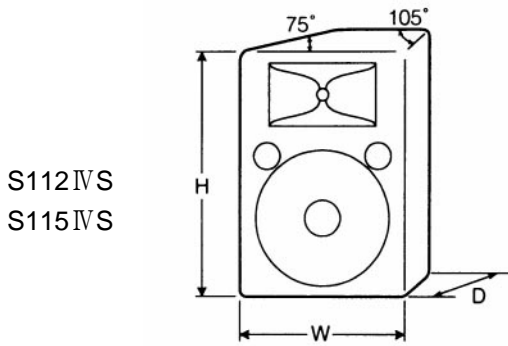
Components having special characteristics are marked  and must be replaced with parts having specification equal to those originally installed.

## ■ SPECIFICATIONS

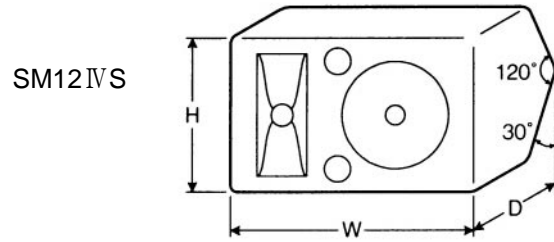
Model		S112IVS	SM12IVS	S115IVS
Enclosure		Bass reflex type		
Speaker Unit	LF	12" cone	12" cone	15" cone
	HF		2" driver	
Frequency Response		60 Hz to 16 kHz	60 Hz to 16 kHz	55 Hz to 16 kHz
Power Capacity	NOISE*	150 W	150 W	250 W
	PGM	300 W	300 W	500 W
	MAX	600 W	600 W	1000W
Nominal Impedance		8 Ω		
Sensitivity		97 dB SPL (1W, 1m)	97 dB SPL (1W, 1m)	99 dB SPL (1W, 1m)
Nominal Dispersion	Horizontal	90 °		
	Vertical	40 °		
Crossover Frequency		2 kHz	2 kHz	1.7 kHz
Input Connectors		1/4" Phone jack x 2 (parallel input)		
Dimensions (W x H X D)		400 x 638 x 318 mm	643 x 402 x 344 mm	475 x 712 x 362 mm
Weight		19.3 kg	19.5 kg	27.5 kg

Model		SW118IVS
Enclosure		Bass reflex type
Speaker Unit		18" cone
Frequency Response		30 Hz to 2 kHz
Power Capacity	NOISE*	250 W
	PGM	500 W
	MAX	1000W
Nominal Impedance		8 Ω
Sensitivity		96 dB SPL (1W, 1m)
Recommended Crossover Frequency		90 Hz, 12 dB/octave
Input Connectors		1/4" Phone jack x 2 (parallel input)
Dimensions (W x H X D)		542 x 654 x 791mm
Weight		32.4 kg

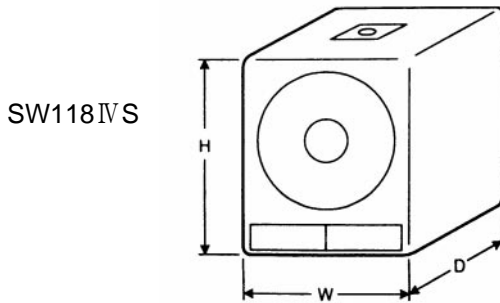
## ■ DIMENSIONS



S112IVS (WXHxD): 400X638X318  
S115IVS (WXHxD): 475X712X362



SM12IVS (WXHxD): 643X402X344

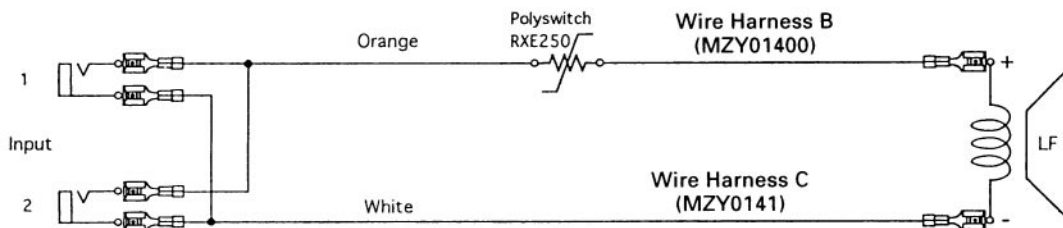


SW118IVS (WXHxD): 542X654X791

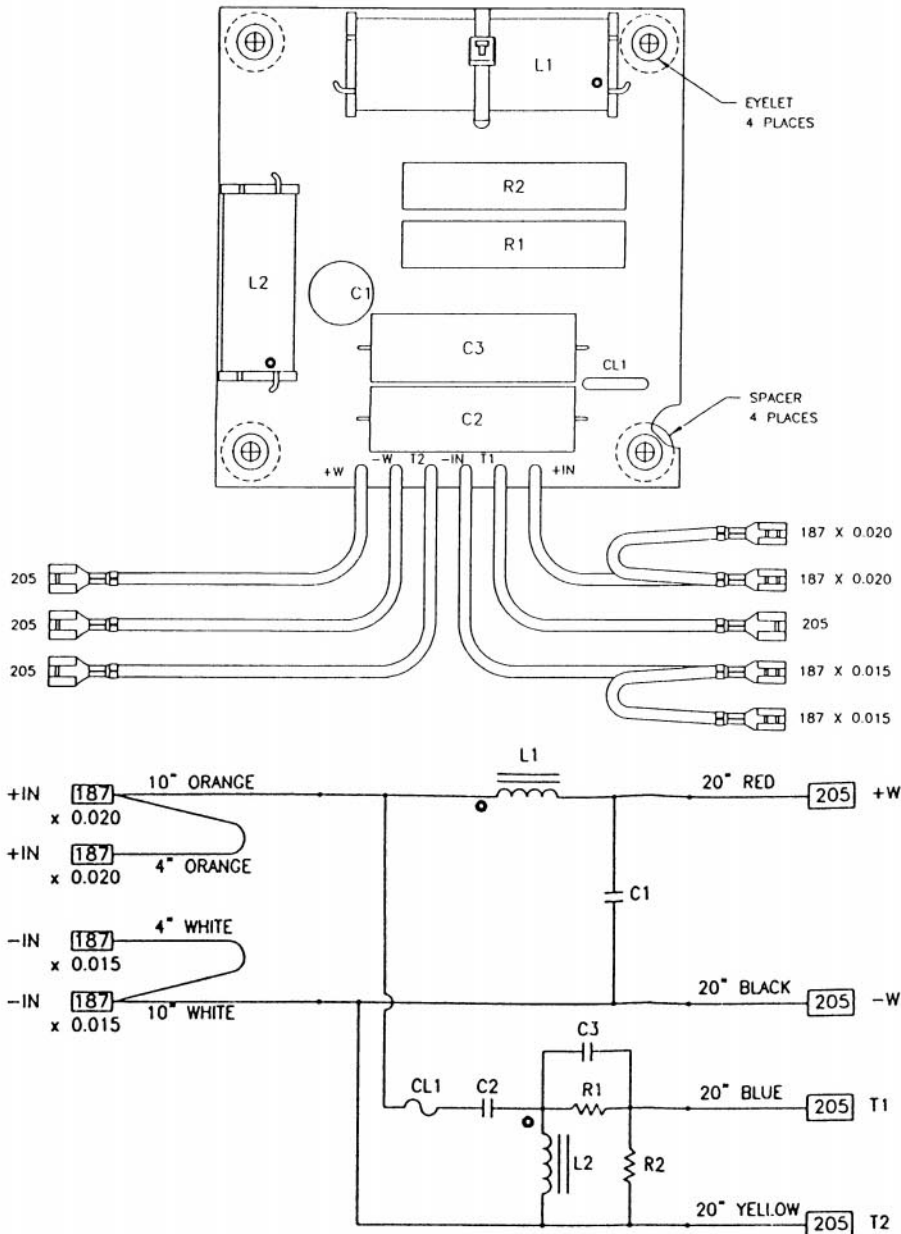
Units: mm

## ■ SCHEMATIC DIAGRAMS & CIRCUIT BOARDS

### • SW118IVS Network



• S115 IVS Network

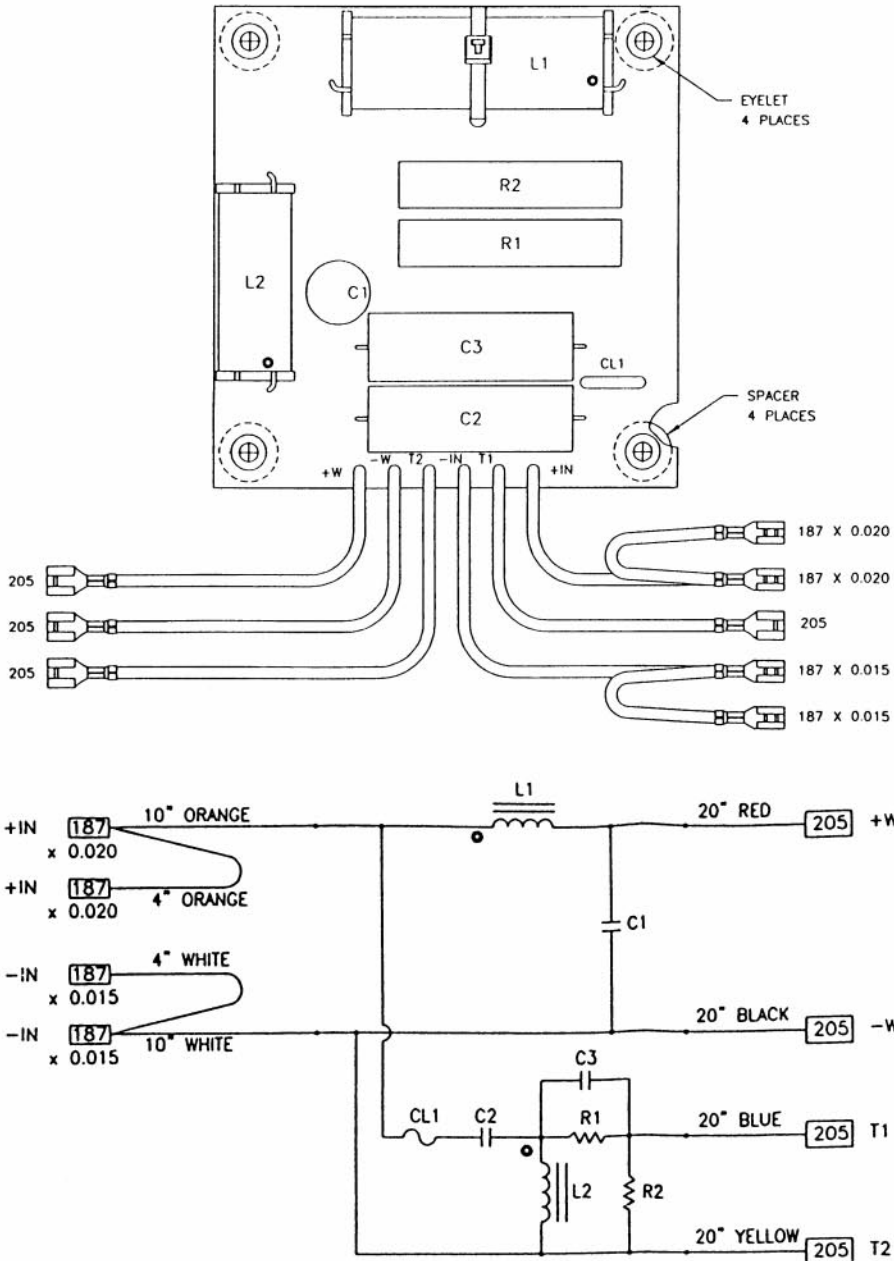


**Network NBY06410 Parts List**

C1	15.0 $\mu$ F, 100V, NON-POLAR, RADIAL, 4% DF, $\pm$ 5%, 13X26mm C.S.
C2, C3	4.7 $\mu$ F, 250V, METALLIZED POLYESTER FILM, FLAT AXIAL TYPE, $\pm$ 5%, 45mm LG
L1	2.00 mH, 57X9.5X10mm, LAMINATED STEEL I CORE, 0.36 ohm DCR, $\pm$ 5%, 19 AWG
L2	0.80 mH, 41X6X7mm, LAMINATED STEEL I CORE, 0.27 ohm DCR, $\pm$ 5%, 20 AWG
R1,R2	8.2 ohm, 10W, $\pm$ 5%, SQZS-2
CL1	CURRENT LIMITER, RXE135
187 X 0.015	FASTON, FEMALE, 0.187 X 0.015, BRASS
187 X 0.020	FASTON, FEMALE, 0.187 X 0.020, TINNED BRASS
205	FASTON, FEMALE, 0.205 X 0.020, BRASS
EYELET	EYELET, SE68, BRASS
PCB	MATERIAL: CEM-1 COPPER: 1 OZ.
SPACER	SPACER, 1/2" O.D. X 3/16" I.D. X 1/8" T, PVC
WIRES	18 AWG, UL-1007

3. ON SOLDER SIDE, MARK THE CHECK BOX CORRESPONDING WITH P/N NBY0613 WITH A BLACK DOT.
2. "o" DENOTES START LEAD OF INDUCTOR.
1. ALL COMPONENTS TO BE TESTED @ 1 Khz., UNLESS OTHERWISE SPECIFIED.

• S112IVS/SM12IVS Network



**Network NBY06420 Parts List**

C1	15.0 uF, 100V, NON-POLAR, RADIAL, 4% DF, ±5%, 13X26mm C.S.
C2, C3	4.7 uF, 250V, METALLIZED POLESTER FILM, FLAT AXIAL TYPE, ±5%, 45mm LG
L1	1.30 mH, 57X9.5X10mm, LAMINATED STEEL I CORE, 0.29 ohm DCR, ±5%, 19 AWG
L2	0.80 mH, 41X6X7mm, LAMINATED STEEL I CORE, 0.27 ohm DCR, ±5%, 20 AWG
R1,R2	5.0 ohm, 10W, ±5%, SQZS-2
CL1	CURRENT LIMITER, RXE135
187 X 0.015	FASTON, FEMALE, 0.187 X 0.015, BRASS
187 X 0.020	FASTON, FEMALE, 0.187 X 0.020, TINNED BRASS
205	FASTON, FEMALE, 0.205 X 0.020, BRASS
EYELET	EYELET, SE68, BRASS
PCB	MATERIAL: CEM-1 COPPER: 1 OZ.
SPACER	SPACER, 1/2" O.D. X 3/16" I.D. X 1/8" T, PVC
WIRES	18 AWG, UL-1007

3. ON SOLDER SIDE, MARK THE CHECK BOX CORRESPONDING WITH P/N NBY0614 WITH A BLACK DOT.
2. "\*" DENOTES START LEAD OF INDUCTOR.
1. ALL COMPONENTS TO BE TESTED @ 1 KHz., UNLESS OTHERWISE SPECIFIED.

# CLUB Series SPEAKER SYSTEM/ SUBWOOFER

## PARTS LIST

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#### OVERALL ASSEMBLY

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#### Notes : DESTINATION ABBREVIATIONS

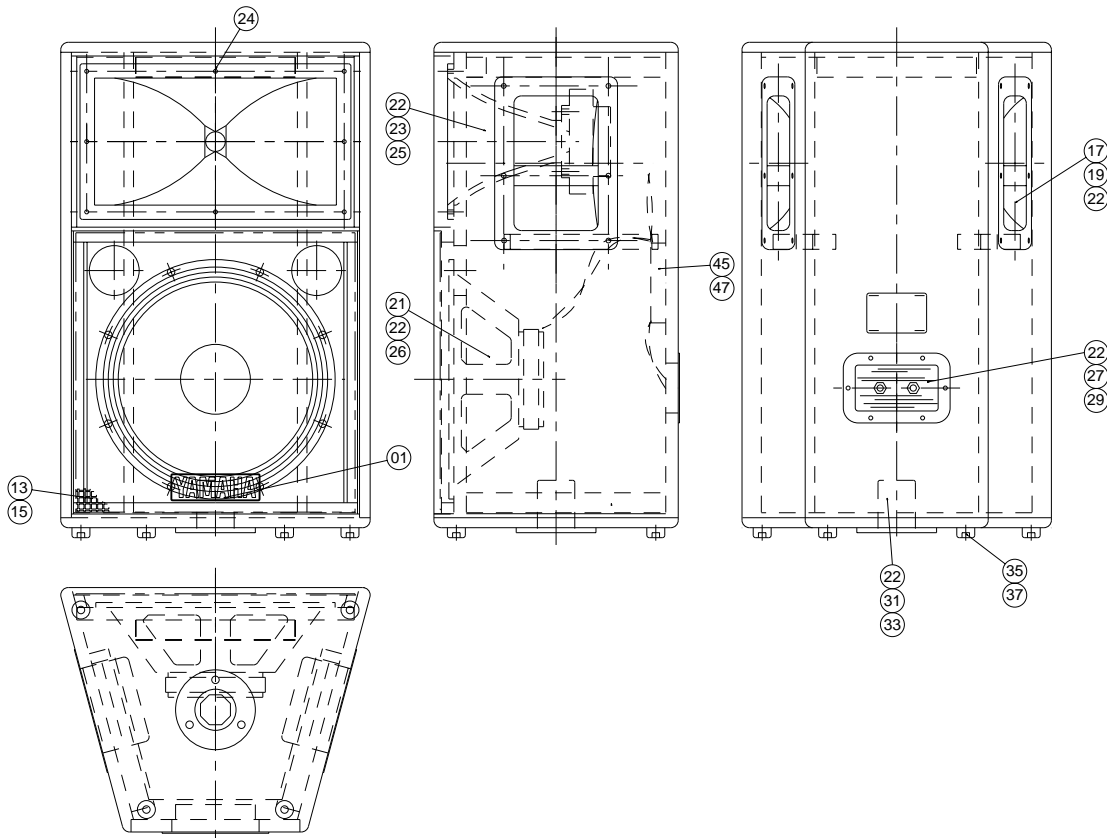
A : Australian model	M: South African model
B : British model	O : Chinese model
C : Canadian model	Q : South-east Asia model
D : German model	T : Taiwan model
E : European model	U : U.S.A. model
F : French model	V : General export model (110V)
H : North European model	W: General export model (220)
I : Indonesian model	N,X: General export model
J : Japanese model	Y : Export model

### ■ WARNING

Components having special characteristics are marked  and must be replaced with parts having specification equal to those originally installed.

- The numbers "QTY" show quantities for each unit.
- The parts with "--" in "PART NO." are not available as spare parts.
- This mark "}" in the REMARKS column means these parts are interchangeable.
- The second letter of the shaded (■) part number is O, not zero.
- The second letter of the shaded (■) part number is I, not one.

**OVERALL ASSEMBLY: S112IVS**



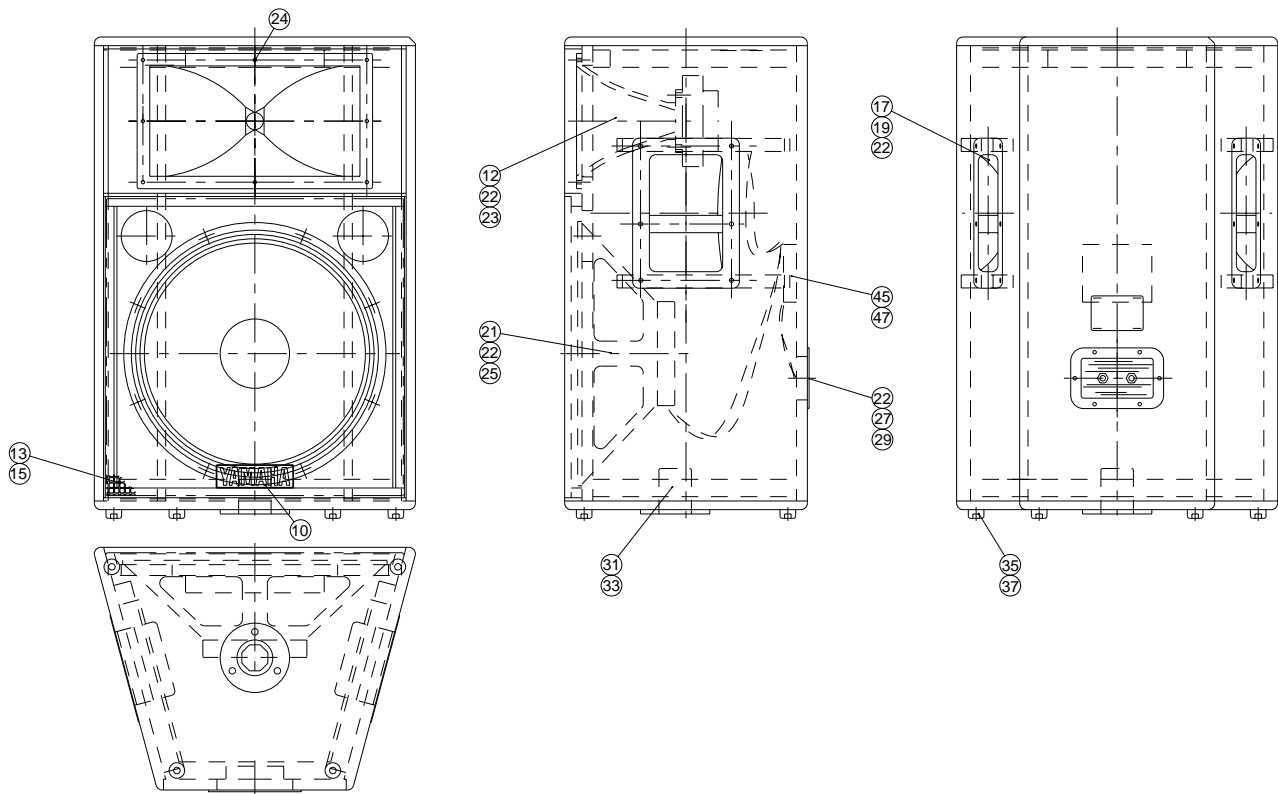
REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
	01	OVERALL ASSEMBLY		S112IVS		05
*	13	YAMAHA Logo				
	15	Metal Grille	#6 X 5/8		8	01
	17	Truss Head SM Screw			2	08
	19	Metal Handle	#8 X 3/4		12	01
	21	Truss Head SM Screw	12"			19
	22	Woofer			11	03
	23	Speaker Gasket				26
	23a	Horn Assembly				13
	23b	Horn-90 Deg				22
	23c	Horn Driver				16
	23d	Diaphragm Assembly			2	01
*	24	Pan Head Screw	1/4-20X5/8 W/T.W			
	25	Pan Head SM Screw	#10 X 1-1/2 BL		7	01
	26	Pan Head PB Screw	#10 X 1 BLK		8	
*	27	Pan Head PB Screw	#8X1 BLK ZINC			
	27a	Input Panel Assembly				08
	27b	Input Panel	3/8SI SAE		2	01
	27c	Plain Washer				05
	27d	Jack		(CBY0523)		
	29	Decal			6	01
	31	Truss Head SM Screw	#6 X 5/8			06
	33	Tripod Support MNT35			3	01
	35	Pan Head PB Screw	#10 X 1 BLK		4	03
	37	Rubber Foot			4	01
	45	Pan Head PB Screw	#10 X 1 BLK			15
	47	Network	12"		4	01
		Pan Head PB Screw	#6 X 3/4			

\*: New Parts

RANK: Japan only



OVERALL ASSEMBLY: S115IVS

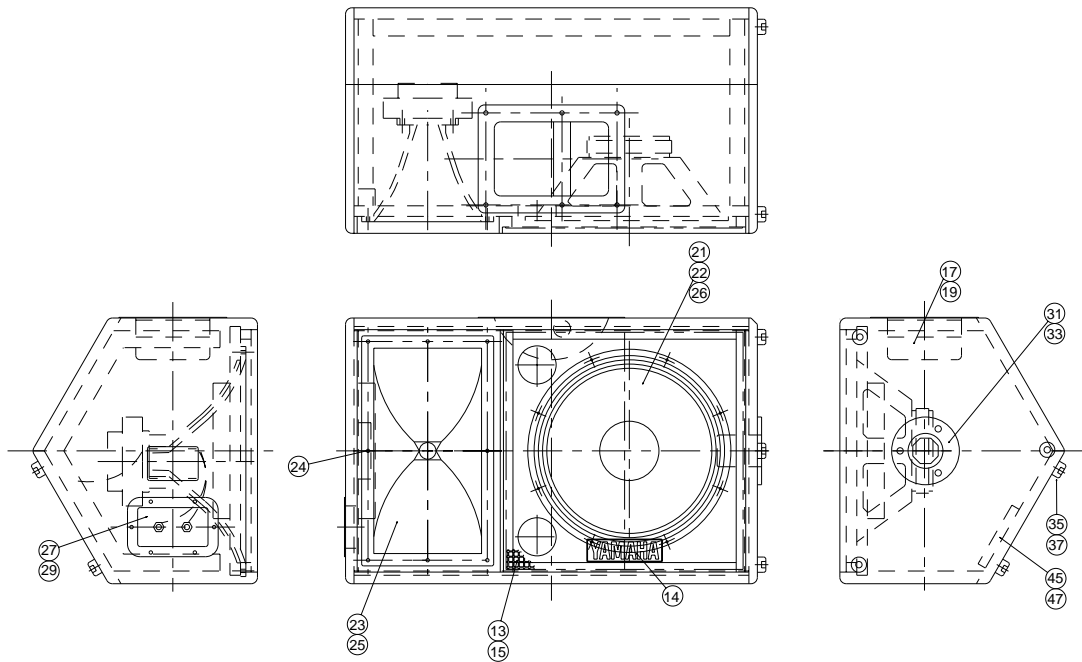


REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
		OVERALL ASSEMBLY		S115IVS		
	10	YAMAHA logo				05
*	12	Pan Head PB Screw	#10 X 1 BLK		7	01
	13	Metal Grille				
	15	Truss Head SM Screw	#6 X 5/8		8	01
	17	Metal Handle			2	08
	19	Truss Head SM Screw	#8 X 3/4		12	01
	21	Woofer	15"			30
	22	Speaker Gasket			12	03
	23	Horn Assembly				26
	23a	Horn-90 Deg				13
	23b	Horn Driver				22
	23c	Diaphragm Assembly				16
	23d	Pan Head Screw	1/4-20X5/8 W/T.W		2	01
*	24	Pan Head SM Screw	#10 X 1-1/2 BL			
	25	Pan Head Screw	#10-32 X 1 BLK		8	03
*	27	Input Panel Assembly				
	27a	Input Panel				08
	27b	Plain Washer	3/8SI SAE		2	01
	27c	Jack				05
	27d	Decal		(CBY0523)		
	29	Truss Head SM Screw	#6 X 5/8		6	01
	31	Tripod Support MNT35				06
	33	Pan Head PB Screw	#10 X 1 BLK		3	01
	35	Rubber Foot			4	03
	37	Pan Head PB Screw	#10 X 1 BLK		4	01
	45	Network	15"			15
	47	Pan Head SM Screw	#6 X 3/4		4	01

\*: New Parts

RANK: Japan only

OVERALL ASSEMBLY: SM12IVS

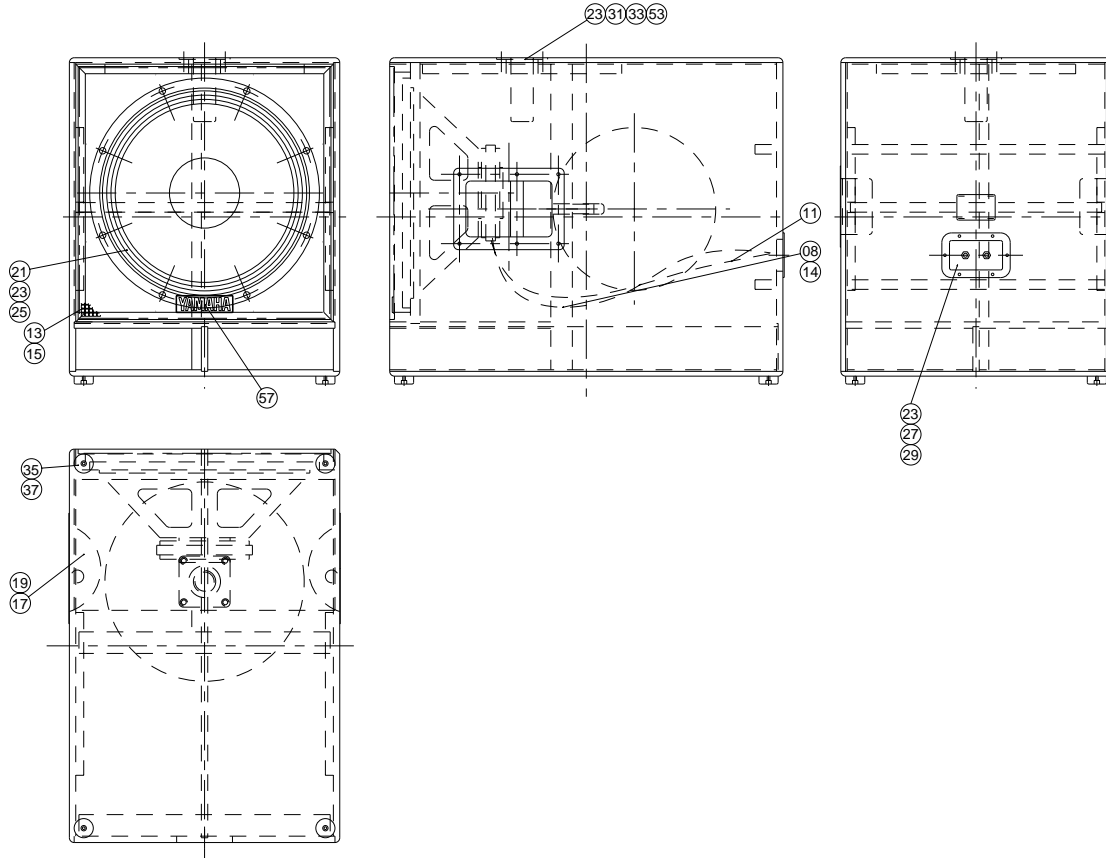


REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
		OVERALL ASSEMBLY		SM12IVS		
*	13	AAY02550 Metal Grille				05
	14	CBY03990 YAMAHA Logo				08
	15	ETAG1030 Truss Head SM Screw	#6 X 5/8		8	01
	17	AAY02200 Metal Handle				01
	19	ETA11230 Truss Head SM Screw	#8 X 3/4		6	01
	21	JAY51200 Woofer	12"			19
	22	CBY01480 Speaker Gasket			9	03
	23	NBY06160 Horn Assembly				26
	23a	CBY03900 Horn-90 Deg				13
	23b	JAY20610 Horn Driver				22
	23c	NBE20610 Diaphragm Assembly				16
	23d	EKY01330 Pan Head Screw	1/4-20X5/8 W/T.W		2	01
*	24	EPAK2430 Pan Head SM Screw	#10 X 1-1/2 BL			01
	25	EKY01240 Pan Head PB Screw	#10 X 1 BLK		7	01
	26	EKY01460 Pan Head PB Screw	#8X1 BLK ZINC		8	
*	27	NBY07020 Input Panel Assembly				08
	27a	AAY02130 Input Panel				01
	27b	EWPP0010 Plain Washer	3/8SI SAE		2	01
	27c	LBY00150 Jack				05
	27d	-- Decal		(CBY0523)		
	29	ETAG1030 Truss Head SM Screw	#6 X 5/8		6	01
	31	CBY03910 Tripod Support MNT35				06
	33	EKY01240 Pan Head PB Screw	#10 X 1 BLK			01
	35	CBY01890 Rubber Foot			7	03
	37	EKY01240 Pan Head PB Screw	#10 X 1 BLK		7	01
	45	NBY06420 Network	12"			15
	47	EPAG1230 Pan Head SM Screw	#6 X 3/4		4	01

\*: New Parts

RANK: Japan only

OVERALL ASSEMBLY: SW118IVS



REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
		OVERALL ASSEMBLY		SW118IVS		
08	--	Wire Harness C		(MZY0141)		
11	MZY01400	Wire Harness B				08
13	AAY02000	Metal Grille				18
14	ETAG1030	Truss Head SM Screw	#6 X 5/8			01
15	ETAG1030	Truss Head SM Screw	#6 X 5/8		14	01
17	AAY02200	Metal Handle			2	08
19	ETA11230	Truss Head SM Screw	#8 X 3/4		12	01
21	JAY70100	Woofer				41
23	CBY01480	Speaker Gasket			10	03
25	EKY00340	Pan Head Screw	#10-32 X 1-1/2		8	01
*	27	NBY07030	Input Panel Assembly			
	27a	AAY02130	Input Panel			08
	27b	EWPP0010	Plain Washer	3/8SI SAE	2	01
	27c	LBY00150	Jack			05
	27d	--	Decal	(CBY0523)		
29	ETAG1030	Truss Head SM Screw	#6 X 5/8		6	01
31	AAY02280	Top Hat	1-3/8			14
33	EFMN2030	Screw	1/4-20 X 1-1/4 BLK		4	01
35	CBY03890	Rubber Foot			4	02
37	EKY01000	Pan Head PB Screw	#10-32 X 1 BLK		4	03
53	--	Caution Label		(CBY0339)		
57	CBY03990	YAMAHA Logo				05

\*: New Parts

RANK: Japan only