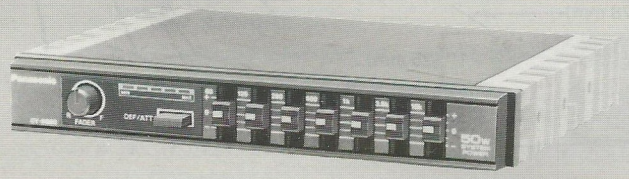
ORDER NO. APD8502129
C1

Service Manual

AUTO PRODUCTS

CY-SG60EU/EC

7-BAND GRAPHIC EQUALIZER + BOOSTER AMP



SPECIFICATIONS*

Power Supply:	12 V DC (11 ~ 16 V) Test Voltage 14.4 V Negative Ground
Maximum Power Output:	25 W (per channel at 1,000 Hz)
Power Output:	12.5 W per channel into 4 ohms 20 ~ 30,000 Hz, at 0.8% THD
Current Consumption:	Less than 1.8 A (at 1 W output)
Speaker Impedance:	4 ohms (4 ohms ~ 8 ohms available)
Frequency Response:	20 to 40,000 Hz ±3 dB
Sensitivity:	0.9 V for 1 W output (High Level) 0.1 V for 1 W output (Low Level)
Input Impedance:	500 ohms (High Level) 10k ohms (Low Level)
Equalizer Action:	±12 dB at 60 Hz, 125 Hz, 250 Hz 500 Hz, 1 kHz, 3.5 kHz and 10 kHz
Distortion:	0.05% at 1,000 Hz, 2 W output
Signal/Noise Ratio: (A-Weighted)	83 dB
Dimensions:	7"(W) x 5-1/2"(D) x 1"(H) (178 mm x 140 mm x 25 mm)
Weight:	1 lb. 10 oz. (0.75 kg)

* Above specifications comply with EIA interim standard.
Specifications subject to change without notice.
** Dimensions and weight shown are approximate.

FEATURES

- 7-Band graphic equalizer with indicators.
- L.E.D. output level indicators.
- Tone defeat/attenuator switch.
- High power output with total max. 50W offers live sound over a wide dynamic range.
- Compact design fits almost anywhere.

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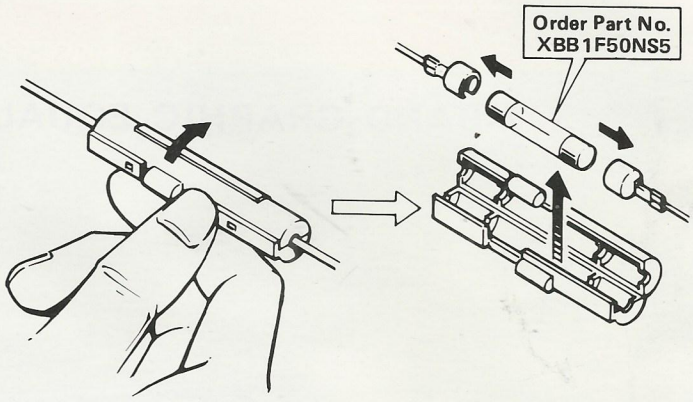
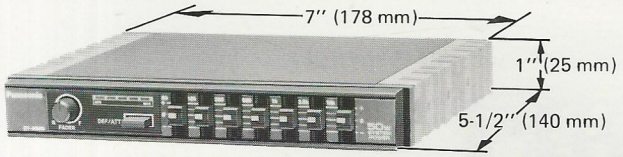
FUSE REPLACEMENT

Be sure to use a fuse of specified rating (5A) when replacing a blown fuse.

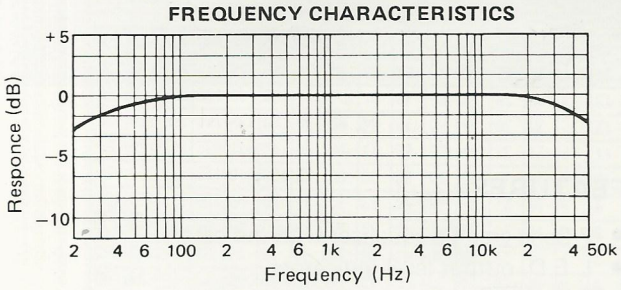
Fuses rated at higher capacity, use of any substitute, or connection without a fuse may result in a fire hazard or damage to the unit.

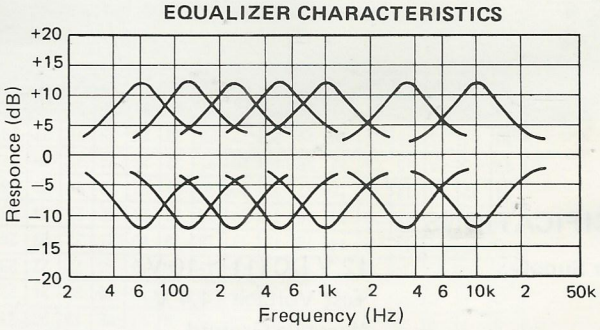


DIMENSIONS



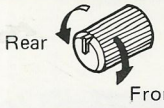
DATA GRAPH





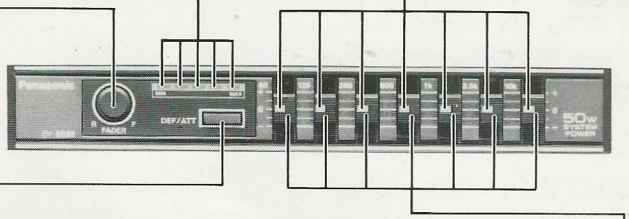
LOCATION OF CONTROLS

Fader Control
Adjust for best sound balance between the front and rear speakers.
This control is effective only when 3 or 4 speakers are installed.



LED Output Level Bargraph Indicators
Automatically indicates the sound output level coming from the speakers. Naturally, the Volume Control adjusts the sound output level.
NOTE: The red LED will light up when the volume level is highest.

Equalizer Indicator
(Orange)
This indicator lights when the DEF/ATT Switch is OFF (▮).



DEF/ATT Switch
(Defeat/Attenuator Switch)
The tone defeat/attenuator switch turns the amplifier and tone circuits off and on. And because it also reduces volume, you'll find it a very convenient way to soften commercials or narrative which are normally louder than the music before them.

▬ ON ▮ OFF

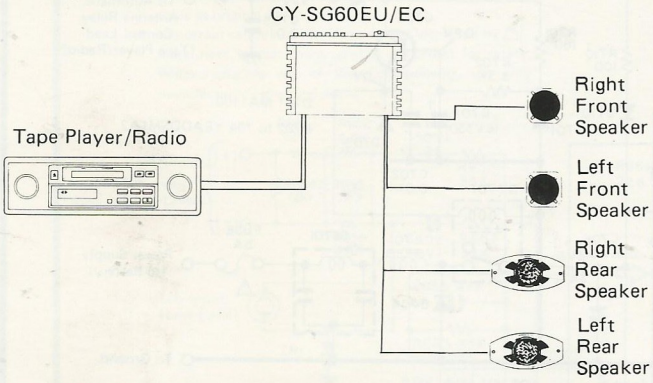
Graphic Equalizer Controls
Graphic Equalizer Controls are used to adjust the frequency response to the individual desired listening characteristics.

- Moving the control up from the center position will boost or increase the tonal sound level in that particular frequency band.
- Moving the control down will decrease the tonal sound level.
- When all the controls are set at the center position, the amplifier frequency response will be "flat".

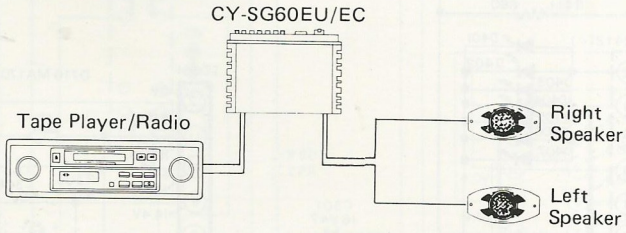
SYSTEM DIAGRAM

CAUTION: CY-SG60EU/EC is not compatible with a Tape Player/Radio carrying a "Use ungrounded speakers" label, or units with "Floating ground" outputs.

■ **4 Speaker System**



■ **2 Speaker System**



Speaker Selection

This unit consists of two amplifiers with rated output of 12.5W per channel. Therefore, please use speakers with 12.5W continuous power rating or more (with max. 25W input or more). When speakers with input capacity less than 12.5W are used, they can be damaged.

■ The speaker impedance should be 4 ~ 8 ohms. If the impedance is too large or too small, it affects the output and may result in damage to the speaker or this unit.

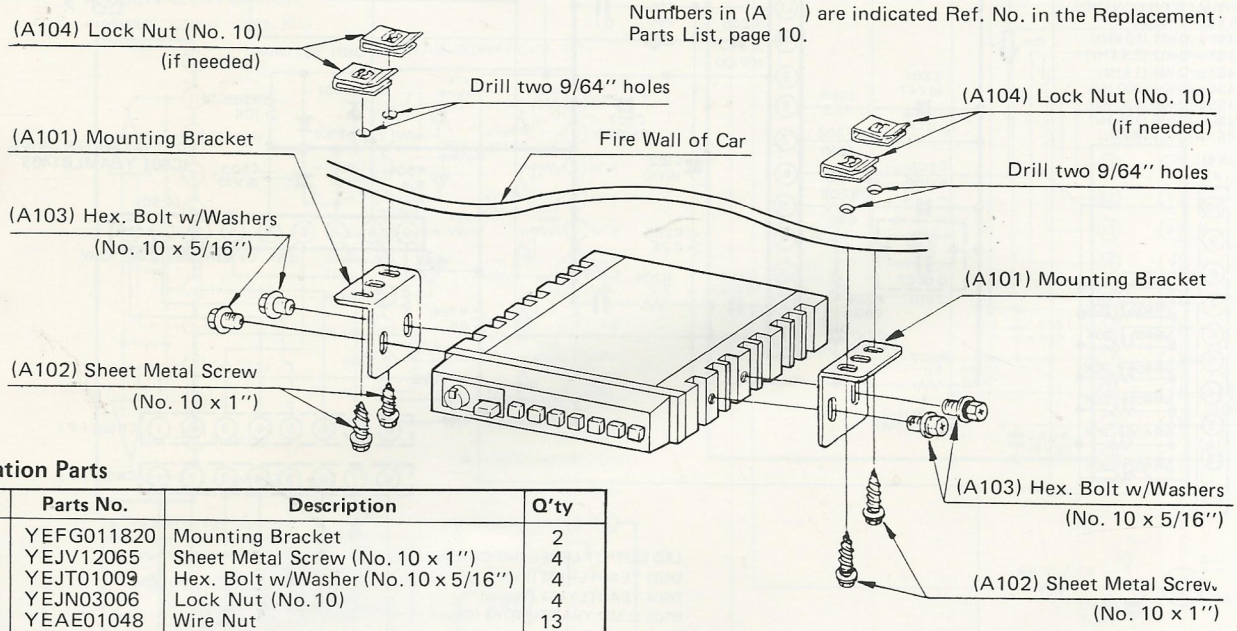
INSTALLATION INSTRUCTIONS

■ This unit is designed to operate from a 12V car battery (negative ground).

■ Don't put anything on top of this unit, or don't mount the unit in contact with anything.

■ This unit delivers high output, and tends to produce much heat. Install the unit in a location where the air circulates freely.

Numbers in (A) are indicated Ref. No. in the Replacement Parts List, page 10.



Installation Parts

No.	Parts No.	Description	Q'ty
A101	YEFG011820	Mounting Bracket	2
A102	YEJV12065	Sheet Metal Screw (No. 10 x 1")	4
A103	YEJT01009	Hex. Bolt w/Washer (No. 10 x 5/16")	4
A104	YEJN03006	Lock Nut (No. 10)	4
A105	YEAE01048	Wire Nut	13
A106	YEAE01460	RCA Extention Cord	1

- If your Tape Player/Radio has no Automatic Antenna Relay Control Lead, connect the CY-SG60EU/EC's Relay Control Lead for Automatic ON/OFF Control (orange) directly to the car's "IGN" or "ACC" terminal of the fuse block.

CAUTION:
- Use ungrounded speakers only. (Two wires per Speaker.)
- Do not ground any of the speaker terminals.
- Be sure to insulate exposed wiring so as to protect it from short-circuit if touched with some metal item.

NOTE:
- Connect the power leads after other connections are made.
- Be sure to connect the yellow power lead to the positive terminal (+) of the battery or fuse block (BAT) terminal.
- Please carefully read the operating instructions of the respective equipment before connecting it to this unit.

WIRE CONNECTIONS

■ In combination with a Tape Player/Radio

If your Tape Player/Radio has a 4-Speaker System, connect the speaker leads of Tape Player/Radio to the input of CY-SG60EU/EC.

Speaker leads from Tape Player/Radio (From '85 Panasonic Models.)

Input leads to CY-SG60EU/EC

To Left Front — Brown ⊕, Gray ⊖ — Blue ⊕ ⊖ — To Left Channel

To Left Rear — Green ⊕

To Right Front — Violet ⊕, Gray ⊖ — Red ⊕ ⊖ — To Right Channel

To Right Rear — White ⊕

Speaker leads from Tape Player/Radio (Up to '84 Panasonic Models.)

Input leads to CY-SG60EU/EC

To Left Front — Blue — Blue ⊕ ⊖ — To Left Channel

To Left Rear — Blue

To Right Front — Red — Red ⊕ ⊖ — To Right Channel

To Right Rear — Red

Either the "Low Level" or "High Level" connection can be applied to this model. Therefore, if "Low Level" connection is to be used, do not use "High Level" connection, and vice-versa. Unused leads/connectors should be insulated with tape to prevent short circuits.

CY-SG60EU/EC

Speaker Leads (Output)

High Level Connection (Blue) ※ (Red) ※

Speaker Leads (Input)

Speaker Leads (Output)

Low Level Connection

Pre-Amp (Output) Out Lead Gray (L) — (A106) Extension Cord — Pre-Amp (Input) Gray (L) Out Lead

Red (R) — Red (R)

Ground Lead (Black) — Connect to a well grounded metallic part of your car.

Fuse (5A) — To Battery — Power Lead (Yellow)

Tape Player/Radio

Automatic Antenna Relay Control Lead

* Relay Control Lead for Automatic ON/OFF Control

(Orange) (Orange) — To Automatic Antenna Relay Control

(Blue) Power Lead — 3A Fuse (3A) — To Accessory — To Battery

Antenna Receptacle

■ Speaker Connections

2-Speaker System

Connect as shown below with wire nuts to their respective leads.

To Left Speaker — (+ or ●) — Speaker Cord — Speaker Lead — Brown — To Left

To Right Speaker — (+ or ●) — Green — Violet — Clip — White — To Right

3-Speaker System

Connect one channel (Right or Left) as explained in 4-Speaker System. Then connect other channel (Left or Right) as explained in the 2-Speaker System.

To Left (Right) Front Speaker — (+ or ●) — Speaker Cord — Speaker Lead — Brown (Violet) — To Left (Right) Front

To Left (Right) Rear Speaker — (+ or ●) — Green (White) — To Left (Right) Rear

To Right (Left) Speaker — (+ or ●) — Violet (Brown) — Clip — White (Green) — To Right (Left)

4-Speaker System

- Remove the two Clips (Black) that are connecting the speaker leads together.
  The Clip can not be removed easily because it is hooked-up. Use a suitable Plier to release the Hook.
  See illustration on the right side.
- Follow the correct wiring connections described on the tag attached to each speaker lead.

Hook — Clip — Plier

Speaker Cord — Speaker Lead

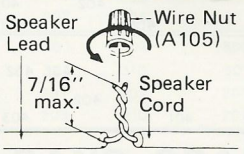
To Left Front Speaker — (+ or ●) — Brown — To Left Front

To Left Rear Speaker — (+ or ●) — Green — To Left Rear

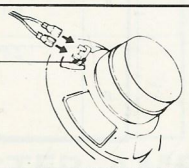
To Right Front Speaker — (+ or ●) — Violet — To Right Front

To Right Rear Speaker — (+ or ●) — White — To Right Rear

Use Wire Nuts (A105) to connect the Speaker Cords to their respective Speaker Leads.



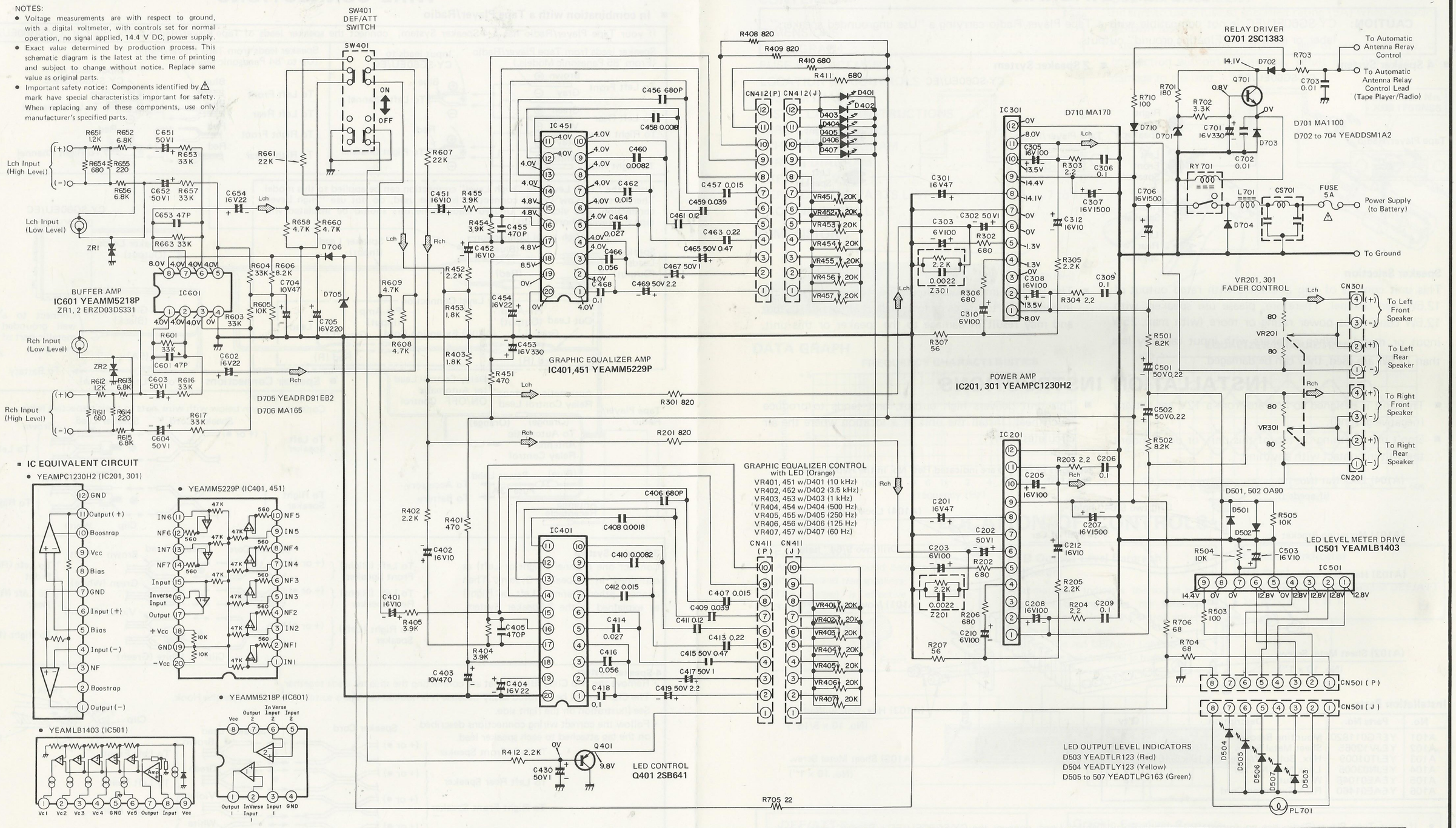
Connect the Red (or Blue) lead to the (+ or ●) marked terminal on the speaker.
(Refer to the speaker manufacturer's directions.)



SCHEMATIC DIAGRAM MODELS CY-SG60EU/EC

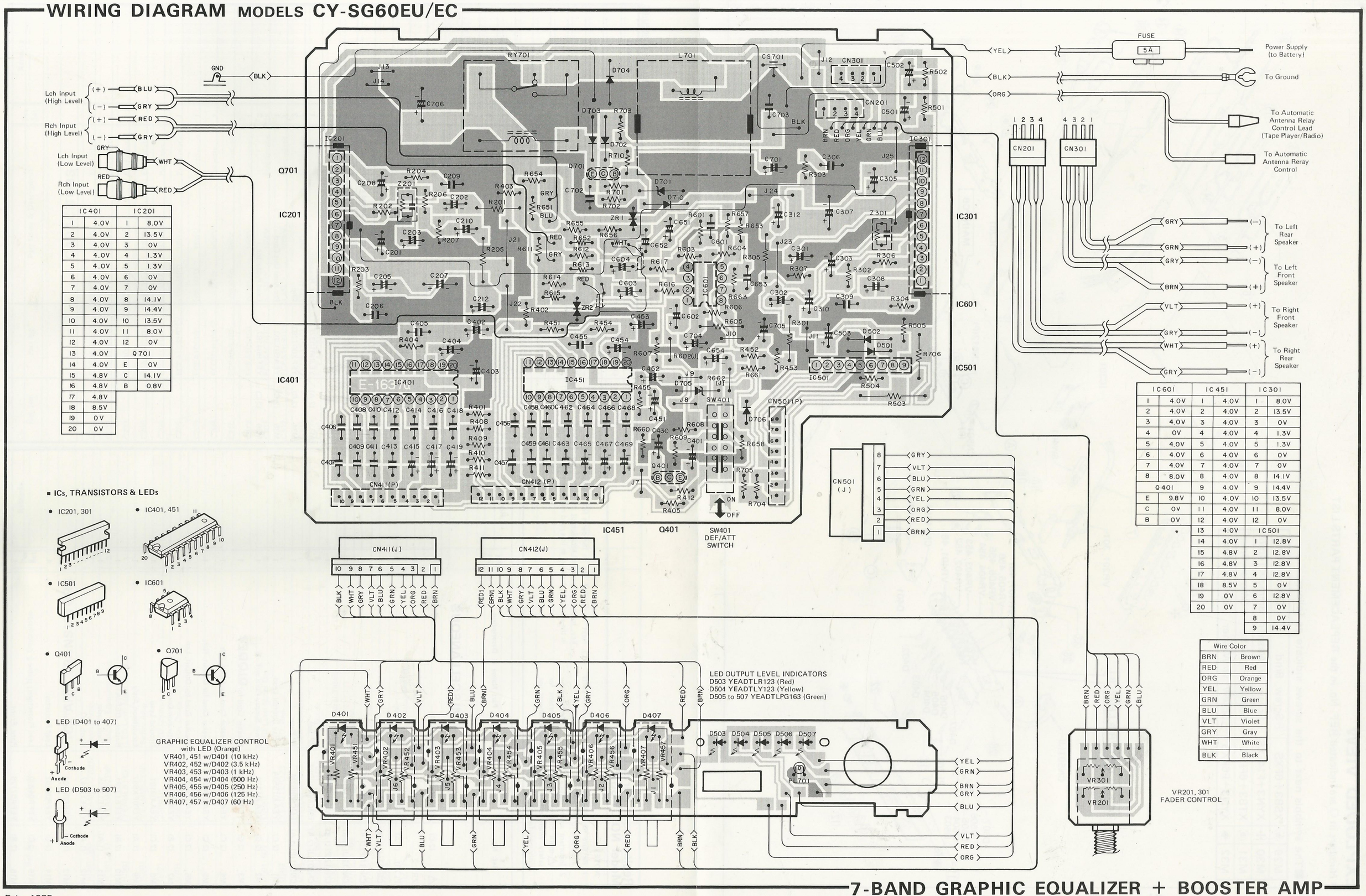
NOTES:

- Voltage measurements are with respect to ground, with a digital voltmeter, with controls set for normal operation, no signal applied, 14.4 V DC, power supply.
- Exact value determined by production process. This schematic diagram is the latest at the time of printing and subject to change without notice. Replace same value as original parts.
- Important safety notice: Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.



| | | |

WIRING DIAGRAM MODELS CY-SG60EU/EC



IC401		IC201	
1	4.0V	1	8.0V
2	4.0V	2	13.5V
3	4.0V	3	0V
4	4.0V	4	1.3V
5	4.0V	5	1.3V
6	4.0V	6	0V
7	4.0V	7	0V
8	4.0V	8	14.1V
9	4.0V	9	14.4V
10	4.0V	10	13.5V
11	4.0V	11	8.0V
12	4.0V	12	0V
13	4.0V	Q701	
14	4.0V	E	0V
15	4.8V	C	14.1V
16	4.8V	B	0.8V
17	4.8V		
18	8.5V		
19	0V		
20	0V		

IC601		IC451		IC301	
1	4.0V	1	4.0V	1	8.0V
2	4.0V	2	4.0V	2	13.5V
3	4.0V	3	4.0V	3	0V
4	0V	4	4.0V	4	1.3V
5	4.0V	5	4.0V	5	1.3V
6	4.0V	6	4.0V	6	0V
7	4.0V	7	4.0V	7	0V
8	8.0V	8	4.0V	8	14.1V
Q401		9	4.0V	9	14.4V
E	9.8V	10	4.0V	10	13.5V
C	0V	11	4.0V	11	8.0V
B	0V	12	4.0V	12	0V
		13	4.0V	IC501	
		14	4.0V	1	12.8V
		15	4.8V	2	12.8V
		16	4.8V	3	12.8V
		17	4.8V	4	12.8V
		18	8.5V	5	0V
		19	0V	6	12.8V
		20	0V	7	0V
				8	0V
				9	14.4V

Wire Color	
BRN	Brown
RED	Red
ORG	Orange
YEL	Yellow
GRN	Green
BLU	Blue
VLT	Violet
GRY	Gray
WHT	White
BLK	Black

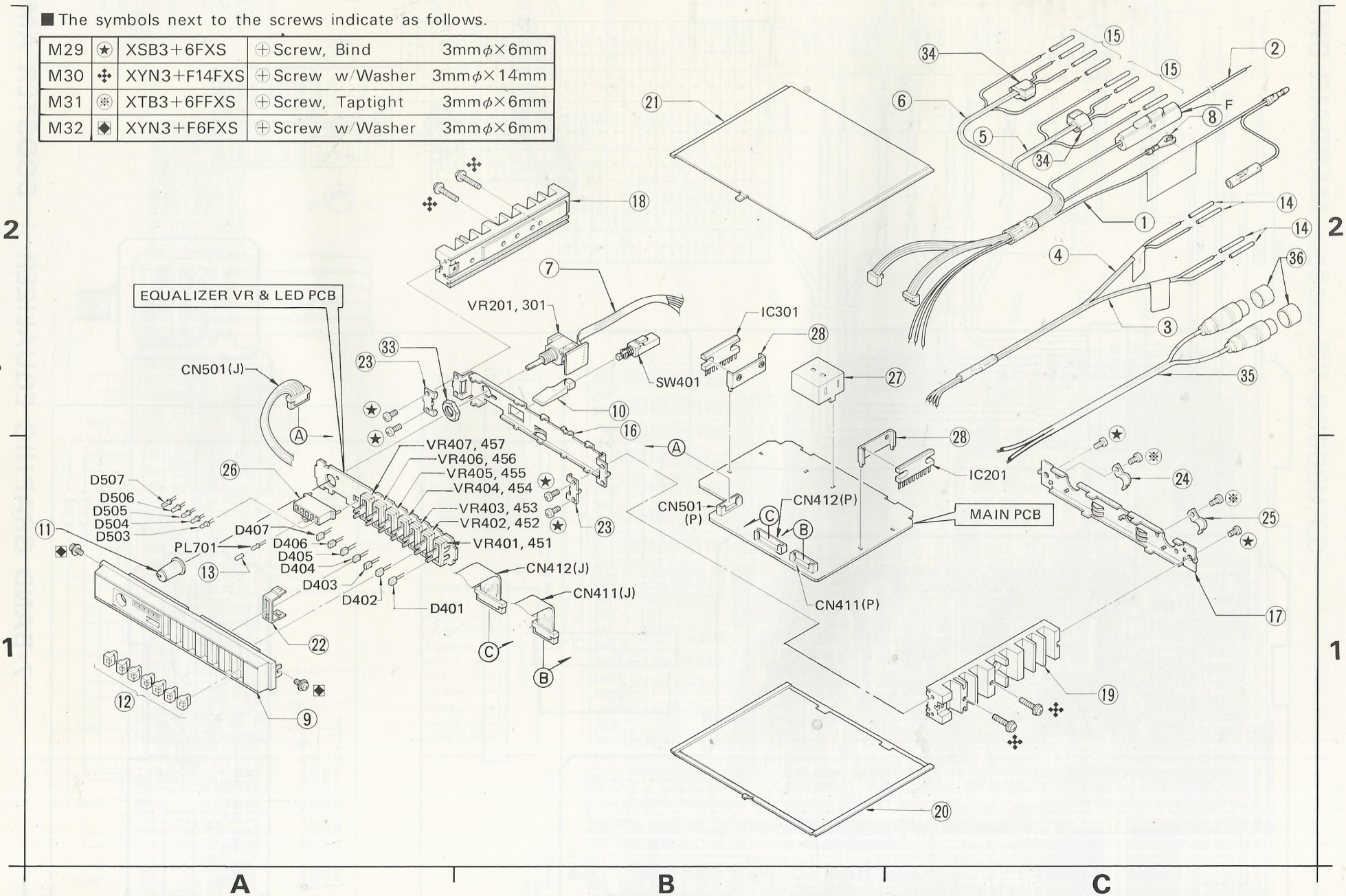
7-BAND GRAPHIC EQUALIZER + BOOSTER AMP

EXPLODED VIEW

■ Numbers in ○ are indicated REF. No. in the REPLACEMENT PARTS LIST.

■ The symbols next to the screws indicate as follows.

M29	★	XSB3+6FXS	⊕Screw, Bind	3mmφ×6mm
M30	✣	XYN3+F14FXS	⊕Screw w/Washer	3mmφ×14mm
M31	※	XTB3+6FFXS	⊕Screw, Taptight	3mmφ×6mm
M32	◆	XYN3+F6FXS	⊕Screw w/Washer	3mmφ×6mm



Replacement Parts List
Model NO. CY-SG60EU/EC

NOTES:

1. Be sure to make your orders of replacement parts according to this list.
2. Inportant safety notice: Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3. Next to the Ref. No. in the parts list is a location key, to show the general location of the parts shown in the exploded drawing, as in a road map.

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
		MISCELLANEOUS		
⚠ F (2-C)	XBB1F50NS5	Fuse, 5A	1	
ZR1, 2	ERZD03DS331	Varistor	2	
PL701 (1-A)	YEAL01101	Pilot Lamp	1	
CN411(J) (1-B)	EMCM1010D61	10 Jack	1	
CN411(P) (1-B)	EMCS1052M	10 Plug	1	
CN412(J) (1-B)	EMCM1210D61	12 Jack	1	
CN412(P) (1-B)	EMCS1252M	12 Plug	1	
CN501(J) (2-A)	EMCM0810D61	8P Jack	1	
CN501(P) (1-B)	EMCS0852M	8P Plug	1	
M1 (2-C)	YEAJ01559A	Relay Control Lead	1	
M2 (2-C)	YEAJ01770	Power Supply Cord w/Fuse	1	
M3 (2-C)	YEAJ03490A	Speaker Cord for Input, Rch	1	
M4 (2-C)	YEAJ03489A	Speaker Cord for Input, Lch	1	
M5 (2-C)	YEAJ03691	Speaker Cord for Output, Rch	1	
M6 (2-C)	YEAJ03692	Speaker Cord for Output, Lch	1	
M7 (2-B)	YEAJ07447	Extention Cord	1	
M8 (2-C)	YEAJ09191	Ground Lead	1	
M9 (1-A)	YEP0FX667	Escutcheon Ass'y	1	
M10 (2-B)	YEFE13761	Button, DEF/ATT	1	
M11 (1-A)	YEFE11046	Knob, Fader	1	
M12 (1-A)	YEFE11047	Knob, EQ	7	
M13 (1-A)	YEFR04202	Illumination Cap	1	
M14 (2-C)	YEFR04162	Lead Protector	4	
M15 (2-C)	YEFR04230	Lead Protector	8	
M16 (2-B)	YEFA07128	Plate, Front	1	
M17 (1-C)	YEFA08181	Plate, Rear	1	
M18 (2-B)	YEFF01425	Heat Sink (L)	1	
M19 (1-C)	YEFF01426	Heat Sink (R)	1	
M20 (1-C)	YEFA05324	Bottom Cover	1	
M21 (2-B)	YEFA03672	Upper Cover	1	
M22 (1-A)	YEFX233215	Holder	1	
M23 (1-B) (2-A)	YEFX233216	Holder	2	
M24 (1-C)	YEFX007082	Cord Clamper	1	
M25 (1-C)	YAFX016027	Cord Clamper	1	
M26 (1-A)	YEFK06209	LED Holder	1	
M27 (2-C)	YEFA13403	Case	1	
M28 (1-C) (2-B)	YEFX0211210	Mounting Bracket, IC201, 301	2	
M29 (★)	XSB3 + 6FXS	⊕ Screw, Bind 3mmø x 6mm	6	
M30 ✣	XYN3 + F14FXS	⊕ Screw w/Washer 3mmø x 14mm	4	
M31 (⁘)	XTB3 + 6FFXS	⊕ Screw, Taptight 3mmø x 6mm	2	
M32 ◆	XYN3 + F6FXS	⊕ Screw w/Washer 3mmø x 6mm	2	
M33 (2-A)	YEJN01037FX	Nut, Hexagon	1	
M34 (2-C)	YEFX007283	Clip	2	
M35 (2-C)	YEAE01303	Pre-Amp Out Cord	1	
M36 (2-C)	YEFR04187	Lead Protector	2	

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
ICs AND TRANSISTORS				
IC201, 301	YEAMPC1230H2	Power Amp	2	
IC401, 451	YEAMM5229P	Graphic Equalizer Amp	2	
IC501	YEAMLB1403	LED Level Meter Drive	1	
IC601	YEAMM5218P	Buffer Amp	1	
Q401	2SB641	LED Control	1	
Q701	2SC1383	Relay Driver	1	
DIODES				
D501, 502	OA90	LED Level Meter Det	2	
D503	YEADTLR123	LED, Red	1	
D504	YEADTLY123	LED, Yellow	1	
D505 to 507	YEADTLPG163	LED, Green	3	
D701	MA1100	Relay Control Timing	1	
D702 to 704	YEADDSM1A2	Protection	3	
D705	YEADRD91EB2	Voltage Stabilizer	1	
D706	MA165	Protection	1	
D710	MA170	Relay Control Timing	1	

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
CAPACITORS				
C201	ECEA1CS470	47 MFD 16WV Electrolytic	1	
C202	ECEA1HS010	1 MFD 50WV Electrolytic	1	
C203	ECEA0JS101	100 MFD 6WV Electrolytic	1	
C205	ECEA1CS101	100 MFD 16WV Electrolytic	1	
C206	ECQV1H104JZ	0.1 MFD 50WV Polyester	1	
C207	ECEA1CS152SZ	1500 MFD 16WV Electrolytic	1	
C208	ECEA1CS101	100 MFD 16WV Electrolytic	1	
C209	ECQV1H104JZ	0.1 MFD 50WV Polyester	1	
C210	ECEA0JS101	100 MFD 6WV Electrolytic	1	
C212	ECEA1CS100	10 MFD 16WV Electrolytic	1	
C301	ECEA1CS470	47 MFD 16WV Electrolytic	1	
C302	ECEA1HS010	1 MFD 50WV Electrolytic	1	
C303	ECEA0JS101	100 MFD 6WV Electrolytic	1	
C305	ECEA1CS101	100 MFD 16WV Electrolytic	1	
C306	ECQV1H104JZ	0.1 MFD 50WV Polyester	1	
C307	ECEA1CS152SZ	1500 MFD 16WV Electrolytic	1	
C308	ECEA1CS101	100 MFD 16WV Electrolytic	1	
C309	ECQV1H104JZ	0.1 MFD 50WV Polyester	1	
C310	ECEA0JS101	100 MFD 6WV Electrolytic	1	
C312	ECEA1CS100	10 MFD 16WV Electrolytic	1	
C401	ECEA1CS100	10 MFD 16WV Electrolytic	1	
C402	ECEA1CS100	10 MFD 16WV Electrolytic	1	
C403	ECEA1AU471	470 MFD 16WV Electrolytic	1	
C404	ECEA1CS220	22 MFD 16WV Electrolytic	1	
C405	YECQZ1H471K	470 PF 50WV Polyester	1	
C406	YECQZ1H681K	680 PF 50WV Polyester	1	
C407	YECQZ1H153K	0.015 MFD 50WV Polyester	1	
C408	YECQZ1H182K	0.0018 MFD 50WV Polyester	1	
C409	ECQV1H393JZ	0.039 MFD 50WV Polyester	1	
C410	YECQZ1H822K	0.0082 MFD 50WV Polyester	1	
C411	ECQV1H124JZ	0.12 MFD 50WV Polyester	1	
C412	YECQZ1H153K	0.015 MFD 50WV Polyester	1	

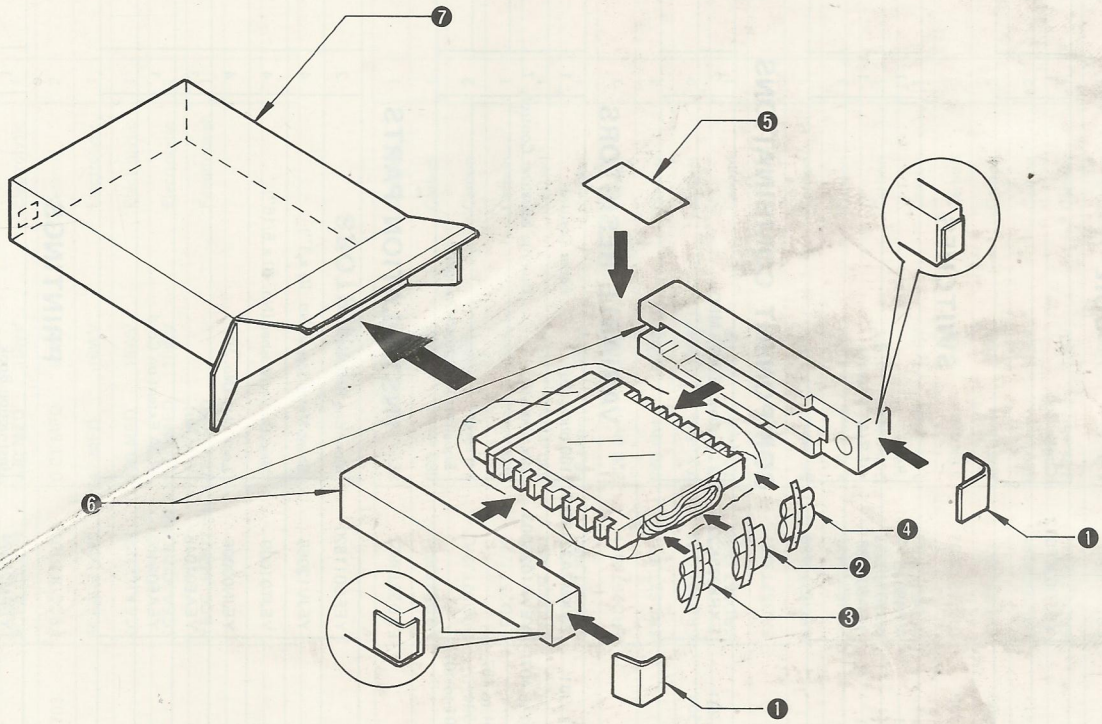
Ref. No.	Part No.	Part Name & Description			Pcs Set	Remarks
C413	ECQV1H224JZ	0.22 MFD	50WV	Polyester	1	
C414	ECQV1H273JZ	0.027 MFD	50WV	Polyester	1	
C415	ECEA1HKLR47	0.47 MFD	50WV	Electrolytic	1	
C416	ECQV1H563JZ	0.056 MFD	50WV	Polyester	1	
C417	ECEA1HKL010	1 MFD	50WV	Electrolytic	1	
C418	ECQV1H104JZ	0.1 MFD	50WV	Polyester	1	
C419	ECEA1HKL2R2	2.2 MFD	50WV	Electrolytic	1	
C430	ECEA1HS010	1 MFD	50WV	Electrolytic	1	
C451	ECEA1CS100	10 MFD	16WV	Electrolytic	1	
C452	ECEA1CS100	10 MFD	16WV	Electrolytic	1	
C453	ECEA1CU331	330 MFD	16WV	Electrolytic	1	
C454	ECEA1CS220	22 MFD	16WV	Electrolytic	1	
C455	YECQZ1H471K	470 PF	50WV	Polyester	1	
C456	YECQZ1H681K	680 PF	50WV	Polyester	1	
C457	YECQZ1H153K	0.015 MFD	50WV	Polyester	1	
C458	YECQZ1H182K	0.0018 MFD	50WV	Polyester	1	
C459	ECQV1H393JZ	0.039 MFD	50WV	Polyester	1	
C460	YECQZ1H822K	0.0082 MFD	50WV	Polyester	1	
C461	ECQV1H124JZ	0.12 MFD	50WV	Polyester	1	
C462	YECQZ1H153K	0.015 MFD	50WV	Polyester	1	
C463	ECQV1H224JZ	0.22 MFD	50WV	Polyester	1	
C464	ECQV1H273JZ	0.027 MFD	50WV	Polyester	1	
C465	ECEA1HKLR47	0.47 MFD	50WV	Electrolytic	1	
C466	ECQV1H563JZ	0.056 MFD	50WV	Polyester	1	
C467	ECEA1HKL010	1 MFD	50WV	Electrolytic	1	
C468	ECQV1H104JZ	0.1 MFD	50WV	Polyester	1	
C469	ECEA1HKL2R2	2.2 MFD	50WV	Electrolytic	1	
C501, 502	ECEA1HSR22	0.22 MFD	50WV	Electrolytic	2	
C503	ECEA1CS100	10 MFD	16WV	Electrolytic	1	
C601	YECCD1H470JM	47 PF	50WV	Ceramic	1	
C602	ECEA1CS220	22 MFD	16WV	Electrolytic	1	
C603, 604	ECEA1HS010	1 MFD	50WV	Electrolytic	2	
C651, 652	ECEA1HS010	1 MFD	50WV	Electrolytic	2	
C653	YECCD1H470JM	47 PF	50WV	Ceramic	1	
C654	ECEA1CS220	22 MFD	16WV	Electrolytic	1	
C701	ECEA1CU331	330 MFD	16WV	Electrolytic	1	
C702, 703	YECCD05103Z	0.01 MFD	50WV	Ceramic	2	
C704	ECEA1AS470	47 MFD	10WV	Electrolytic	1	
C705	ECEA1CU221	220 MFD	16WV	Electrolytic	1	
C706	ECEA1CS152SZ	1500 MFD	16WV	Electrolytic	1	
CS701	YECCL55B222M	2200 MFD		Feedthrough	1	
RESISTORS						
R201	ERD25TJ821	820 ohms	1/4W	Carbon	1	
R202	ERDS2TJ681	680 ohms	1/8W	Carbon	1	
R203, 204	ERDS2TJ2R2	2.2 ohms	1/8W	Carbon	2	
R205	ERD25TJ222	2.2k ohms	1/4W	Carbon	1	
R206	ERDS2TJ681	680 ohms	1/8W	Carbon	1	
R207	ERDS2TJ560	56 ohms	1/8W	Carbon	1	
R301	ERD25TJ821	820 ohms	1/4W	Carbon	1	
R302	ERDS2TJ681	680 ohms	1/8W	Carbon	1	
R303, 304	ERDS2TJ2R2	2.2 ohms	1/8W	Carbon	2	
R305	ERD25TJ222	2.2k ohms	1/4W	Carbon	1	
R306	ERDS2TJ681	680 ohms	1/8W	Carbon	1	
R307	ERDS2TJ560	56 ohms	1/8W	Carbon	1	
R401	ERDS2TJ471	470 ohms	1/8W	Carbon	1	
R402	ERDS2TJ222	2.2k ohms	1/8W	Carbon	1	
R403	ERDS2TJ182	1.8k ohms	1/8W	Carbon	1	
R404, 405	ERDS2TJ392	3.9k ohms	1/8W	Carbon	2	
R408, 409	ERDS2TJ821	820 ohms	1/8W	Carbon	2	
R410, 411	ERDS2TJ681	680 ohms	1/8W	Carbon	2	
R412	ERDS2TJ222	2.2k ohms	1/8W	Carbon	1	
R451	ERDS2TJ471	470 ohms	1/8W	Carbon	1	
R452	ERDS2TJ222	2.2k ohms	1/8W	Carbon	1	
R453	ERDS2TJ182	1.8k ohms	1/8W	Carbon	1	
R454, 455	ERDS2TJ392	3.9k ohms	1/8W	Carbon	2	

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
R501, 502	ERDS2TJ822	8,2k ohms 1/8W Carbon	2	
R503	ERG1AN101	100 ohms 1W Carbon	1	
R504, 505	ERDS2TJ103	10k ohms 1/8W Carbon	2	
R601	ERDS2TJ333	33k ohms 1/8W Carbon	1	
R603, 604	ERDS2TJ333	33k ohms 1/8W Carbon	2	
R605	ERDS2TJ103	10k ohms 1/8W Carbon	1	
R606	ERDS2TJ822	8.2k ohms 1/8W Carbon	1	
R607	ERDS2TJ223	22k ohms 1/8W Carbon	1	
R608, 609	ERDS2TJ472	4.7k ohms 1/8W Carbon	2	
R611	ERDS2TJ681	680 ohms 1/8W Carbon	1	
R612	ERDS2TJ122	1.2k ohms 1/8W Carbon	1	
R613	ERDS2TJ682	6.8k ohms 1/8W Carbon	1	
R614	ERDS2TJ221	220 ohms 1/8W Carbon	1	
R615	ERDS2TJ682	6.8k ohms 1/8W Carbon	1	
R616, 617	ERDS2TJ333	33k ohms 1/8W Carbon	2	
R651	ERDS2TJ122	1.2k ohms 1/8W Carbon	1	
R652	ERDS2TJ682	6.8k ohms 1/8W Carbon	1	
R653	ERDS2TJ333	33k ohms 1/8W Carbon	1	
R654	ERDS2TJ681	680 ohms 1/8W Carbon	1	
R655	ERDS2TJ221	220 ohms 1/8W Carbon	1	
R656	ERDS2TJ682	6.8k ohms 1/8W Carbon	1	
R657	ERDS2TJ333	33k ohms 1/8W Carbon	1	
R658	ERDS2TJ472	4.7k ohms 1/8W Carbon	1	
R660	ERDS2TJ472	4.7k ohms 1/8W Carbon	1	
R661	ERDS2TJ223	22k ohms 1/8W Carbon	1	
R663	ERDS2TJ333	33k ohms 1/8W Carbon	1	
R701	ERDS2TJ181	180 ohms 1/8W Carbon	1	
R702	ERDS2TJ332	3.3k ohms 1/8W Carbon	1	
R703	ERDS2TJ1R0	1 ohm 1/8W Carbon	1	
R704	ERDS2TJ680	68 ohms 1/8W Carbon	1	
R705	ERDS2TJ220	22 ohms 1/8W Carbon	1	
R706	ERDS1FJ680	68 ohms 1W Carbon	1	
R710	ERDS2TJ101	100 ohms 1/8W Carbon	1	

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
COIL				
L701	YETQ020F072	Choke Coil	1	
SWITCHES				
RY701	AR49015	Relay	1	
SW401	YEAS09186	DEF/ATT Switch	1	
COMPONENT COMBINATIONS				
Z201, 301	EXRP222K222	2.2k ohms, 0.0022 MFD	2	
VARIABLE RESISTORS				
VR201, 301	EVKM7A221BD2	160 ohms (B) Fader Control	1	
VR401 to 407	YEVA102B003	20k ohms (B) Graphic Equalizer Control	7	
VR451 to 457				
w/D401 to 407		Equalizer Indicator (Orange)		
INSTALLATION PARTS				
A101	YEFG011820	Mounting Bracket	2	
A102	YEJV12065	Sheet Metal Screw (No. 10 x 1")	4	
A103	YEJT01009	Hex. Bolt w/Washer (No. 10 x 5/16")	4	
A104	YEJN03006	Lock Nut (No. 10)	4	
A105	YEAE01048	Wire Nut	13	
A106	YEAE01460	RCA Extention Cord	1	
PRINTINGS				
A110	YEFM28874	Instruction Book	1	
A111	YEFM28901	Instruction Book (CY-SG60EC only)	1	

PACKING PARTS LIST

■ *Item numbers listed below should not be order regular spare parts.*



Item No.	Part No.	Part Name & Description	Q'ty
❶	YEFG011820	Mounting Bracket	2
❷	YEJV12065 YEJT01009 YEJN03006	Sheet Metal Screw (No. 10 x 1'') Hex. Bolt w/Washer (No. 10 x 5/16'') Lock Nut (No. 10)	4 4 4
❸	YEAE01048	Wire Nut	13
❹	YEAE01460	RCA Extention Cord	1
❺	YEFM28874 YEFM28901	Instruction Book Instruction Book (CY-SG60EC only)	1 1
❻	YEFU044625	Packing Pad	1
❼	YEFU032791 YEFU032819	Inner Carton (CY-SG60EU) Inner Carton (CY-SG60EC)	1 1

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