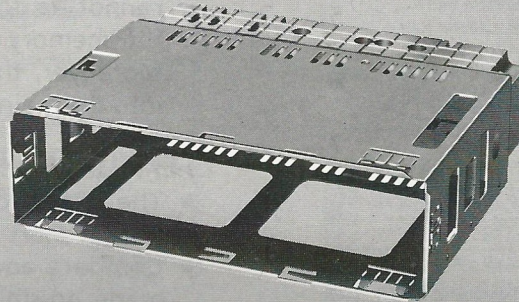


# Service Manual

## AUTO PRODUCTS

### CY-AM100/AM50EN

#### POWER AMPLIFIER



#### SPECIFICATIONS\*

##### CY-AM50EN

|                                  |   |
|----------------------------------|---|
| Power Supply:                    | 12 V DC (11 V~16 V),<br>Test Voltage 14.4 V,<br>Negative Ground |
| Current Consumption:             | Less than 1.7 A<br>(at 0.5 W output)                            |
| Maximum Power<br>Output:         | 25 W (per channel at 400Hz<br>volume control maximum)           |
| Speaker Impedance:               | 4Ω (4~8Ω available)   |
| Pre-amplifier Output<br>Voltage: | 0.6 V (ref. level: 0 dB)  |
| Frequency Response:              | 20 Hz~40kHz, $\pm 3$ dB   |
| Signal to Noise Ratio:           | 78 dB (IHF A)   |
| Dimensions (W x H x D):          | 182 mm x 52 mm x 150 mm   |
| Weight:                          | 0.6kg   |

##### CY-AM100EN

|                          |   |
|--------------------------|---|
| Power Supply:            | 12 V DC (11 V~16 V),<br>Test Voltage 14.4 V,<br>Negative Ground |
| Current Consumption:     | Less than 2.5 A<br>(at 0.5 W output)                            |
| Maximum Power<br>Output: | 50 W (per channel at 400Hz<br>volume control maximum)           |
| Speaker Impedance:       | 4Ω (4~8Ω available)   |
| Frequency Response:      | 20 Hz~40kHz, $\pm 3$ dB   |
| Signal to Noise Ratio:   | 78 dB (IHF A)   |
| Dimensions (W x H x D):  | 182 mm x 52 mm x 150 mm   |
| Weight:                  | 0.6kg   |

#### NOTE:

Specifications and the design are subject to possible modification without notice due to improvements.



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**FUSE REPLACEMENT**

Be sure to use a fuse of specified rating (10A · 5A · 1A) 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.

If the replacement fuse fails, contact your nearest authorized **Panasonic** Service Center.

**CAUTION:**

Connect the BATTERY LEAD (yellow) direct to the battery. Otherwise, memory settings cannot be done or it will have a bad effect on the memory circuit.

Moreover, the memory back-up battery (built into the main unit) will deteriorate quickly.

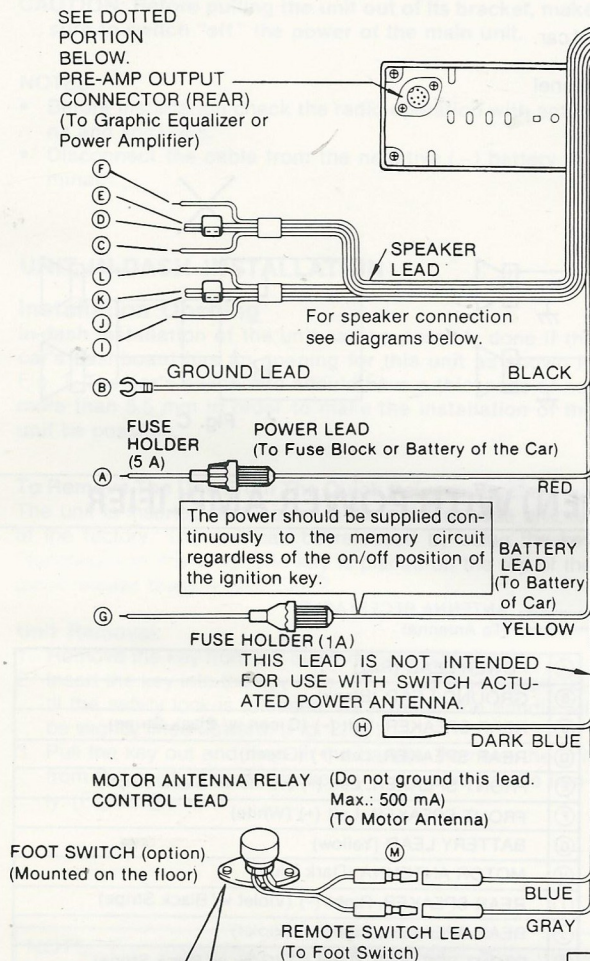
**FEATURES**

- The BTL circuit adopted is added with the output short protection circuit.
- Compact and lightweight physical design is made possible by use of ICs with low thermal resistance.
- Amplifier power ON/OFF operation is controlled by the power switch mounted on the main unit.
- Quick-release type stealing prevention device is adopted for ease of main unit mounting and removal.

**DIMENSIONS**



## ELECTRICAL CONNECTION (FOR CY-AM50EN) WITH POWER AMPLIFIER



## CAUTION

Although the color of all negative speaker wires are with BLACK stripes they are not connected at the same common point internally.

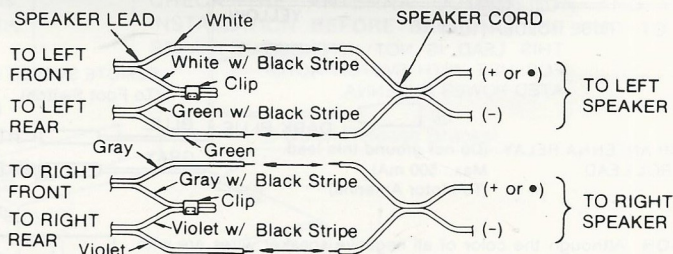
They work respectively with their positive pair, and the pairs of speaker wires are adhered together. Therefore, do not split the speaker wire pairs beyond the manufacture's setting unless you can recognize their positions.

|     |  |
|-----|--|
| (A) | POWER LEAD (Red)                                 |
| (B) | GROUND LEAD (Black)                              |
| (C) | REAR SPEAKER, Left (+) (Green)                   |
| (D) | REAR SPEAKER, Left (-) (Green w/ Black Stripe)   |
| (E) | FRONT SPEAKER, Left (-) (White w/ Black Stripe)  |
| (F) | FRONT SPEAKER, Left (+) (White)                  |
| (G) | BATTERY LEAD (Yellow)                            |
| (H) | MOTOR ANTENNA (Dark Blue)                        |
| (I) | REAR SPEAKER, Right (+) (Violet)                 |
| (J) | REAR SPEAKER, Right (-) (Violet w/ Black Stripe) |
| (K) | FRONT SPEAKER, Right (-) (Gray w/ Black Stripe)  |
| (L) | FRONT SPEAKER, Right (+) (Gray)                  |
| (M) | FOOT SWITCH (Blue/Gray)                          |

The Foot Switch enables you to tune in the radio frequency automatically (SEEK TUNING). Mount the Foot Switch on the floor where it is convenient for you to press it by foot.

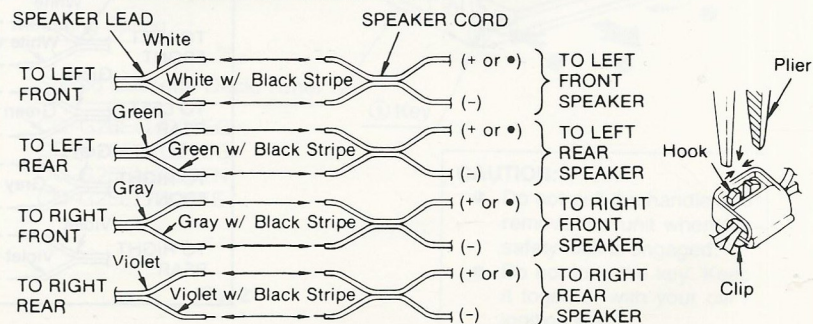
## 2-SPEAKER SYSTEM (25 w x 2)

**CAUTION:** The two clips must not be removed when connecting 2-speaker system. Carefully follow the illustration here.



## 4-SPEAKER SYSTEM (8 w x 4)

- Remove the two clips 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 below.





## Important Instructions for Installation

1. The plus and minus terminals of the speaker should be connected to the corresponding plus and minus terminal of this unit. (Fig. A)
2. Never ground the minus terminal of the speaker to the chassis or body of car.
3. Never connect the speaker leads as shown in Figs. B and C.
4. If a fader equipment (option) is used, the minus terminal of the left channel must be separated from the minus terminal of the right channel.

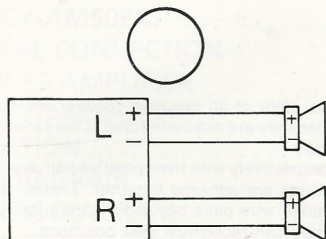


Fig. A

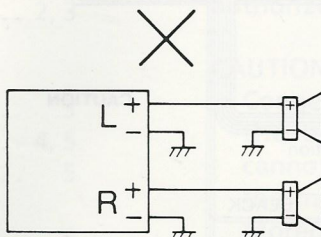


Fig. B

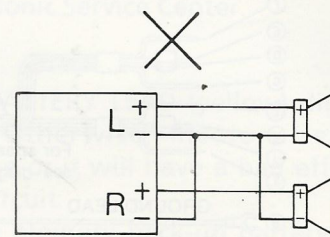
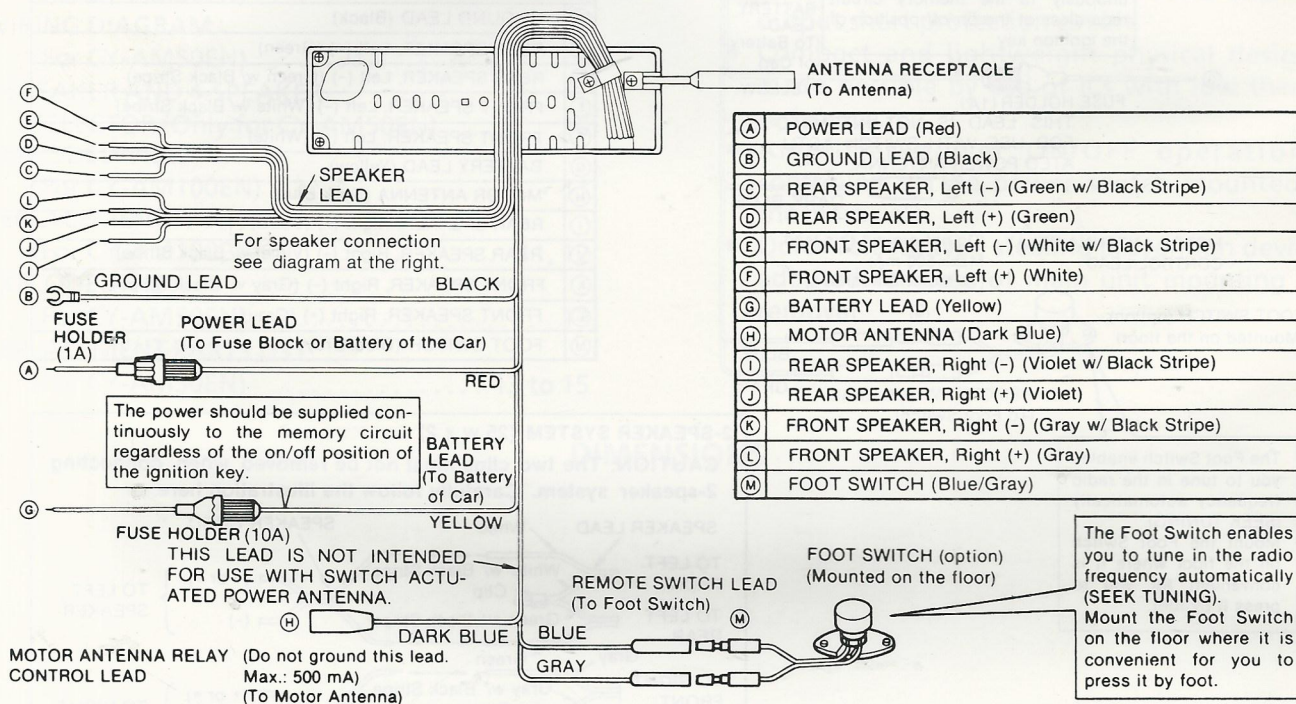


Fig. C

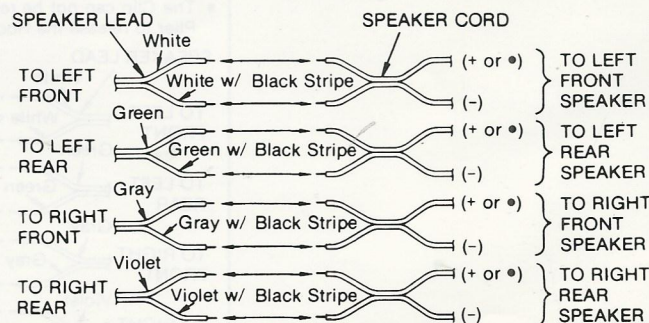
## ELECTRICAL CONNECTION (FOR CY-AM100EN) WITH POWER AMPLIFIER



**CAUTION** Although the color of all negative speaker wires are with BLACK stripes they are not connected at the same common point internally. They work respectively with their positive pair, and the pairs of speaker wires are adhered together. Therefore, do not split the speaker wire pairs beyond the manufacture's setting unless you can recognize their positions.

### 4-SPEAKER SYSTEM (25 w x 4)

- Be sure to connect all 4 speakers completely.
- If it should be necessary to connect only 2 speakers, make sure to insulate unused leads to prevent possible short-circuit.





## INSTALLATION

**CAUTION:** Before pulling the unit out of its bracket, make sure to switch "off" the power of the main unit.

### NOTES:

- Before installation check the radio operation with antenna and speakers.
- Disconnect the cable from the negative (-) battery terminal.

### UNIT IN-DASH INSTALLATION

#### Installation Opening

In-dash installation of the unit can be possibly done if the car's dashboard has an opening for this unit as shown in Fig. 1. The car's dashboard should have a thickness of not more than 5.5 mm in order to make the installation of the unit be possible.

#### To Remove The Unit From The Quick Release Bracket

The unit is inserted and locked in the quick release bracket at the factory. The unit can be released by using the key (supplied with this unit). The key is placed on the top of the quick release bracket. See Fig. 2.

#### Unit Removal:

1. Remove the key from the quick release bracket.
2. Insert the key into the key hole. (Fig. 2, ①) completely until the safety lock is released. As a result, the handle will be slightly lifted upward. (Fig. 2, ②).
3. Pull the key out and then lift the handle. Remove the unit from the quick release bracket by pulling the handle firmly. (Fig. 2, ③)

### Installation Procedures

1. Insert the quick release bracket into the car's dashboard and bend the mounting springs correspondingly by means of a screwdriver, as shown in Fig. 2.
2. Before final mounting the quick release bracket to the car's dashboard, read "To Secure the Rear of the quick release bracket" which is explained at below and check whether the rear of the unit is properly secured to the fire wall of car.
3. After installation reconnect the negative (-) battery terminal.
4. Now insert the unit into the quick release bracket.

Also check the electrical connections by referring to this installation instructions. Mount the quick release bracket to the car's dashboard as shown in Fig. 2.

#### To Secure the Rear of the Quick Release Bracket.

- Using the Rear Support Strap (See Fig. 3)  
Fix one end of the rear support strap to the rear of the quick release bracket, and the other end to the Fire Wall of Car, or some other solid area.

### Installation Parts List

| Illust No. | Description                       | Q'ty |
|------------|-----------------------------------|------|
| ①          | Quick Release Bracket             | 1    |
| ②          | Rear Support Strap                | 1    |
| ③          | Hex. Bolt (5mm $\phi$ × 25mm)     | 1    |
| ④          | Hex. Nut (5mm $\phi$ )            | 2    |
| ⑤          | Spring Washer (5mm $\phi$ )       | 2    |
| ⑥          | Plain Washer (5mm $\phi$ )        | 2    |
| ⑦          | Toothed Lock Washer (5mm $\phi$ ) | 1    |
| ⑧          | Mounting Bolt                     | 1    |
| ⑨          | Key                               | 2    |

IF THE RADIO RECEPTION IS NOT OBTAINED SATISFACTORILY, THERE IS A POSSIBILITY THAT THE ANTENNA CONNECTION WAS NOT DONE PROPERLY. CHECK THE ANTENNA CONNECTION AND ITS INSTALLATION BEFORE BRINGING THE UNIT TO A REPAIR SHOP.

**NOTE:** For installation to cars equipped with trip or navigational computer, all electronic memory settings previously registered on the computer would fade out when the battery terminal is disconnected. For this type of car, battery could not be disconnected (unless necessary) thus, wiring connection and installation of this unit should be carefully done and short-circuit should be avoided.

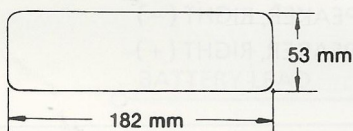


Fig. 1

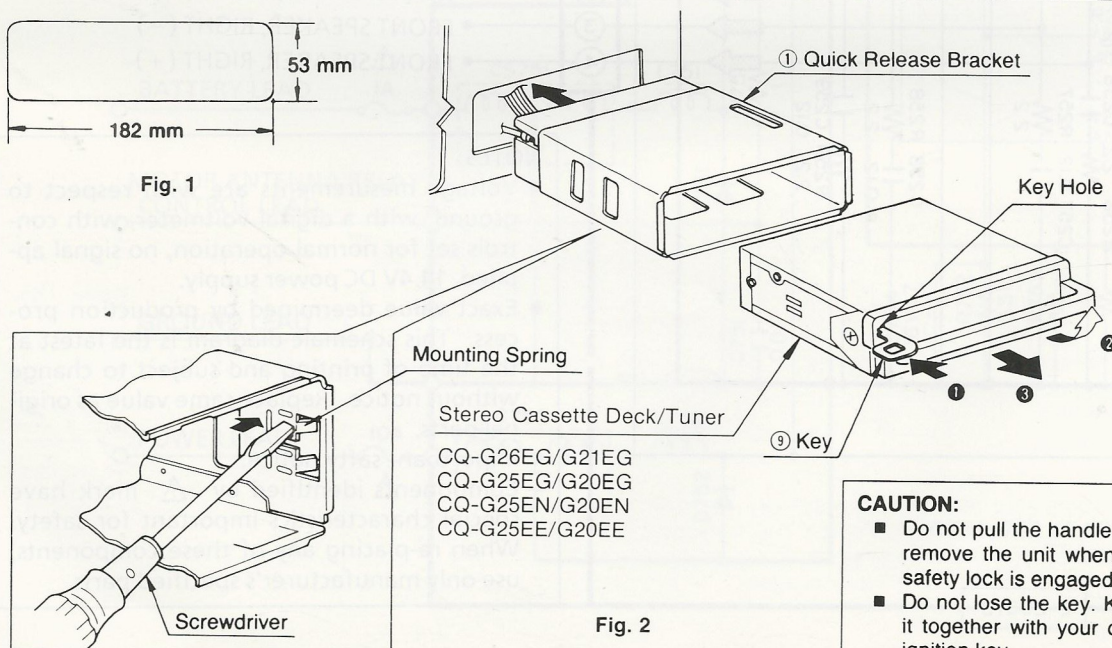
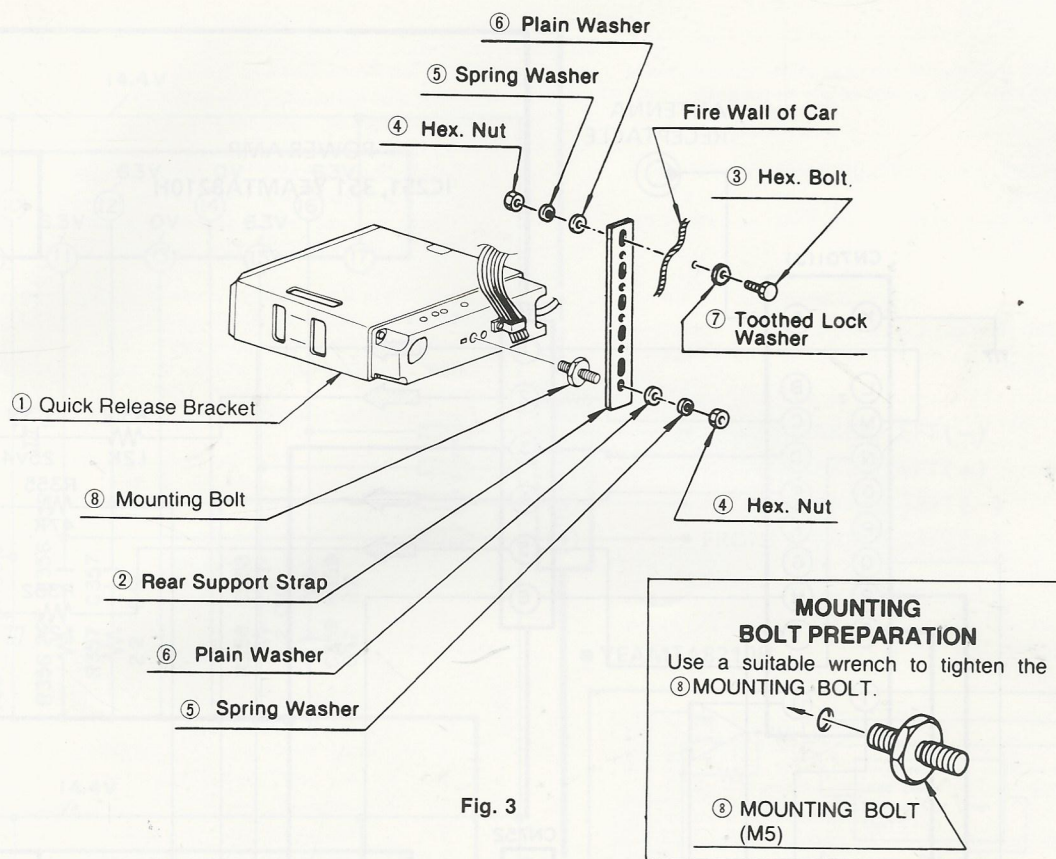


Fig. 2

#### CAUTION:

- Do not pull the handle and remove the unit when the safety lock is engaged.
- Do not lose the key. Keep it together with your car's ignition key.

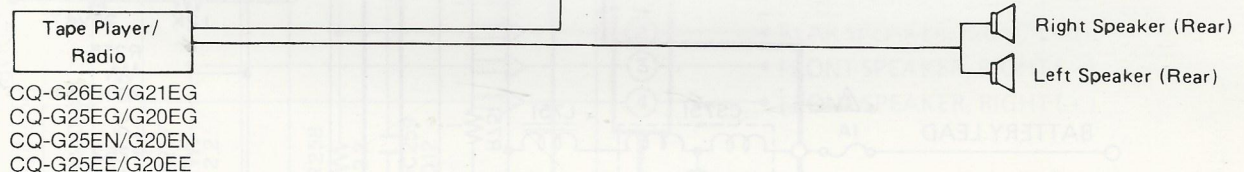




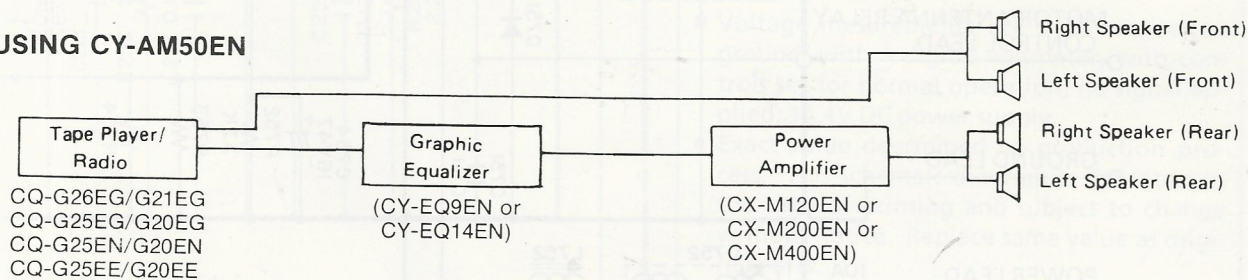
## SYSTEM DIAGRAM

Various types of speakers are available from your dealer.  
Select the speakers that suit your preference.

### • USING CY-AM100EN or CY-AM50EN



### • USING CY-AM50EN

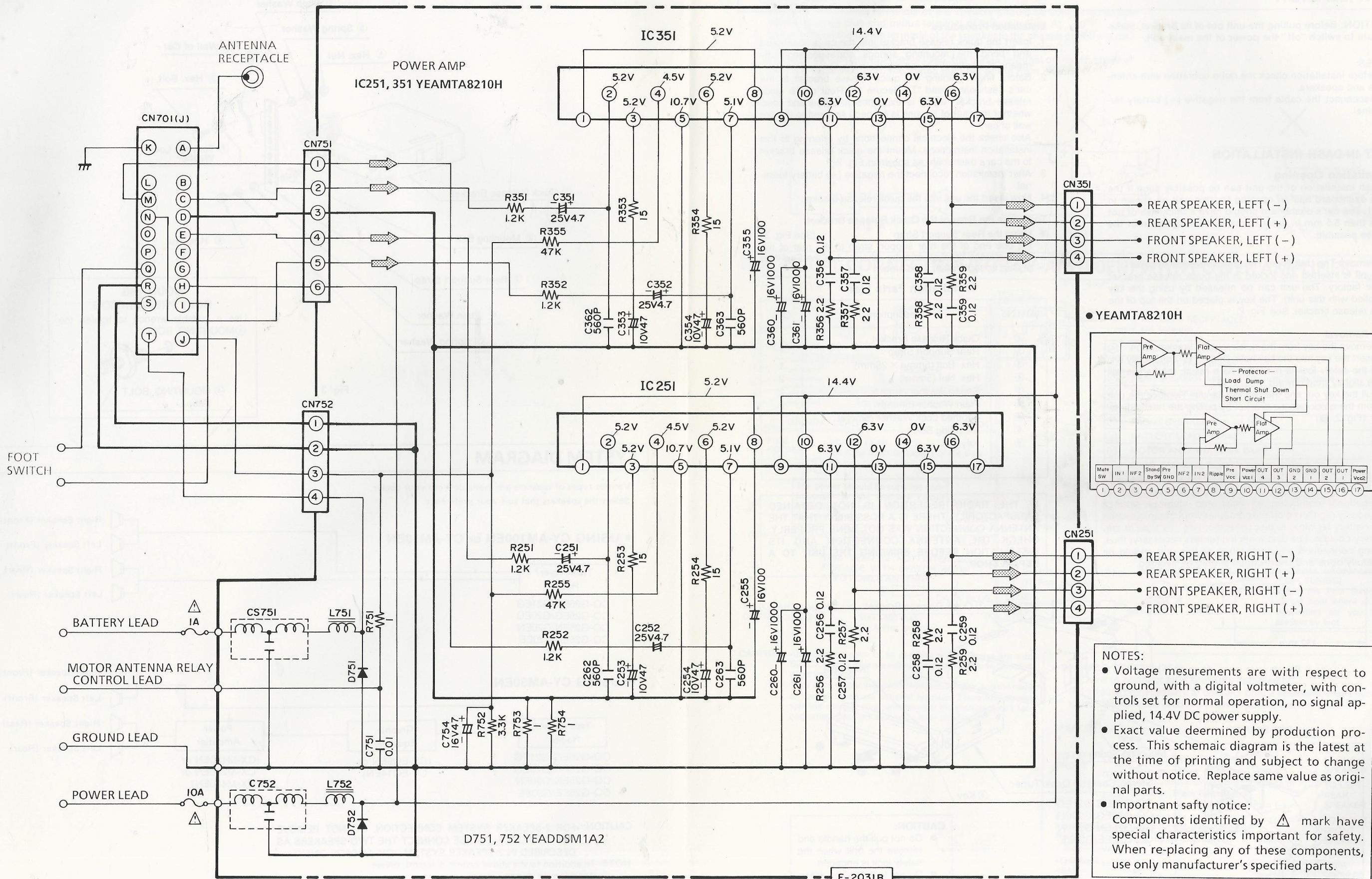


**CAUTION:** FOR 2-SPEAKER SYSTEM CONNECTION, DO NOT REMOVE THE TWO CLIPS. PLEASE CONNECT THE TWO SPEAKERS AS DESCRIBED IN 2-SPEAKER SYSTEM (CY-AM50EN ONLY).

**NOTE:** In addition to the above system diagrams, please consult your dealer.



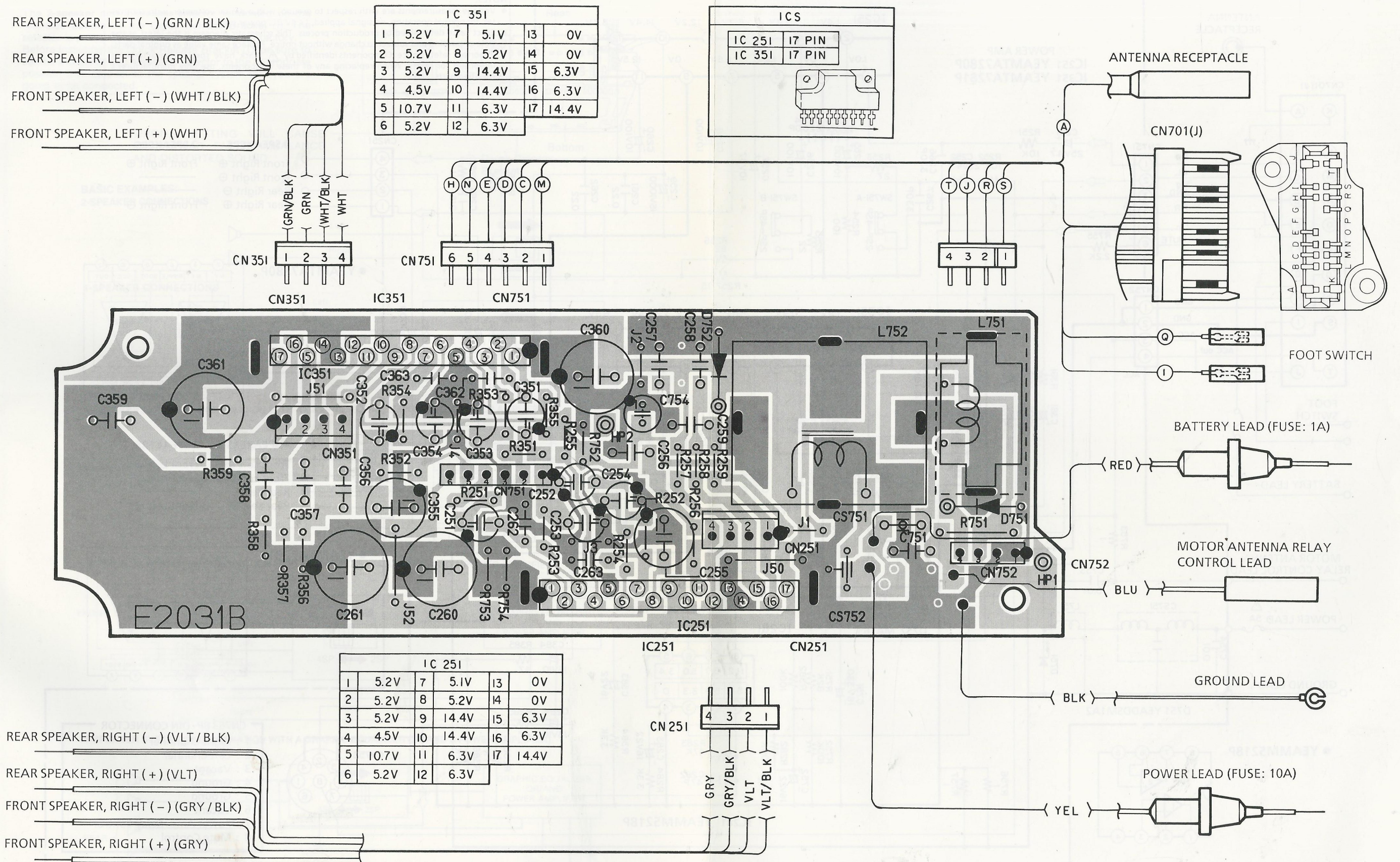
# SCHEMATIC DIAGRAM MODEL CY-AM100EN



POWER AMPLIFIER



## WIRING DIAGRAM MODEL CY-AM100EN

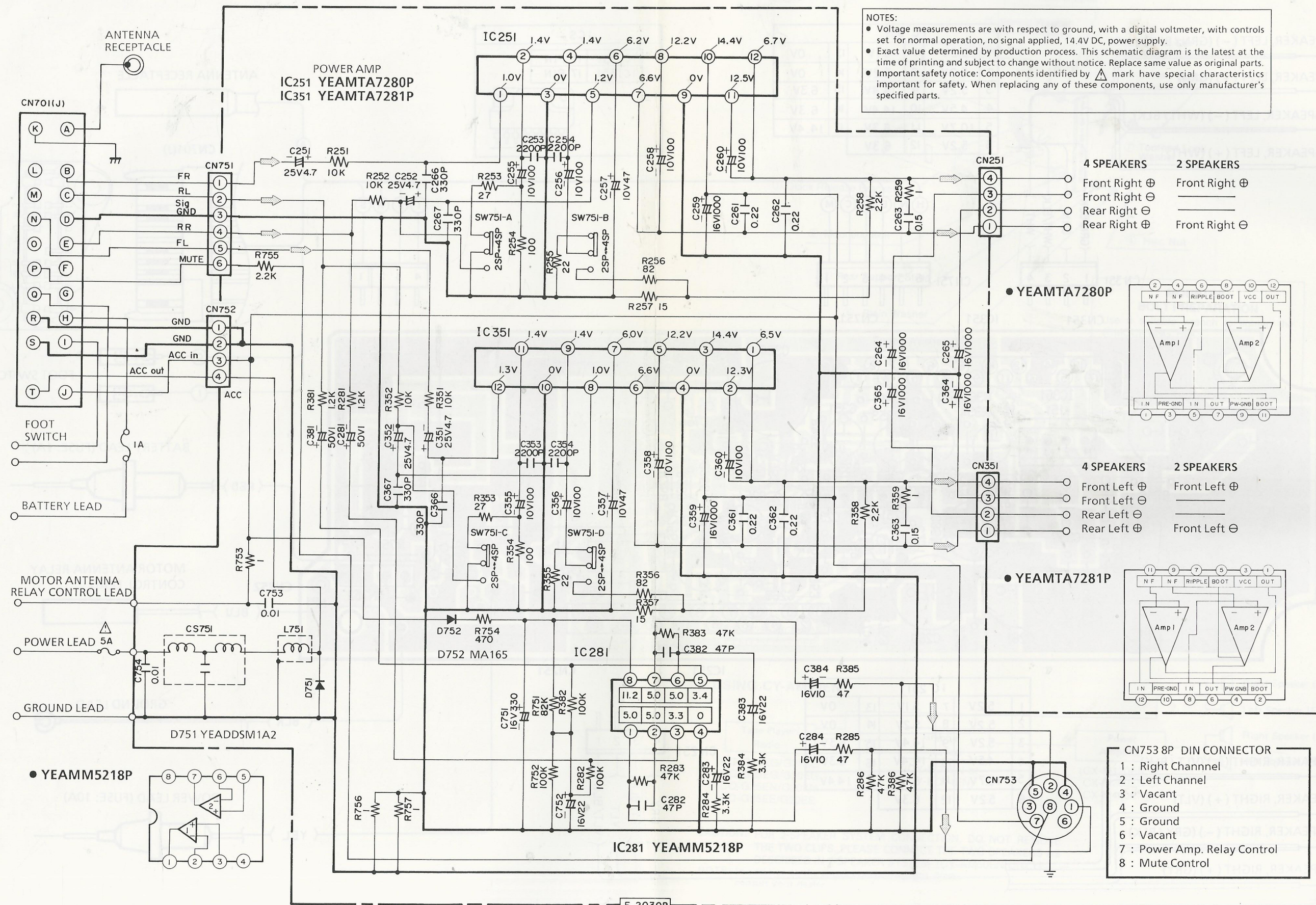




# SCHEMATIC DIAGRAM MODEL CY-AM50EN

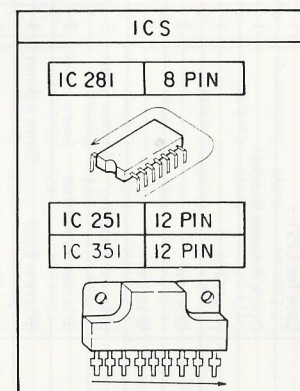
## NOTES:

- Voltage measurements are with respect to ground, with a digital voltmeter, with controls set for normal operation, no signal applied, 14.4V 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  $\Delta$  mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.





# WIRING DIAGRAM MODEL CY-AM50EN

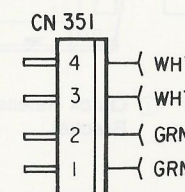
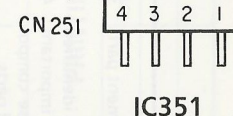


4SPEAKER FRONT SPEAKER, RIGHT (+) (GRY)  
2SPEAKER (FRONT SPEAKER, RIGHT (+))

FRONT SPEAKER, RIGHT (-) (GRY/BLK)

REAR SPEAKER, RIGHT (-) (VLT/BLK)

4SPEAKER REAR SPEAKER, RIGHT (+) (VLT)  
2SPEAKER (FRONT SPEAKER, RIGHT (-))

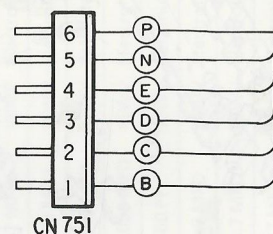
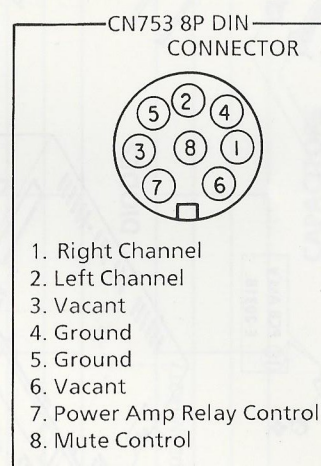
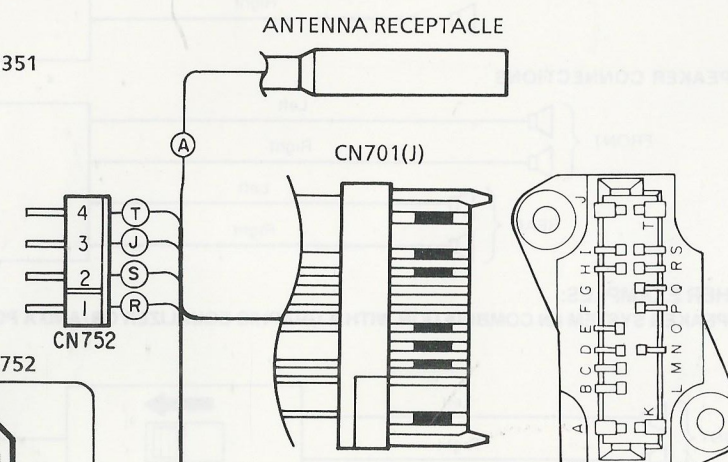
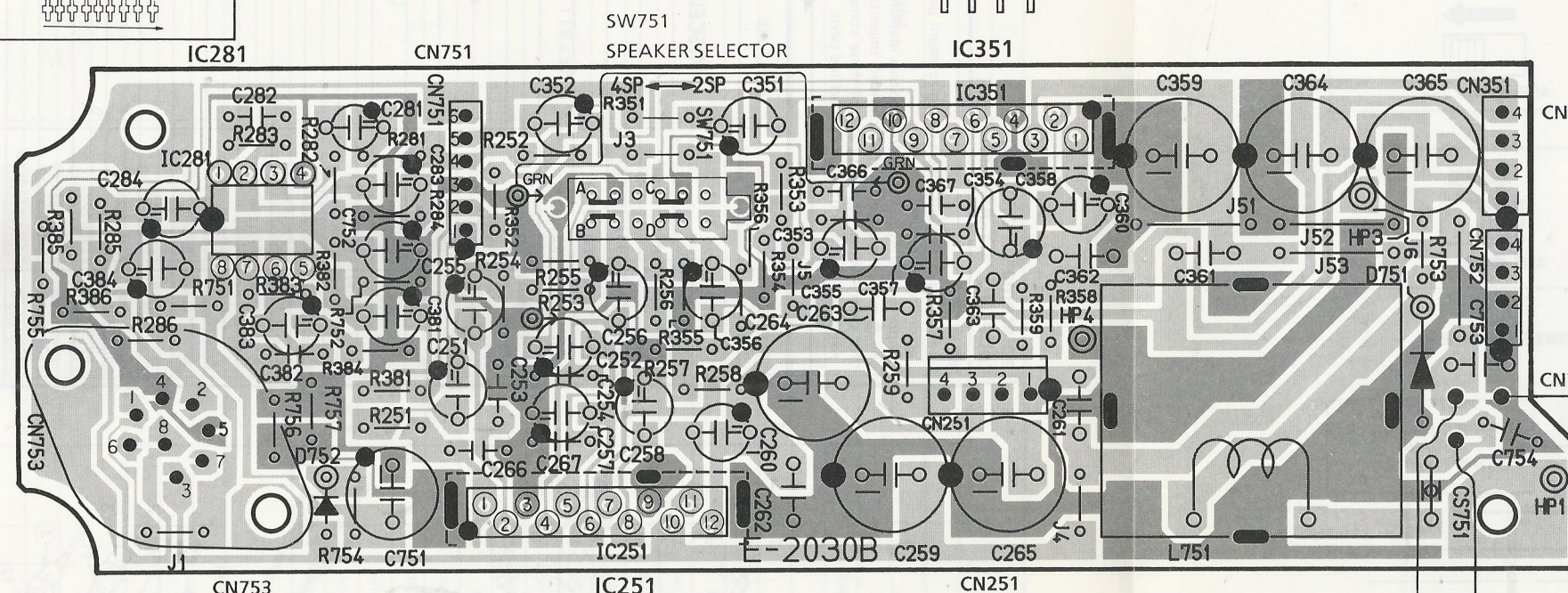


4SPEAKER FRONT SPEAKER, LEFT (+) (WHT)  
2SPEAKER (FRONT SPEAKER, LEFT (+))

FRONT SPEAKER, LEFT (-) (WHT/BLK)

REAR SPEAKER, LEFT (-) (GRN/BLK)

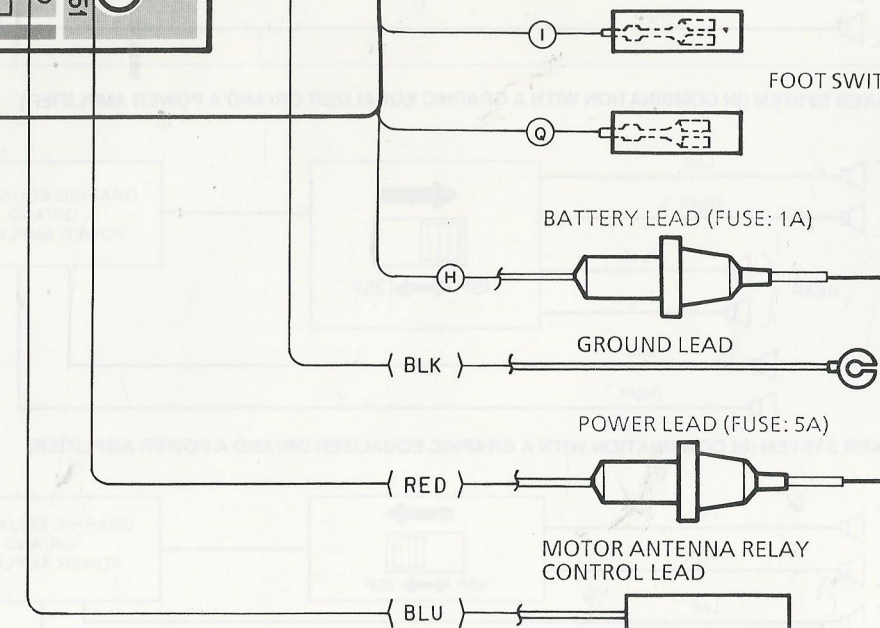
4SPEAKER REAR SPEAKER, LEFT (+) (GRN)  
2SPEAKER (FRONT SPEAKER, LEFT (-))



| IC 281 |      |   |       |
|--------|------|---|-------|
| 1      | 5.0V | 5 | 3.4V  |
| 2      | 5.0V | 6 | 5.0V  |
| 3      | 3.3V | 7 | 5.0V  |
| 4      | 0V   | 8 | 11.2V |

| IC 251 |      |   |       |    |       |
|--------|------|---|-------|----|-------|
| 1      | 1.0V | 5 | 1.2V  | 9  | 0V    |
| 2      | 1.4V | 6 | 6.2V  | 10 | 13.2V |
| 3      | 0V   | 7 | 6.2V  | 11 | 12.5V |
| 4      | 1.4V | 8 | 12.2V | 12 | 6.7V  |

| IC 351 |       |   |       |    |      |
|--------|-------|---|-------|----|------|
| 1      | 6.5V  | 5 | 12.2V | 9  | 1.4V |
| 2      | 12.3V | 6 | 6.6V  | 10 | 0V   |
| 3      | 13.2V | 7 | 6.0V  | 11 | 1.4V |
| 4      | 0V    | 8 | 1.0V  | 12 | 1.3V |



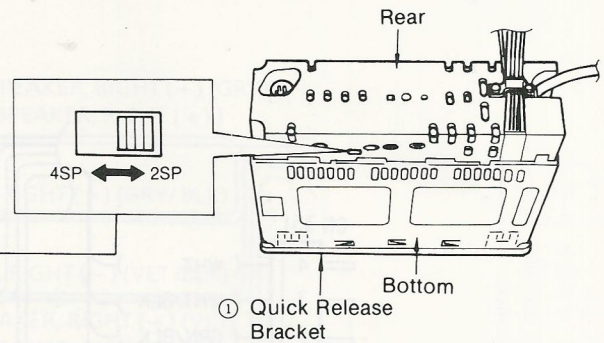
POWER AMPLIFIER



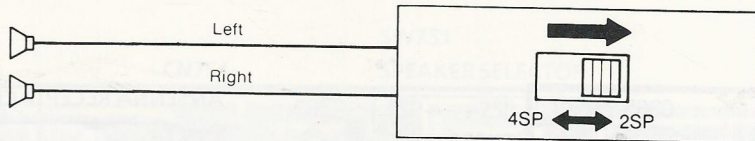
## 2-SPEAKER AND 4-SPEAKER SELECTOR (ONLY FOR CY-AM50EN)

The 2-speaker and 4-speaker selector is located on the rear-side bottom of the Quick Release Bracket ①. The selector is preset at "2-speaker" position in the factory. Before installing the Quick Release Bracket ①, be sure to set the 2-speaker and 4-speaker selector to the appropriate position with respect to the speaker system that you are going to be connected.

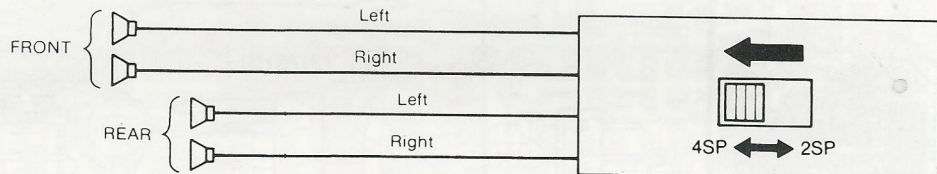
WRONG SETTING WILL CAUSE  
FRONT/REAR FADER IMBALANCE  
AND DISTORTED SOUND.



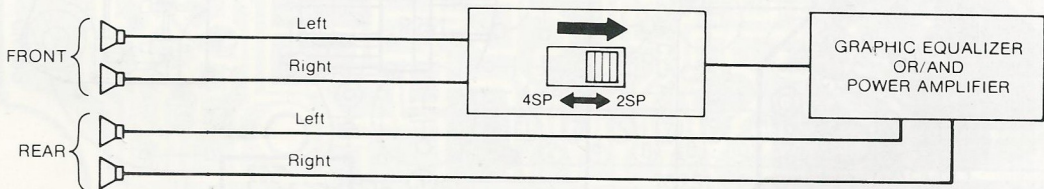
### BASIC EXAMPLES: 2-SPEAKER CONNECTIONS



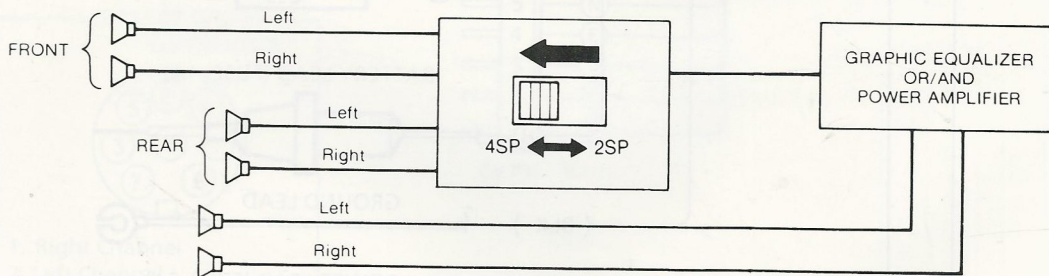
### 4-SPEAKER CONNECTIONS



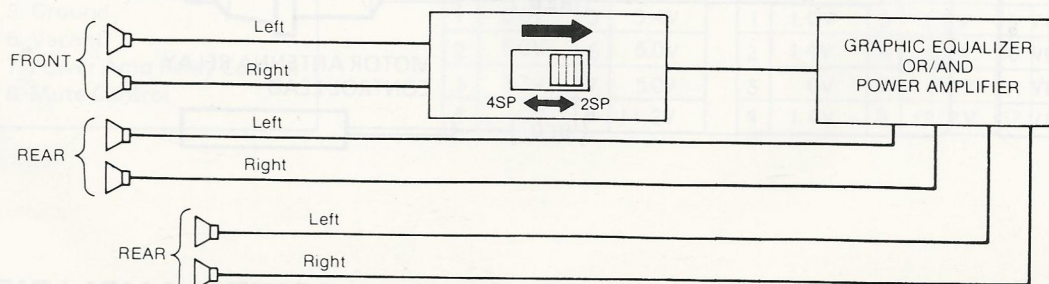
### OTHER EXAMPLES: 4-SPEAKER SYSTEM (IN COMBINATION WITH A GRAPHIC EQUALIZER OR/AND A POWER AMPLIFIER)



### 6-SPEAKER SYSTEM (IN COMBINATION WITH A GRAPHIC EQUALIZER OR/AND A POWER AMPLIFIER)



### 6-SPEAKER SYSTEM (IN COMBINATION WITH A GRAPHIC EQUALIZER OR/AND A POWER AMPLIFIER)



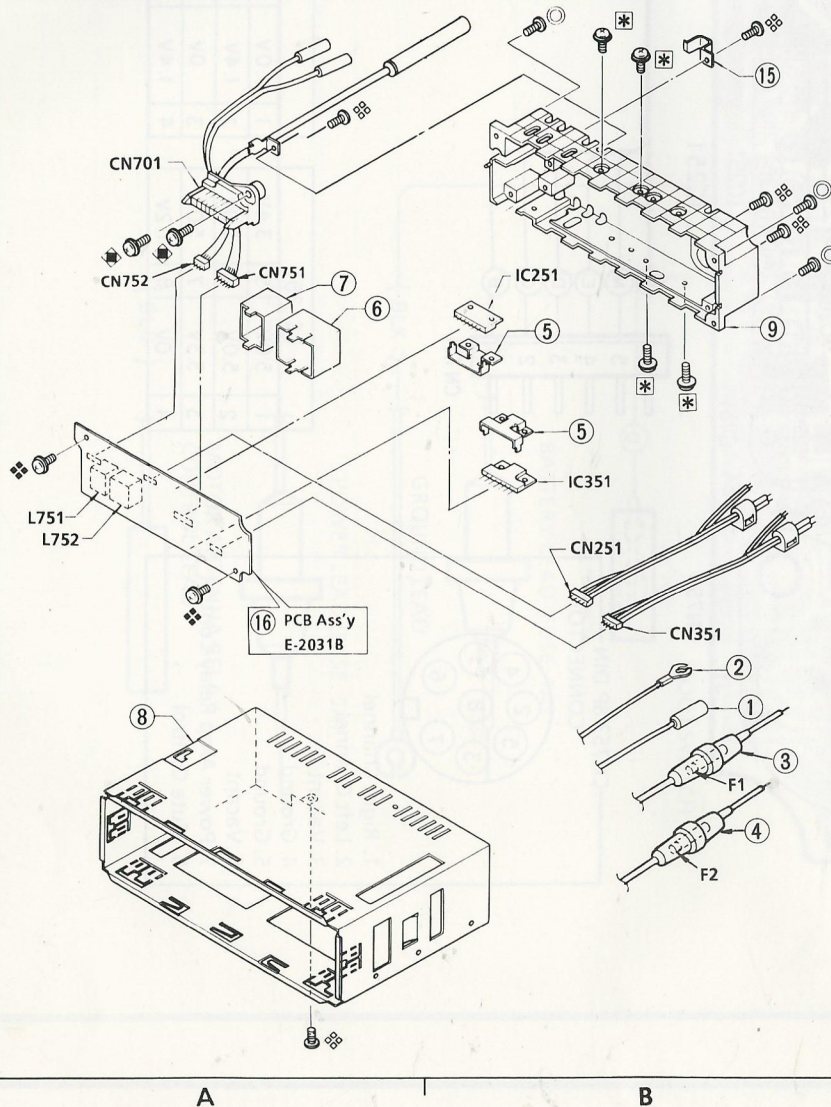


## EXPLODED VIEW (Model CY-AM100EN)

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

■ The symbols next to the screws indicate as follows.

|    |   |               |                             |
|----|---|---------------|-----------------------------|
| 10 | ◆ | YEJS05006     | ⊕Screw                      |
| 11 | ✱ | YEJS05002     | ⊕Screw                      |
| 12 | ◆ | XTB3 + 5FFXS  | ⊕Screw, Tapping 3mmφ × 5mm  |
| 13 | ◆ | XYN3 + F14FXS | ⊕Screw w/Washer 3mmφ × 14mm |
| 14 | ◎ | XSB3 + 8FXS   | ⊕Screw, Bind 4mmφ × 8mm     |



## Replacement Parts List

### Model NO. CY-AM100EN

## NOTES :

1. Be sure to make your orders of replacement parts according to this list.
2. Important safety notice : Components identified by  $\Delta$  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.
4. Printed circuit board assembly with mark (NLA) is no longer available after production discontinuation of the complete set.

| Ref. No.      | Part No. | Part Code     | Part Name & Description          | Pcs set | Remarks |
|---------------|----------|---------------|----------------------------------|---------|---------|
| MISCELLANEOUS |          |               |                                  |         |         |
| $\Delta$ F1   | (1-B)    | XBB1C10NR1    | Fuse 1A                          | 1       |         |
| $\Delta$ F2   | (1-B)    | XBB1F100NR1   | Fuse 10A                         | 1       |         |
| CN251         | (2-B)    | YEAJ03789     | Speaker Cord                     | 1       |         |
| CN351         | (2-B)    | YEAJ03799     | Speaker Cord                     | 1       |         |
| CN701         | (3-A)    | YEAJ02418     | Connector                        | 1       |         |
| CN751         |          |               |                                  |         |         |
| CN752         |          |               |                                  |         |         |
| 1             | (1-B)    | YEAJ12031     | Motor Antenna Relay Control Lead | 1       |         |
| 2             | (2-B)    | YEAJ09222     | Ground Lead                      | 1       |         |
| 3             | (1-B)    | YEAJ011022    | Power Lead w/Fuse 1A             | 1       |         |
| 4             | (1-B)    | YEAJ011023    | Battery Lead w/Fuse 10A          | 1       |         |
| 5             | (2-B)    | YEFX0211338   | Mounting Bracket IC251/351       | 2       |         |
| 6             | (2-A)    | YEFA13689A    | Case for L752                    | 1       |         |
| 7             | (2-A)    | YEFA13504     | Case for L751                    | 1       |         |
| 8             | (1-A)    | YFEG012166B   | Quick Release Bracket            | 1       |         |
| 9             | (2-B)    | YEFF01538     | Heat Sink                        | 1       |         |
| 10            | ◆        | YEJS05006     | ⊕Screw                           | 2       |         |
| 11            | ✱        | YEJS05002     | ⊕Screw                           | 4       |         |
| 12            | ◆        | XTB3 + 5FFXS  | ⊕Screw Tapping 3mm × 5mm         | 5       |         |
| 13            | ◆        | XYN3 + F14FXS | ⊕Screw w/Washer 3mm × 14mm       | 2       |         |
| 14            | ◎        | XSB3 + 8FXS   | ⊕Screw Bind 3mm × 8mm            | 3       |         |
| 15            | (3-B)    | YAFX106042    | Cord Clamper                     | 1       |         |
| 16            | (2-A)    | YEP0PT2031A0  | PCB w/Component                  | 1       | NLA     |
|               |          |               |                                  |         |         |
|               |          |               |                                  |         |         |



| Ref. No.          | Part No.     | Part Code | Part Name & Description    | Pcs set | Remarks |
|-------------------|--------------|-----------|----------------------------|---------|---------|
| <b>ICS</b>        |              |           |                            |         |         |
| IC251, 351        | YEAMTA8210H  |           | Power Amp                  | 2       |         |
|                   |              |           |                            |         |         |
|                   |              |           |                            |         |         |
| <b>DIODES</b>     |              |           |                            |         |         |
| D751, 752         | YEADDSM1A2T7 |           |                            | 2       |         |
|                   |              |           |                            |         |         |
|                   |              |           |                            |         |         |
| <b>CAPACITORS</b> |              |           |                            |         |         |
| (E2031B)          |              |           |                            |         |         |
| C251              | ECEA1EU4R7   |           | 4.7 MFD 25WV Electrolytic  | 1       |         |
| C252              | ECEA1EK4R7   |           | 4.7 MFD 25WV Electrolytic  | 1       |         |
| C253              | ECEA1AU4R7   |           | 4.7 MFD 25WV Electrolytic  | 2       |         |
| C254              | ECEA1AK470   |           | 47 MFD 10WV Electrolytic   | 1       |         |
| C255              | ECEA1CU101   |           | 100 MFD 16WV Electrolytic  | 1       |         |
| C256 to 259       | ECQV1H124JZ  |           | 0.12 MFD 50WV Polyester    | 4       |         |
| C260, 261         | ECEA1CU102   |           | 1000 MFD 16WV Electrolytic | 2       |         |
| C262, 263         | YEU05B561K   |           | 560 PF 50WV Ceramic        | 2       |         |
| C351              | ECEA1EU4R7   |           | 4.7 MFD 25WV Electrolytic  | 1       |         |
| C352              | ECEA1EK4R7   |           | 4.7 MFD 25WV Electrolytic  | 1       |         |
| C353, 354         | ECEA1AU470   |           | 47 MFD 10WV Electrolytic   | 2       |         |
| C355              | ECEA1CU101   |           | 100 MFD 16WV Electrolytic  | 1       |         |
| C356 to 359       | ECQV1H124JZ  |           | 0.12 MFD 50WV Polyester    | 4       |         |
| C360, 361         | ECEA1CU102   |           | 1000 MFD 16WV Electrolytic | 2       |         |
| C362, 363         | YEU05B561K   |           | 560 PF 50WV Ceramic        | 2       |         |
| C751              | YECKD05103Z  |           | 0.01 MFD 50WV Ceramic      | 1       |         |
| C754              | ECEA1CU470   |           | 47 MFD 16WV Electrolytic   | 1       |         |
| CS751             | YECCL05B222T |           | 2200 MFD Feedthrough       | 1       |         |
| CS752             | YECCL05B222M |           | 2200 MFD Feedthrough       | 1       |         |
|                   |              |           |                            |         |         |
|                   |              |           |                            |         |         |
|                   |              |           |                            |         |         |

| Ref. No.                  | Part No.    | Part Code | Part Name & Description | Pcs set | Remarks |
|---------------------------|-------------|-----------|-------------------------|---------|---------|
| <b>RESISTORS</b>          |             |           |                         |         |         |
| (E2031B)                  |             |           |                         |         |         |
| R251, 252                 | ERDS2TJ122  |           | 1.2k ohms 1/4W Carbon   | 2       |         |
| R253, 254                 | ERDS2TJ150  |           | 15 ohms 1/4W Carbon     | 2       |         |
| R255                      | ERDS2TJ473  |           | 47k ohms 1/4W Carbon    | 1       |         |
| R256 to 259               | ERDS2TJ2R2  |           | 2.2 ohms 1/4W Carbon    | 4       |         |
| R351, 352                 | ERDS2TJ122  |           | 1.2k ohms 1/4W Carbon   | 2       |         |
| R353, 354                 | ERDS2TJ150  |           | 15 ohms 1/4W Carbon     | 2       |         |
| R355                      | ERDS2TJ473  |           | 47k ohms 1/4W Carbon    | 1       |         |
| R356 to 359               | ERDS2TJ2R2  |           | 2.2 ohms 1/4W Carbon    | 4       |         |
| R751                      | ERD25FJ1R0  |           | 1 ohm 1/4W Carbon       | 1       |         |
| R752                      | ERDS2TJ332  |           | 3.3k ohms 1/4W Carbon   | 1       |         |
| R753, 754                 | ERDS2TJ1R0  |           | 1 ohm 1/4W Carbon       | 2       |         |
|                           |             |           |                         |         |         |
| <b>COILS</b>              |             |           |                         |         |         |
| L751                      | YETQ026F067 |           | Choke Coil              | 1       |         |
| L752                      | YETQ026F084 |           | Choke Coil              | 1       |         |
|                           |             |           |                         |         |         |
| <b>INSTALLATION PARTS</b> |             |           |                         |         |         |
| 1                         | YFEG04010A  |           | Rear Support Strap      | 1       |         |
| 2                         | XNG5AFXS    |           | Hex. Nut (M5)           | 2       |         |
| 3                         | XWC5CFX     |           | Washer Toothed Lock     | 1       |         |
| 4                         | YEJV01060   |           | Hex.Bolt (M5 x 1")      | 1       |         |
| 5                         | XVG5C25FXS  |           | Bolt Hex.               | 1       |         |
| 6                         | XWA5BFX     |           | Lock Washer (No.10)     | 2       |         |
| 7                         | XWG5FX      |           | Washer Polished         | 2       |         |
|                           |             |           |                         |         |         |
| <b>PRINTINGS</b>          |             |           |                         |         |         |
|                           | YEFM281415  |           | Instruction Book        | 1       |         |
|                           |             |           |                         |         |         |
|                           |             |           |                         |         |         |

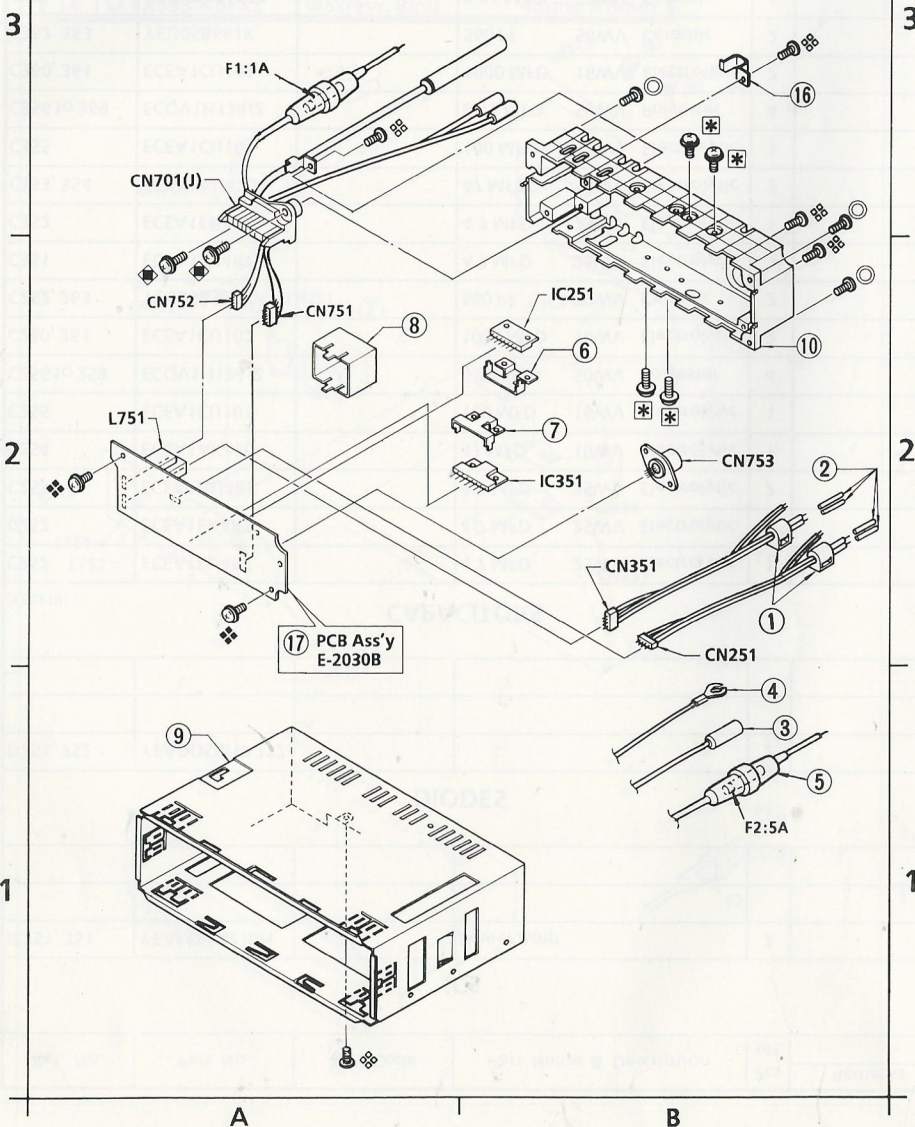


## EXPLODED VIEW (Model CY-AM50EN)

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

The symbols next to the screws indicate as follows.

|    |   |               |                             |
|----|---|---------------|-----------------------------|
| 11 | ◆ | YEJS05006     | ⊕Screw                      |
| 12 | ✱ | YEJS05001     | ⊕Screw                      |
| 13 | ◆ | XTB3 + 5FFXS  | ⊕Screw, Tapping 3mmφ × 5mm  |
| 14 | ◆ | XYN3 + F14FXS | ⊕Screw w/Washer 3mmφ × 14mm |
| 15 | ◎ | XSB3 + 8FXS   | ⊕Screw, Bind 3mmφ × 8mm     |



## Replacement Parts List Model NO. CY-AM50EN

### NOTES:

1. Be sure to make your orders of replacement parts according to this list.
2. 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.
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.
4. Printed circuit board assembly with mark (NLA) is no longer available after production discontinuation of the complete set.

| Ref. No.      | Part No. | Part Code     | Part Name & Description          | Pcs set | Remarks |
|---------------|----------|---------------|----------------------------------|---------|---------|
| MISCELLANEOUS |          |               |                                  |         |         |
| △F1           | (3-A)    | XBB1C10NR1    | Fuse 1A                          | 1       |         |
| △F2           | (1-B)    | XBB1C50NS1    | Fuse 5A                          | 1       |         |
| CN251         | (2-B)    | YEAJ03797A    | Speaker Cord                     | 1       |         |
| CN351         | (2-B)    | YEAJ03796A    | Speaker Cord                     | 1       |         |
| CN701         | (3-A)    | YEAJ02416     | Extension Cord w/Fuse 1A         | 1       |         |
| CN751         |          |               |                                  |         |         |
| CN752         |          |               |                                  |         |         |
| CN753         | (2-B)    | YEA01668      | 8P DIN Connector                 | 1       |         |
| 1             | (2-B)    | YEFX007283    | Cord Clamp CN251, 351            | 2       |         |
| 2             | (2-B)    | YEF04230      | Protector Cap                    | 4       |         |
| 3             | (1-B)    | YEAJ12031     | Motor Antenna Relay Control Lead | 1       |         |
| 4             | (1-B)    | YEAJ09191     | Ground Lead                      | 1       |         |
| 5             | (1-B)    | YEAJ011015    | Power Lead w/Fuse 5A             | 1       |         |
| 6             | (2-B)    | YEFX0212264   | Mounting Bracket (IC251)         | 1       |         |
| 7             | (2-B)    | YEFX0212265   | Mounting Bracket (IC351)         | 1       |         |
| 8             | (2-A)    | YEFA13689A    | Case for L751                    | 1       |         |
| 9             | (1-A)    | YEG012166B    | Quick Release Bracket            | 1       |         |
| 10            | (2-B)    | YEFF01538     | Heat Sink                        | 1       |         |
| 11            | ◆        | YEJS05006     | ⊕Screw                           | 2       |         |
| 12            | ✱        | YEJS05001     | ⊕Screw                           | 4       |         |
| 13            | ◆        | XTB3 + 5FFXS  | ⊕Screw Tapping 3mmφ × 5mm        | 5       |         |
| 14            | ◆        | XYN3 + F14FXS | ⊕Screw w/washer 3mmφ × 14mm      | 2       |         |
| 15            | ◎        | XSB3 + 8FXS   | ⊕Screw Bind 3mmφ × 8mm           | 3       |         |
| 16            | (3-B)    | YAFX016042    | Cord Clamper                     | 1       |         |
| 17            | (2-A)    | YEP0PT2030A0  | PCB w/Component                  | 1       | NLA     |



[illegible]

| Ref. No.                | Part No.    | Part Code | Part Name & Description    | Pcs set | Remarks |
|-------------------------|-------------|-----------|----------------------------|---------|---------|
|                         |             |           |                            |         |         |
| <b>ICS &amp; DIODES</b> |             |           |                            |         |         |
| (E2030B)                |             |           |                            |         |         |
| IC251                   | YEAMTA7280P |           | Power Amp                  | 1       |         |
| IC281                   | YEAMM5218P  |           | OP Amp                     | 1       |         |
| IC351                   | YEAMTA7281P |           | Power Amp                  | 1       |         |
| D751                    | YEADD5M1A2  |           |                            | 1       |         |
| D752                    | MA165       |           |                            | 1       |         |
|                         |             |           |                            |         |         |
|                         |             |           |                            |         |         |
| <b>CAPACITORS</b>       |             |           |                            |         |         |
| (E2030B)                |             |           |                            |         |         |
| C251, 252               | ECEA1EU4R7  |           | 4.7 MFD 25WV Electrolytic  | 2       |         |
| C253, 254               | YEE05X222M  |           | 0.0022 MFD 50WV Ceramic    | 2       |         |
| C255, 256               | ECEA1AU101  |           | 100 MFD 10WV Electrolytic  | 2       |         |
| C257                    | ECEA1AU470  |           | 47 MFD 10WV Electrolytic   | 1       |         |
| C258                    | ECEA1AU101  |           | 100 MFD 10WV Electrolytic  | 1       |         |
| C259                    | ECEA1CU102  |           | 1000 MFD 16WV Electrolytic | 1       |         |
| C260                    | ECEA1AU101  |           | 100 MFD 10WV Electrolytic  | 1       |         |
| C261, 262               | ECQV1H224JZ |           | 0.22 MFD 50WV Polyester    | 2       |         |
| C263                    | ECQV1H154JZ |           | 0.15 MFD 50WV Polyester    | 1       |         |
| C264, 265               | ECEA1CU102  |           | 1000 MFD 16WV Electrolytic | 2       |         |
| C266, 267               | YEU05B331K  |           | 330 PF 50WV Ceramic        | 2       |         |
| C281                    | ECEA1HK010  |           | 1 MFD 50WV Electrolytic    | 1       |         |
| C282                    | YEU05SL470J |           | 47 PF 50WV Ceramic         | 1       |         |
| C283                    | ECEA1CU220  |           | 22 MFD 16WV Electrolytic   | 1       |         |
| C284                    | ECEA1CU100  |           | 10 MFD 16WV Electrolytic   | 1       |         |
| C351, 352               | ECEA1EK4R7  |           | 4.7 MFD 25WV Electrolytic  | 2       |         |
| C353, 354               | YEE05X222M  |           | 0.0022 MFD 50WV Ceramic    | 2       |         |
| C355, 356               | ECEA1AU101  |           | 100 MFD 10WV Electrolytic  | 2       |         |
| C357                    | ECEA1AU470  |           | 47 MFD 10WV Electrolytic   | 1       |         |
| C358                    | ECFA1AK5101 |           | 100 MFD 10WV Electrolytic  | 1       |         |
| C359                    | ECEA1CU102  |           | 1000 MFD 16WV Electrolytic | 1       |         |
| C360                    | ECEA1AU101  |           | 100 MFD 10WV Electrolytic  | 1       |         |
| C361, 362               | ECQV1H224JZ |           | 0.22 MFD 50WV Polyester    | 2       |         |



