

# Service Manual

Colour Television EURO 2 Chassis

## TX-25MD5E

|                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                   |                                                                                                                                      |
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# Service Manual



**Colour Television**

**TX-25MD5E**

**EURO-2 Chassis**

## Specifications

|                                  |                                                                                                                     |                               |                                                                                                                        |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------|-------------------------------|------------------------------------------------------------------------------------------------------------------------|
| <b>Power Source :</b>            | 220—240V AC 50Hz                                                                                                    | AV2 IN                        | Video (21 pin) 1 Vp—p 75Ω<br>Audio (21 pin) 500mV rms, 10 kΩ<br>S—Video IN Y : 1 Vp—p 75Ω<br>(21 pin) C : 0.3 Vp—p 75Ω |
| <b>Power Consumption :</b>       | 92W                                                                                                                 | AV2 OUT                       | Video (21 pin) 1 Vp—p 75Ω<br>Audio (21 pin) 500mV rms, 1 kΩ                                                            |
| <b>Aerial Impedance :</b>        | 75Ω unbalanced, Coaxial Type                                                                                        | AV3 IN                        | Audio (RCA x 2)<br>500mV rms, 10kΩ<br>Video (RCA x 1)<br>1 Vp—p 75Ω                                                    |
| <b>Receiving System :</b>        | PAL—B / G, H, PAL—60<br>SECAM—B / G                                                                                 | <b>High Voltage :</b>         | 28kV ±1 kV at zero beam current                                                                                        |
| <b>Receiving Channels :</b>      | VHF E2 — E12<br>VHF H1 — H2 (ITALY)<br>VHF R1 — R2<br>VHF R6 — R12<br>CATV (S01 — S05)<br>CATV S11 — S20 (U1 — U10) | <b>Picture Tube :</b>         | 63 cmV<br>measured diagonally.                                                                                         |
|                                  | VHF A — H (ITALY)<br>VHF R3 — R5<br>UHF E21 — E69<br>CATV S1 — S10 (M1 — M10)<br>CATV S21 — S41 (HYPERBAND)         | <b>Audio Output :</b>         |                                                                                                                        |
| <b>Intermediate Frequency :</b>  |                                                                                                                     | Internal Speaker              | 2 x 15 W (Music Power)<br>8Ω Impedance                                                                                 |
| Video                            | 38.9MHz                                                                                                             | Headphones                    | 1 x 8 Ω Impedance                                                                                                      |
| Sound                            | 33.4MHz, 33.16MHz<br>32.4MHz, 33.05MHz                                                                              | <b>Accessories supplied :</b> | Remote Control<br>UM3 Battery                                                                                          |
| Colour                           | 34.47MHz (PAL)<br>34.657MHz, 34.5MHz (SECAM)                                                                        | <b>Dimensions :</b>           | Height : 531mm<br>Width : 601mm<br>Depth : 439mm                                                                       |
| <b>Video / Audio Terminals :</b> |                                                                                                                     | <b>Net Weight</b>             | 25kg                                                                                                                   |
| AUDIO MONITOR OUT                | Audio (RCA x 2) 500mV rms, 1 kΩ                                                                                     |                               |                                                                                                                        |
| AV1 IN                           | Video (21 pin) 1 Vp—p 75Ω<br>Audio (21 pin) 500mV rms, 10kΩ<br>RGB (21 pin)                                         |                               |                                                                                                                        |
| AV1 OUT                          | Video (21 pin) 1 Vp—p 75Ω<br>Audio (21 pin) 500mV rms, 1 kΩ                                                         |                               |                                                                                                                        |

Specifications are subject to change without notice.  
Weight and dimensions shown are approximate.

**Panasonic**

## Contents

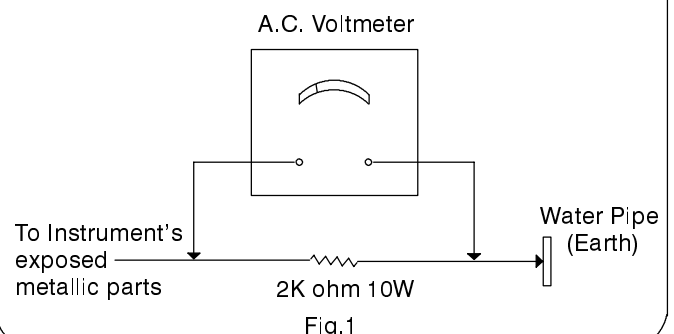
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## Safety Precautions

### General Guide Lines

1. It is advisable to insert an isolation transformer in the AC supply before servicing a hot chassis.
2. When servicing, observe the original lead dress in the high voltage circuits. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
3. After servicing, see that all the protective devices such as insulation barriers, insulation papers, shields and isolation R-C combinations are correctly installed.
4. When the receiver is not being used for a long period of time, unplug the power cord from the AC outlet.
5. Potentials as high as 29 kV are present when this receiver is in operation. Operation of the receiver without the rear cover involves the danger of a shock hazard from the receiver power supply. Servicing should not be attempted by anyone who is not familiar with the precautions necessary when working on high voltage equipment. Always discharge the anode of the picture to the chassis before handling the tube.
6. After servicing make the following leakage current checks to prevent the customer from being exposed to shock hazards.
  4. Check each exposed Metallic part and check the voltage at each point.
  5. Reverse the AC plug at the outlet and repeat each of the above measurements.
  6. The potential at any point should not exceed 1.4 Vrms. In case a measurement is outside the limits specified, there is a possibility of a shock hazard, and the receiver should be repaired and rechecked before it is returned to the customer.

### HOT CHECK CIRCUIT



### Leakage Current Cold Check

1. Unplug the AC cord and connect a jumper between the two prongs of the plug.
2. Turn on the receiver's power switch.
3. Measure the resistance value with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the receiver, such as screw heads, aerials, connectors, control shafts etc. When the exposed metallic part has a return path to the chassis the reading should be between 4M ohm and 20M ohm. When the exposed metal does not have a return path to the chassis the reading must be infinite.

### Leakage Current Hot Check

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a 2k ohm 10W resistor in series with an exposed metallic part on the receiver and an earth such as a water pipe.
3. Use an AC voltmeter with high impedance to measure the potential across the resistor.

### X-Radiation Warning

1. The potential sources of X-Radiation in TV sets are the high voltage section and the picture tube.
2. When using a picture tube test jig for service ensure that the jig is capable of handling 29kV without causing X-Radiation.

**NOTE :** It is important to use an accurate periodically calibrated high voltage meter

1. Set the brightness to minimum.
2. Measure the high voltage. The meter should indicate  $28\text{kV} \pm 1\text{kV}$  at zero beam current if the meter indication is out of tolerance, immediate service and correction is required to prevent the possibility of premature component failure.
3. To prevent an X-Radiation possibility, it is essential to use the specified tube.

## Service Hints

### How to remove the rear cover

1. Remove the 5 fixing screws (A) as shown in Fig.2

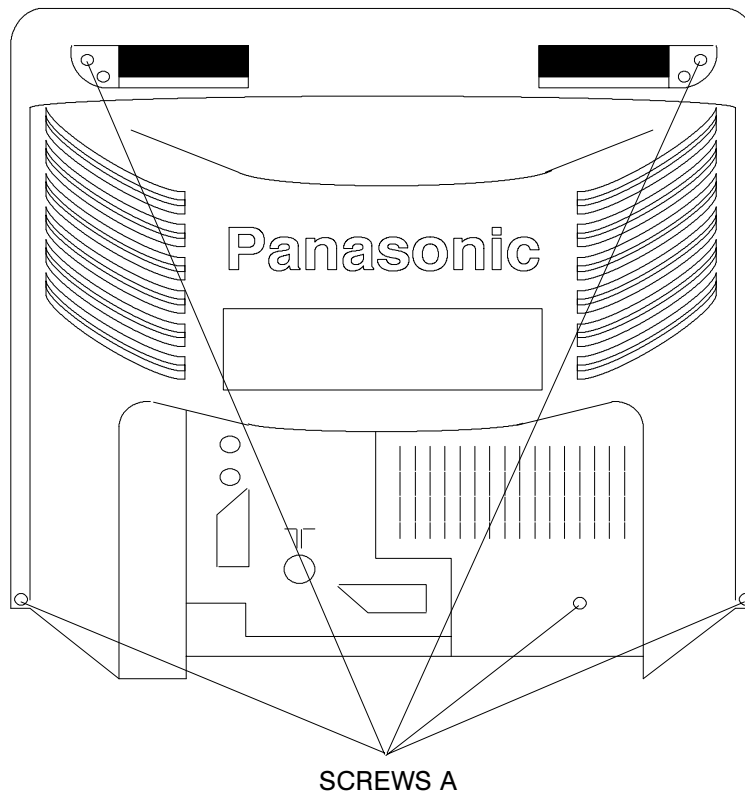


Fig.2.

## Location Of Controls

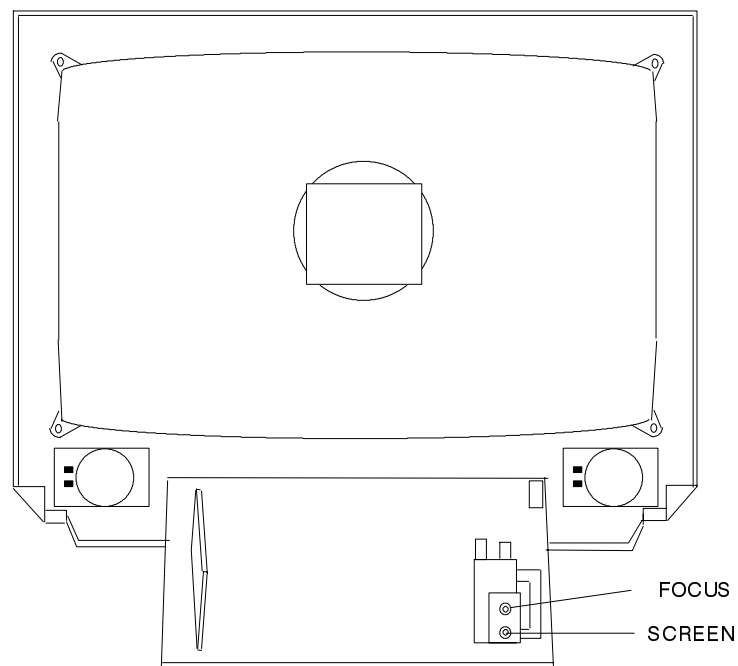
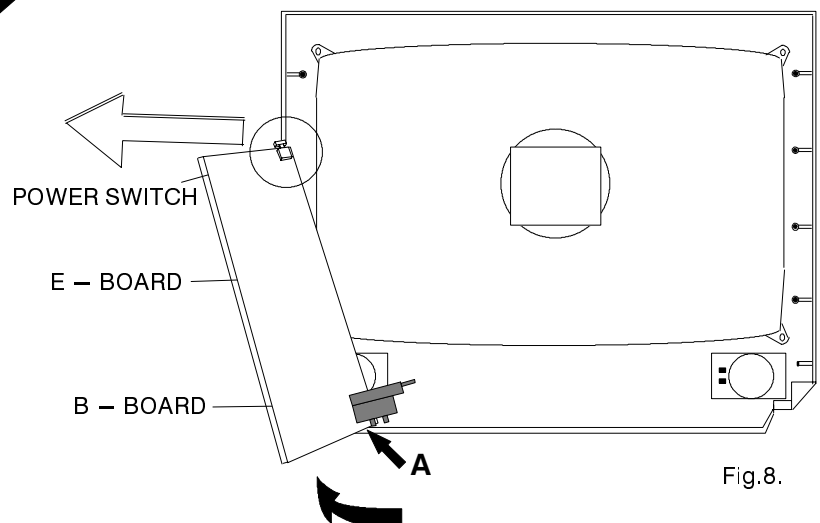
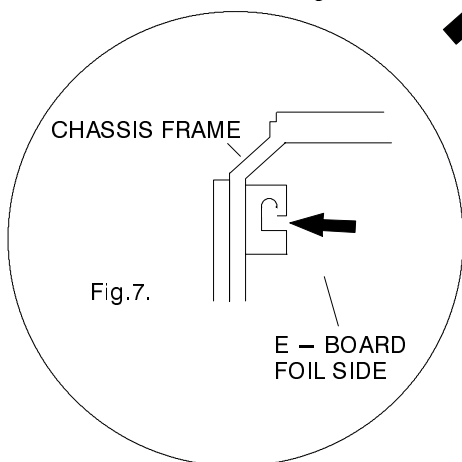
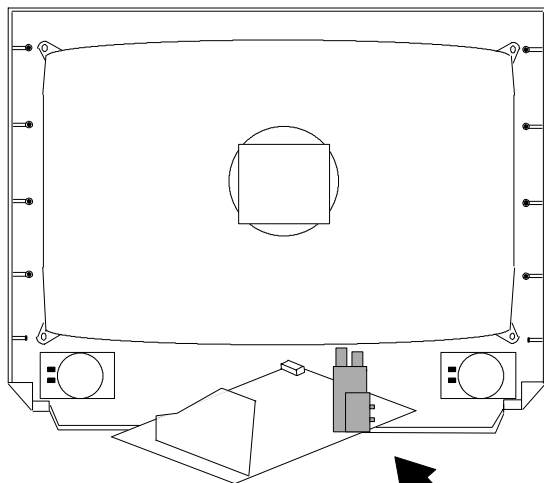
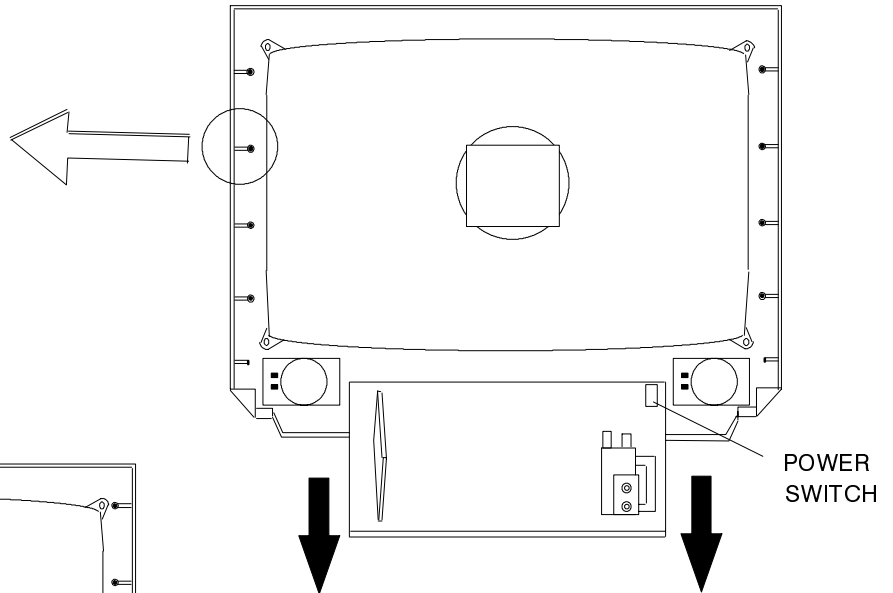
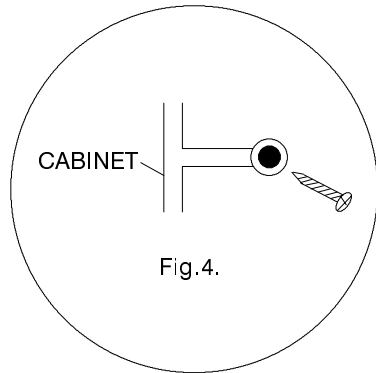


Fig.3.

## How to move the chassis into the Service position

1. Insert 1 of the backcover screws into the rib on the left hand side of the cabinet as shown in Fig.4.
2. Hold and lift the rear of the E- PCB chassis and gently pull the chassis toward you as shown in fig.5.
3. Release the respective wiring clips and rotate the chassis horizontally through 90°, anti-clockwise, shown in Fig.6, then elevate the front of the chassis as shown in fig.8.
4. Clip the chassis frame onto the screw in the rib of the cabinet, shown in Fig.7/8.
5. Locate the base of the chassis frame into the recess marked A, shown in Fig.8.
6. After servicing remove the screw and ensure all wiring is returned to its original position before returning the receiver to the customer.



## Service Mode

The remote control is used for entering and storing adjustments, with the exception of cut-off adjustments which must always be done prior to service adjustment. Perform adjustments in accordance with screen display. The display on the screen also specifies the CCU variants as well as the approx. setting values. The adjustment sequence for the service mode is indicated below.

1. Set the Bass to maximum position, set the Treble to minimum position, press the F button followed by the Volume down on the customer controls at the front of the TV and at the same time press the Reveal button on the remote control, this will place the TV into the Service Mode.
2. Press the RED / GREEN buttons to step down / up through the functions.
3. Press the YELLOW / BLUE buttons to alter the function values.
4. Press the STORE button on the preset panel after each adjustment has been made to store the required values.
5. To exit the Service Mode press the Normalisation button.

**NOTE:** This TV also has the option of using a Memory Pack which enables you to copy the preset TV channels and analogue levels into the Memory Pack and then upload them onto another EURO-2 TV set.

## Using the Memory Pack

### TV to Memory Pack process

1. Plug the memory pack into the lower of the two 21 pin terminals at the back of the TV and switch the TV on. If the TV has only one 21 pin connector then this will be able to accept the memory pack.
2. Go into the Service Mode as explained above. The screen will show:—

Program  
External>>TV

3. Press the blue button on the remote control. The screen will show:—

Program  
TV>>External

4. Press the STORE button on the TV. The screen will show:—

Storing

5. All the tuning information stored inside the TV will now be transferred to the Memory Pack. This process will take 2–3 minutes to complete and when finished the screen will show:—

OK!

### Memory Pack to TV Process

1. Plug the memory pack into the lower of the two 21 pin terminals at the back of the TV and switch the TV on. If the TV has only one 21 pin connector then this will be able to accept the memory pack.
2. Go into the Service Mode as explained above. The screen will show:—

Program  
External>>TV

3. Press the STORE button on the TV. The screen will show:—

Loading

4. All the tuning information stored inside the Memory Pack will now be transferred to the TV. This process will take 2–3 minutes to complete and when finished the screen will show:—

OK!

5. The tuning information from the Memory Pack has now been copied into the TV
6. To exit from the Service Mode switch off the TV.
7. The process has now been completed and the Memory Pack can now be removed.

## Errors

If an error occurs while using the Memory Pack the TV will detect this and the screen will show:—

Program  
Error!

If this happens then switch off the TV and repeat the process that was being used. If the errors continue to occur then check the connectors between the TV and the memory pack and check the 9V battery inside the memory pack.

## SELF CHECK

Self check is used to automatically check the Bus lines and Hexadecimal code of the TV set.

To enter the Self Check mode press Function down button, on the Preset Panel, at the same time pressing the Status button, on the Remote Control, and the screen will show:—

|          |                      |          |                     |         |           |
|----------|----------------------|----------|---------------------|---------|-----------|
| 1 — ok   | Tuner                | 11 — — — | Dolby IC<br>for C/R | 21 — ok | P SBLED   |
| 2 — ok   | VIF                  | 12 — ok  | P S MODE            | 22 — ok | P OFF     |
| 3 — ok   | EEPROM               | 13 — ok  | P TA0               | 23 — ok | P DEFL    |
| 4 — — —  | Sound AV<br>switch 1 | 14 — ok  | P TA1               | 24 — ok | P RAM     |
| 5 — ok   | Video AV<br>switch 1 | 15 — ok  | P TA2               |         |           |
| 6 — ok   | VDP                  | 16 — ok  | P TA3               | 5A      |           |
| 7 — ok   | TPU                  | 17 — ok  | P SDA               | 22      |           |
| 8 — ok   | MSP                  | 18 — ok  | P SCL1              | 20      | Hex codes |
| 9 — — —  | Dolby Sub            | 19 — ok  | P SCL3              | 94      |           |
| 10 — — — | Dolby IC<br>for L/R  | 20 — ok  | P SCL4              | 85      |           |

If the CCU ports have been checked and found to be incorrect then "—" will appear in place of "OK".

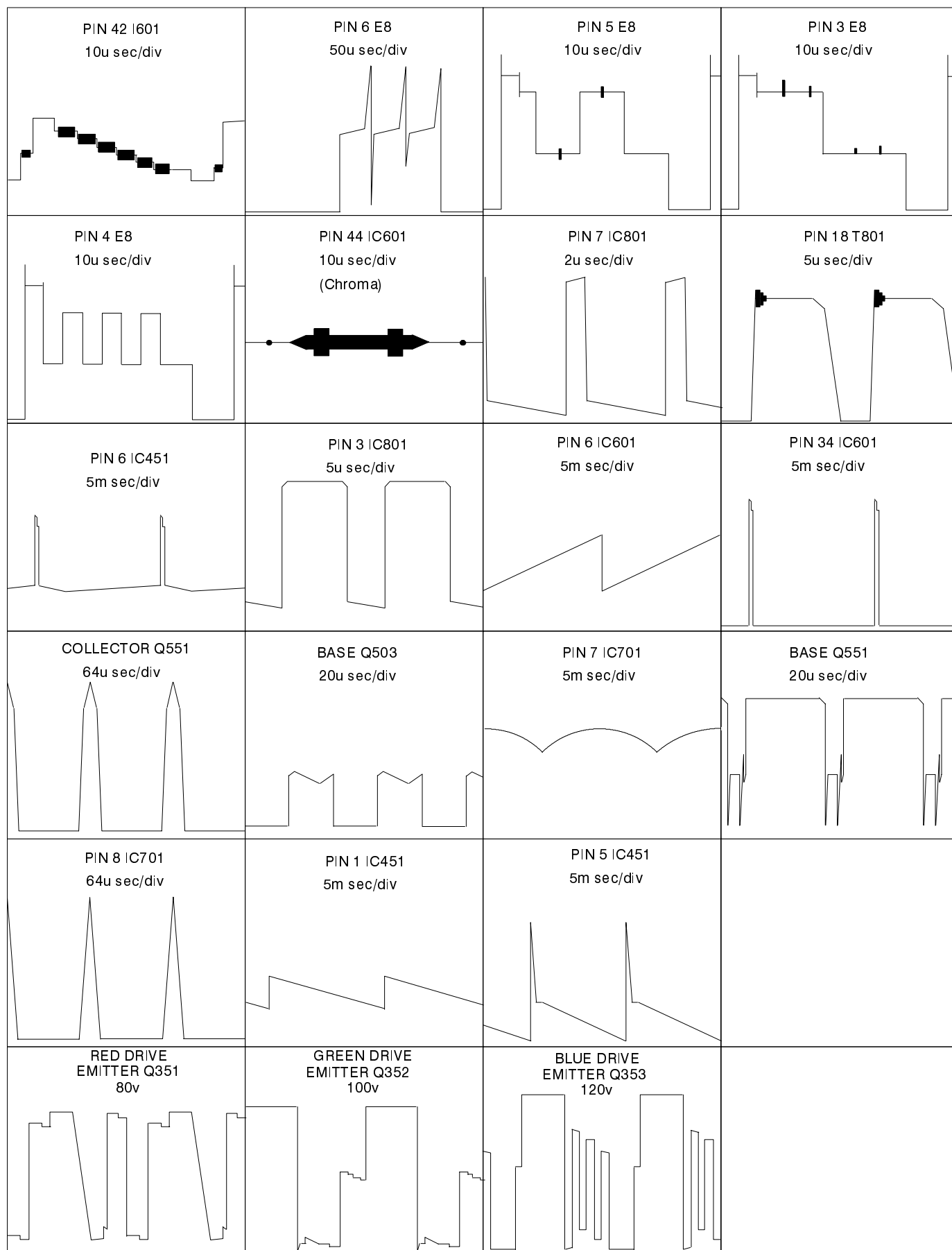
## Adjustment Procedure

| Item/Preparation                                                                                                                                                | Adjustments                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>+B SET-UP</b><br>1. Receive a Greyscale pattern<br>2. Set the controls:<br>Brightness      minimum<br>Contrast        minimum<br>Volume          minimum     | 1. Set the +B voltage up as follows:<br>Adjust <b>R811</b> so that <b>B2</b> shows 147V $\pm$ 1V<br>2. Confirm the following voltages.<br><b>B1</b> 203 $\pm$ 10V <b>B6</b> 12 $\pm$ 0.5V<br><b>B3</b> 27 $\pm$ 1V <b>B7</b> 5 + 0.1/—0.25V<br><b>B4</b> 35.5 $\pm$ 1V <b>B8</b> 5 $\pm$ 0.25V<br><b>B5</b> 15.5 $\pm$ 1V <b>U33</b> 31 $\pm$ 1V                                                 |
| <b>RF AGC</b><br>1. Receive a test pattern.<br>2. Connect an oscilloscope between the tuner RF AGC and ground.<br>3. Set the oscilloscope gain range to 1V/div. | 1. Check that the noise becomes large when the RF AGC VR <b>R126</b> is turned counterclockwise. After the check turn it clockwise.<br>2. Gradually turn the RF AGC VR anti-clockwise, and set the RF AGC VR to the point where the RF AGC voltage is just falling to a point where this voltage drops by 0.2V from the maximum value.                                                           |
| <b>CUT OFF</b><br>1. Receive a Greyscale pattern.<br>2. Degauss the tube externally.<br>3. Set the TV into Service Mode 1.<br>4. Select Cutoff DC mode.         | 1. Confirm the value is 128 and select Ug2 mode noting colour with largest value<br>2. Turn the screen VR until a colour reaches 20~30.<br>3. Connect an oscilloscope to the cathode with the biggest value colour.<br>4. Select Cutoff DC mode and adjust Cutoff pulse to 159V $\pm$ 5V.<br>5. Disconnect the oscilloscope and adjust the screen to whichever colour reaches 70 $\pm$ 30 first. |

## Alignment Settings

| Alignment Function      | TX-25MD5E                      | Settings / Special features                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Vertical amplitude   | V-AMP<br>051                   | Optimum setting                                                                                                                                                                                                                                                                                                                                                                                             |
| 2. Vertical symmetry    | V-SYM<br>013                   |                                                                                                                                                                                                                                                                                                                                                                                                             |
| 3. Vertical linearity   | V-LIN<br>012                   |                                                                                                                                                                                                                                                                                                                                                                                                             |
| 4. Vert. D.C.           | Vert. D.C.<br>000              | No adjustment                                                                                                                                                                                                                                                                                                                                                                                               |
| 5. V-Pos.               | V. Pos.<br>003                 | Optimum setting                                                                                                                                                                                                                                                                                                                                                                                             |
| 6. Horizontal amplitude | H-AMP<br>-033                  | Optimum setting                                                                                                                                                                                                                                                                                                                                                                                             |
| 7. Horizontal position  | H-POS<br>049                   |                                                                                                                                                                                                                                                                                                                                                                                                             |
| 8. Text Position        | TEXT POSITION<br>045           | Optimum setting                                                                                                                                                                                                                                                                                                                                                                                             |
| 9. EW-amplitude         | E-W-AMP 1<br>-058              | Optimum setting                                                                                                                                                                                                                                                                                                                                                                                             |
| 10. EW-amplitude        | E-W-AMP 2<br>023               | Optimum setting                                                                                                                                                                                                                                                                                                                                                                                             |
| 11. Trapezium-comp      | TRAPEZ-1<br>-014               | Optimum setting                                                                                                                                                                                                                                                                                                                                                                                             |
| 12. Trapezium- comp     | TRAPEZ-2<br>012                | Optimum setting                                                                                                                                                                                                                                                                                                                                                                                             |
| 13. Colour VCO          | Colour VCO<br>015              | Press either Blue or Yellow buttons to effect automatic adjustment                                                                                                                                                                                                                                                                                                                                          |
| 14. Cut-off DC          | Cut-off DC<br>050              | No adjustment                                                                                                                                                                                                                                                                                                                                                                                               |
| 15. Ug2 Test            | Ug 2 Test<br>107    021    023 | Select Cutoff DC in ServiceMode and confirm the value is 128. Select Ug 2 Test noting colour with largest value, adjust on FBT until a colour reaches 20 ~ 30. Connect an oscilloscope to the cathode of the biggest value colour, select Cutoff DC mode and adjust get Cutoff pulse voltage to $159\pm5V$ . Disconnect the oscilloscope and adjust the screen to whichever colour reaches $70\pm30$ first. |
| 16. Cutoff              | Cutoff<br>045    055    050    | Press the GREEN button to step through the settings.<br>Adjust for optimum.                                                                                                                                                                                                                                                                                                                                 |
| 17. White               | White<br>224    255    237     | Press the GREEN button to step through the settings.<br>Adjust for optimum.                                                                                                                                                                                                                                                                                                                                 |

# WAVEFORM PATTERN TABLE



## SCHEMATIC DIAGRAM FOR MODELS TX-25MD5E (EURO-2L CHASSIS)

### 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.

### Notes

1. **RESISTOR**  
All resistors are carbon  $\frac{1}{4}W$  resistor, unless marked.  
Unit of resistance is OHM ( $\Omega$ ) (K=1,000, M=1,000,000).
2. **CAPACITOR**  
All capacitors are ceramic 50V capacitors, unless marked, the unit of capacitance is  $\mu F$  unless otherwise stated.
3. **COIL**  
Unit of inductance is  $\mu H$ , unless otherwise stated.
4. **TEST POINT**  
 : Test Point position
5. **EARTH SYMBOL**  

 : Chassis Earth (Cold)
 

 : Line Earth (Hot)
6. **VOLTAGE MEASUREMENT**  
Voltage is measured by a DC voltmeter.  
Measurement conditions are as follows:
 

|                       |                        |
|-----------------------|------------------------|
| Power source          | AC 220-240V, 50Hz      |
| Receiving Signal      | Colour Bar signal (RF) |
| All customer controls | Maximum position       |
7.
 

 : Indicates the Video signal path  
 : Indicates the Audio signal path  
 : Indicates the Vertical/Horizontal signal path
8. This schematic diagram is the latest at the time of printing and is subject to change without notice.

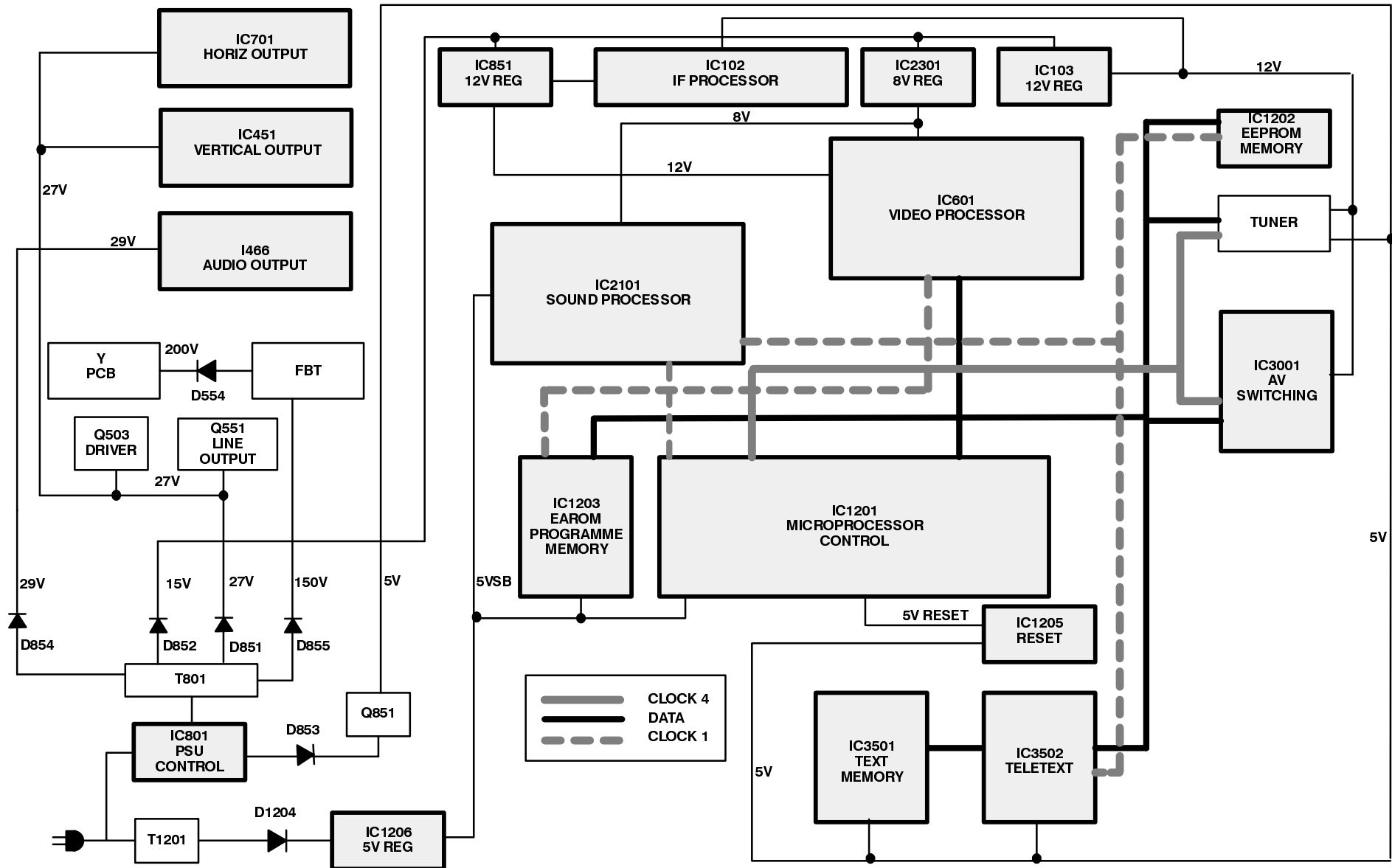
### Precautions

- a. Do not touch the hot part, or the hot and cold parts at the same time, as you are liable to a shock hazard.
- b. Do not short-circuit the hot and cold circuits as electrical components may be damaged.
- c. Do not connect an instrument, such as an oscilloscope, to the hot and cold circuits simultaneously, as this may cause fuse failure. Connect the earth of the instruments to the earth connection of the circuit being measured.
- d. Make sure to disconnect the power plug before removing the chassis.

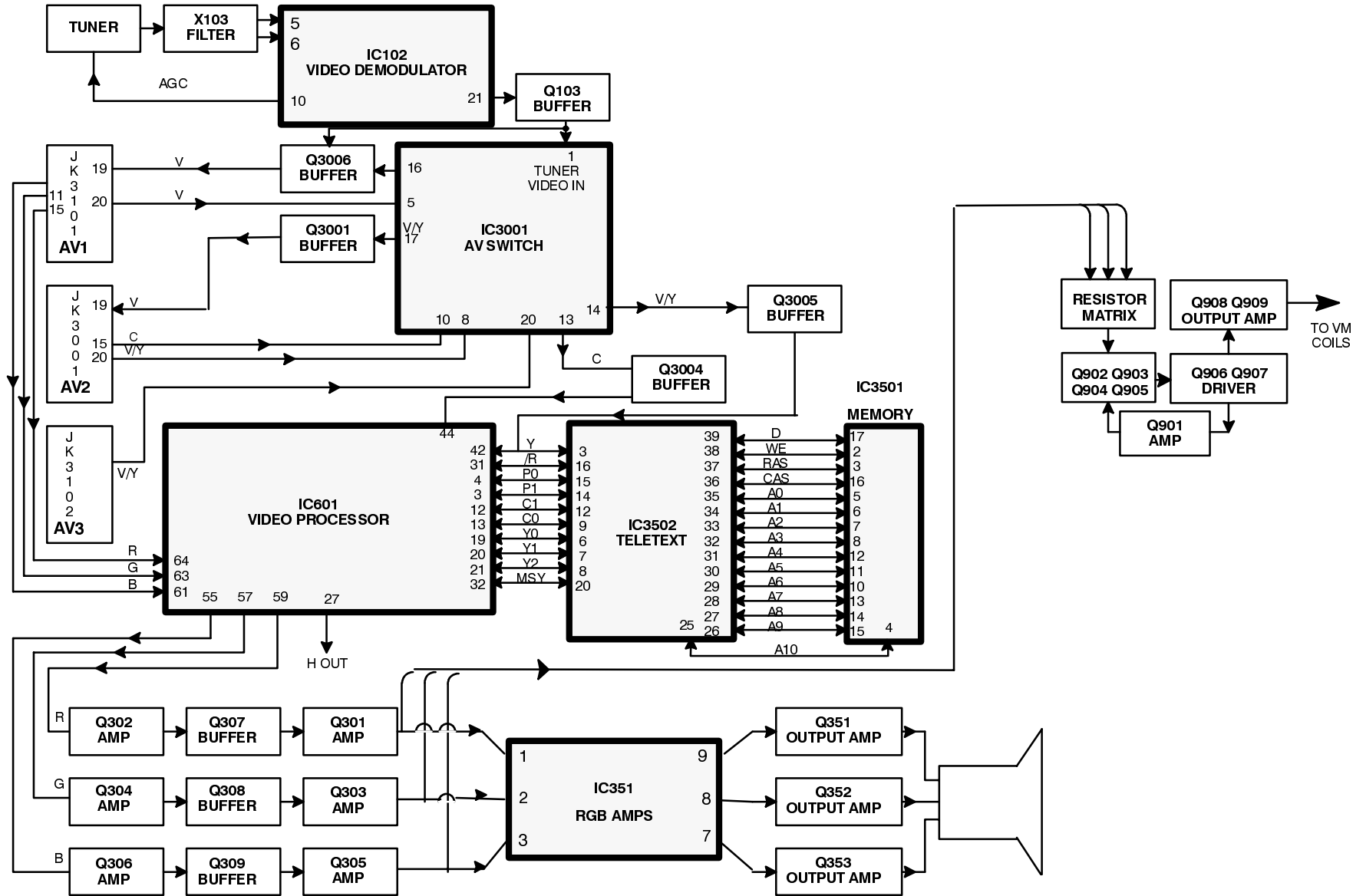
### Remarks

1. The Power Circuit contains a circuit area which uses a separate power supply to isolate the earth connection. The circuit is defined by HOT and COLD indications in the schematic diagram. All circuits, except the Power Circuit, are COLD.

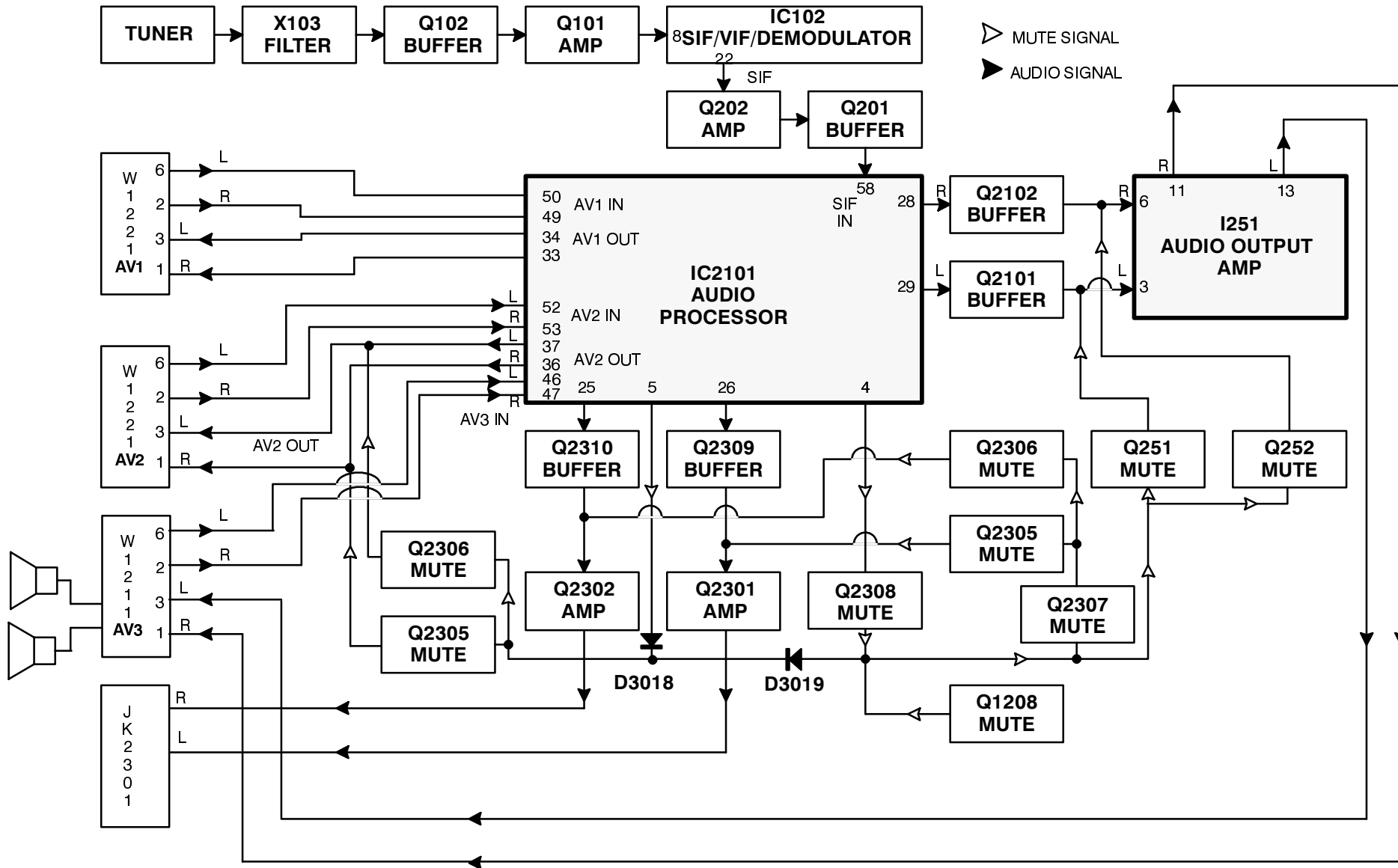
## POWER SUPPLY AND CONTROL BLOCK DIAGRAM



# VIDEO BLOCK DIAGRAM

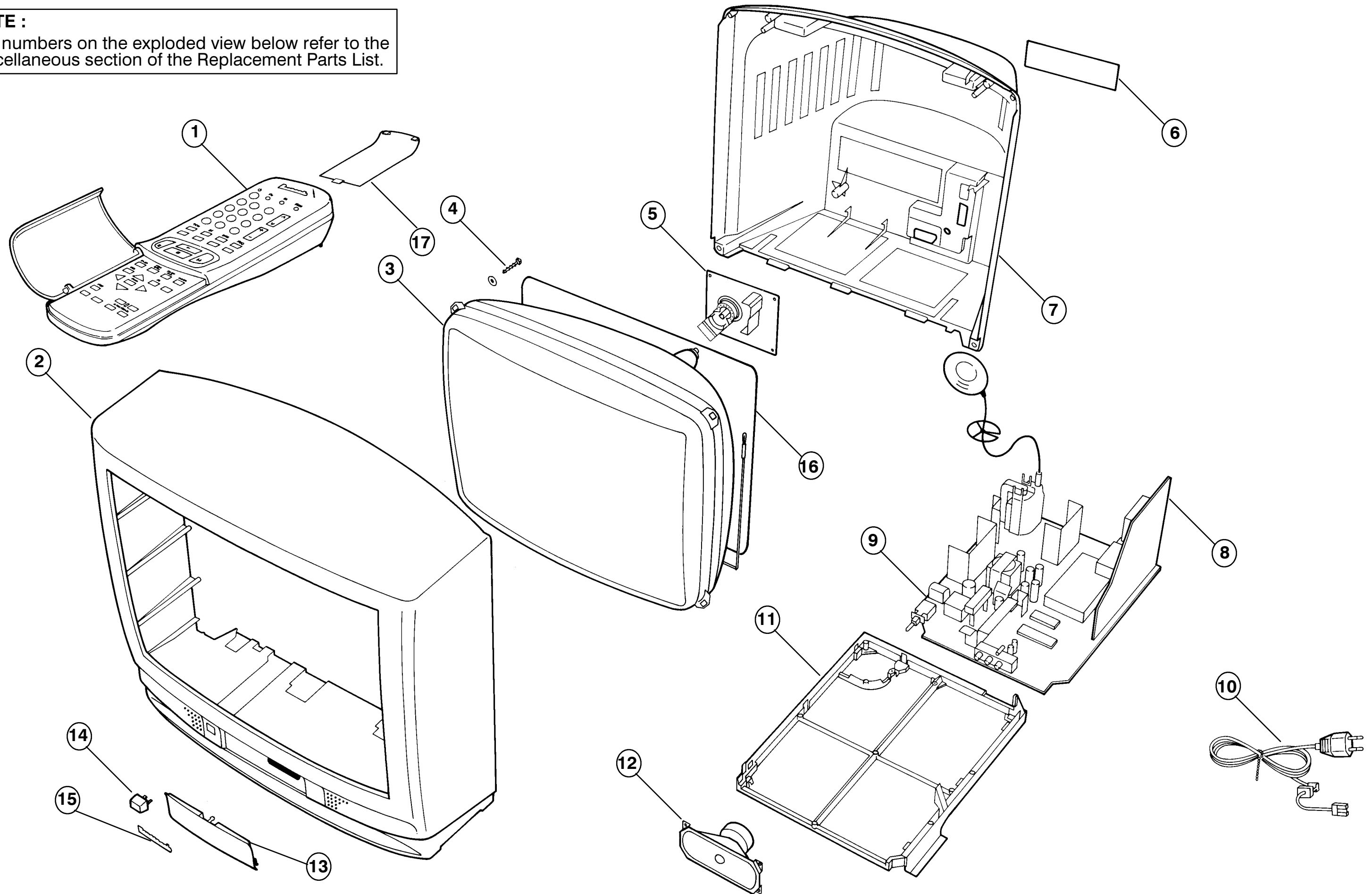


## AUDIO BLOCK DIAGRAM



# EXPLODED VIEW

**NOTE :**  
The numbers on the exploded view below refer to the miscellaneous section of the Replacement Parts List.



## REPLACEMENT PARTS LIST

**Important Safety Notice**

Components identified by Δ mark have special characteristics important for safety.  
When replacing any of these components, use only manufacturer's specified parts.

| Ref No.                         | Part No.     | Description     |            |
|---------------------------------|--------------|-----------------|------------|
| <b>MISCELLANEOUS COMPONENTS</b> |              |                 |            |
| 1)                              | EUR51920     | REMOTE CONTROL  |            |
| 2)                              | TKY8E040-5   | CABINET         | Δ          |
| 3)                              | A59ECF50X12  | CRT             | Δ          |
| 5)                              | TNP117070AC  | Y P.C.B.        | Δ          |
| 6)                              | TBM8E1451-1  | PRESET LABEL    |            |
| 7)                              | TKU8E00190-1 | REAR COVER      | Δ          |
| 8)                              | TNP117064AG  | B P.C.B.        | Δ          |
| 9)                              | TNP197091BE  | E P.C.B.        | Δ          |
| 11)                             | TMX8E010     | CHASSIS BRACKET |            |
| 12)                             | EASG12D531F2 | SPEAKER         |            |
| 13)                             | TKP8E1127-1  | LID             |            |
| 14)                             | TBX8E026     | POWER BUTTON    |            |
| 15)                             | TBM153022    | PANASONIC BADGE |            |
| 16)                             | TLK8E05120   | DEGUASS COIL    |            |
| 17)                             | UR51EC780    | BATTERY COVER   |            |
|                                 | F9-4-220     | RELAY           |            |
|                                 | SVM100       | COIL            |            |
|                                 | TBM8E1617    | MODEL LABEL     |            |
|                                 | TEK6935      | LID SWITCH      |            |
|                                 | TKP8E1128    | LED PANEL       |            |
|                                 | TMW8E020     | LED HOLDER      |            |
|                                 | TPC8E4588    | OUTER CARTON    |            |
|                                 | TPD8E562     | CUSHION         |            |
|                                 | TQB8E2244-E  | INST BOOK       | Δ          |
| MOE10                           | TES4537      | SPRING          |            |
| MOE6                            | TES4537      | SPRING          |            |
| TNR001                          | ENV578F5G3   | TUNER           | Δ          |
| <b>CAPACITORS</b>               |              |                 |            |
| C001                            | ECUV1H103ZFX | S.M.CAP         | 50V 10nF   |
| C002                            | ECEA1HUR33   | ELECT           | 50V 0.33μF |
| C003                            | ECUV1H104ZFX | S.M.CAP         | 50V 100nF  |
| C004                            | ECEA1CU221   | ELECT           | 16V 220μF  |
| C006                            | ECEA1CU101   | ELECT           | 16V 100μF  |
| C008                            | ECQB1H104J   | FILM            | 50V 100nF  |
| C009                            | ECUV1H104ZFX | S.M.CAP         | 50V 100nF  |
| C011                            | ECQB1H104J   | FILM            | 50V 100nF  |
| C011                            | ECUV1H104ZFX | S.M.CAP         | 50V 100nF  |
| C109                            | ECUV1H390JPX | S.M.CAP         | 50V 39pF   |
| C110                            | ECUV1H102KBX | S.M.CAP         | 50V 1nF    |
| C111                            | ECUV1H683ZFX | S.M.CAP         | 50V 68nF   |
| C112                            | ECUV1H150JCX | S.M.CAP         | 50V 15pF   |
| C113                            | ECEA1CU100   | ELECT           | 16V 10μF   |
| C114                            | ECUV1H270JPX | S.M.CAP         | 50V 27pF   |
| C115                            | ECUV1H103ZFX | S.M.CAP         | 50V 10nF   |
| C116                            | ECEA1CU100   | ELECT           | 16V 10μF   |
| C117                            | ECUV1H103ZFX | S.M.CAP         | 50V 10nF   |
| C118                            | ECUV1H103ZFX | S.M.CAP         | 50V 10nF   |
| C119                            | ECEA1HUR47   | ELECT           | 50V 0.47μF |
| C120                            | ECUV1H102KBX | S.M.CAP         | 50V 1nF    |
| C121                            | ECUV1H103ZFX | S.M.CAP         | 50V 10nF   |
| C122                            | ECUV1H151JX  | S.M.CAP         | 50V 150pF  |
| C123                            | ECUV1H102KBX | S.M.CAP         | 50V 1nF    |
| C124                            | ECEA1CU470   | ELECT           | 16V 47μF   |
| C125                            | ECUV1H103ZFX | S.M.CAP         | 50V 10nF   |
| C127                            | ECEA1CU470   | ELECT           | 16V 47μF   |
| C128                            | ECUV1H103ZFX | S.M.CAP         | 50V 10nF   |
| C130                            | ECEA1HUR47   | ELECT           | 50V 0.47μF |
| C131                            | ECEA1HU2R2   | ELECT           | 50V 2.2μF  |

| Ref No. | Part No.     | Description |            |
|---------|--------------|-------------|------------|
| C132    | ECUV1H331KBX | S.M.CAP     | 50V 330pF  |
| C133    | ECUV1H102KBX | S.M.CAP     | 50V 1nF    |
| C134    | ECUV1H103ZFX | S.M.CAP     | 50V 10nF   |
| C135    | ECUV1H103ZFX | S.M.CAP     | 50V 10nF   |
| C136    | ECEA1CU100   | ELECT       | 16V 10μF   |
| C137    | ECEA1EU100   | ELECT       | 25V 10μF   |
| C138    | ECUV1H103ZFX | S.M.CAP     | 50V 10nF   |
| C139    | ECUV1H020CCX | S.M.CAP     | 50V 2pF    |
| C140    | ECEA1HU010   | ELECT       | 50V 1μF    |
| C141    | ECUV1H102KBX | S.M.CAP     | 50V 1nF    |
| C142    | ECUV1H102KBX | S.M.CAP     | 50V 1nF    |
| C143    | ECUV1H102KBX | S.M.CAP     | 50V 1nF    |
| C145    | ECEA1CU470   | ELECT       | 16V 47μF   |
| C146    | ECUV1H104ZFX | S.M.CAP     | 50V 100nF  |
| C170    | ECUV1H331KBX | S.M.CAP     | 50V 330pF  |
| C201    | ECUV1H070DCX | S.M.CAP     | 50V 7pF    |
| C202    | ECUV1H070DCX | S.M.CAP     | 50V 7pF    |
| C203    | ECUV1H470JX  | S.M.CAP     | 50V 47pF   |
| C204    | ECUV1H560JCX | S.M.CAP     | 50V 56pF   |
| C205    | ECUV1H100DCX | S.M.CAP     | 50V 10pF   |
| C207    | ECUV1H220JCX | S.M.CAP     | 50V 22pF   |
| C209    | ECUV1H103ZFX | S.M.CAP     | 50V 10nF   |
| C210    | ECUV1H103ZFX | S.M.CAP     | 50V 10nF   |
| C211    | ECUV1H103ZFX | S.M.CAP     | 50V 10nF   |
| C251    | ECA1EM101GB  | ELECT       | 25V 1μF    |
| C252    | ECUV1H223KBX | S.M.CAP     | 50V 22nF   |
| C253    | ECA1HM4R7GB  | ELECT       | 50V 4.7μF  |
| C254    | ECQM1H334J   | FILM        | 50V 330nF  |
| C255    | ECEA1EGE101  | ELECT       | 25V 100μF  |
| C256    | ECUV1H223KBX | S.M.CAP     | 50V 22nF   |
| C257    | ECA1HM4R7GB  | ELECT       | 50V 4.7μF  |
| C258    | ECA1EM101GB  | ELECT       | 25V 1μF    |
| C259    | ECQM1H334J   | FILM        | 50V 330nF  |
| C260    | ECA1VM102GE  | ELECT       | 35V 1nF    |
| C261    | ECA1VM102GE  | ELECT       | 35V 1nF    |
| C262    | ECEA1HN2R2   | ELECT       | 50V 2.2μF  |
| C263    | ECA1HM010GB  | ELECT       | 50V 1pF    |
| C264    | ECEA1HGE222  | ELECT       | 50V 2200μF |
| C265    | ECEA1HN2R2   | ELECT       | 50V 2.2μF  |
| C266    | ECA1HM010GB  | ELECT       | 50V 1pF    |
| C267    | ECUV1H104ZFX | S.M.CAP     | 50V 100nF  |
| C268    | ECUV1H104ZFX | S.M.CAP     | 50V 100nF  |
| C269    | ECA1CM100GB  | ELECT       | 16V 10pF   |
| C271    | ECUV1H561KBX | S.M.CAP     | 50V 560pF  |
| C301    | ECA1CM470GB  | ELECT       | 16V 47μF   |
| C302    | ECUV1H104ZFX | S.M.CAP     | 50V 100nF  |
| C303    | ECUV1H104ZFX | S.M.CAP     | 50V 100nF  |
| C310    | ECUV1H104ZFX | S.M.CAP     | 50V 100nF  |
| C354    | ECQM2104KZ   | FILM        | 250V 100nF |
| C355    | ECUV1H222JCX | S.M.CAP     | 50V 2.2nF  |
| C356    | ECUV1H222JCX | S.M.CAP     | 50V 2.2nF  |
| C357    | ECUV1H222JCX | S.M.CAP     | 50V 2.2nF  |
| C358    | ECQM1H224J   | FILM        | 50V 220nF  |
| C360    | ECKC3D152J   | CERAMIC     | 2KV 1.5nF  |
| C361    | ECA1HMR47GB  | ELECT       | 50V 0.47μF |
| C364    | ECUV1H103ZFX | S.M.CAP     | 50V 10nF   |
| C366    | ECA1CM100GB  | ELECT       | 16V 10pF   |
| C451    | ECUV1H102JX  | S.M.CAP     | 50V 1nF    |
| C452    | ECUV1H473ZFX | S.M.CAP     | 50V 47nF   |
| C453    | ECUV1H472KBX | S.M.CAP     | 50V 4.7nF  |
| C454    | ECUV1H104ZFX | S.M.CAP     | 50V 100nF  |
| C455    | ECEA1VGE222  | ELECT       | 35V 2200μF |
| C456    | ECEA1HGE221  | ELECT       | 50V 220μF  |

| Ref No. | Part No.     | Description |       |        |   |  |
|---------|--------------|-------------|-------|--------|---|--|
| C457    | ECUV1H223KBX | S.M.CAP     | 50V   | 22nF   |   |  |
| C458    | ECQM1H154J   | FILM        | 50V   | 150nF  |   |  |
| C459    | ECQM1H224J   | FILM        | 50V   | 220nF  |   |  |
| C460    | ECQV1H105JZ  | FILM        | 50V   | 1μF    |   |  |
| C461    | ECQM1H684J   | FILM        | 50V   | 680nF  |   |  |
| C462    | ECEA1VGE332  | ELECT       | 35V   | 3300μF |   |  |
| C501    | ECA1AM330GB  | ELECT       | 10V   | 33pF   |   |  |
| C506    | ECUV1H103ZFX | S.M.CAP     | 50V   | 10nF   |   |  |
| C508    | ECQV1H105JZ  | FILM        | 50V   | 1μF    |   |  |
| C509    | ECEA1HGE101  | ELECT       | 50V   | 100μF  |   |  |
| C510    | ECUV1H104ZFX | S.M.CAP     | 50V   | 100nF  |   |  |
| C511    | ECQM2683JZ   | FILM        | 250V  | 68nF   |   |  |
| C551    | ECWH15H472J  | FILM        | 1500V | 4700μF |   |  |
| C552    | ECWH15H102H  | FILM        | 1500V | 100pF  |   |  |
| C554    | ECWF2H514J   | FILM        | 500V  | 510nF  | Δ |  |
| C555    | ECWH12H103J  | FILM        | 1250V | 10nF   | Δ |  |
| C556    | ECQM4333JC   | FILM        | 400V  | 33nF   |   |  |
| C559    | ECWF2H684J   | FILM        | 500V  | 680nF  | Δ |  |
| C560    | ECEA2GGE2R2  | ELECT       | 400V  | 2.2μF  |   |  |
| C562    | ECKC2H101J   | CERAMIC     | 500V  | 100pF  | Δ |  |
| C563    | ECEA2EU220   | ELECT       | 250V  | 22μF   |   |  |
| C564    | ECEA2AU2R2   | ELECT       | 100V  | 2.2μF  |   |  |
| C565    | ECQP1H273J   | FILM        | 100V  | 2700μF |   |  |
| C601    | ECUV1H271JCX | S.M.CAP     | 50V   | 270pF  |   |  |
| C602    | ECUV1H121JCX | S.M.CAP     | 50V   | 120pF  |   |  |
| C603    | ECUV1H471JCX | S.M.CAP     | 50V   | 470pF  |   |  |
| C604    | ECA0JM102GB  | ELECT       | 6.3V  | 1nF    |   |  |
| C605    | ECUV1H103ZFX | S.M.CAP     | 50V   | 10nF   |   |  |
| C608    | ECUV1H683ZFX | S.M.CAP     | 50V   | 68nF   |   |  |
| C609    | ECA1CM470GB  | ELECT       | 16V   | 47μF   |   |  |
| C610    | ECUV1H683ZFX | S.M.CAP     | 50V   | 68nF   |   |  |
| C611    | ECUV1H104ZFX | S.M.CAP     | 50V   | 100nF  |   |  |
| C612    | ECUV1H103ZFX | S.M.CAP     | 50V   | 10nF   |   |  |
| C613    | ECUV1H102JCX | S.M.CAP     | 50V   | 1nF    |   |  |
| C614    | ECUV1H104ZFX | S.M.CAP     | 50V   | 100nF  |   |  |
| C615    | ECUV1H103ZFX | S.M.CAP     | 50V   | 10nF   |   |  |
| C616    | ECUV1H103ZFX | S.M.CAP     | 50V   | 10nF   |   |  |
| C618    | ECUV1H473ZFX | S.M.CAP     | 50V   | 47nF   |   |  |
| C619    | ECUV1H104ZFX | S.M.CAP     | 50V   | 100nF  |   |  |
| C620    | ECUV1H104ZFX | S.M.CAP     | 50V   | 100nF  |   |  |
| C621    | ECA1CM100GB  | ELECT       | 16V   | 10pF   |   |  |
| C622    | ECA1CM100GB  | ELECT       | 16V   | 10pF   |   |  |
| C623    | ECUV1H104ZFX | S.M.CAP     | 50V   | 100nF  |   |  |
| C624    | ECUV1H103ZFX | S.M.CAP     | 50V   | 10nF   |   |  |
| C625    | ECEA1HNR22   | ELECT       | 50V   | 0.22μF |   |  |
| C626    | ECA0JM102GB  | ELECT       | 6.3V  | 1nF    |   |  |
| C627    | ECUV1H100DCX | S.M.CAP     | 50V   | 10pF   |   |  |
| C628    | ECUV1H470JCX | S.M.CAP     | 50V   | 47pF   |   |  |
| C629    | ECUV1H101JCX | S.M.CAP     | 50V   | 100pF  |   |  |
| C630    | ECUV1H104ZFX | S.M.CAP     | 50V   | 100nF  |   |  |
| C631    | ECUV1H104ZFX | S.M.CAP     | 50V   | 100nF  |   |  |
| C632    | ECUV1H104ZFX | S.M.CAP     | 50V   | 100nF  |   |  |
| C633    | ECUV1H102JCX | S.M.CAP     | 50V   | 1nF    |   |  |
| C636    | ECUV1H101JCX | S.M.CAP     | 50V   | 100pF  |   |  |
| C637    | ECUV1H102KBX | S.M.CAP     | 50V   | 1nF    |   |  |
| C638    | ECUV1H181JCX | S.M.CAP     | 50V   | 180pF  |   |  |
| C639    | ECUV1H561KBX | S.M.CAP     | 50V   | 560pF  |   |  |
| C701    | ECEA1HGE101  | ELECT       | 50V   | 100μF  |   |  |
| C702    | ECUV1H103KBX | S.M.CAP     | 50V   | 10nF   |   |  |
| C703    | ECEA1HGE100  | ELECT       | 50V   | 10μF   |   |  |
| C704    | ECQB1H223K   | FILM        | 50V   | 22nF   |   |  |
| C705    | ECQB1H102J   | FILM        | 50V   | 1nF    |   |  |
| C801    | ECUV1H101JCX | S.M.CAP     | 50V   | 100pF  |   |  |
| C802    | ECQE6104K    | FILM        | 600V  | 100nF  | Δ |  |
| C803    | ECUV1H560JX  | S.M.CAP     | 50V   | 56pF   |   |  |
| C804    | ECA1HM101GB  | ELECT       | 50V   | 100pF  |   |  |
| C805    | ECUV1H104ZFX | S.M.CAP     | 50V   | 100nF  |   |  |
| C806    | ECEA1HU101   | ELECT       | 50V   | 100μF  |   |  |
| C807    | ECEA1EGE101  | ELECT       | 25V   | 100μF  |   |  |
| C808    | ECQB1H103J   | FILM        | 50V   | 10nF   |   |  |
| C809    | ECQB1H103J   | FILM        | 50V   | 10nF   |   |  |

| Ref No. | Part No.          | Description |       |        |   |  |
|---------|-------------------|-------------|-------|--------|---|--|
| C810    | ECQU2A224MN       | FILM        | 250V  | 220nF  |   |  |
| C811    | ECEA1HN010        | ELECT       | 50V   | 1μF    |   |  |
| C815    | ECKC2H472J        | CERAMIC     | 500V  | 4.7nF  | Δ |  |
| C816    | ECKC3D222JB       | CERAMIC     | 2KV   | 2200pF | Δ |  |
| C817    | ECQB1H223K        | FILM        | 50V   | 22nF   |   |  |
| C818    | ECKC2H472J        | CERAMIC     | 500V  | 4.7nF  | Δ |  |
| C820    | ECOS2GG181NGELECT |             | 400V  | 180μF  | Δ |  |
| C821    | ECKCNS332J        | CERAMIC     | 1.2KV | 3.3nF  | Δ |  |
| C851    | ECKC2H681J        | CERAMIC     | 500V  | 680pF  | Δ |  |
| C852    | ECEA1HU102        | ELECT       | 50V   | 1000μF |   |  |
| C853    | ECEA1EGE222       | ELECT       | 25V   | 2200μF |   |  |
| C854    | ECEA1HGE102       | ELECT       | 50V   | 1000μF |   |  |
| C855    | ECKC3D471JB       | CERAMIC     | 2KV   | 470pF  | Δ |  |
| C856    | ECEA1EGE222       | ELECT       | 25V   | 2200μF |   |  |
| C857    | ECEA2EU101        | ELECT       | 250V  | 100μF  |   |  |
| C858    | ECUV1H103ZFX      | S.M.CAP     | 50V   | 10nF   |   |  |
| C859    | ECUV1H103ZFX      | S.M.CAP     | 50V   | 10nF   |   |  |
| C860    | ECA1CM471GB       | ELECT       | 16V   | 470pF  |   |  |
| C861    | ECOS2EA221AB      | ELECT       | 250V  | 220μF  |   |  |
| C862    | ECA1CM471GB       | ELECT       | 16V   | 470pF  |   |  |
| C901    | ECUV1H030CCX      | S.M.CAP     | 50V   | 30pF   |   |  |
| C902    | ECA1VM101GB       | ELECT       | 35V   | 100pF  |   |  |
| C903    | ECA1CM470GB       | ELECT       | 16V   | 47μF   |   |  |
| C904    | ECUV1H103ZFX      | S.M.CAP     | 50V   | 10nF   |   |  |
| C905    | ECA1HM4R7GB       | ELECT       | 50V   | 4.7μF  |   |  |
| C906    | ECUV1H471KBX      | S.M.CAP     | 50V   | 470pF  |   |  |
| C907    | ECUV1H271JCX      | S.M.CAP     | 50V   | 270pF  |   |  |
| C908    | ECUV1H151JCX      | S.M.CAP     | 50V   | 150pF  |   |  |
| C909    | ECKC2H472J        | CERAMIC     | 500V  | 4.7nF  | Δ |  |
| C910    | ECKC2H472J        | CERAMIC     | 500V  | 4.7nF  | Δ |  |
| C911    | ECUV1H151JCX      | S.M.CAP     | 50V   | 150pF  |   |  |
| C912    | ECEA2CU100        | ELECT       | 160V  | 10μF   |   |  |
| C913    | ECA1HM101GB       | ELECT       | 50V   | 100pF  |   |  |
| C914    | ECA1HM101GB       | ELECT       | 50V   | 100pF  |   |  |
| C915    | ECA1CM471GB       | ELECT       | 16V   | 470pF  |   |  |
| C916    | ECEA2CU100        | ELECT       | 160V  | 10μF   |   |  |
| C1051   | ECA0JM101G        | ELECT       | 6.3V  | 100pF  |   |  |
| C1052   | ECUV1H104ZFX      | S.M.CAP     | 50V   | 100nF  |   |  |
| C1201   | ECUV1H332KBX      | S.M.CAP     | 50V   | 3.3nF  |   |  |
| C1202   | ECUV1H332KBX      | S.M.CAP     | 50V   | 3.3nF  |   |  |
| C1203   | ECUV1H332KBX      | S.M.CAP     | 50V   | 3.3nF  |   |  |
| C1204   | ECUV1H332KBX      | S.M.CAP     | 50V   | 3.3nF  |   |  |
| C1205   | ECUV1H103ZFX      | S.M.CAP     | 50V   | 10nF   |   |  |
| C1206   | ECA1HM4R7GB       | ELECT       | 50V   | 4.7μF  |   |  |
| C1207   | ECUV1H472KBX      | S.M.CAP     | 50V   | 4.7nF  |   |  |
| C1208   | ECUV1H390JCX      | S.M.CAP     | 50V   | 39pF   |   |  |
| C1209   | ECUV1H390JCX      | S.M.CAP     | 50V   | 39pF   |   |  |
| C1210   | ECUV1H103ZFX      | S.M.CAP     | 50V   | 10nF   |   |  |
| C1211   | ECUV1H470JCX      | S.M.CAP     | 50V   | 47pF   |   |  |
| C1212   | ECA1CM470GB       | ELECT       | 16V   | 47μF   |   |  |
| C1213   | ECUV1H103ZFX      | S.M.CAP     | 50V   | 10nF   |   |  |
| C1214   | ECA1CM470GB       | ELECT       | 16V   | 47μF   |   |  |
| C1215   | ECUV1H103ZFX      | S.M.CAP     | 50V   | 10nF   |   |  |
| C1217   | ECUV1H104ZFX      | S.M.CAP     | 50V   | 100nF  |   |  |
| C1219   | ECA1CM471GB       | ELECT       | 16V   | 470pF  |   |  |
| C1220   | ECUV1H103ZFX      | S.M.CAP     | 50V   | 10nF   |   |  |
| C1221   | ECA0JM102GB       | ELECT       | 6.3V  | 1nF    |   |  |
| C1222   | ECUV1H104ZFX      | S.M.CAP     | 50V   | 100nF  |   |  |
| C1223   | ECA1HM101GB       | ELECT       | 50V   | 100pF  |   |  |
| C1224   | ECA0JM222GB       | ELECT       | 6.3V  | 2.2nF  |   |  |
| C1225   | ECA0JM472GE       | ELECT       | 6.3V  | 4.7nF  |   |  |
| C1226   | ECA1HM101GB       | ELECT       | 50V   | 100pF  |   |  |
| C2101   | ECUV1H223KBX      | S.M.CAP     | 50V   | 22nF   |   |  |
| C2102   | ECUV1H391KBX      | S.M.CAP     | 50V   | 390pF  |   |  |
| C2103   | ECUV1H102KBX      | S.M.CAP     | 50V   | 1nF    |   |  |
| C2104   | ECUV1H102KBX      | S.M.CAP     | 50V   | 1nF    |   |  |
| C2107   | ECUV1H391KBX      | S.M.CAP     | 50V   | 390pF  |   |  |
| C2108   | ECEA1CU101        | ELECT       | 16V   | 100μF  |   |  |
| C2109   | ECUV1H223KBX      | S.M.CAP     | 50V   | 22nF   |   |  |
| C2110   | ECEA1CU100        | ELECT       | 16V   | 10μF   |   |  |

| Ref No. | Part No.             | Description |
|---------|----------------------|-------------|
| C2111   | ECUV1H104ZFX S.M.CAP | 50V 100nF   |
| C2112   | ECEA1CU100 ELECT     | 16V 10μF    |
| C2113   | ECUV1H102KBX S.M.CAP | 50V 1nF     |
| C2114   | ECUV1H104ZFX S.M.CAP | 50V 100nF   |
| C2115   | ECUV1H471KBX S.M.CAP | 50V 470pF   |
| C2116   | ECEA1HU3R3 ELECT     | 50V 3.3μF   |
| C2117   | ECUV1H471KBX S.M.CAP | 50V 470pF   |
| C2118   | ECUV1H104ZFX S.M.CAP | 50V 100nF   |
| C2119   | ECEA1CU100 ELECT     | 16V 10μF    |
| C2120   | ECUV1H104ZFX S.M.CAP | 50V 100nF   |
| C2121   | ECUV1H104ZFX S.M.CAP | 50V 100nF   |
| C2122   | ECUV1H104ZFX S.M.CAP | 50V 100nF   |
| C2123   | ECEA1CU100 ELECT     | 16V 10μF    |
| C2124   | ECUV1H104ZFX S.M.CAP | 50V 100nF   |
| C2125   | ECUV1H030CCX S.M.CAP | 50V 30pF    |
| C2126   | ECUV1H030CCX S.M.CAP | 50V 30pF    |
| C2127   | ECEA1CU100 ELECT     | 16V 10μF    |
| C2307   | ECEA1CU470 ELECT     | 16V 47μF    |
| C2308   | ECEA1CU470 ELECT     | 16V 47μF    |
| C2309   | ECEA1CU101 ELECT     | 16V 100μF   |
| C2310   | ECEA1CU470 ELECT     | 16V 47μF    |
| C2312   | ECUV1H104ZFX S.M.CAP | 50V 100nF   |
| C2313   | ECUV1H103KBX S.M.CAP | 50V 10nF    |
| C2314   | ECUV1H104ZFX S.M.CAP | 50V 100nF   |
| C2315   | ECUV1H103KBX S.M.CAP | 50V 10nF    |
| C2316   | ECUV1H103ZFX S.M.CAP | 50V 10nF    |
| C2317   | ECEA1CU470 ELECT     | 16V 47μF    |
| C2318   | ECUV1H222KBX S.M.CAP | 50V 2.2nF   |
| C2319   | ECUV1H222KBX S.M.CAP | 50V 2.2nF   |
| C2651   | ECUV1H103KBX S.M.CAP | 50V 10nF    |
| C2652   | ECUV1H103KBX S.M.CAP | 50V 10nF    |
| C3001   | ECA1HMR47GB ELECT    | 50V 0.47μF  |
| C3002   | ECA1HMR47GB ELECT    | 50V 0.47μF  |
| C3003   | ECEA1EU4R7 ELECT     | 25V 4.7μF   |
| C3004   | ECA1HM4R7GB ELECT    | 50V 4.7μF   |
| C3005   | ECEA1HU4R7 ELECT     | 50V 4.7μF   |
| C3006   | ECUV1H473ZFX S.M.CAP | 50V 47nF    |
| C3007   | ECEA1HU470 ELECT     | 50V 47μF    |
| C3011   | ECUV1H473ZFX S.M.CAP | 50V 47nF    |
| C3012   | ECEA1CU470 ELECT     | 16V 47μF    |
| C3013   | ECUV1H104ZFX S.M.CAP | 50V 100nF   |
| C3014   | ECUV1H104ZFX S.M.CAP | 50V 100nF   |
| C3017   | ECEA1CN470 ELECT     | 16V 47μF    |
| C3018   | ECUV1H102KBX S.M.CAP | 50V 1nF     |
| C3019   | ECUV1H102KBX S.M.CAP | 50V 1nF     |
| C3021   | ECUV1H102KBX S.M.CAP | 50V 1nF     |
| C3023   | ECEA1CU470 ELECT     | 16V 47μF    |
| C3024   | ECUV1H473ZFX S.M.CAP | 50V 47nF    |
| C3025   | ECUV1H102KBX S.M.CAP | 50V 1nF     |
| C3026   | ECA1CM470GB ELECT    | 16V 47μF    |
| C3027   | ECA1CM470GB ELECT    | 16V 47μF    |
| C3028   | ECUV1H221JX S.M.CAP  | 50V 220pF   |
| C3029   | ECUV1H221JX S.M.CAP  | 50V 220pF   |
| C3030   | ECUV1H221JX S.M.CAP  | 50V 220pF   |
| C3031   | ECUV1H221JX S.M.CAP  | 50V 220pF   |
| C3032   | ECA1HMR47GB ELECT    | 50V 0.47μF  |
| C3033   | ECA1HMR47GB ELECT    | 50V 0.47μF  |
| C3034   | ECUV1H221JX S.M.CAP  | 50V 220pF   |
| C3035   | ECUV1H221JX S.M.CAP  | 50V 220pF   |
| C3036   | ECUV1H222KBX S.M.CAP | 50V 2.2nF   |
| C3037   | ECUV1H561JCX S.M.CAP | 50V 560pF   |
| C3038   | ECEA1CU470 ELECT     | 16V 47μF    |
| C3039   | ECEA1CU470 ELECT     | 16V 47μF    |
| C3040   | ECEA1HUR47 ELECT     | 50V 0.47μF  |
| C3041   | ECEA1HUR47 ELECT     | 50V 0.47μF  |
| C3043   | ECEA1HU4R7 ELECT     | 50V 4.7μF   |
| C3045   | ECUV1H104ZFX S.M.CAP | 50V 100nF   |
| C3050   | ECUV1H222KBX S.M.CAP | 50V 2.2nF   |
| C3051   | ECUV1H222KBX S.M.CAP | 50V 2.2nF   |
| C3052   | ECUV1H561JCX S.M.CAP | 50V 560pF   |
| C3053   | ECUV1H561JCX S.M.CAP | 50V 560pF   |
| C3054   | ECUV1H222KBX S.M.CAP | 50V 2.2nF   |

| Ref No. | Part No.             | Description |
|---------|----------------------|-------------|
| C3055   | ECUV1H561JCX S.M.CAP | 50V 560pF   |
| C3056   | ECUV1H101JCX S.M.CAP | 50V 100pF   |
| C3062   | ECUV1H104ZFX S.M.CAP | 50V 100nF   |
| C3071   | ECUV1H104ZFX S.M.CAP | 50V 100nF   |
| C3151   | ECUV1H561JCX S.M.CAP | 50V 560pF   |
| C3152   | ECUV1H561JCX S.M.CAP | 50V 560pF   |
| C3501   | ECUV1H104ZFX S.M.CAP | 50V 100nF   |
| C3502   | ECA1HM101GB ELECT    | 50V 100pF   |
| C3503   | ECUV1H103ZFX S.M.CAP | 50V 10nF    |
| C3504   | ECUV1H102JCX S.M.CAP | 50V 1nF     |
| C3505   | ECUV1H104ZFX S.M.CAP | 50V 100nF   |
| C3506   | ECA1CM470GB ELECT    | 16V 47μF    |
| C3507   | ECA1CM470GB ELECT    | 16V 47μF    |
| C3508   | ECUV1H473ZFX S.M.CAP | 50V 47nF    |
| C3509   | ECUV1H103ZFX S.M.CAP | 50V 10nF    |
| C3510   | ECA0JM102GB ELECT    | 6.3V 1nF    |
| C3511   | ECUV1H103ZFX S.M.CAP | 50V 10nF    |

## DIODES

|      |             |                  |
|------|-------------|------------------|
| D251 | MA2180TP    | DIODE            |
| D252 | MA165TA5    | DIODE 1SS133T-77 |
| D253 | MA700TA5    | DIODE            |
| D254 | MA700TA5    | DIODE            |
| D310 | MA165TA5    | DIODE 1SS133T-77 |
| D311 | MA29TA5     | DIODE            |
| D312 | MA29TA5     | DIODE            |
| D354 | ERA22-04V1  | DIODE            |
| D355 | ERA22-04V1  | DIODE            |
| D356 | ERA22-04V1  | DIODE            |
| D357 | MA165TA5    | DIODE 1SS133T-77 |
| D358 | MA165TA5    | DIODE 1SS133T-77 |
| D359 | MA165TA5    | DIODE 1SS133T-77 |
| D360 | MA4150      | DIODE            |
| D451 | MA165TA5    | DIODE 1SS133T-77 |
| D452 | MA165TA5    | DIODE 1SS133T-77 |
| D454 | ERA15-02V3  | DIODE            |
| D456 | MA2160BLFS  | DIODE            |
| D501 | MA165TA5    | DIODE 1SS133T-77 |
| D502 | EU02        | DIODE            |
| D551 | ERD07-15L7  | DIODE            |
| D552 | TVSRU2AM    | DIODE            |
| D554 | AU02V0      | DIODE            |
| D556 | MA166TA5    | DIODE            |
| D601 | MA165TA5    | DIODE 1SS133T-77 |
| D602 | MA165TA5    | DIODE 1SS133T-77 |
| D604 | MA165TA5    | DIODE 1SS133T-77 |
| D605 | MA165TA5    | DIODE 1SS133T-77 |
| D606 | MA165TA5    | DIODE 1SS133T-77 |
| D609 | MA167TA5    | DIODE            |
| D701 | MA165TA5    | DIODE 1SS133T-77 |
| D702 | MA4056      | DIODE            |
| D801 | MA165TA5    | DIODE 1SS133T-77 |
| D802 | MA165TA5    | DIODE 1SS133T-77 |
| D803 | MA165TA5    | DIODE 1SS133T-77 |
| D804 | ERA15-02V3  | DIODE            |
| D805 | EU02        | DIODE            |
| D806 | RBV4-08     | DIODE            |
| D807 | EU02        | DIODE            |
| D808 | PC120FY     | DIODE            |
| D809 | MA165TA5    | DIODE 1SS133T-77 |
| D851 | EU02        | DIODE            |
| D852 | ERD32-02L7  | DIODE            |
| D853 | FML22SLF610 | DIODE            |
| D854 | RU4AMLF-M1  | DIODE            |
| D855 | RU4BLF-L1   | DIODE            |
| D856 | MA4047      | DIODE            |
| D857 | MA4300      | DIODE            |
| D858 | MA29TA5     | DIODE            |
| D901 | MA165TA5    | DIODE 1SS133T-77 |
| D902 | MA165TA5    | DIODE 1SS133T-77 |
| D904 | MA165TA5    | DIODE 1SS133T-77 |
| D906 | RLS72TE-11  | DIODE PMLL4148   |

| Ref No. | Part No.   | Description      |
|---------|------------|------------------|
| D1201   | LN81RPHL   | DIODE            |
| D1203   | MA4082     | DIODE            |
| D1204   | TVSS1WBS20 | DIODE            |
| D1205   | MA165TA5   | DIODE 1SS133T-77 |
| D1207   | MA165TA5   | DIODE 1SS133T-77 |
| D1208   | MA165TA5   | DIODE 1SS133T-77 |
| D1209   | MA165TA5   | DIODE 1SS133T-77 |
| D2303   | MA165TA5   | DIODE 1SS133T-77 |
| D2304   | MA4091     | DIODE            |
| D3001   | MA4120     | DIODE            |
| D3003   | MA4082     | DIODE            |
| D3004   | MA4100     | DIODE            |
| D3005   | MA4120     | DIODE            |
| D3006   | MA4120     | DIODE            |
| D3007   | MA4120     | DIODE            |
| D3008   | MA4082     | DIODE            |
| D3009   | MA4082     | DIODE            |
| D3010   | MA4082     | DIODE            |
| D3011   | MA4082     | DIODE            |
| D3012   | MA4120     | DIODE            |
| D3013   | MA4120     | DIODE            |
| D3014   | MA4120     | DIODE            |
| D3015   | MA4120     | DIODE            |
| D3016   | MA4120     | DIODE            |
| D3018   | MA165TA5   | DIODE 1SS133T-77 |
| D3019   | MA165TA5   | DIODE 1SS133T-77 |
| D3501   | MA165TA5   | DIODE 1SS133T-77 |

**FUSES**

|       |            |             |   |
|-------|------------|-------------|---|
| F801  | 19181-3.15 | FUSE        | △ |
| F851  | TR5-T1250  | FUSE        | △ |
| F852  | TR5-T2000  | FUSE        | △ |
| F853  | TR5-T2000  | FUSE        | △ |
| F8011 | EYF52BC    | FUSE HOLDER |   |
| F8012 | EYF52BC    | FUSE HOLDER |   |

**SOCKETS**

H1202 832AG11D-ESL I.C.SOCKET

**INTEGRATED CIRCUITS**

|        |              |                      |
|--------|--------------|----------------------|
| IC102  | LA7577N      | V.I.F.               |
| IC103  | L78M12MRB    | 12V REGULATOR        |
| IC1051 | RPM-637CBRL  | LED RECEIVER         |
| IC1201 | CCU30001-05  | CENTRAL CONTROL UNIT |
| IC1202 | 27C010-A04AB | EPROM                |
| IC1203 | X24C0803D    | EAROM                |
| IC1205 | MN1280R      | RESET                |
| IC1206 | L78M05MRB    | 5V REGULATOR         |
| IC2101 | MSP3410-15   | AUDIO PROCESSOR      |
| IC2301 | AN78L08TA    | 8V REGULATOR         |
| IC251  | LA4280-TV    | AUDIO OUTPUT         |
| IC3001 | TEA6415C     | VIDEO SWITCH         |
| IC3501 | UD61256DC-08 | DYNAMIC RAM          |
| IC3502 | TPU3040-20   | TEXT PROCESSOR       |
| IC351  | TDA6103Q-N3  | R.G.B.AMPLIFIER      |
| IC451  | TDA8175-3    | VERTICAL OUTPUT      |
| IC601  | VDP3108APPA1 | VIDEO PROCESSOR      |
| IC701  | TEA2031A     | HORIZONTAL OUTPUT    |
| IC801  | TDA4601      | POWER SUPPLY         |
| IC851  | L78M12MRB    | 12V REGULATOR        |

**TERMINALS AND LINKS**

|       |             |          |       |    |    |
|-------|-------------|----------|-------|----|----|
| JA.1  | ERJ6GEY0R00 | S.M.CARB | 0.1W  | 5% | 0Ω |
| JA.1  | ERJ8GEY0R00 | S.M.CAR  | .125W | 5% | 0Ω |
| JA.10 | ERJ6GEY0R00 | S.M.CARB | 0.1W  | 5% | 0Ω |
| JA.11 | ERJ6GEY0R00 | S.M.CARB | 0.1W  | 5% | 0Ω |
| JA.11 | ERJ8GEY0R00 | S.M.CAR  | .125W | 5% | 0Ω |
| JA.12 | ERJ6GEY0R00 | S.M.CARB | 0.1W  | 5% | 0Ω |
| JA.12 | ERJ8GEY0R00 | S.M.CAR  | .125W | 5% | 0Ω |
| JA.13 | ERJ6GEY0R00 | S.M.CARB | 0.1W  | 5% | 0Ω |
| JA.14 | ERJ6GEY0R00 | S.M.CARB | 0.1W  | 5% | 0Ω |

| Ref No. | Part No.    | Description         |
|---------|-------------|---------------------|
| JA.14   | ERJ8GEY0R00 | S.M.CAR .125W 5% 0Ω |
| JA.15   | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JA.15   | ERJ8GEY0R00 | S.M.CAR .125W 5% 0Ω |
| JA.16   | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JA.16   | ERJ8GEY0R00 | S.M.CAR .125W 5% 0Ω |
| JA.17   | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JA.17   | ERJ8GEY0R00 | S.M.CAR .125W 5% 0Ω |
| JA.18   | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JA.19   | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JA.2    | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JA.2    | ERJ8GEY0R00 | S.M.CAR .125W 5% 0Ω |
| JA.20   | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JA.21   | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JA.22   | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JA.22   | ERJ8GEY0R00 | S.M.CAR .125W 5% 0Ω |
| JA.23   | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JA.24   | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JA.25   | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JA.25   | ERJ8GEY0R00 | S.M.CAR .125W 5% 0Ω |
| JA.26   | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JA.27   | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JA.28   | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JA.29   | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JA.3    | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JA.3    | ERJ8GEY0R00 | S.M.CAR .125W 5% 0Ω |
| JA.30   | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JA.31   | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JA.32   | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JA.33   | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JA.34   | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JA.35   | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JA.36   | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JA.37   | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JA.38   | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JA.39   | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JA.4    | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JA.4    | ERJ8GEY0R00 | S.M.CAR .125W 5% 0Ω |
| JA.5    | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JA.6    | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JA.6    | ERJ8GEY0R00 | S.M.CAR .125W 5% 0Ω |
| JA.7    | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JA.7    | ERJ8GEY0R00 | S.M.CAR .125W 5% 0Ω |
| JA.8    | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JA.9    | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JK2301  | TJB18644    | AV TERMINAL         |
| JK3001  | TJS8E007    | 21 PIN TERMINAL     |
| JK3101  | TJS8E007    | 21 PIN TERMINAL     |
| JK3102  | TJB16673    | AV TERMINAL         |
| JSB.5   | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JSE011  | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JSE012  | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JSE013  | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JSE014  | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JSE015  | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JSE016  | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JSE031  | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JSE032  | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JSE036  | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |
| JSE038  | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω |

**COILS**

|      |             |      |
|------|-------------|------|
| L001 | TLT100K991R | COIL |
| L002 | TLT047K991R | COIL |
| L102 | EIV7EN200B  | COIL |
| L103 | TLT100K991R | COIL |
| L104 | EIV7EN201B  | COIL |
| L105 | TLT082K991R | COIL |
| L106 | TLT022K991R | COIL |
| L109 | TLTR47K991R | COIL |
| L111 | TLTR82K991R | COIL |
| L112 | EXCELSA35T  | COIL |
| L113 | EXCELSA35T  | COIL |

| Ref No. | Part No.     | Description |
|---------|--------------|-------------|
| L202    | TLT068K991R  | COIL        |
| L251    | EXCELSA35T   | COIL        |
| L301    | TLT047K991R  | COIL        |
| L302    | EXCEMT101BT  | COIL        |
| L303    | EXCEMT101BT  | COIL        |
| L304    | EXCEMT101BT  | COIL        |
| L352    | SDL-4101     | COIL        |
| L353    | SDL-4101     | COIL        |
| L354    | SDL-4101     | COIL        |
| L552    | ELH5L429     | COIL        |
| L553    | ELC08D055    | COIL        |
| L554    | 297-23293    | COIL        |
| L601    | TLT047K991R  | COIL        |
| L602    | EXCELD35V    | COIL        |
| L603    | TLT047K991R  | COIL        |
| L604    | EXCELD35V    | COIL        |
| L606    | TLT015K991R  | COIL        |
| L607    | EXCELSA35T   | COIL        |
| L701    | ELC10D006    | COIL        |
| L801    | EXCELSA24T   | COIL        |
| L802    | TLT022K991R  | COIL        |
| L803    | ELF18D490F   | COIL        |
| L804    | ELESN4R7KA   | COIL        |
| L805    | 298-82858001 | COIL        |
| L851    | EXCELD35V    | COIL        |
| L852    | EXCELSA35T   | COIL        |
| L853    | ELEIE470KA   | COIL        |
| L854    | ELEIN470KA   | COIL        |
| L855    | ELEIN470KA   | COIL        |
| L856    | ELEIN470KA   | COIL        |
| L901    | EXCELSA24T   | COIL        |
| L902    | EXCELSA24T   | COIL        |
| L1051   | TLT331K991R  | COIL        |
| L1201   | TLT047K991R  | COIL        |
| L1202   | TLT047K991R  | COIL        |
| L1203   | TLT047K991R  | COIL        |
| L1204   | EXCELD35V    | COIL        |
| L2101   | TLT100K991R  | COIL        |
| L2102   | TLT039K991R  | COIL        |
| L2103   | EXCELSA35T   | COIL        |
| L2104   | EXCELSA35T   | COIL        |
| L3151   | EXCEMT101BT  | COIL        |
| L3152   | EXCEMT101BT  | COIL        |
| L3153   | EXCEMT101BT  | COIL        |
| L3154   | EXCEMT101BT  | COIL        |
| L3155   | ELEBT6R8KA   | COIL        |
| L3156   | ELEBT6R8KA   | COIL        |
| L3158   | EXCELSA39V   | COIL        |
| L3501   | EXCELD35V    | COIL        |
| L3502   | EXCELD35V    | COIL        |
| L3503   | ELESN4R7KA   | COIL        |
| L3504   | EXCELSA35T   | COIL        |

**TRANSISTORS**

|      |            |                         |
|------|------------|-------------------------|
| Q101 | BF370-126  | TRANSISTOR              |
| Q102 | BF370-126  | TRANSISTOR              |
| Q103 | BC847B     | TRANSISTOR OR 2SD601ATX |
| Q201 | BC847B     | TRANSISTOR OR 2SD601ATX |
| Q202 | BC847B     | TRANSISTOR OR 2SD601ATX |
| Q251 | 2SD1328STX | TRANSISTOR              |
| Q252 | 2SD1328STX | TRANSISTOR              |
| Q253 | BC847B     | TRANSISTOR OR 2SD601ATX |
| Q301 | BC857B     | TRANSISTOR OR 2SB709ATX |
| Q302 | BC847B     | TRANSISTOR OR 2SD601ATX |
| Q303 | BC857B     | TRANSISTOR OR 2SB709ATX |
| Q304 | BC847B     | TRANSISTOR OR 2SD601ATX |
| Q305 | BC857B     | TRANSISTOR OR 2SB709ATX |
| Q306 | BC847B     | TRANSISTOR OR 2SD601ATX |
| Q307 | BC847B     | TRANSISTOR OR 2SD601ATX |
| Q308 | BC847B     | TRANSISTOR OR 2SD601ATX |
| Q309 | BC847B     | TRANSISTOR OR 2SD601ATX |
| Q310 | BC847B     | TRANSISTOR OR 2SD601ATX |

| Ref No. | Part No.     | Description               |
|---------|--------------|---------------------------|
| Q311    | BC847B       | TRANSISTOR OR 2SD601ATX   |
| Q351    | 2SA1767      | TRANSISTOR                |
| Q352    | 2SA1767      | TRANSISTOR                |
| Q353    | 2SA1767      | TRANSISTOR                |
| Q451    | BC847B       | TRANSISTOR OR 2SD601ATX   |
| Q501    | BC847B       | TRANSISTOR OR 2SD601ATX   |
| Q502    | BC847B       | TRANSISTOR OR 2SD601ATX   |
| Q503    | 2SD836-AL    | TRANSISTOR                |
| Q504    | BC847B       | TRANSISTOR OR 2SD601ATX   |
| Q551    | 2SD1577LB    | TRANSISTOR                |
| Q552    | 2SC1473-RN   | TRANSISTOR                |
| Q701    | BC857B       | TRANSISTOR OR 2SB709ATX   |
| Q801    | 2SC1573      | TRANSISTOR                |
| Q802    | S2000NLBMA   | TRANSISTOR                |
| Q851    | 2SD1273PLB   | TRANSISTOR ALT2SD2396/JM3 |
| Q852    | TFD312SOF632 | DIODE                     |
| Q901    | BC847B       | TRANSISTOR OR 2SD601ATX   |
| Q902    | BC847B       | TRANSISTOR OR 2SD601ATX   |
| Q903    | BC847B       | TRANSISTOR OR 2SD601ATX   |
| Q904    | BC857B       | TRANSISTOR OR 2SB709ATX   |
| Q905    | BC847B       | TRANSISTOR OR 2SD601ATX   |
| Q906    | BC847B       | TRANSISTOR OR 2SD601ATX   |
| Q907    | BC857B       | TRANSISTOR OR 2SB709ATX   |
| Q908    | 2SB940APLB   | TRANSISTOR                |
| Q909    | 2SD1264APLB  | TRANSISTOR                |
| Q1201   | BC847B       | TRANSISTOR OR 2SD601ATX   |
| Q1202   | BC847B       | TRANSISTOR OR 2SD601ATX   |
| Q1205   | BC847B       | TRANSISTOR OR 2SD601ATX   |
| Q1206   | BC847B       | TRANSISTOR OR 2SD601ATX   |
| Q1207   | BC847B       | TRANSISTOR OR 2SD601ATX   |
| Q1208   | BC857B       | TRANSISTOR OR 2SB709ATX   |
| Q2101   | BC860B       | TRANSISTOR                |
| Q2102   | BC860B       | TRANSISTOR                |
| Q2301   | BC857B       | TRANSISTOR OR 2SB709ATX   |
| Q2302   | BC857B       | TRANSISTOR OR 2SB709ATX   |
| Q2305   | 2SD1328STX   | TRANSISTOR                |
| Q2306   | 2SD1328STX   | TRANSISTOR                |
| Q2307   | BC860B       | TRANSISTOR                |
| Q2308   | BC857B       | TRANSISTOR OR 2SB709ATX   |
| Q2309   | BC860B       | TRANSISTOR                |
| Q2310   | BC860B       | TRANSISTOR                |
| Q3001   | 2SC1318-S    | TRANSISTOR                |
| Q3004   | BC847B       | TRANSISTOR OR 2SD601ATX   |
| Q3005   | BC847B       | TRANSISTOR OR 2SD601ATX   |
| Q3006   | 2SC1318-S    | TRANSISTOR                |
| Q3011   | BC857B       | TRANSISTOR OR 2SB709ATX   |
| Q3012   | 2SD1328STX   | TRANSISTOR                |
| Q3013   | 2SD1328STX   | TRANSISTOR                |

**RESISTOR**

|      |             |          |      |    |      |
|------|-------------|----------|------|----|------|
| R107 | ERJ6GEY0R00 | S.M.CARB | 0.1W | 5% | 0Ω   |
| R109 | ERJ6GEY0R00 | S.M.CARB | 0.1W | 5% | 0Ω   |
| R123 | ERJ6GEY0R00 | S.M.CARB | 0.1W | 5% | 0Ω   |
| R139 | ERJ6GEY0R00 | S.M.CARB | 0.1W | 5% | 0Ω   |
| R142 | ERJ6GEY0R00 | S.M.CARB | 0.1W | 5% | 0Ω   |
| R143 | ERJ6GEY0R00 | S.M.CARB | 0.1W | 5% | 0Ω   |
| R203 | ERJ6GEY0R00 | S.M.CARB | 0.1W | 5% | 0Ω   |
| R604 | ERJ6GEY0R00 | S.M.CARB | 0.1W | 5% | 0Ω   |
| R622 | ERJ6GEY0R00 | S.M.CARB | 0.1W | 5% | 0Ω   |
| R925 | ERJ6GEY0R00 | S.M.CARB | 0.1W | 5% | 0Ω   |
| R926 | ERJ6GEY0R00 | S.M.CARB | 0.1W | 5% | 0Ω   |
| R001 | ERJ6GEYJ223 | S.M.CARB | 0.1W | 5% | 22KΩ |
| R002 | ERJ6GEYJ101 | S.M.CARB | 0.1W | 5% | 100Ω |
| R003 | ERJ6GEYJ101 | S.M.CARB | 0.1W | 5% | 100Ω |
| R004 | ERJ6GEYJ101 | S.M.CARB | 0.1W | 5% | 100Ω |
| R113 | ERJ6GEYJ153 | S.M.CARB | 0.1W | 5% | 15KΩ |
| R116 | ERJ6GEYJ103 | S.M.CARB | 0.1W | 5% | 10KΩ |
| R117 | ERJ6GEYJ683 | S.M.CARB | 0.1W | 5% | 68KΩ |
| R118 | ERJ6ENF4701 | S.M.CARB | 0.1W | 1% | 4K7Ω |
| R119 | ERJ6ENF1202 | S.M.CARB | 0.1W | 1% | 1K2Ω |
| R120 | ERJ6GEYJ102 | S.M.CARB | 0.1W | 5% | 1KΩ  |
| R121 | ERJ6GEYJ201 | S.M.CARB | 0.1W | 5% | 200Ω |

| Ref No. | Part No.     | Description   |     |       |   |
|---------|--------------|---------------|-----|-------|---|
| R122    | ERJ6GEYJ470  | S.M.CARB 0.1W | 5%  | 47Ω   |   |
| R124    | ERJ6GEYJ682  | S.M.CARB 0.1W | 5%  | 6K8Ω  |   |
| R125    | ERJ6GEYJ102  | S.M.CARB 0.1W | 5%  | 1KΩ   |   |
| R126    | EVNDXAA03B53 | CONTROL       |     | 5KΩ   |   |
| R127    | ERDS1TJ121   | CARBON 0.5W   | 5%  | 120Ω  |   |
| R128    | ERJ6GEYJ271  | S.M.CARB 0.1W | 5%  | 270Ω  |   |
| R129    | ERJ6GEYJ332  | S.M.CARB 0.1W | 5%  | 3K3Ω  |   |
| R130    | ERJ6GEYJ101  | S.M.CARB 0.1W | 5%  | 100Ω  |   |
| R131    | ERJ6GEYJ102  | S.M.CARB 0.1W | 5%  | 1KΩ   |   |
| R132    | ERJ6GEYJ222  | S.M.CARB 0.1W | 5%  | 2K2Ω  |   |
| R133    | ERJ6GEYJ682  | S.M.CARB 0.1W | 5%  | 6K8Ω  |   |
| R134    | ERJ6GEYJ222  | S.M.CARB 0.1W | 5%  | 2K2Ω  |   |
| R136    | ERJ6GEYJ473  | S.M.CARB 0.1W | 5%  | 47KΩ  |   |
| R137    | ERJ6GEYJ563  | S.M.CARB 0.1W | 5%  | 56KΩ  |   |
| R138    | ERJ6GEYJ101  | S.M.CARB 0.1W | 5%  | 100Ω  |   |
| R141    | ERJ6GEYJ102  | S.M.CARB 0.1W | 5%  | 1KΩ   |   |
| R145    | ERJ6GEYJ152  | S.M.CARB 0.1W | 5%  | 1K5Ω  |   |
| R146    | ERJ6GEYJ471  | S.M.CARB 0.1W | 5%  | 470Ω  |   |
| R147    | ERJ6GEYJ821  | S.M.CARB 0.1W | 5%  | 820Ω  |   |
| R149    | ERJ6GEYJ181  | S.M.CARB 0.1W | 5%  | 180Ω  |   |
| R201    | ERJ6GEYJ471  | S.M.CARB 0.1W | 5%  | 470Ω  |   |
| R204    | ERJ6GEYJ471  | S.M.CARB 0.1W | 5%  | 470Ω  |   |
| R205    | ERJ6GEYJ332  | S.M.CARB 0.1W | 5%  | 3K3Ω  |   |
| R206    | ERJ6GEYJ681  | S.M.CARB 0.1W | 5%  | 680Ω  |   |
| R207    | ERJ6GEYJ103  | S.M.CARB 0.1W | 5%  | 10KΩ  |   |
| R208    | ERJ6GEYJ222  | S.M.CARB 0.1W | 5%  | 2K2Ω  |   |
| R209    | ERJ6GEYJ332  | S.M.CARB 0.1W | 5%  | 3K3Ω  |   |
| R210    | ERJ6GEYJ471  | S.M.CARB 0.1W | 5%  | 470Ω  |   |
| R251    | ERJ6GEYJ820  | S.M.CARB 0.1W | 5%  | 82Ω   |   |
| R252    | ERJ6GEYJ122  | S.M.CARB 0.1W | 5%  | 1K2Ω  |   |
| R253    | ERJ6GEYJ103  | S.M.CARB 0.1W | 5%  | 10KΩ  |   |
| R254    | ERJ6GEYJ820  | S.M.CARB 0.1W | 5%  | 82Ω   |   |
| R255    | ERJ6GEYJ103  | S.M.CARB 0.1W | 5%  | 10KΩ  |   |
| R256    | ERJ6GEYJ471  | S.M.CARB 0.1W | 5%  | 470Ω  |   |
| R257    | ERJ6GEYJ100  | S.M.CARB 0.1W | 5%  | 10Ω   |   |
| R258    | ERJ6GEYJ122  | S.M.CARB 0.1W | 5%  | 1K2Ω  |   |
| R259    | ERJ6GEYJ100  | S.M.CARB 0.1W | 5%  | 10Ω   |   |
| R260    | ERJ6GEYJ103  | S.M.CARB 0.1W | 5%  | 10KΩ  |   |
| R261    | ERJ6GEYJ471  | S.M.CARB 0.1W | 5%  | 470Ω  |   |
| R262    | ERJ6GEYJ103  | S.M.CARB 0.1W | 5%  | 10KΩ  |   |
| R263    | ERJ6GEYJ104  | S.M.CARB 0.1W | 5%  | 100KΩ |   |
| R264    | ERJ6GEYJ473  | S.M.CARB 0.1W | 5%  | 47KΩ  |   |
| R265    | ERD25TJ2R2   | CARBON 0.25W  | 5%  | 2R2Ω  |   |
| R266    | ERD25TJ2R2   | CARBON 0.25W  | 5%  | 2R2Ω  |   |
| R267    | ERF7ZK4R7    | WOUND 7W      | 10% | 4R7Ω  | Δ |
| R268    | ERJ6GEYJ103  | S.M.CARB 0.1W | 5%  | 10KΩ  |   |
| R269    | ERJ6GEYJ273  | S.M.CARB 0.1W | 5%  | 27KΩ  |   |
| R271    | ERJ6GEYJ103  | S.M.CARB 0.1W | 5%  | 10KΩ  |   |
| R272    | ERF7ZK5R6    | WOUND 7W      | 10% | 5R6Ω  | Δ |
| R273    | ERD25TJ273   | CARBON 0.25W  | 5%  | 27KΩ  |   |
| R301    | ERJ6GEYJ750  | S.M.CARB 0.1W | 5%  | 75Ω   |   |
| R302    | ERJ6GEYJ471  | S.M.CARB 0.1W | 5%  | 470Ω  |   |
| R303    | ERJ6GEYJ471  | S.M.CARB 0.1W | 5%  | 470Ω  |   |
| R304    | ERJ6GEYJ471  | S.M.CARB 0.1W | 5%  | 470Ω  |   |
| R305    | ERJ6GEYJ750  | S.M.CARB 0.1W | 5%  | 75Ω   |   |
| R306    | ERJ6GEYJ471  | S.M.CARB 0.1W | 5%  | 470Ω  |   |
| R307    | ERJ6GEYJ471  | S.M.CARB 0.1W | 5%  | 470Ω  |   |
| R308    | ERJ6GEYJ471  | S.M.CARB 0.1W | 5%  | 470Ω  |   |
| R309    | ERJ6GEYJ750  | S.M.CARB 0.1W | 5%  | 75Ω   |   |
| R310    | ERJ6GEYJ471  | S.M.CARB 0.1W | 5%  | 470Ω  |   |
| R311    | ERJ6GEYJ471  | S.M.CARB 0.1W | 5%  | 470Ω  |   |
| R312    | ERJ6GEYJ471  | S.M.CARB 0.1W | 5%  | 470Ω  |   |
| R313    | ERJ6GEYJ101  | S.M.CARB 0.1W | 5%  | 100Ω  |   |
| R314    | ERJ6GEYJ332  | S.M.CARB 0.1W | 5%  | 3K3Ω  |   |
| R315    | ERJ6GEYJ332  | S.M.CARB 0.1W | 5%  | 3K3Ω  |   |
| R316    | ERJ6GEYJ332  | S.M.CARB 0.1W | 5%  | 3K3Ω  |   |
| R321    | ERJ6GEYJ473  | S.M.CARB 0.1W | 5%  | 47KΩ  |   |
| R322    | ERJ6GEYJ473  | S.M.CARB 0.1W | 5%  | 47KΩ  |   |
| R323    | ERJ6GEYJ103  | S.M.CARB 0.1W | 5%  | 10KΩ  |   |
| R324    | ERJ6GEYJ104  | S.M.CARB 0.1W | 5%  | 100KΩ |   |
| R351    | ERJ6GEYJ102  | S.M.CARB 0.1W | 5%  | 1KΩ   |   |
| R352    | ERJ6GEYJ102  | S.M.CARB 0.1W | 5%  | 1KΩ   |   |

| Ref No. | Part No.     | Description    |     |       |   |
|---------|--------------|----------------|-----|-------|---|
| R353    | ERJ6GEYJ102  | S.M.CARB 0.1W  | 5%  | 1KΩ   |   |
| R354    | ERJ6GEYJ102  | S.M.CARB 0.1W  | 5%  | 1KΩ   |   |
| R355    | ERJ6GEYJ102  | S.M.CARB 0.1W  | 5%  | 1KΩ   |   |
| R356    | ERJ6GEYJ102  | S.M.CARB 0.1W  | 5%  | 1KΩ   |   |
| R357    | ERG1SJ683    | METAL 1W       | 5%  | 680Ω  |   |
| R358    | ERG1SJ683    | METAL 1W       | 5%  | 680Ω  |   |
| R359    | ERG1SJ683    | METAL 1W       | 5%  | 680Ω  |   |
| R363    | ERD25TJ103   | CARBON 0.25W   | 5%  | 10KΩ  |   |
| R364    | ERD25TJ103   | CARBON 0.25W   | 5%  | 10KΩ  |   |
| R365    | ERD25TJ103   | CARBON 0.25W   | 5%  | 10KΩ  |   |
| R366    | ERDS1TJ152   | CARBON 0.5W    | 5%  | 1K5Ω  |   |
| R367    | ERDS1TJ152   | CARBON 0.5W    | 5%  | 1K5Ω  |   |
| R368    | ERDS1TJ152   | CARBON 0.5W    | 5%  | 1K5Ω  |   |
| R369    | ERD25TJ203   | CARBON 0.25W   | 5%  | 20KΩ  |   |
| R370    | ERJ6GEYJ822  | S.M.CARB 0.1W  | 5%  | 8K2Ω  |   |
| R372    | ERQ12AJ121   | FUSIBLE 0.5W   | 5%  | 120Ω  | Δ |
| R373    | ERJ6GEYJ220  | S.M.CARB 0.1W  | 5%  | 22Ω   |   |
| R374    | ERD25TJ274   | CARBON 0.25W   | 5%  | 270KΩ |   |
| R375    | ERJ6GEYJ684  | S.M.CARB 0.1W  | 5%  | 680KΩ |   |
| R376    | ERJ6GEYJ183  | S.M.CARB 0.1W  | 5%  | 18KΩ  |   |
| R377    | ERQ12HKR82   | FUSIBLE 0.5W   | 10% | 82Ω   | Δ |
| R381    | ERJ6GEYJ102  | S.M.CARB 0.1W  | 5%  | 1KΩ   |   |
| R382    | ERJ6GEYJ102  | S.M.CARB 0.1W  | 5%  | 1KΩ   |   |
| R383    | ERJ6GEYJ102  | S.M.CARB 0.1W  | 5%  | 1KΩ   |   |
| R451    | ERJ6GEYJ223  | S.M.CARB 0.1W  | 5%  | 22KΩ  |   |
| R452    | ERJ6GEYJ472  | S.M.CARB 0.1W  | 5%  | 4K7Ω  |   |
| R453    | ERJ6GEYJ104  | S.M.CARB 0.1W  | 5%  | 100KΩ |   |
| R455    | ERJ6GEYJ472  | S.M.CARB 0.1W  | 5%  | 4K7Ω  |   |
| R456    | ERJ6GEYJ103  | S.M.CARB 0.1W  | 5%  | 10KΩ  |   |
| R457    | ERJ6GEYJ682  | S.M.CARB 0.1W  | 5%  | 6K8Ω  |   |
| R458    | ERD25TJ1R5   | CARBON 0.25W   | 5%  | 1R5Ω  |   |
| R459    | ERJ6GEYJ470  | S.M.CARB 0.1W  | 5%  | 47Ω   |   |
| R460    | ERJ6GEYJ183  | S.M.CARB 0.1W  | 5%  | 18KΩ  |   |
| R461    | ERDS1TJ471   | CARBON 0.5W    | 5%  | 470Ω  |   |
| R462    | ERJ6GEYJ472  | S.M.CARB 0.1W  | 5%  | 4K7Ω  |   |
| R463    | ERJ6GEYJ472  | S.M.CARB 0.1W  | 5%  | 4K7Ω  |   |
| R464    | ERW12PKR68   | WIREWOUND 0.5W | 10% | 68Ω   | Δ |
| R465    | ERJ6GEYJ101  | S.M.CARB 0.1W  | 5%  | 100Ω  |   |
| R466    | ERO25CKF1801 | METAL 0.25W    | 1%  | 1K8Ω  | Δ |
| R467    | ERO25CKF1801 | METAL 0.25W    | 1%  | 1K8Ω  | Δ |
| R471    | ERDS1TJ152   | CARBON 0.5W    | 5%  | 1K5Ω  |   |
| R472    | ERDS1TJ4R7   | CARBON 0.5W    | 5%  | 4R7Ω  |   |
| R501    | ERJ6GEYJ331  | S.M.CARB 0.1W  | 5%  | 330Ω  |   |
| R502    | ERJ6GEYJ560  | S.M.CARB 0.1W  | 5%  | 56Ω   |   |
| R503    | ERJ6GEYJ273  | S.M.CARB 0.1W  | 5%  | 27KΩ  |   |
| R504    | ERJ6GEYJ101  | S.M.CARB 0.1W  | 5%  | 100Ω  |   |
| R506    | ERD25TJ560   | CARBON 0.25W   | 5%  | 56Ω   |   |
| R507    | ERQ14AJ3R3   | METAL 0.25W    | 5%  | 3R3Ω  | Δ |
| R509    | ERDS1TJ152   | CARBON 0.5W    | 5%  | 1K5Ω  |   |
| R510    | ERDS1TJ152   | CARBON 0.5W    | 5%  | 1K5Ω  |   |
| R511    | ERJ6GEYJ104  | S.M.CARB 0.1W  | 5%  | 100KΩ |   |
| R512    | ERJ6GEYJ472  | S.M.CARB 0.1W  | 5%  | 4K7Ω  |   |
| R513    | ERJ6GEYJ123  | S.M.CARB 0.1W  | 5%  | 12KΩ  |   |
| R514    | ERJ6GEYJ123  | S.M.CARB 0.1W  | 5%  | 12KΩ  |   |
| R551    | ERW2PKR47    | WIREWOUND 2W   | 10% | 0R47Ω | Δ |
| R553    | ERG1SJ152    | METAL 1W       | 5%  | 1K5Ω  |   |
| R554    | ERQ14AJW101  | METAL 0.25W    | 5%  | 100Ω  | Δ |
| R558    | ERDS1TJ124   | CARBON 0.5W    | 5%  | 120KΩ |   |
| R561    | ERJ6GEYJ563  | S.M.CARB 0.1W  | 5%  | 56KΩ  |   |
| R562    | ERJ6GEYJ155  | S.M.CARB 0.1W  | 5%  | 1M5Ω  |   |
| R563    | ERJ6GEYJ155  | S.M.CARB 0.1W  | 5%  | 1M5Ω  |   |
| R564    | ERJ6GEYJ393  | S.M.CARB 0.1W  | 5%  | 39KΩ  |   |
| R566    | ERJ6GEYJ273  | S.M.CARB 0.1W  | 5%  | 27KΩ  |   |
| R567    | ERJ6GEYJ274  | S.M.CARB 0.1W  | 5%  | 270KΩ |   |
| R601    | ERJ6GEYJ151  | S.M.CARB 0.1W  | 5%  | 150Ω  |   |
| R602    | ERJ6GEYJ151  | S.M.CARB 0.1W  | 5%  | 150Ω  |   |
| R603    | ERJ6GEYJ750  | S.M.CARB 0.1W  | 5%  | 75Ω   |   |
| R605    | ERJ6GEYJ183  | S.M.CARB 0.1W  | 5%  | 18KΩ  |   |
| R606    | ERJ6GEYJ472  | S.M.CARB 0.1W  | 5%  | 4K7Ω  |   |
| R607    | ERJ6GEYJ103  | S.M.CARB 0.1W  | 5%  | 10KΩ  |   |
| R608    | ERJ6GEYJ101  | S.M.CARB 0.1W  | 5%  | 100Ω  |   |
| R609    | ERJ6GEYJ101  | S.M.CARB 0.1W  | 5%  | 100Ω  |   |

| Ref No. | Part No.     | Description |       |     |       |   |
|---------|--------------|-------------|-------|-----|-------|---|
| R610    | ERJ6GEYJ473  | S.M.CARB    | 0.1W  | 5%  | 47KΩ  |   |
| R611    | ERJ6GEYJ102  | S.M.CARB    | 0.1W  | 5%  | 1KΩ   |   |
| R612    | ERJ6GEYJ123  | S.M.CARB    | 0.1W  | 5%  | 12KΩ  |   |
| R613    | ERJ6GEYJ271  | S.M.CARB    | 0.1W  | 5%  | 270Ω  |   |
| R614    | ERJ6GEYJ470  | S.M.CARB    | 0.1W  | 5%  | 47Ω   |   |
| R615    | ERJ6GEYJ333  | S.M.CARB    | 0.1W  | 5%  | 33KΩ  |   |
| R616    | ERJ6GEYJ153  | S.M.CARB    | 0.1W  | 5%  | 15KΩ  |   |
| R618    | ERJ6GEYJ151  | S.M.CARB    | 0.1W  | 5%  | 150Ω  |   |
| R619    | ERJ6GEYJ472  | S.M.CARB    | 0.1W  | 5%  | 4K7Ω  |   |
| R623    | ERJ6GEYJ821  | S.M.CARB    | 0.1W  | 5%  | 820Ω  |   |
| R701    | ERQ12AJ101   | FUSIBLE     | 0.5W  | 5%  | 100Ω  | Δ |
| R702    | ERQ12HJ220   | METAL       | 0.5W  | 5%  | 22Ω   | Δ |
| R703    | ERG2FJ821    | METAL       | 2W    | 5%  | 820Ω  | Δ |
| R704    | ERJ6GEYJ563  | S.M.CARB    | 0.1W  | 5%  | 56KΩ  |   |
| R705    | ERJ6GEYJ104  | S.M.CARB    | 0.1W  | 5%  | 100KΩ |   |
| R706    | ERJ6GEYJ242  | S.M.CARB    | 0.1W  | 5%  | 2K4Ω  |   |
| R707    | ERJ6GEYJ911  | S.M.CARB    | 0.1W  | 5%  | 910Ω  |   |
| R708    | ERJ6GEYJ393  | S.M.CARB    | 0.1W  | 5%  | 39KΩ  |   |
| R709    | ERJ6GEYJ393  | S.M.CARB    | 0.1W  | 5%  | 39KΩ  |   |
| R710    | ERJ6GEYJ273  | S.M.CARB    | 0.1W  | 5%  | 27KΩ  |   |
| R711    | ERJ6GEYJ681  | S.M.CARB    | 0.1W  | 5%  | 680Ω  |   |
| R712    | ERJ6GEYJ472  | S.M.CARB    | 0.1W  | 5%  | 4K7Ω  |   |
| R713    | ERG1SJ101    | METAL       | 1W    | 5%  | 100Ω  |   |
| R801    | ERG3FJ682H   | METAL       | 3W    | 5%  | 6K8Ω  | Δ |
| R802    | ERG2FJ472    | METAL       | 2W    | 5%  | 4K7Ω  | Δ |
| R803    | ERX12SJWR47  | METAL       | 12W   | 5%  | R47   |   |
| R804    | ERJ6GEYJ682  | S.M.CARB    | 0.1W  | 5%  | 6K8Ω  |   |
| R805    | ERJ6GEYJ221  | S.M.CARB    | 0.1W  | 5%  | 220Ω  |   |
| R806    | ERG1SJ823    | METAL       | 1W    | 5%  | 820Ω  |   |
| R807    | ERO25CKF1201 | METAL       | 0.25W | 1%  | 1K2Ω  | Δ |
| R808    | 232266296706 | THERMISTOR  |       |     |       |   |
| R809    | ERO25CKF1332 | METAL       | 0.25W | 1%  | 13KΩ  | Δ |
| R810    | ERD25TJ103   | CARBON      | 0.25W | 5%  | 10KΩ  |   |
| R811    | EVMEASA00B33 | CONTROL     |       |     | 3KΩ   |   |
| R812    | ERDS1TJ220   | CARBON      | 0.5W  | 5%  | 22Ω   |   |
| R813    | ERD50FJ274   | CARBON      | 0.5W  | 5%  | 270KΩ |   |
| R814    | ERF7ZK2R7    | WOUND       | 7W    | 20% | 2R7Ω  | Δ |
| R815    | ERDS1TJ563   | CARBON      | 0.5W  | 5%  | 56KΩ  |   |
| R817    | ERG3FJ470    | METAL       | 3W    | 5%  | 47Ω   | Δ |
| R818    | ERD50FJ104   | CARBON      | 0.5W  | 5%  | 100KΩ |   |
| R819    | ERD50FJ184   | CARBON      | 0.5W  | 5%  | 180KΩ |   |
| R820    | ERD75TAJ825  | CARBON      | 0.75W | 5%  | 8M2Ω  | Δ |
| R852    | ERJ6GEYJ271  | S.M.CARB    | 0.1W  | 5%  | 270Ω  |   |
| R853    | ERJ6GEYJ101  | S.M.CARB    | 0.1W  | 5%  | 100Ω  |   |
| R854    | ERDS1TJ474   | CARBON      | 0.5W  | 5%  | 470KΩ |   |
| R855    | ERG2FJ223    | METAL       | 2W    | 5%  | 22KΩ  | Δ |
| R856    | ERJ6GEYJ102  | S.M.CARB    | 0.1W  | 5%  | 1KΩ   |   |
| R901    | ERJ6GEYJ562  | S.M.CARB    | 0.1W  | 5%  | 5K6Ω  |   |
| R902    | ERJ6GEYJ562  | S.M.CARB    | 0.1W  | 5%  | 5K6Ω  |   |
| R903    | ERJ6GEYJ562  | S.M.CARB    | 0.1W  | 5%  | 5K6Ω  |   |
| R904    | ERJ6GEYJ222  | S.M.CARB    | 0.1W  | 5%  | 2K2Ω  |   |
| R905    | ERJ6GEYJ681  | S.M.CARB    | 0.1W  | 5%  | 680Ω  |   |
| R906    | ERJ6GEYJ223  | S.M.CARB    | 0.1W  | 5%  | 22KΩ  |   |
| R907    | ERJ6GEYJ472  | S.M.CARB    | 0.1W  | 5%  | 4K7Ω  |   |
| R908    | ERJ6GEYJ471  | S.M.CARB    | 0.1W  | 5%  | 470Ω  |   |
| R909    | ERJ6GEYJ102  | S.M.CARB    | 0.1W  | 5%  | 1KΩ   |   |
| R910    | ERJ6GEYJ101  | S.M.CARB    | 0.1W  | 5%  | 100Ω  |   |
| R911    | ERJ6GEYJ152  | S.M.CARB    | 0.1W  | 5%  | 1K5Ω  |   |
| R913    | ERJ6GEYJ183  | S.M.CARB    | 0.1W  | 5%  | 18KΩ  |   |
| R914    | ERJ6GEYJ222  | S.M.CARB    | 0.1W  | 5%  | 2K2Ω  |   |
| R915    | ERJ6GEYJ182  | S.M.CARB    | 0.1W  | 5%  | 1K8Ω  |   |
| R916    | ERJ6GEYJ221  | S.M.CARB    | 0.1W  | 5%  | 220Ω  |   |
| R917    | ERJ6GEYJ121  | S.M.CARB    | 0.1W  | 5%  | 120Ω  |   |
| R919    | ERQ14AJ390   | FUSABLE     | 0.25W | 5%  | 39Ω   | Δ |
| R920    | ERQ14AJ390   | FUSABLE     | 0.25W | 5%  | 39Ω   | Δ |
| R921    | ERD25TJ471   | CARBON      | 0.25W | 5%  | 470Ω  |   |
| R922    | ERD25TJ393   | CARBON      | 0.25W | 5%  | 39KΩ  |   |
| R923    | ERD25TJ393   | CARBON      | 0.25W | 5%  | 39KΩ  |   |
| R924    | ERDS1FJ390   | CARBON      | 0.5W  | 5%  | 39Ω   | Δ |
| R927    | ERD25TJ471   | CARBON      | 0.25W | 5%  | 470Ω  |   |
| R928    | ERD25TJ5R6   | CARBON      | 0.25W | 5%  | 5R6Ω  |   |

| Ref No. | Part No.    | Description |       |    |       |   |
|---------|-------------|-------------|-------|----|-------|---|
| R929    | ERDS1FJ471  | CARBON      | 0.5W  | 5% | 470Ω  | Δ |
| R930    | ERD25TJ5R6  | CARBON      | 0.25W | 5% | 5R6Ω  |   |
| R931    | ERDS1FJ390  | CARBON      | 0.5W  | 5% | 39Ω   | Δ |
| R932    | ERDS1FJ101  | CARBON      | 0.5W  | 5% | 100Ω  | Δ |
| R933    | ERJ6GEYJ103 | S.M.CARB    | 0.1W  | 5% | 10KΩ  |   |
| R934    | ERJ6GEYJ222 | S.M.CARB    | 0.1W  | 5% | 2K2Ω  |   |
| R935    | ERQ14AJ3R9  | FUSIBLE     | 0.25W | 5% | 3R9Ω  | Δ |
| R936    | ERQ1CJP331  | METAL       | 1W    | 5% | 330Ω  | Δ |
| R937    | ERQ14AJ100  | METAL       | 0.25W | 5% | 10Ω   | Δ |
| R1201   | ERJ6GEYJ271 | S.M.CARB    | 0.1W  | 5% | 270Ω  |   |
| R1202   | ERJ6GEYJ101 | S.M.CARB    | 0.1W  | 5% | 100Ω  |   |
| R1203   | ERJ6GEYJ101 | S.M.CARB    | 0.1W  | 5% | 100Ω  |   |
| R1204   | ERJ6GEYJ101 | S.M.CARB    | 0.1W  | 5% | 100Ω  |   |
| R1205   | ERJ6GEYJ101 | S.M.CARB    | 0.1W  | 5% | 100Ω  |   |
| R1206   | ERJ6GEYJ101 | S.M.CARB    | 0.1W  | 5% | 100Ω  |   |
| R1207   | ERD25TJ331  | CARBON      | 0.25W | 5% | 330Ω  |   |
| R1208   | ERJ6GEYJ223 | S.M.CARB    | 0.1W  | 5% | 22KΩ  |   |
| R1209   | ERJ6GEYJ472 | S.M.CARB    | 0.1W  | 5% | 4K7Ω  |   |
| R1210   | ERJ6GEYJ472 | S.M.CARB    | 0.1W  | 5% | 4K7Ω  |   |
| R1212   | ERJ6GEYJ103 | S.M.CARB    | 0.1W  | 5% | 10KΩ  |   |
| R1213   | ERJ6GEYJ103 | S.M.CARB    | 0.1W  | 5% | 10KΩ  |   |
| R1214   | ERJ6GEYJ472 | S.M.CARB    | 0.1W  | 5% | 4K7Ω  |   |
| R1215   | ERJ6GEYJ101 | S.M.CARB    | 0.1W  | 5% | 100Ω  |   |
| R1216   | ERJ6GEYJ101 | S.M.CARB    | 0.1W  | 5% | 100Ω  |   |
| R1217   | ERJ6GEYJ101 | S.M.CARB    | 0.1W  | 5% | 100Ω  |   |
| R1218   | ERJ6GEYJ472 | S.M.CARB    | 0.1W  | 5% | 4K7Ω  |   |
| R1219   | ERJ6GEYJ472 | S.M.CARB    | 0.1W  | 5% | 4K7Ω  |   |
| R1220   | ERJ6GEYJ472 | S.M.CARB    | 0.1W  | 5% | 4K7Ω  |   |
| R1221   | ERJ6GEYJ103 | S.M.CARB    | 0.1W  | 5% | 10KΩ  |   |
| R1222   | ERJ6GEYJ103 | S.M.CARB    | 0.1W  | 5% | 10KΩ  |   |
| R1224   | ERJ6GEYJ103 | S.M.CARB    | 0.1W  | 5% | 10KΩ  |   |
| R1225   | ERJ6GEYJ472 | S.M.CARB    | 0.1W  | 5% | 4K7Ω  |   |
| R1226   | ERJ6GEYJ472 | S.M.CARB    | 0.1W  | 5% | 4K7Ω  |   |
| R1227   | ERJ6GEYJ472 | S.M.CARB    | 0.1W  | 5% | 4K7Ω  |   |
| R1229   | ERJ6GEY0R00 | S.M.CARB    | 0.1W  | 5% | 0Ω    |   |
| R1230   | ERJ6GEY0R00 | S.M.CARB    | 0.1W  | 5% | 0Ω    |   |
| R1231   | ERJ6GEYJ472 | S.M.CARB    | 0.1W  | 5% | 4K7Ω  |   |
| R1232   | ERJ6GEYJ103 | S.M.CARB    | 0.1W  | 5% | 10KΩ  |   |
| R1233   | ERJ6GEYJ472 | S.M.CARB    | 0.1W  | 5% | 4K7Ω  |   |
| R1235   | ERJ6GEYJ103 | S.M.CARB    | 0.1W  | 5% | 10KΩ  |   |
| R1236   | ERJ6GEYJ472 | S.M.CARB    | 0.1W  | 5% | 4K7Ω  |   |
| R1237   | ERJ6GEYJ103 | S.M.CARB    | 0.1W  | 5% | 10KΩ  |   |
| R1238   | ERJ6GEYJ393 | S.M.CARB    | 0.1W  | 5% | 39KΩ  |   |
| R1239   | ERJ6GEYJ392 | S.M.CARB    | 0.1W  | 5% | 3K9Ω  |   |
| R1240   | ERJ6GEYJ392 | S.M.CARB    | 0.1W  | 5% | 3K9Ω  |   |
| R1241   | ERJ6GEYJ101 | S.M.CARB    | 0.1W  | 5% | 100Ω  |   |
| R1242   | ERJ6GEYJ101 | S.M.CARB    | 0.1W  | 5% | 100Ω  |   |
| R1244   | ERJ6GEY0R00 | S.M.CARB    | 0.1W  | 5% | 0Ω    |   |
| R1245   | ERJ6GEYJ222 | S.M.CARB    | 0.1W  | 5% | 2K2Ω  |   |
| R1246   | ERJ6GEYJ103 | S.M.CARB    | 0.1W  | 5% | 10KΩ  |   |
| R1247   | ERJ6GEYJ103 | S.M.CARB    | 0.1W  | 5% | 10KΩ  |   |
| R1249   | ERJ6GEYJ472 | S.M.CARB    | 0.1W  | 5% | 4K7Ω  |   |
| R1250   | ERJ6GEYJ103 | S.M.CARB    | 0.1W  | 5% | 10KΩ  |   |
| R1251   | ERJ6GEYJ393 | S.M.CARB    | 0.1W  | 5% | 39KΩ  |   |
| R1252   | ERX1SJ3R3   | METAL       | 1W    | 5% | 3R3Ω  |   |
| R1253   | ERJ6GEYJ103 | S.M.CARB    | 0.1W  | 5% | 10KΩ  |   |
| R1254   | ERJ6GEYJ104 | S.M.CARB    | 0.1W  | 5% | 100KΩ |   |
| R1255   | ERJ6GEYJ104 | S.M.CARB    | 0.1W  | 5% | 100KΩ |   |
| R1256   | ERJ6GEYJ102 | S.M.CARB    | 0.1W  | 5% | 1KΩ   |   |
| R1257   | ERJ6GEYJ101 | S.M.CARB    | 0.1W  | 5% | 100Ω  |   |
| R1258   | ERJ6GEYJ472 | S.M.CARB    | 0.1W  | 5% | 4K7Ω  |   |
| R1260   | ERDS1FJ121  | CARBON      | 0.5W  | 5% | 120Ω  | Δ |
| R2101   | ERJ6GEYJ471 | S.M.CARB    | 0.1W  | 5% | 470Ω  |   |
| R2102   | ERJ6GEYJ222 | S.M.CARB    | 0.1W  | 5% | 2K2Ω  |   |
| R2103   | ERJ6GEYJ471 | S.M.CARB    | 0.1W  | 5% | 470Ω  |   |
| R2104   | ERJ6GEYJ471 | S.M.CARB    | 0.1W  | 5% | 470Ω  |   |
| R2105   | ERJ6GEYJ222 | S.M.CARB    | 0.1W  | 5% | 2K2Ω  |   |
| R2106   | ERJ6GEYJ183 | S.M.CARB    | 0.1W  | 5% | 18KΩ  |   |
| R2107   | ERJ6GEYJ471 | S.M.CARB    | 0.1W  | 5% | 470Ω  |   |
| R2108   | ERJ6GEYJ101 | S.M.CARB    | 0.1W  | 5% | 100Ω  |   |
| R2109   | ERJ6GEYJ101 | S.M.CARB    | 0.1W  | 5% | 100Ω  |   |
| R2110   | ERJ6GEYJ103 | S.M.CARB    | 0.1W  | 5% | 10KΩ  |   |

| Ref No. | Part No.    | Description            |
|---------|-------------|------------------------|
| R2111   | ERJ6GEYJ473 | S.M.CARB 0.1W 5% 47KΩ  |
| R2301   | ERJ6GEYJ222 | S.M.CARB 0.1W 5% 2K2Ω  |
| R2302   | ERJ6GEYJ222 | S.M.CARB 0.1W 5% 2K2Ω  |
| R2303   | ERJ6GEYJ471 | S.M.CARB 0.1W 5% 470Ω  |
| R2304   | ERJ6GEYJ471 | S.M.CARB 0.1W 5% 470Ω  |
| R2313   | ERJ6GEYJ101 | S.M.CARB 0.1W 5% 100Ω  |
| R2314   | ERJ6GEYJ101 | S.M.CARB 0.1W 5% 100Ω  |
| R2315   | ERJ6GEYJ473 | S.M.CARB 0.1W 5% 47KΩ  |
| R2316   | ERJ6GEYJ104 | S.M.CARB 0.1W 5% 100KΩ |
| R2318   | ERJ6GEYJ104 | S.M.CARB 0.1W 5% 100KΩ |
| R2321   | ERJ6GEYJ103 | S.M.CARB 0.1W 5% 10KΩ  |
| R2322   | ERJ6GEYJ471 | S.M.CARB 0.1W 5% 470Ω  |
| R2323   | ERJ6GEYJ103 | S.M.CARB 0.1W 5% 10KΩ  |
| R2324   | ERJ6GEYJ471 | S.M.CARB 0.1W 5% 470Ω  |
| R2325   | ERJ6GEYJ273 | S.M.CARB 0.1W 5% 27KΩ  |
| R2326   | ERJ6GEYJ471 | S.M.CARB 0.1W 5% 470Ω  |
| R2327   | ERJ6GEYJ471 | S.M.CARB 0.1W 5% 470Ω  |
| R2328   | ERJ6GEYJ473 | S.M.CARB 0.1W 5% 47KΩ  |
| R2329   | ERJ6GEYJ222 | S.M.CARB 0.1W 5% 2K2Ω  |
| R2330   | ERJ6GEYJ222 | S.M.CARB 0.1W 5% 2K2Ω  |
| R2331   | ERJ6GEYJ223 | S.M.CARB 0.1W 5% 22KΩ  |
| R2332   | ERJ6GEYJ471 | S.M.CARB 0.1W 5% 470Ω  |
| R2333   | ERJ6GEYJ471 | S.M.CARB 0.1W 5% 470Ω  |
| R2334   | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω    |
| R2335   | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω    |
| R2651   | ERG2FJ221   | METAL 2W 5% 220Ω ▲     |
| R2652   | ERG2FJ221   | METAL 2W 5% 220Ω ▲     |
| R2653   | ERDS1TJ151  | CARBON 0.5W 5% 150Ω    |
| R2654   | ERDS1TJ151  | CARBON 0.5W 5% 150Ω    |
| R3001   | ERJ6GEYJ153 | S.M.CARB 0.1W 5% 15KΩ  |
| R3002   | ERJ6GEYJ101 | S.M.CARB 0.1W 5% 100Ω  |
| R3003   | ERJ6GEYJ101 | S.M.CARB 0.1W 5% 100Ω  |
| R3004   | ERJ6GEYJ153 | S.M.CARB 0.1W 5% 15KΩ  |
| R3005   | ERJ6GEYJ470 | S.M.CARB 0.1W 5% 47Ω   |
| R3006   | ERJ6GEYJ470 | S.M.CARB 0.1W 5% 47Ω   |
| R3007   | ERJ6GEYJ750 | S.M.CARB 0.1W 5% 75Ω   |
| R3008   | ERJ6GEYJ104 | S.M.CARB 0.1W 5% 100KΩ |
| R3009   | ERJ6GEYJ104 | S.M.CARB 0.1W 5% 100KΩ |
| R3010   | ERJ6GEYJ101 | S.M.CARB 0.1W 5% 100Ω  |
| R3011   | ERJ6GEYJ101 | S.M.CARB 0.1W 5% 100Ω  |
| R3012   | ERJ6GEYJ101 | S.M.CARB 0.1W 5% 100Ω  |
| R3013   | ERJ6GEYJ101 | S.M.CARB 0.1W 5% 100Ω  |
| R3015   | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω    |
| R3016   | ERJ6GEYJ103 | S.M.CARB 0.1W 5% 10KΩ  |
| R3017   | ERJ6GEYJ102 | S.M.CARB 0.1W 5% 1KΩ   |
| R3019   | ERJ6GEYJ471 | S.M.CARB 0.1W 5% 470Ω  |
| R3020   | ERJ6GEYJ103 | S.M.CARB 0.1W 5% 10KΩ  |
| R3022   | ERD2FCG560  | CARBON 2W 2% 56Ω       |
| R3024   | ERJ6GEYJ471 | S.M.CARB 0.1W 5% 470Ω  |
| R3025   | ERJ6GEYJ103 | S.M.CARB 0.1W 5% 10KΩ  |
| R3026   | ERJ6GEYJ471 | S.M.CARB 0.1W 5% 470Ω  |
| R3027   | ERJ6GEYJ680 | S.M.CARB 0.1W 5% 68Ω   |
| R3029   | ERJ6GEYJ680 | S.M.CARB 0.1W 5% 68Ω   |
| R3030   | ERJ6GEYJ103 | S.M.CARB 0.1W 5% 10KΩ  |
| R3032   | ERJ6GEYJ680 | S.M.CARB 0.1W 5% 68Ω   |
| R3034   | ERJ6GEYJ103 | S.M.CARB 0.1W 5% 10KΩ  |
| R3036   | ERJ6GEYJ220 | S.M.CARB 0.1W 5% 22Ω   |
| R3037   | ERJ6GEYJ750 | S.M.CARB 0.1W 5% 75Ω   |
| R3038   | ERD2FCG100  | CARB 2W 2% 10Ω         |
| R3039   | ERJ6GEYJ101 | S.M.CARB 0.1W 5% 100Ω  |
| R3040   | ERJ6GEYJ101 | S.M.CARB 0.1W 5% 100Ω  |
| R3041   | ERJ6GEYJ153 | S.M.CARB 0.1W 5% 15KΩ  |
| R3042   | ERJ6GEYJ682 | S.M.CARB 0.1W 5% 6K8Ω  |
| R3043   | ERD2FCG100  | CARB 2W 2% 10Ω         |
| R3044   | ERJ6GEYJ101 | S.M.CARB 0.1W 5% 100Ω  |
| R3045   | ERJ6GEYJ471 | S.M.CARB 0.1W 5% 470Ω  |
| R3046   | ERJ6GEYJ101 | S.M.CARB 0.1W 5% 100Ω  |
| R3047   | ERJ6GEYJ680 | S.M.CARB 0.1W 5% 68Ω   |
| R3048   | ERJ6GEYJ102 | S.M.CARB 0.1W 5% 1KΩ   |
| R3049   | ERJ6GEYJ680 | S.M.CARB 0.1W 5% 68Ω   |
| R3050   | ERJ6GEYJ101 | S.M.CARB 0.1W 5% 100Ω  |
| R3051   | ERJ6GEYJ101 | S.M.CARB 0.1W 5% 100Ω  |

| Ref No. | Part No.    | Description            |
|---------|-------------|------------------------|
| R3052   | ERJ6GEYJ101 | S.M.CARB 0.1W 5% 100Ω  |
| R3053   | ERJ6GEYJ101 | S.M.CARB 0.1W 5% 100Ω  |
| R3054   | ERJ6GEYJ101 | S.M.CARB 0.1W 5% 100Ω  |
| R3055   | ERJ6GEYJ101 | S.M.CARB 0.1W 5% 100Ω  |
| R3056   | ERJ6GEYJ101 | S.M.CARB 0.1W 5% 100Ω  |
| R3057   | ERJ6GEYJ101 | S.M.CARB 0.1W 5% 100Ω  |
| R3058   | ERJ6GEYJ153 | S.M.CARB 0.1W 5% 15KΩ  |
| R3059   | ERJ6GEYJ153 | S.M.CARB 0.1W 5% 15KΩ  |
| R3060   | ERJ6GEYJ470 | S.M.CARB 0.1W 5% 47Ω   |
| R3062   | ERJ6GEYJ750 | S.M.CARB 0.1W 5% 75Ω   |
| R3063   | ERJ6GEYJ750 | S.M.CARB 0.1W 5% 75Ω   |
| R3064   | ERJ6GEYJ103 | S.M.CARB 0.1W 5% 10KΩ  |
| R3065   | ERJ6GEYJ104 | S.M.CARB 0.1W 5% 100KΩ |
| R3066   | ERJ6GEYJ104 | S.M.CARB 0.1W 5% 100KΩ |
| R3067   | ERJ6GEYJ273 | S.M.CARB 0.1W 5% 27KΩ  |
| R3068   | ERJ6GEYJ103 | S.M.CARB 0.1W 5% 10KΩ  |
| R3069   | ERJ6GEYJ103 | S.M.CARB 0.1W 5% 10KΩ  |
| R3070   | ERJ6GEYJ750 | S.M.CARB 0.1W 5% 75Ω   |
| R3071   | ERJ6GEYJ470 | S.M.CARB 0.1W 5% 47Ω   |
| R3150   | ERJ6GEYJ750 | S.M.CARB 0.1W 5% 75Ω   |
| R3151   | ERJ6GEYJ750 | S.M.CARB 0.1W 5% 75Ω   |
| R3152   | ERJ6GEYJ750 | S.M.CARB 0.1W 5% 75Ω   |
| R3153   | ERJ6GEYJ750 | S.M.CARB 0.1W 5% 75Ω   |
| R3154   | ERJ6GEYJ153 | S.M.CARB 0.1W 5% 15KΩ  |
| R3155   | ERJ6GEYJ101 | S.M.CARB 0.1W 5% 100Ω  |
| R3156   | ERJ6GEYJ101 | S.M.CARB 0.1W 5% 100Ω  |
| R3157   | ERJ6GEYJ153 | S.M.CARB 0.1W 5% 15KΩ  |
| R3158   | ERJ6GEYJ750 | S.M.CARB 0.1W 5% 75Ω   |
| R3502   | ERJ6GEYJ101 | S.M.CARB 0.1W 5% 100Ω  |
| R3504   | ERJ6GEYJ101 | S.M.CARB 0.1W 5% 100Ω  |
| R3505   | ERJ6GEY0R00 | S.M.CARB 0.1W 5% 0Ω    |
| R3508   | ERJ6GEYJ183 | S.M.CARB 0.1W 5% 18KΩ  |
| R3511   | ERJ6GEYJ103 | S.M.CARB 0.1W 5% 10KΩ  |
| R3512   | ERJ6GEYJ472 | S.M.CARB 0.1W 5% 4K7Ω  |

## SWITCHES

|       |            |            |
|-------|------------|------------|
| S.351 | 0330550049 | CRT SOCKET |
| S801  | ESB91232A  | SWITCH ▲   |
| S1201 | EVQ23405R  | SWITCH     |
| S1202 | EVQ23405R  | SWITCH     |
| S1203 | EVQ23405R  | SWITCH     |
| S1204 | EVQ23405R  | SWITCH     |
| S1205 | EVQ23405R  | SWITCH     |

## TRANSFORMERS

|       |              |             |
|-------|--------------|-------------|
| T501  | 5270103200   | TRANSFORMER |
| T551  | ZTFH65008A   | TRANSFORMER |
| T801  | TLP8E1002    | TRANSFORMER |
| T1201 | ETP35KAN61ZU | TRANSFORMER |

## FILTERS

|       |            |                |
|-------|------------|----------------|
| X101  | EFCS5M7MW3 | CERAMIC FILTER |
| X103  | G3355K     | SAW FILTER     |
| X105  | EFCV3095A6 | CHIP FILTER    |
| X601  | TSS2169-B  | CRYSTAL        |
| X1201 | TSS120M2   | CRYSTAL        |
| X2101 | TSS4004-B  | CRYSTAL        |

