CAUTION:
Before servicing this chassis, it is important that the servicetechnician read the "Safety Precautions" and "Product Safety Notices" in this servicemanual.

ATTENTION:
Avant d'effectuer l'entretien du châssis, le technicien doit lire les "Précautions de sécurité" et les "Notices de sécurité du produit" présentés dans le présent manuel.

VORSICHT:
Vor Öffnen des Gehäuses hat der Service-Ingenieur die "Sicherheitshinweise" und Hinweise zur Produktsicherheit" im vorliegenden Wartungshandbuch zu lesen.

Contents
- Specifications ................................................................. 3
- Service Points ............................................................... 4
- Wiring Diagram .............................................................. 8
- Printed Wiring Board ...................................................... 9
- Circuit Diagram ............................................................ 17
- Block Diagram ............................................................. 29
- Exploded View ............................................................ 31
- Replacement Parts List .................................................. 35

Specifications and parts are subject to change for improvement.

Mini Component Hi-Fi System
September 2000
SAFETY PRECAUTIONS

WARNING: The following precautions must be observed.

ALL PRODUCTS
Before any service is performed on the chassis an isolation transformer should be inserted between the power line and the product.

1. When replacing the chassis in the cabinet, ensure all the protective devices are put back in place.
2. When service is required, observe the original lead dressing. Extra precaution should be taken to ensure correct lead dressing in any high voltage circuitry area.
3. Many electrical and mechanical parts in HITACHI products have special safety related characteristics. These characteristics are often not evident from visual inspection, nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified by marking with a \( \Delta \) on the schematics and the replacement parts list.
   The use of a substitute replacement component that does not have the same safety characteristics as the HITACHI recommended replacement one, shown in the parts list, may create electrical shock, fire, X-radiation, or other hazards.
4. Always replace original spacers and maintain lead lengths. Furthermore, where a short circuit has occurred, replace those components that indicate evidence of overheating.
5. Insulation resistance should not be less than 2M ohms at 500V DC between the main poles and any accessible metal parts.
6. No flashover or breakdown should occur during the dielectric strength test, applying 3kV AC or 4.25kV DC for two seconds between the main poles and accessible metal parts.
7. Before returning a serviced product to the customer, the service technician must thoroughly test the unit to be certain that it is completely safe to operate without danger of electrical shock. The service technician must make sure that no protective device built into the instrument by the manufacturer has become defective, or inadvertently damaged during servicing.

CE MARK
1. HITACHI products may contain the CE mark on the rating plate indicating that the product contains parts that have been specifically approved to provide electromagnetic compatibility to designated levels.
2. When replacing any part in this product, please use only the correct part itemised in the parts list to ensure this standard is maintained, and take care to replace lead dressing to its original state, as this can have a bearing on the electromagnetic radiation/immunity.

PICTURE TUBE
1. The line output stage can develop voltages in excess of 25kV; if the E.H.T. cap is required to be removed, discharge the anode to chassis via a high value resistor, prior to its removal from the picture tube.
2. High voltage should always be kept at the rated value of the chassis and no higher. Operating at higher voltages may cause a failure of the picture tube or high voltage supply, and also, under certain circumstances could produce X-radiation levels moderately in excess of design levels. The high voltage must not, under any circumstances, exceed 29kV on the chassis (except for projection Televisions).
3. The primary source of X-radiation in the product is the picture tube. The picture tube utilised for the above mentioned function in this chassis is specially constructed to limit X-radiation. For continued X-radiation protection, replace tube with the same type as the original HITACHI approved type.
4. Keep the picture tube away from the body while handling. Do not install, remove, or handle the picture tube in any manner unless shatterproof goggles are worn. People not so equipped should be kept away while picture tubes are handled.

LASERS
If the product contains a laser avoid direct exposure to the beam when the cover is open or when interlocks are defeated or have failed.
• The caution labels on laser usage  • Notices de précautions d’emploi du laser

Check that exposed parts are acceptably insulated from the supply circuit before returning the repaired instrument to the customer.

- Checking method
  Measure the resistance value between the both poles of attachment cup (Power supply plug) and the exposed parts (Parts such as Knob, Cover, etc. where the customer is easy to touch.) and check that the resistance value is 500 kohms or more.
SAFETY PRECAUTIONS

The following precautions should be observed when servicing.
1. Since many parts in the unit have special safety-related characteristics, always use genuine Hitachi's replacement parts. Especially critical parts in the power circuit block should not be replaced with other makers. Critical parts are marked with △ in the circuit diagram.
2. Before returning a repaired unit to the customer, the service technician must thoroughly test the unit to ascertain that it is completely safe to operate without danger of electrical shock.

SPECIFICATIONS

• RECEIVER SECTION
  Tuner Range
  : FM: 87.5 - 108.0 MHz (0.1 MHz step) – UC
  : FM: 87.50 - 108.00 MHz (0.05 MHz step) – E, EBS, W, WUN
  : MW: 520 - 1,710 kHz (10 kHz step) – UC, W, WUN
  : MW: 522 - 1,611 kHz (9 kHz step) – E, EBS, W, WUN
  : LW: 153 - 281 kHz (1 kHz step) – E, EBS

• CD SECTION
  Sampling Frequency
  : 44.1 kHz
  Laser
  : Semiconductor laser

• TIMER SECTION
  System
  : Digital Quartz Clock
  Display Format
  : 24-hour cycle – E, EBS, W, WUN
  : 12-hour cycle – UC
  Timer Accuracy
  : Within 60 seconds at monthly rate in normal room temperature

• GENERAL SPECIFICATIONS
  Power Supply
  : AC 110 - 127 V/220 - 240 V, 50/60 Hz – W, WUN
  : AC 120 V, 60 Hz – UC
  : AC 230 V, 50 Hz – E, EBS
  Power Consumption
  : 48 W (ECO-ON mode: less than 1 W) – E, EBS, W, WUN
  : 1.1 A include AC outlet (ECO-ON mode: less than 1 W) – UC
  Rated Output Power
  : 30 W + 30 W (6 ohms, THD 10%)
  Inputs/Outputs
  : MD, TAPE, AUX, Optical Digital Out, Pre out, Headphone, System Connector

• SPEAKER SECTION
  System
  : 2 Way Bass Reflex Speaker System
  Speaker Unit
  : Woofer: 10 cm ≈ 1, Tweeter: 5 cm ≈ 1
  Impedance
  : 6 ohms

• DIMENSIONS
  HCU-R30 Unit
  : 210 (W) ≈ 120 (H) ≈ 325 (D) mm
  Speaker Unit
  : 150 (W) ≈ 275 (H) ≈ 227 (D) mm

• WEIGHT
  HCU-R30 Unit
  : 4.4 kg
  Speaker Unit
  : 3.0 kg (1 speaker)

• ACCESSORY SUPPLIED
  : FM Antenna, AM LOOP Antenna,
  Remote Control (RB-AXF3), Battery,
  Edison plug adapter (For W, WUN only)

* Specifications are subject to change for performance improvement without notice.
SERVICE POINTS

1. Removal of Top Cover
   (1) Remove 4 screws 1 from each side.
   (2) Remove 4 screws 2 from the rear plate.

2. Removal of Rear Plate and Power Cord
   (1) Remove 11 screws 3 and 4 from the rear plate.
   (2) Detach the power cord.

3. Removal of Tuner P.W.B Board
   (1) Remove 2 screws 5.
   (2) Pull the tuner P.W.B gently to detach from connector A of the main PCB.
4. Removal of Front Panel
   (1) Detach connector B & C (Refer to Fig. 5-2)
   (2) Remove 3 screws 6 from base of front panel.
   (3) Remove 1 screw 7 from each side and screw 8.
   (4) Release the claw of the inner panel from each side.

5. Removal of Front P.W.B Board
   (1) Remove the volume knob to detach the nut.
   (2) Remove 13 screws 9.
6. Removal of Main P.W.B Board and Power Transformer
   (1) Detach the connector D to K.
   (2) Remove 4 screws ! from base of the plate and 4 screws ".
   (3) Press and push downwards the P.W.B. support.
   (4) Gently pull the main P.W.B. upwards and remove the Power Transformer.

<table>
<thead>
<tr>
<th>No.</th>
<th>CONNECTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>CN702</td>
</tr>
<tr>
<td>E</td>
<td>CN701</td>
</tr>
<tr>
<td>F</td>
<td>PG301</td>
</tr>
<tr>
<td>G</td>
<td>PG302</td>
</tr>
<tr>
<td>H</td>
<td>PG501</td>
</tr>
<tr>
<td>I</td>
<td>PG601</td>
</tr>
<tr>
<td>J</td>
<td>CN501</td>
</tr>
<tr>
<td>K</td>
<td>PG505</td>
</tr>
<tr>
<td>L</td>
<td>PG602</td>
</tr>
</tbody>
</table>

7. Removal of Amp P.W.B Board
   (1) Remove 1 screw #.
   (2) Remove 4 screws $ from base of chassis.
8. Removal of P.W.B. Holder

(1) Remove 3 screws \( \frac{3}{8} \) to detach the P.W.B. Holder.

Fig. 8

8. Removal of CD Mechanism Assembly

(1) Remove 4 screws \( \frac{1}{4} \) and pull up the CD mechanism.

Fig. 9
Component Side

FL PWB

I/O P.W.B.

AC OUTLET P.W.B.
EXPLODED VIEW (Cabinet Chassis)

- Nos. are reference Nos. of part list
THE UPDATED PARTS LIST
FOR THIS MODEL IS
AVAILABLE ON ESTA