

ROTEL *hi-fi*

RA-970BX

Stereo Integrated Amplifier

Technical Manual

TABLE OF CONTENTS

| | |
|---------------------------------|---|
| Chassis Layout..... | 1 |
| Specifications | 2 |
| Adjustment..... | 2 |
| Wiring Diagram | 3 |
| Printed Circuit Boards | 4 |
| Schematic Diagram | 5 |
| PC Board Ass'y Parts List | 6 |

THE ROTEL CO., LTD.

1-36-8, OHOKAYAMA, MEGURO-KU, TOKYO 152, JAPAN

ROTEL ELECTRONICS CO., LTD.

3F-2, NO.35, FU HSING NORTH ROAD, TAIPEI, TAIWAN, REPUBLIC OF CHINA

MN20002176

SPECIFICATIONS

RA 970BX STEREO INTEGRATED AMPLIFIER

| | |
|--|---|
| Rated power, RMS, FTC* specs (Both channels driven, 20-20,000 Hz, 0.03% THD) | 60 watts (8 ohms) 90 watts (4 ohms) |
| DIN Output (1 kHz, 1% THD) | 80 watts (8 ohms) 100 watts (4 ohms) |
| Total Harmonic Distortion (rated power) | 0.03% |
| Intermodulation Distortion (rated power) | 0.03% |
| Damping factor | 150 (20-20,000 Hz, 8 ohms) |
| Input sensitivity / Impedance (all inputs) | 160 mV / 8 kohms |
| Signal to Noise ratio (all inputs) | > 95 dB (IHF, A network) |
| Frequency response | 10-100,000 Hz +1 dB, -3 dB |
| Tone control response: | |
| Bass | ± 6 dB (100 Hz) |
| Treble | ± 6 dB (10 kHz) |
| Input overload level (all inputs) | 5 volts |
| Power requirement | 115 volts AC 50/60 Hz 230 volts AC 50/60 Hz |
| Power consumption | 300 watts |
| Weight | 6.2 kgs/ 13.6 lbs |
| Dimensions | 440 (w) x 92 (h) x 347 (d) mm 17-3/8" (w) x 3-5/8" (h) x 13-11/16" (d) |

All specifications are accurate at the time of printing. Rotel reserves the right to improvement without notice.

* Measured pursuant to the Federal Trade Commission's Trade Regulation Rule or, Power Claims for Amplifiers (applicable to the U.S.A. only).

Power Amplifier Bias Adjustment

Instruments: DC milli-voltmeter

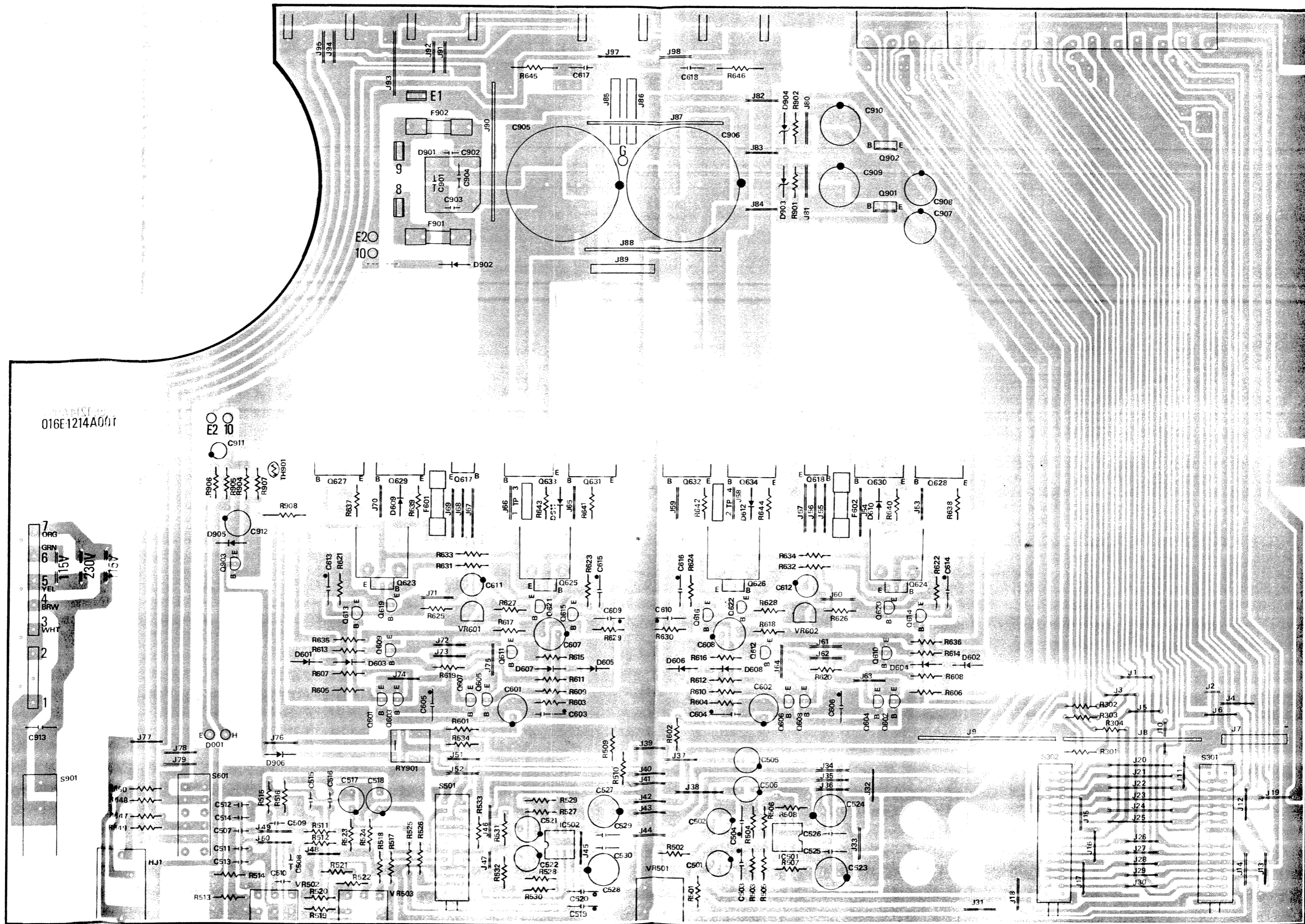
Notes: Prior to Bias Adjustment, run about 5 minutes with rated output (8 ohm) and warm up Power Transistor and Heat Sink.
Set Volume control to minimum.

| Step | Coupling | | Adjust | Adjust for |
|------|-----------|------------|--------|----------------------------------|
| | Plus Lead | Minus Lead | | |
| 1 | TP1 | TP3 | VR601 | DC milli-voltmeter reads 8 mV |
| 2 | TP2 | TP4 | VR602 | |

Parts List

| SYMBOL | PARTS NO. | DESCRIPTION |
|--------|------------|--|
| | | (H, E, Y1, Y2, S1) ⚠ |
| | CD00000085 | AC POWER CORD C-2504A(K1) ⚠ |
| | CD00000115 | AC POWER CORD C-3763-T (G1) ⚠ |
| | AA20000786 | FRONT PANEL 2TQF-1#7 TFP-715 |
| | BU00001145 | POWER RING W/LED 4TQF-13 14x14 |
| | BU00001157 | PUSH BUTTON RING 4TQF-14 5x10 |
| | BU00001169 | KNOB RING 4TQF-17 39F |
| | KB20002681 | POWER BUTTON 4TQF-15 14x14 |
| | KB20002693 | PUSH BUTTON 4TQF-16 5x10 |
| | OM10001272 | ORNAMENTAL SIDE BOARD 4TR-2797#2 H=80MM |
| | OM70000065 | PUSH BUTTON CONNECTOR 4TTL-15 |
| | SN00000179 | BUTTON SPRING 4TR-1988A#2 10F |
| | AU00001201 | TOP COVER POLY 3TTF-5#7 H=80MM |
| | KB10001722 | KNOB 4TQF-18 13F |
| | KB10001734 | KNOB 4TQF-19 24F |
| | KB10001746 | KNOB 4TQF-20 33F (WR) |
| | KB10001758 | KNOB 4TQF-21 33F (WF) |
| | SR00000882 | UPPER COVER SPACER 4TR-2418 |
| | MN10003529 | OWNER'S MANUAL RA-970BX |
| | PL00001051 | STYROL SIDE MOULDING 2TR-2800B TZ-183 |
| | TN10004682 | INSIDE CARTON 4TR-3080#2 |

Printed Circuit Boards



Schematic Diagram

SCHEMATIC DIAGRAM MODEL NO. RA-970BX

