



SECTION 2

SPECIFICATIONS AND PERFORMANCE

2.1 General Specifications

Frequency Response: Hi level $\pm 25\text{dB}$ 10Hz-50KHz; phono level $\pm 25\text{dB}$ of RIAA curve, 20Hz-20KHz.

Hum and Noise: From 20Hz-20KHz Hi level 97dB below rated output, 103dB below rated output A weighted; phono level 87dB below 10mV input, 93dB below 10mV input, A weighted.

Phase Response: Hi level $\pm 12^\circ$ 20Hz-20KHz; phono level $+14^\circ -0^\circ$ 20Hz-20KHz.

Harmonic Distortion: Less than .009% from 20Hz-20KHz maximum, at rated output. Less than .0009% at 1KHz with IHF load. Phono: less than .009% from 20Hz-20KHz.

Intermodulation Distortion (IM): Less than .0025% at rated output; 60Hz and 7KHz 4:1. Phono: Less than .0025% at rated output.

Low Filter: 18dB per octave slope, down 32dB at 10Hz.

Input Impedance: Hi level inputs, 25K ohms; phono level inputs, 47K ohms in parallel with $< 50\text{pf}$.

Phono Gain: Adjustable 30-50dB (33-330mV for rated out).

Input Sensitivity: 250mV applied to hi level input jacks yields full rated output, at full gain of 20dB.

Output Impedance: 600 ohms.

Output Level: Main outputs rated at 2.5V. Phono output rated at 2.5V. Tape outputs carry the same level as the output of the source selected with the input selector. Monitor output same as main output (isolated by 22 ohms).

Controls: Power (on/off), Tape 1, 2 monitor switches, (Rotary) Input Selector (Phono, Tuner Aux 1, Aux 2), Rotary Copy Switch (1 $\rightarrow$ 2, 2 $\rightarrow$ 1, Normal, Phono), Tone Activate switch, detented Treble and Bass controls, center-detented output Balance control, detented Level (gain) control, Loudness switch, Low Filter switch.

Indicators: Amber Power On, Yellow Tone Activate, 2 Green Signal Presence and 2 Red Overload, Yellow Rumble indicator.

Loudness Compensation: Bass compensation matched to ISO curves (Robinson-Dadson) down to 60 phons; tracked to level (gain) control with active network to eliminate unwanted sub-sonic boost.

Muting: Seven second turn-on delay during which outputs are shorted to prevent turn-on noise from components ahead of the Straight Line Two from reaching the speakers.

Power Requirements: Operates on any of five line voltages: 100, 120, 200, 220 and 240 VAC ($\pm 10\%$) at frequencies of 50Hz, 60Hz or 400Hz. Total accessory AC outlet consumption is rated at 1200 watts.

Fuse Size: $\frac{1}{8}$ amp, 120 VAC

Finish: Two finishes are available: a black polyester vinyl coated aluminum front panel (shown in this manual) or brushed and satinized aluminum front panel.

Dimensions: 19 inches (48.3cm) standard rack mount, $1\frac{3}{4}$ " (4.4cm) high and $11\frac{1}{2}$ " (29.2cm) deep from mounting surface of front panel.

Net Weight: Approximately 11 pounds (5kg).

2.2 Performance Graphs

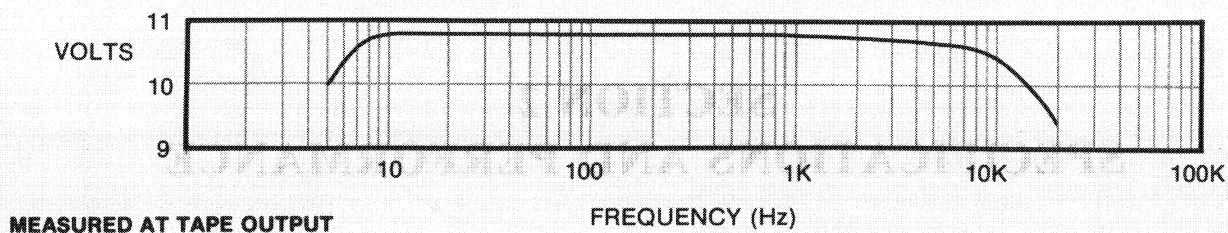


Fig. 2.1 Phono Level Maximum Output into IHF Load

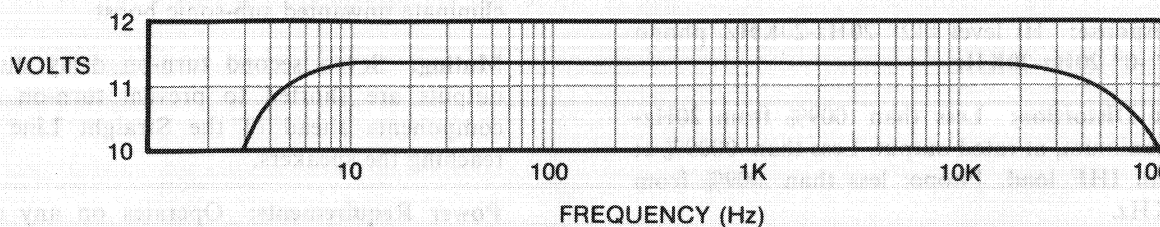


Fig. 2.2 High Level Maximum Output into IHF Load

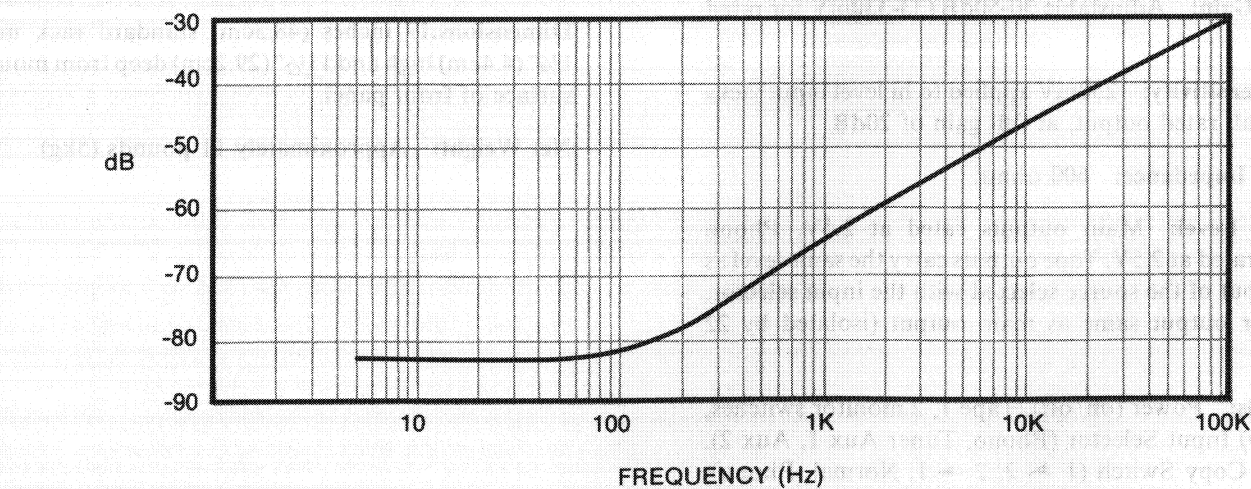


Fig. 2.3 Stereo Separation (Worst Case)

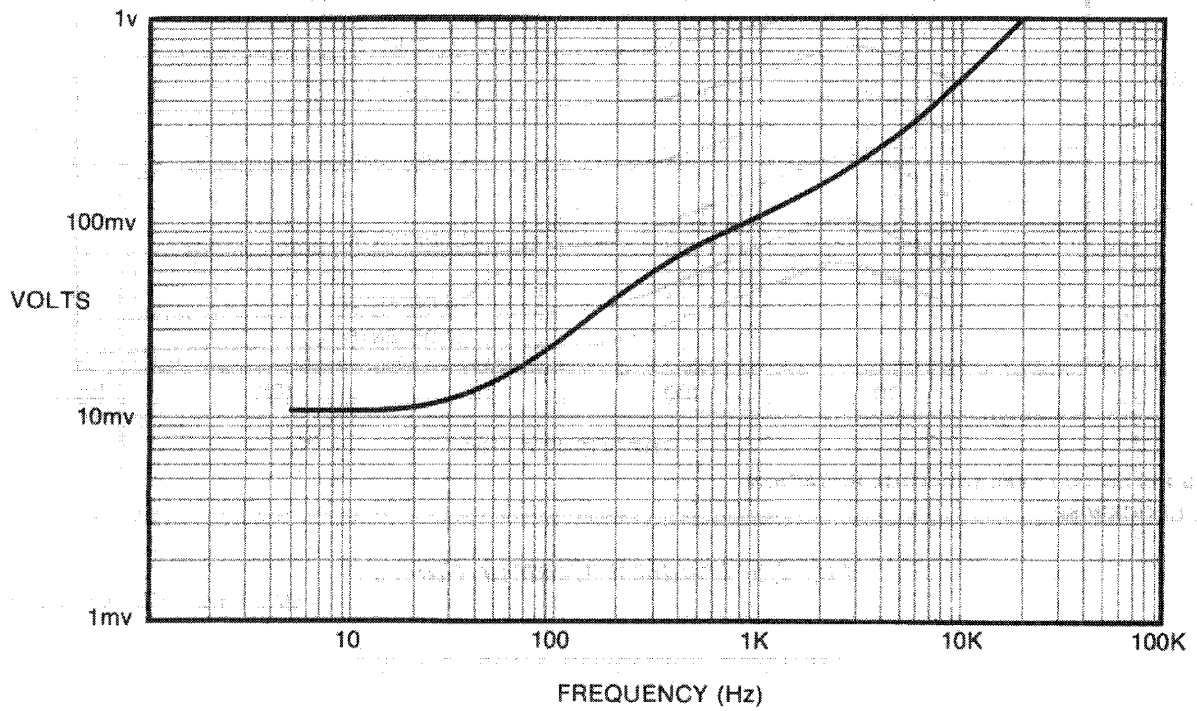
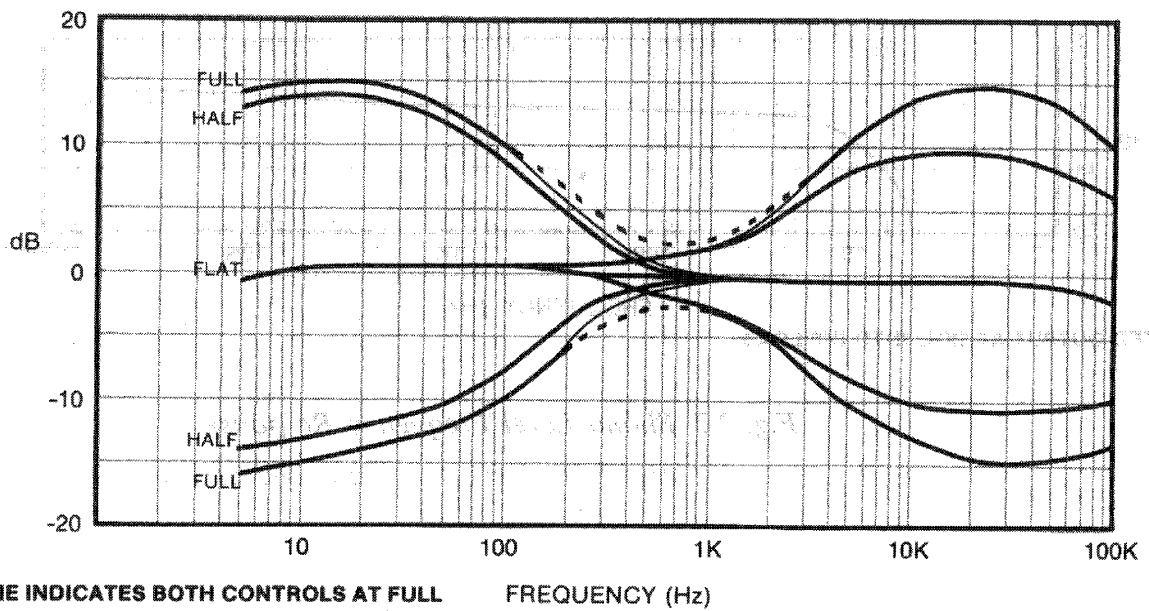
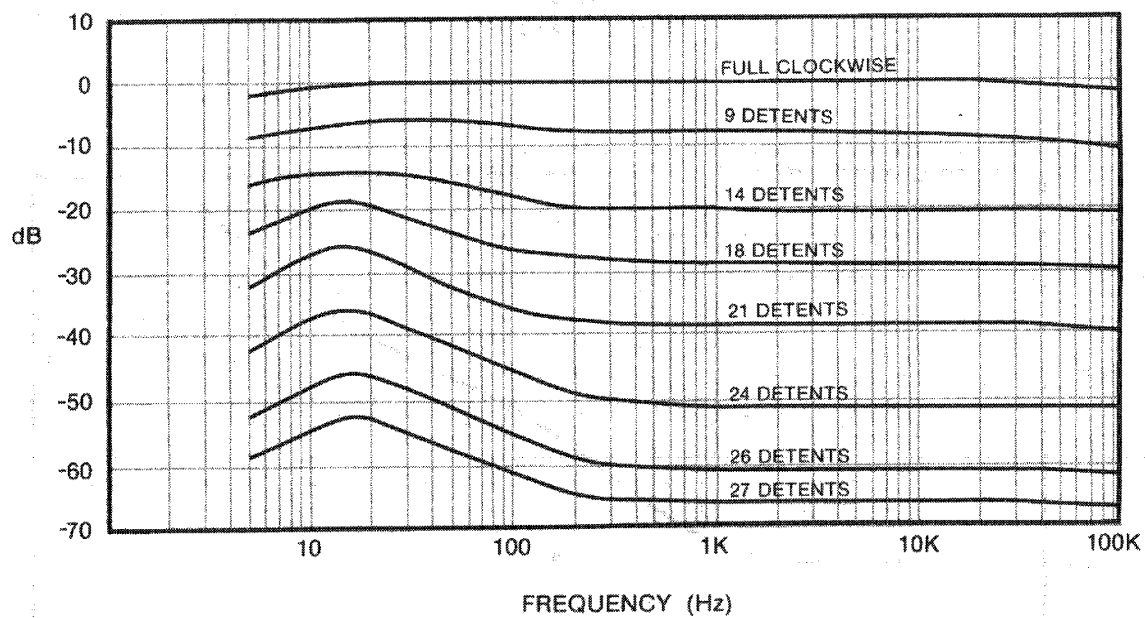


Fig. 2.4 Input Voltage for Phono at Maximum Output



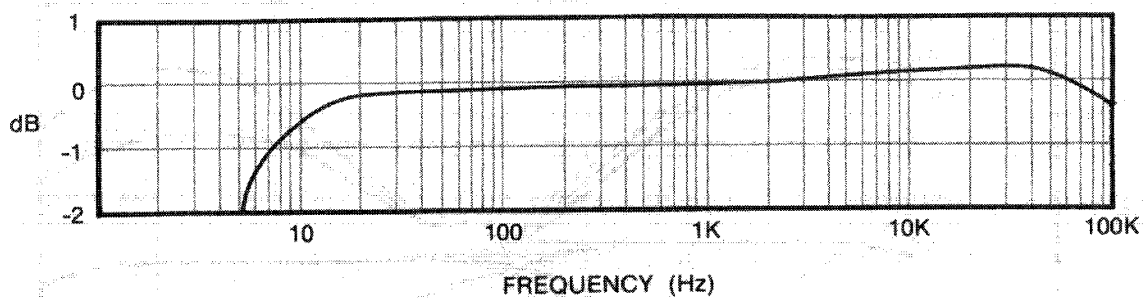
DASHED LINE INDICATES BOTH CONTROLS AT FULL CUT (LOWER)/BOOST (UPPER)

Fig. 2.5 Typical Tone Control Curves



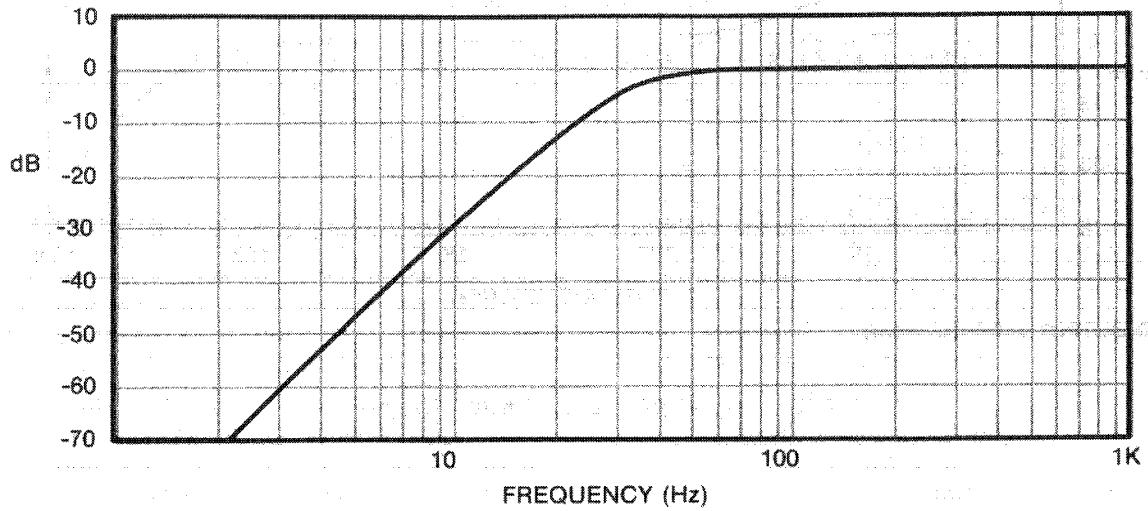
DETENTS REFER TO LEVEL CONTROL ROTATION
AT FULL CLOCKWISE

Fig. 2.6 Loudness Contour Curves



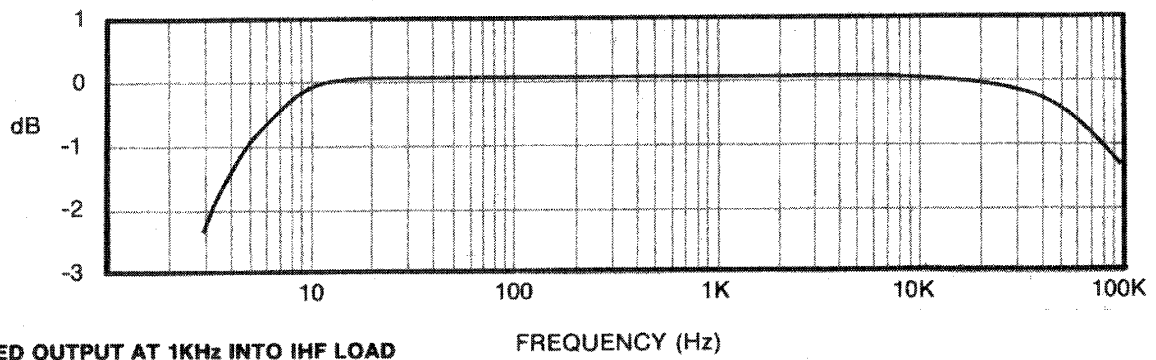
RATED OUTPUT AT 1KHz INTO IHF LOAD

Fig. 2.7 Phono Level Frequency Response



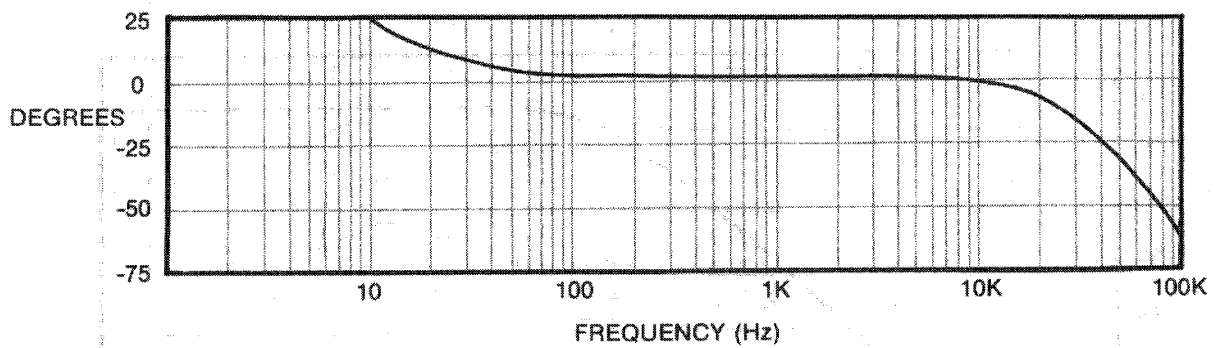
RATED OUTPUT INTO IHF LOAD

Fig. 2.8 Filter Frequency Response



RATED OUTPUT AT 1KHz INTO IHF LOAD

Fig. 2.9 High Level Frequency Response



RATED OUTPUT INTO IHF LOAD

Fig. 2.10 High Level Phase Response



SECTION 3 INSTALLATION AND OPERATION

3.1 Unpacking

As soon as the unit is received, please inspect for any damage incurred in transit. Since the unit was carefully inspected and tested at the factory, it left unmarred. If damage is found, notify the transportation company immediately. Only the consignee may institute a claim with the carrier for damage during shipment. However, Crown will cooperate fully in such an event. Be sure to save the carton as evidence of damage for the shipper's inspection.

Even if the unit arrived in perfect condition, as most do, it is advantageous to save the packing materials. They will prove valuable in preventing damage should there ever be occasion to transport or ship the unit. Note the carton and internal pack - each is designed for protection during transit. **DO NOT SHIP THE UNIT WITHOUT THIS FACTORY PACK!**

3.2 Accessories Supplied

The Straight Line Two comes complete with the following:

1. One Instruction Manual
2. One Hardware Kit:
 - a. four cable ties
 - b. shorting input plugs
 - c. two pin-pin cables
 - d. four nylon thumb screw washers

3.3 Mounting

The Straight Line Two may be mounted in either a Crown walnut cabinet (other hardwoods available upon request) or a customized cabinet of your own design. In each case, standard 19" width spacing should be utilized as shown in Fig. 3.1. In most situations, use of vented panels in the top and bottom of the outside cabinet will be adequate ventilation for the Straight Line Two.

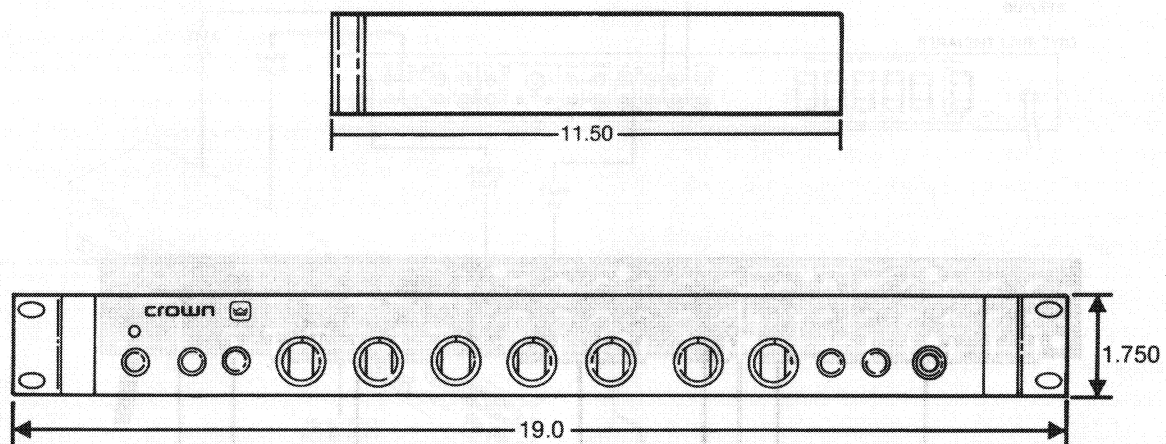


Fig. 3.1 Straight Line Two Mounting Dimensions

However, should power amplifiers be mounted in the same cabinet special attention to ventilation may become necessary (see amplifier instruction manual).

3.4 Operating Precautions

The following are number of operating precautions given as an aid to understanding proper and improper preamplifier usage:

1. Use care in making connections, selecting signal sources, and laying out overall connection schemes. Crown is not liable for any damage due to overdriving sensitive inputs.
2. Never connect the output of a power amplifier to the input of the Straight Line Two.

3. Operate the preamplifier from AC mains not more than 10% above or below the selected line voltage, and only at 50, 60 or 400Hz. Failure to comply with these limits will void the warranty.

4. When using input sources of uncertain level, or any audio components which have not previously been used with the Straight Line Two, always begin with the Level control at a minimum and gradually increase it while monitoring the audio output. Remember that the turn-on delay mutes the output for a brief period. If a loud blast is fed to the amplifier and speakers, Crown is not liable for any resulting damage.

3.5 Controls and Adjustments

The following paragraphs refer to front and rear panel diagrams (Fig. 3.2 and 3.3).

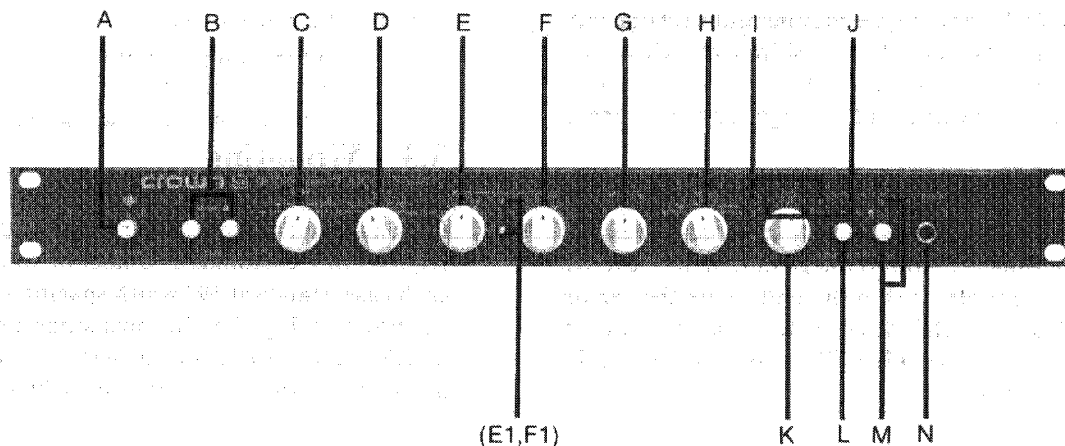


Fig. 3.2 Straight Line Two Front Panel

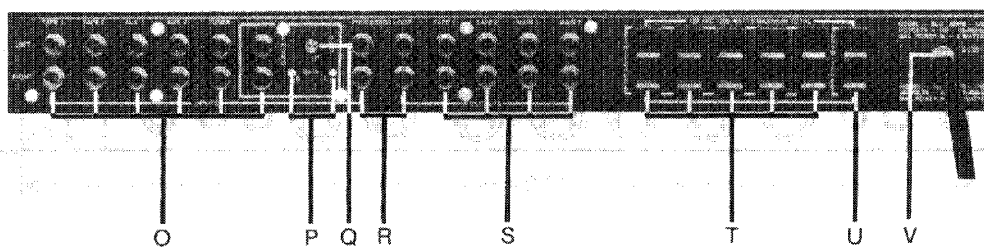


Fig. 3.3 Straight Line Two Rear Panel