

**DERIVED CENTER CHANNEL OUTPUT** - For feeding an output composed of mixture of the left and right channel signals to a third power amplifier, driving either a remote speaker (or speakers), or a speaker for stereo "center-fill".

**SWITCHED AC OUTLET** - For supplying power to devices such as power amplifiers and tuners,

which may then be controlled by the power switch on the Preamplifier.

**NORMAL AC OUTLET** - For supplying power to devices such as record changers or tape decks, which may be subjected to damage if power is removed without shutting off the mechanism.

## OPERATION

### INPUT LEVEL CONTROLS

After making all input connections, the INPUT LEVEL controls should be adjusted for approximately equal volume levels as the push-buttons are depressed, switching from one input to another.

- ( ) Set the VOLUME control at midpoint; and the OFF-ON pushbutton ON (depressed).
- ( ) Adjust all the INPUT LEVEL CONTROLS to their maximum clockwise position, viewed from the bottom of the chassis through the holes in the bottom plate.

NOTE: If your system includes a TAPE HEAD input, follow the procedure given in A. If your system does not include a TAPE HEAD input, follow the procedure given in B.

- A. No level controls are provided for the TAPE HEAD inputs. This is because, generally, the signal from the tape head will be lower in level than that from the magnetic phono pickup. Therefore, the PHONO LEVEL CONTROLS and all the other level controls should be adjusted to match that of the tape head level.
- B. With the VOLUME control at midpoint, depress the PHONO button. Adjust the PHONO level control to a desirable listening level. Adjust all the other level controls to match that of the PHONO. Each level control, previously adjusted to its minimum value, should be turned until the same comparative level as the PHONO is reached.

### FRONT PANEL CONTROLS

The Preamplifier controls may be thought of as being in two groups; a primary group and a

secondary group. The primary group is composed of the VOLUME, BASS and TREBLE controls and the 9-pushbutton switch. The secondary group, under the control panel cover, is composed of the BLEND, and BALANCE controls and the VOLUME-LOUDNESS, SCRATCH FILTER, RUMBLE FILTER, MODE, PHASE and CHANNEL REVERSE switches. The primary controls offer maximum flexibility of operation with a minimum of control complexity. The secondary controls offer the means for correcting any deficiencies existent in program material. The function of each control is explained in the following sections.

#### PRIMARY GROUP:

##### VOLUME -

It is of dual-tandem construction, allowing the listening levels of both channels to be adjusted simultaneously. Maximum volume is obtained when the knob is rotated clockwise.

##### BASS AND TREBLE -

Each of these controls has two knobs that are concentrically clutched. Rotating the larger inner knob (clear plastic) of either control also rotates the smaller outer knob (black) of that control; therefore, the tonal response is simultaneously varied by the same amount in both channels.

If it is desired to introduce different tonal response (either in bass response or in treble response) in the left and right channels, the two concentric knobs of either control may be individually adjusted by holding one knob stationary while turning the other to any desired position of boost or cut.