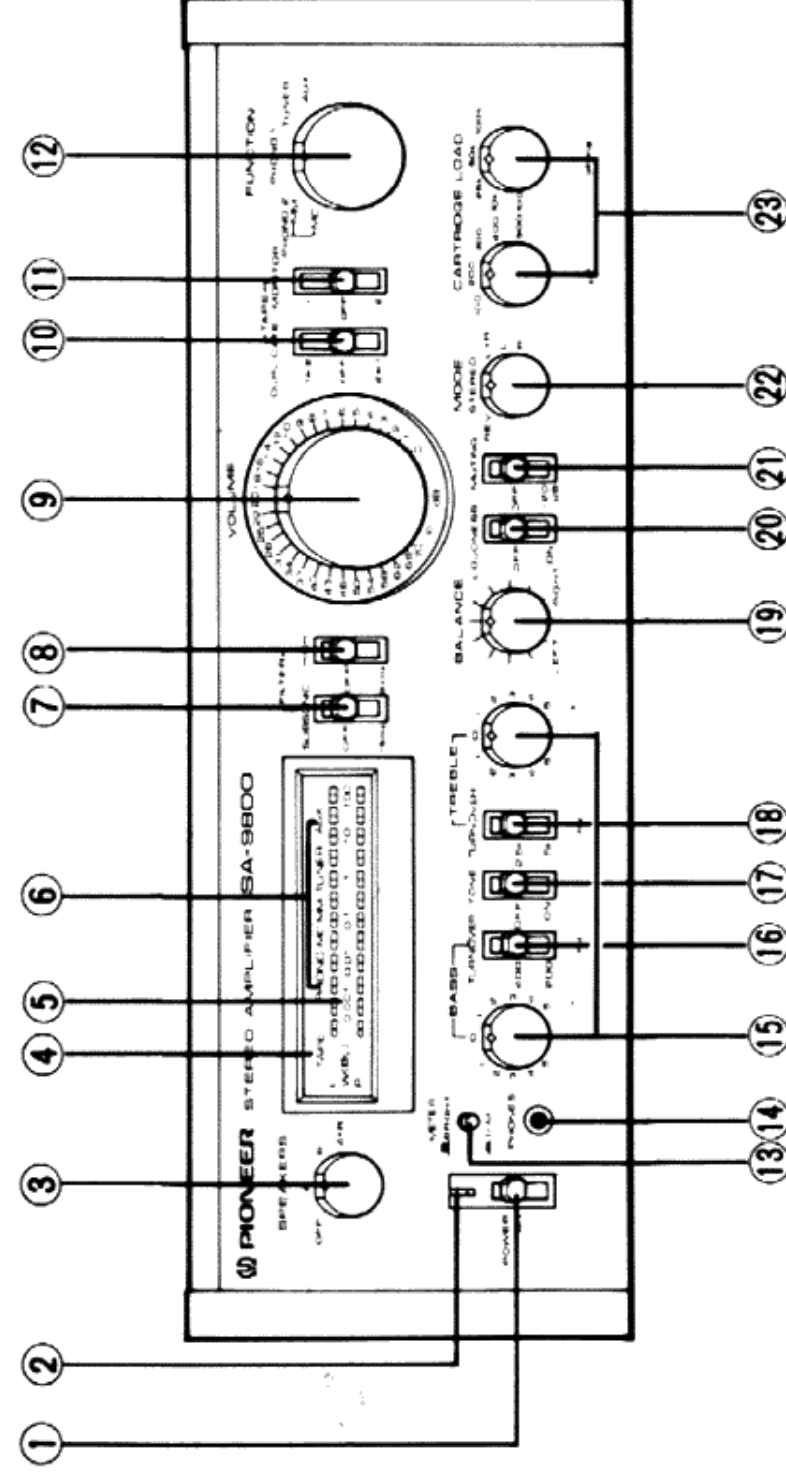


2. FRONT PANEL FACILITIES



① POWER SWITCH

Set this switch to ON to supply power to the amplifier. There will be a short delay when it is set to ON, because the muting circuit has been actuated to suppress the unpleasant noise that is sometimes generated when the power is on and off.

② POWER INDICATOR

When the power switch is set to ON, this lamp lights up, indicating the amplifier is turned on.

③ SPEAKER SELECTOR

Use this selector to select the speaker systems.

OFF: Sound not obtained from speakers.

A: Sound obtained from speakers connected to the A speaker terminals.

B: Sound obtained from speakers connected to the B speaker terminals.

A+B: Sound obtained from speakers connected to both A and B speaker terminals.

④ TAPE MONITOR INDICATOR

The TAPE lamp lights up when the tape monitor switch is set to either position "1" or "2".

⑤ POWER METER

This meter allows you to read out the rated power level on the fluorescent display tube when speakers with a nominal impedance of 8 ohms are connected to the amplifier's speaker terminals.

⑥ FUNCTION INDICATORS

The PHONO, MC, MM, TUNER, AUX function indicators light up in accordance with the position of the function selector.

NOTE:

The function indicator will not go off when the tape monitor switch is set to position "1" or "2". This indicates a program at the recording source end during the monitoring of a recording.

⑦ SUBSONIC FILTER SWITCH

When this switch is set to the 15Hz position, the subsonic filter with a cut-off frequency of 15Hz is actuated. The subsonic filter serves to attenuate frequencies lower than 15Hz in a 12dB/oct slope. It is therefore effective in suppressing ultra-low frequency noise which is generated by record warp and other causes. You cannot actually hear this noise but it is a factor in the generation of intermodulation distortion and it may damage your speaker system. Set this switch to the 15Hz position during record play for the best effect.

⑧ HIGH FILTER SWITCH

The high filter with a cut-off frequency of 8kHz is actuated when this switch is set to the 8kHz position.

The high filter serves to attenuate frequencies higher than 8kHz in a 12dB/oct slope. This is why it is effective in suppressing high-frequency noise or noise from scratches on records being played.

⑨ VOLUME CONTROL

Use this control to adjust the output level to the speakers and headphones. Turn it clockwise to increase the output level. No sound will be heard if you set it to ∞ . The scale is graduated in dB which indicate the attenuation when the maximum output level is 0dB.

⑩ TAPE DUPLICATE SWITCH

Use this switch when employing two tape decks to duplicate recorded tapes or edit tapes. This switch is otherwise kept at the OFF position.

1►2: When playing back the tape on a deck connected to the TAPE 1 jacks and recording (duplicating) on a deck connected to the TAPE 2 jacks.

OFF: Set to this position when not duplicating.

2►1: When playing back the tape on a deck connected to the TAPE 2 jacks and recording (duplicating) on a deck connected to the TAPE 1 jacks.

⑪ TAPE MONITOR SWITCH

Use this switch to select the program source which is being reproduced.

1: Set here to monitor a recording or a tape being played back on a tape deck which is connected to the TAPE 1 jacks.

OFF: Set here whenever you are not playing back a tape or monitoring a recording (i.e. when you have set the function selector to PHONO 1, PHONO 2 MM, MC, TUNER, or AUX for an alternative program source).

2: Set here to monitor a recording or a tape being played back on a tape deck which is connected to the TAPE 2 jacks.

⑫ FUNCTION SELECTOR

Use this selector to select the program source. When set, the function indicator above the meter panel corresponding to the position of the function selector will light up.

PHONO 2 MC: Set here when playing records on a turntable with a moving coil (MC) cartridge connected to the rear PHONO 2 jacks.

(The PHONO MC function indicator lights up.)

PHONO 2 MM: Set here when playing records on a turntable with a moving magnet (MM) cartridge connected to the rear PHONO 2 jacks.

(The PHONO MM function indicator lights up.)

PHONO 1: Set here when playing records on a turntable connected to the PHONO 1 jacks. (The PHONO MM function indicator lights up.)

If you intend to play a record on a turntable with a moving coil cartridge, connect the turntable to the rear PHONO 2 jacks and then set the function selector to the PHONO 2 MC position.

TUNER: Set here when listening to broadcasts on a tuner connected to the TUNER jacks. (The TUNER function indicator lights up.)

AUX: Set here when listening to a program source which is connected to the AUX jacks.

(The AUX function indicator lights up.)

NOTE:

When the function selector is set to the PHONO 2 MM or PHONO 1 position, you can select the input circuit resistance and the input capacitance in line with the load impedance of the cartridge being used with the CARTRIDGE LOAD selectors (ohms and pF).

⑬ METER SWITCH

This allows you to select the brightness of the meter panel.

BRIGHT (released position): This brightens the meter panel.

DIM (depressed position): This dims the meter panel. When your listening room is dark and the meter panel is too bright, set the switch to the DIM position.

⑭ HEADPHONE JACK

Plug the headphones into this jack when you want to listen through your stereo headphones.

NOTE:

Set the speaker selector to OFF when listening only with headphones.

⑮ BASS AND TREBLE CONTROLS

Use these controls to adjust the bass and the treble. If you set the tone switch to ON and turn the bass control to right from its center position, you will be able to emphasize the sound in a frequency range is lower than that selected by the bass turnover switch.

Conversely, turning this control from the center position to the left will attenuate the sound.

You can use the treble control to adjust the sound in a frequency higher than that selected by the treble turnover switch. For further details, refer to "TURNOVER SWITCHES" on page 6.

⑯ BASS TURNOVER SWITCH

Use this switch to change over the frequency in which the sound adjustment with the bass control is starting to take effect. Select 200Hz or 400Hz in accordance with the characteristics of your listening room and of your speakers, and with your general preference.

⑪ TONE SWITCH

Set this switch to ON when adjusting the bass and treble controls. When set to OFF, the tone control circuits are disengaged and frequency response is flat. This function is convenient for checking phono cartridge and speaker tone quality and listening room acoustics.

⑫ TREBLE TURNOVER SWITCH

Use this switch to change over the frequency in which the sound adjustment with the treble control is starting to take effect. Select 2.5kHz or 5kHz in accordance with the characteristics of your listening room and of your speakers, and with your general preference.

⑬ BALANCE CONTROL

Use this control to balance the volume of the left and right channels. First, however, set the mode selector to mono (L+R, L, or R), and adjust so that the sound appears to come from somewhere exactly between the two speakers. If the sound appears to be louder on the right, it means that the volume of the right channel is higher. Turn the balance control to the left and adjust.

Conversely, if the sound appears to be louder on the left, it means that the volume of the left channel is higher. Therefore, turn the balance control to the right and adjust. After adjusting, return the mode selector to STEREO.

⑭ LOUDNESS SWITCH

When listening to a performance with the volume control turned down, set this switch to ON and the bass and treble will be accentuated.

When the volume is low, the human ear finds it harder to hear the bass and treble than when the volume is high. The loudness switch is thus designed to compensate for this deficiency. By setting it to ON, the bass and treble come through much more strongly and the sound takes on a punch even when the volume control is turned down.

⑮ MUTING SWITCH

Set this switch to -20dB to attenuate the audio output indicated by the volume control by 20dB. There is no need to adjust the volume control if you use this switch when turning down the audio output temporarily and when changing over records or tapes.

⑯ MODE SELECTOR

Use this selector for selecting the performances.

REV: Reverses left and right channel stereo signals and reproduces them stereophonically.

STEREO: Set to this position for normal stereo reproduction.

L+R: Mixes left and right channel signals and reproduces them monophonically.

L: Left channels signal is reproduced monophonically from both speakers.

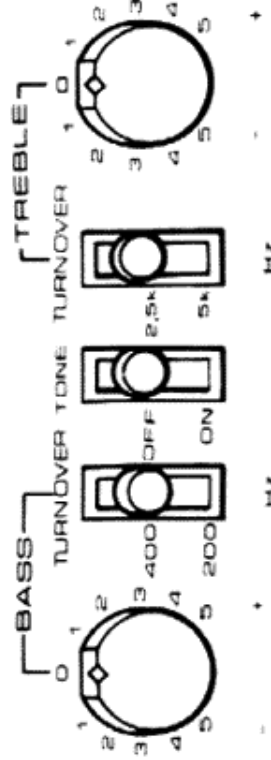
R: Right channel signal is reproduced monophonically from both speakers.

⑰ CARTRIDGE LOAD SELECTORS (ohms and pF)

These selectors allow you to select the input resistance and input capacitance in line with the rated load impedance and load capacitance of a moving magnet (MM) cartridge for record play.

Use these two switches to produce the sound quality of your preference or the ideal conditions for your cartridge.

TURNOVER SWITCHES



This amplifier adopts a tone control system that combined bass and treble controls with two turnover switches which are used to select the frequency. Select the frequency with the turnover switches and then enhance or attenuate the sound in the lower (or higher) frequencies with the bass (or treble) controls.

For instance, if the bass turnover switch is set to 400Hz (see Fig. A), the bass covers a wide with large gain per step of the bass control. For this reason, the reproduced sound sometimes seems unnatural depending on the program source, but this can be remedied by setting the switch to 200Hz.

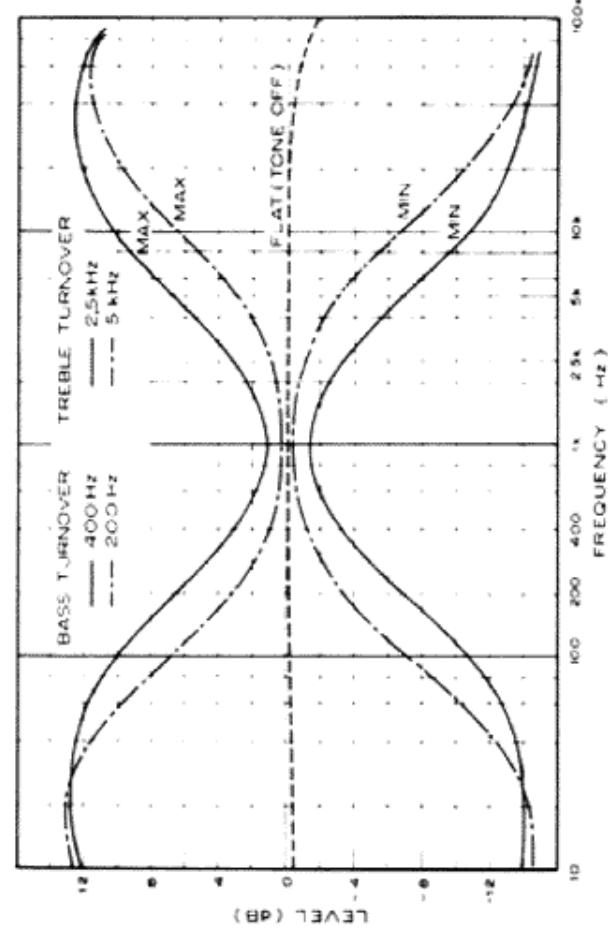


Fig. A