

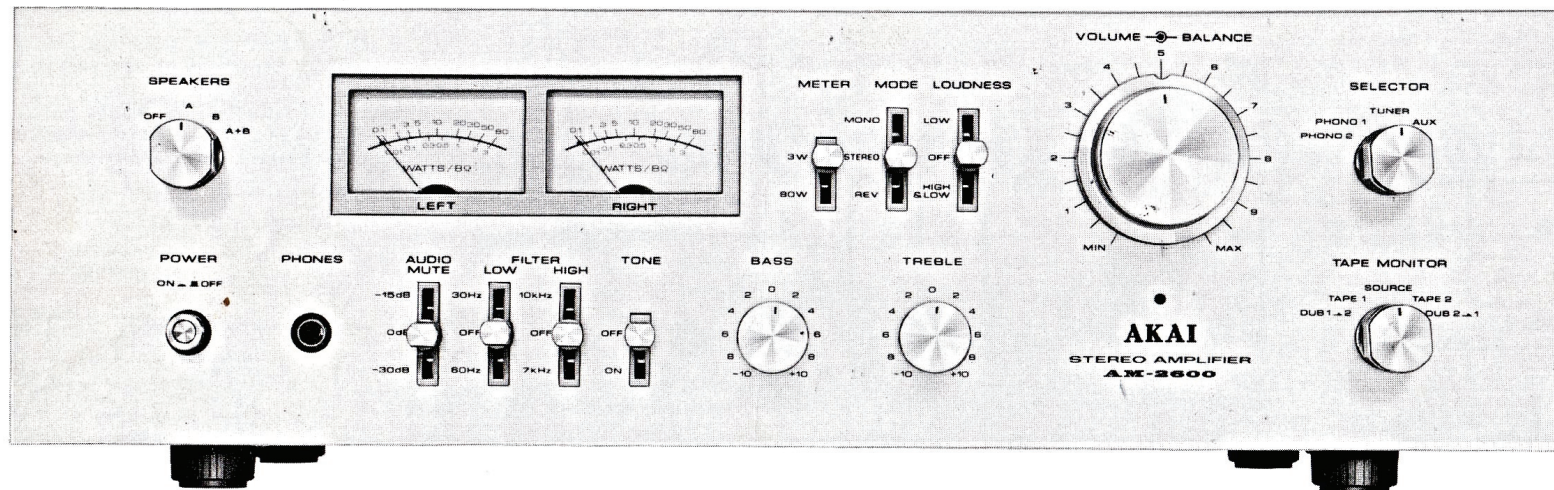
# AM-2600

## STEREO PRE-MAIN AMPLIFIER

### *Operator's Manual*

**WARNING:**  
THIS APPARATUS MUST BE EARTHED.

**240V, 50 Hz**



**IMPORTANT:**

The wires in this mains lead are coloured in accordance with the following code:

Green-and-yellow: Earth, Blue: Neutral, Brown: Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol  $\perp$  or coloured green or green-and-yellow.

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black. The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

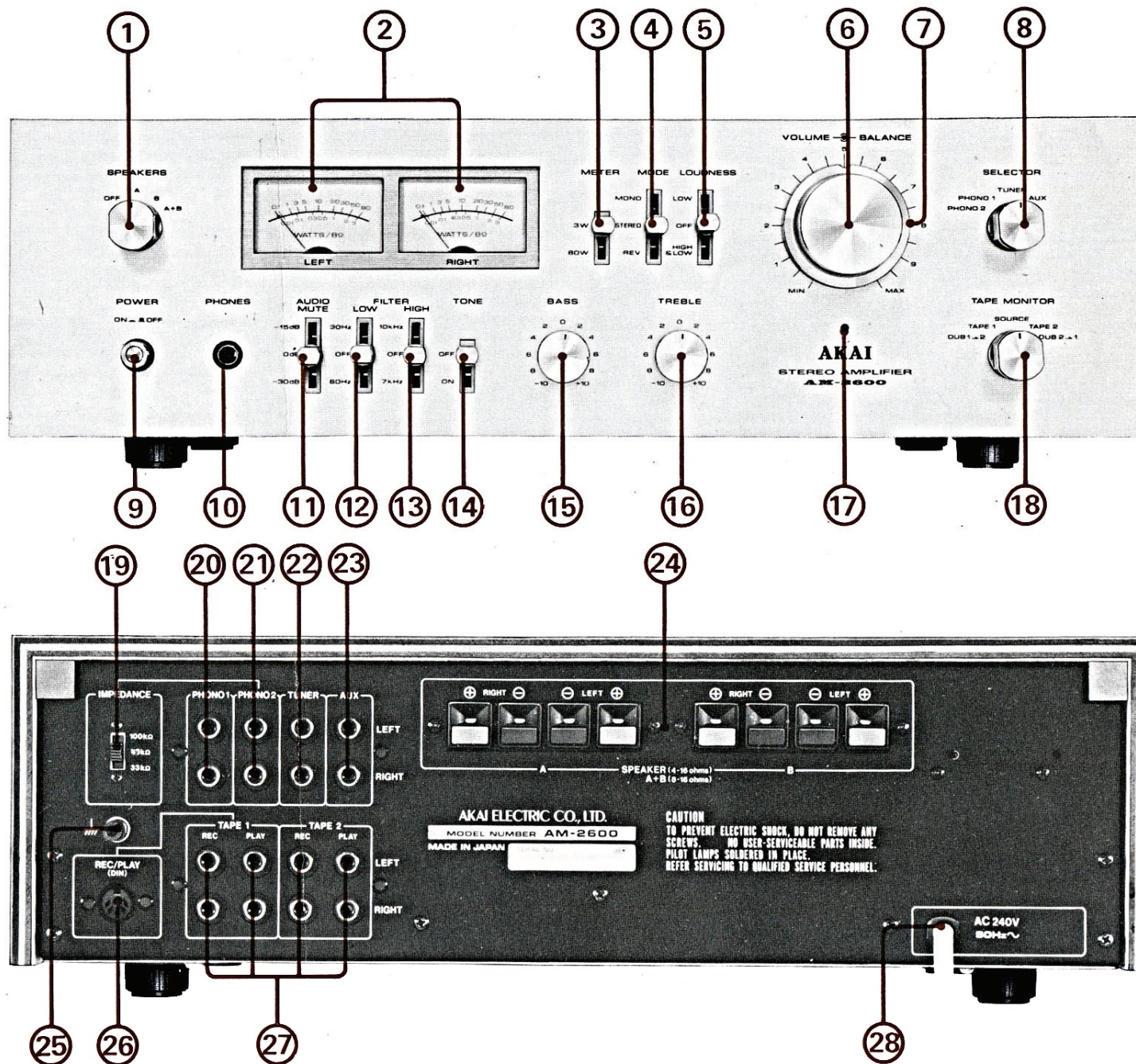
# AKAI

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# CONTROLS

## NOTES:

- Avoid using your machine in extremely hot or humid places.
- Place unit for proper ventilation and do not block the ventilator.
- Your machine incorporates an electronic protection circuit. In the event there is a short from the amplifier to the speaker outputs, or when the output is excessively high, this circuit will automatically be activated to protect the power transistors. When the output is excessively high, the output will be interrupted within 3 seconds. In such an instance, turn off power and readjust controls. When there is a short from the amplifier to the speakers, a successive clicking sound will be heard until correct connection is made.



## 1. SPEAKER SYSTEM SELECTOR

A: For output from speakers when utilizing A System speaker terminals.

B: For output from speakers when utilizing B System speaker terminals.

A+B: For output from both A and B Speaker Systems.  
\* Set to this position only when both systems are connected.

OFF: Cuts sound from speakers. Use this setting for private headphone listening.

\* A and B System accommodates speakers of 4 to 16 ohms impedance, but if both systems are used simultaneously, speakers of 8 to 16 ohms must be used.

## 2. OUTPUT POWER LEVEL METERS (Left and Right)

Indicates output power level. For upper scale indication, set Meter Switch to 80W position, and for lower scale indication, set Meter Switch to 3W position.

## 3. METER SWITCH

Sets meters for output level indication.

3W: For 0.01 to 3W meter indication.

80W: For 0.1 to 80W meter indication.

## 4. MODE SWITCH

MONO: Left and right channel source signals are mixed and emitted from both the left and right speakers.

STEREO: Left and right channel source signals are separated and emitted from left and right speakers respectively.

REV: Reverses left/right speaker output.

## 5. LOUDNESS SWITCH

When listening at a low volume level, the range audible by the human ear is limited. The loudness circuit supplements this range by boosting the bass or bass and treble response. Set this switch to LOW position to boost bass at low volume, and to HIGH & LOW position to boost bass and treble at low volume.

## 6. VOLUME CONTROL

For volume adjustment. Turning clockwise increases volume.

## 7. STEREO BALANCE CONTROL

For left and right speaker balance. Turning clockwise increases the volume of the right channel while decreasing the volume of the left channel and vice versa. Output of left and right channel is equal when set to "5" position.

## 8. INPUT SELECTOR

PHONO 1: For input from turntable connected to rear panel PHONO 1 terminals.

PHONO 2: For input from turntable connected to rear panel PHONO 2 terminals.

TUNER: For input from tuner connected to rear panel TUNER terminals.

AUX: For input from tape deck or other external source connected to the rear panel AUX terminals.

## 9. POWER SWITCH

## 10. HEADPHONE JACK

Accommodates 8 ohm low impedance type stereo headphones for monitoring or private headphone listening.

## 11. AUDIO MUTE SWITCH

Setting this switch to -15 dB or -30 dB position reduces volume by those respective amounts. Returning to 0 dB position restores preset volume level.

## 12. LOW FILTER SWITCH

Aids in elimination of low frequency disturbances such as turntable rumble, etc. Set to 30 Hz or 60 Hz position as required. Use only when necessary.

## 13. HIGH FILTER SWITCH

Aids in elimination of high frequency surface noise such as noise caused by nearby appliances, noise from old or worn tapes, or phonograph record scratch, etc. Set to 7 kHz or 10 kHz position as required. Use only when such noise exists.

## 14. TONE SWITCH

Set to ON position for tone control adjustment, and to OFF position when tone control is not desired.

\* When this switch is at OFF position, Bass and Treble Controls have no effect.

## 15. BASS TONE CONTROL

For low range frequency response control. Set Tone Switch to ON position and adjust as required.

## 16. TREBLE TONE CONTROL

For high range frequency response control. Set Tone Switch to ON position and adjust as required.

## 17. POWER INDICATOR LAMP

Lights when power source is being received.

## 18. TAPE MONITOR SWITCH

TAPE 1: Set to this position to monitor playback of tape deck or recorder connected to rear panel Tape 1 System terminals.

TAPE 2: Set to this position to monitor playback of tape deck or recorder connected to rear panel Tape 2 System terminals.

DUB 1 → 2: Set to this position when dubbing from Tape 1 to Tape 2 System.

DUB 2 → 1: Set to this position when dubbing from Tape 2 to Tape 1 System.

SOURCE: Set to this position to monitor source connection.

## 19. IMPEDANCE SWITCH

Sets PHONO 2 terminals to correspond with output impedance of turntable being used.

## 20. PHONO 1 TERMINALS

Connects to outputs of magnetic cartridge type turntable.  
\* Do not connect a crystal or ceramic type pick-up turntable to PHONO 1 or PHONO 2 terminals. When using this type of turntable, employ the AUX Jacks.

## 21. PHONO 2 TERMINALS

Connects to outputs of magnetic cartridge type turntable.  
Set Impedance Switch at left to correspond with output impedance of the turntable being used and then connect turntable.

## 22. TUNER TERMINALS

Connects to tuner outputs.

## 23. AUX TERMINALS

For connection of relatively high output components such as a tape deck or recorder.

## 24. A AND B SYSTEM SPEAKER TERMINALS

These push-button speaker terminals facilitate easy speaker connection. A and B System accommodates speakers of 4 to 16 ohms impedance. However, if both A and B Systems are used simultaneously, speakers of 8 to 16 ohms impedance must be used.

1. Strip about a 1 cm length of vinyl covering from end of speaker cord.

2. Push respective button and insert in terminal.

3. Be sure to match plus and minus and left and right. If plus and minus terminals are reversed, poor and unnatural sound will result.

## 25. GROUND TERMINAL

Connect a cable from this terminal to a deeply buried underground bar.

\* Do not connect to a gas line, etc.

## 26. TAPE 1 SYSTEM DIN JACK

This one-cord connection can be used instead of Tape 1 System REC/P.B. terminals.

## 27. TAPE 1 AND TAPE 2 SYSTEM REC/P.B. TERMINALS

For connection to a tape deck or recorder for recording/playback.

REC: Connects to inputs of tape deck for recording.

P.B. (PLAY): Connects to outputs of tape deck for playback.

\* Refer to TAPE DECK OR RECORDER CONNECTIONS AND TAPE DUBBING procedures.

## 28. AC CORD

## 1. SPEAKER SYSTEM SELECTOR

- A: For output from speakers when utilizing A System speaker terminals.
- B: For output from speakers when utilizing B

## RECORD PLAYBACK

With MM (moving magnet) or IM (induced magnet) type cartridge turntable connected to rear panel PHONO 1 or PHONO 2 terminals.

- A. Turn Volume Control to minimum and turn on Power Switch.
- B. Set Input Selector to PHONO 1 or PHONO 2 according to connection.
- C. Set Tape Monitor Switch to SOURCE.
- D. Set Mode Selector to STEREO or MONO position according to record.
- E. Set player to play mode and adjust Volume and Tone Controls.

Caution: Do not connect a crystal or ceramic pick up record player to PHONO 1 or PHONO 2 terminals. When using this type of turntable, employ the AUX Jacks and set Input Selector to AUX.

- \* When a pick-up ground line is available, connect to the Ground terminal.
- \* Avoid placing player too close to the speaker system. If placed too close, transmission of vibration from the speakers will cause howling.
- \* Confirm that connections are complete and thickness of wire sufficient. Incorrect or incomplete wiring is, in some cases, the cause of hum.
- \* If poor tone quality or noisy sound exists during record playback, check for worn stylus. If stylus is worn, replace immediately. Stylus and record must also be clean, and stylus pressure properly set.

## TUNER PLAYBACK

Connect outputs of tuner to rear panel TUNER terminals.

- A. Turn Volume Control to minimum and turn on Power Switch.

- B. Set Input Selector to TUNER.
- C. Set Tape Monitor Switch to SOURCE.
- D. Set Mode Selector as required.
- E. Set tuner to receive FM or AM broadcast.
- F. Adjust Volume and Tone Controls.

## 9. POWER SWITCH

## 10. HEADPHONE JACK

Accommodates 8 ohm low impedance type stereo head-

## TAPE DECK OR RECORDER CONNECTIONS

Connect inputs of tape deck or recorder to corresponding left and right Tape 1 and Tape 2 System REC terminals for stereo recording, and connect outputs to corresponding left and right Tape 1 and Tape 2 System P.B. (PLAY) terminals for stereo playback. (Refer to CONNECTIONS)

### Playback

- A. Turn Volume Control to minimum and turn on Power Switch.
- B. Set Tape Monitor Switch to TAPE 1 or TAPE 2 position according to connection.
- C. Set Mode Selector to STEREO.
- D. Set deck to playback mode.
- E. Adjust Volume, Tone, and Stereo Balance Controls.
  - \* For monaural playback, set Mode Selector to MONO.
  - \* To reverse left/right speaker output during stereo playback, set Mode Switch to REV.
  - \* For recording, set Tape Monitor Switch to SOURCE, set Input Selector according to source, and set deck or recorder connected to REC terminals to recording mode.
  - \* The DIN Jack can be used instead of Tape 1 REC/P.B. terminals for recording or playback. However, do not connect machines to both Tape 1 REC/P.B. terminals and the DIN Jack during Tape 1 System playback.
  - \* By employing both Tape 1 and Tape 2 Systems, simultaneous recording can be accomplished.
  - \* The AUX terminals can also be used for playback. In this case, set the Tape Monitor Switch to SOURCE, and set the Input Selector to AUX.

## TAPE DUBBING

### From Tape 1 to Tape 2 System

Set tape deck connected to Tape 1 System terminals to playback mode and set tape deck connected to Tape 2 System terminals to recording mode. Set Tape Monitor Switch to DUB 1 → 2 position.

- \* Do not connect a machine to both Tape 1 terminals and the DIN Jack at this time.

## 21. PHONO 2 TERMINALS

Connects to outputs of magnetic cartridge type turntable.

Set Impedance Switch at left to correspond with output

### From Tape 2 to Tape 1 System

Set tape deck connected to Tape 2 System terminals to playback mode and set tape deck connected to Tape 1 System terminals to recording mode. Set Tape Monitor Switch to DUB 2 → 1 position.

Caution: Set Tape Monitor Switch to DUB 1 → 2 or DUB 2 → 1 only when dubbing to and from Tape 1 and Tape 2 Systems.

### Using AUX Jacks

Set machine connected to AUX terminals to playback mode, and set deck connected to Tape 1 or Tape 2 System terminals to recording mode. Set Input Selector to AUX position.

- \* By utilizing both Tape 1 and Tape 2 System terminals, simultaneous dubbing can be accomplished.

## MONITORING

When using a 3 head machine for recording (independent recording, playback, and erase heads), the recording being made can be compared with the source. In this case, connect the recording machine to both the REC and P.B. terminals of the amplifier and set the Tape Monitor Switch of the recording machine to TAPE position. Comparison of signals can then be made through the speaker system by alternately setting the Tape Monitor Switch of the AM-2600 to SOURCE to monitor source signals and to Tape 1 or Tape 2 position to monitor just-recorded signals.

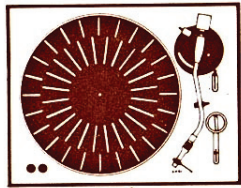
- \* During dubbing to and from Tape 1 and Tape 2 Systems, only the just-recorded signals can be monitored through the speaker system.
- \* For monitoring through headphones, use 8 ohm impedance stereo headphones.

## RECOMMENDED OPTIONAL ACCESSORIES

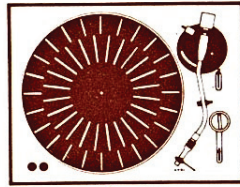
Dynamic Type Stereo Headphones:	ASE-22
	ASE-24
	ASE-26
	ASE-30
Electret Condenser Stereo Headphones:	ASE-80C

# CONNECTIONS

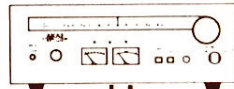
Magnetic cartridge turntable



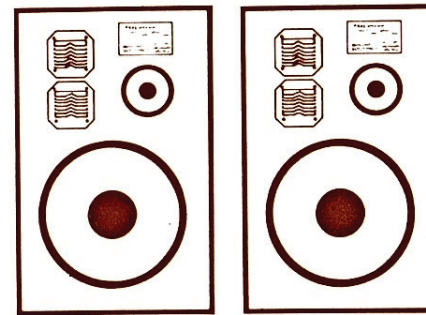
Magnetic cartridge turntable



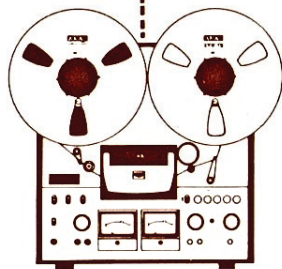
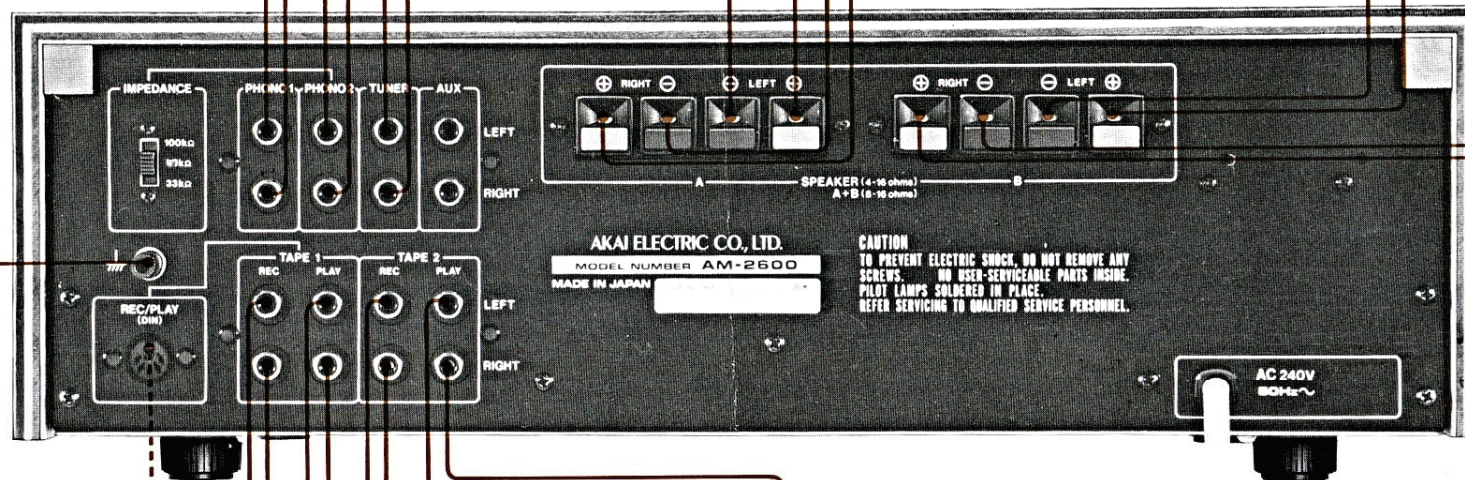
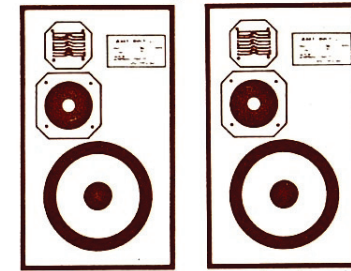
Tuner



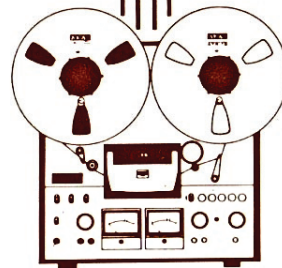
A System



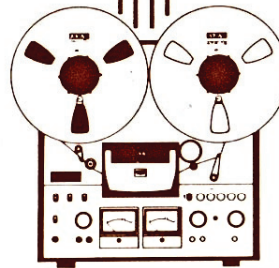
B System



Tape Deck



Tape Deck



Tape Deck

A and B speaker system accommodates speakers of 4 to 16 ohms impedance, but if both systems are used simultaneously, speakers of 8 to 16 ohms must be used.

**TECHNICAL DATA****POWER AMPLIFIER SECTION****Continuous Power Output**

2-Channels Driven . . . 65 watts per channel, minimum RMS, at 4 ohms from 20 to 20,000 Hz with no more than 0.1% total harmonic distortion.  
 60 watts per channel, minimum RMS, at 8 ohms from 20 to 20,000 Hz with no more than 0.1% total harmonic distortion.  
 2 x 70 watts into 4 ohms at 1 kHz, with no more than 0.1% total harmonic distortion.  
 2 x 65 watts into 8 ohms at 1 kHz, with no more than 0.1% total harmonic distortion.

Power Bandwidth (IHF) . . . 7 Hz to 40 kHz/8 ohms (Total Harmonic Distortion: 0.1%)

**Signal to Noise Ratio (IHF)**

PHONO . . . . . Better than 75 dB

AUX . . . . . Better than 95 dB

Residual Noise . . . . . Less than 0.5 mV at 8 ohms

**Channel Separation (IHF)**

PHONO . . . . . Better than 55 dB at 1,000 Hz

Damping Factor . . . . . More than 60 (1 kHz, 8 ohms)

**Output**

Speakers . . . . . A, B (4 to 16 ohms)/A + B (8 to 16 ohms)

Headphone . . . . . 4 to 16 ohms

Power Indicator Meters . . (2) 3/80W switchable

**PREAMPLIFIER SECTION****Input Sensitivity/Impedance**

PHONO . . . . . PHONO 2: 3 mV/33, 47, or 100 k ohms,

PHONO 1: 3 mV/50 k ohms  
 AUX . . . . . 150 mV/100 k ohms  
 TUNER . . . . . 150 mV/100 k ohms  
 TAPE MONITOR . . . . . PIN: 150 mV/100 k ohms  
 . . . . . DIN: 30 mV/180 k ohms

**Output Level/Impedance**

TAPE REC . . . . . PIN: 150 mV/100 k ohms  
 . . . . . DIN: 150 mV/100 k ohms

**Frequency Response**

PHONO  
 (RIAA equalization) . . . 30 Hz to 15 kHz +0.8 dB, -0.8 dB  
 TUNER, AUX,  
 TAPE MONITOR . . . . . 7 Hz to 70 kHz +0 dB, -1 dB

**Tone Control**

BASS . . . . . ±9 dB at 100 Hz

TREBLE . . . . . ±9 dB at 10 kHz

Loudness Control . . . . . +10 dB at 100 Hz, +6 dB at 10 kHz  
 (HIGH position)

+10 dB at 100 Hz (LOW position)  
 (Volume control set at -30 dB position)

Filter High . . . . . -5 dB at 7 kHz (7 kHz position),  
 -3 dB at 10 kHz (10 kHz position)

Low . . . . . -2 dB at 50 Hz (30 Hz position),  
 -6 dB at 50 Hz (60 Hz position)

**MISCELLANEOUS**

Semi-conductors . . . . . Transistors: 35, Diodes: 17

Power Requirements . . . . . 240V, 50 Hz

Dimensions . . . . . 440(W) x 141(H) x 331(D) mm,  
 (17.3 x 5.6 x 13 inches)

Weight . . . . . 10 kg (22 lbs)

**STANDARD ACCESSORIES**

Connection Cords . . . . . 1 set  
 Operator's Manual . . . . . 1



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