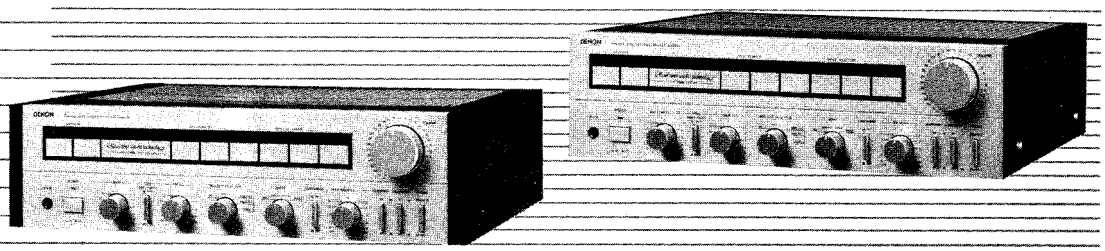
DENON

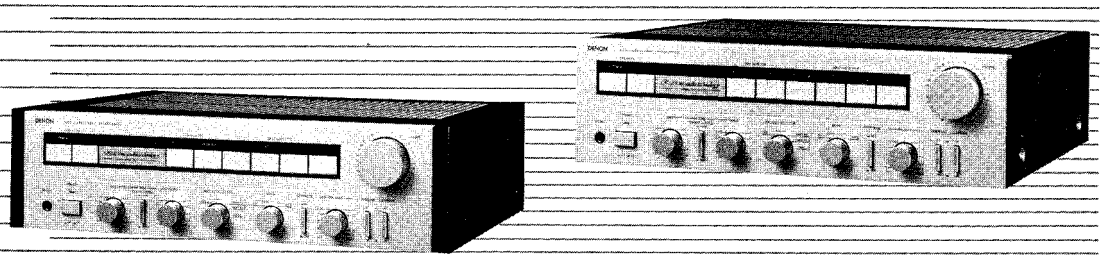
PRE-MAIN AMPLIFIER

PMA-777/757

OPERATING INSTRUCTIONS
MODE D'EMPLOI
BEDIENUNGSANLEITUNG

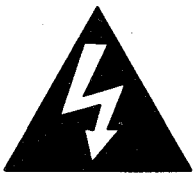


PMA-777
U.S.A. Version
Version pour les Etats-Vnis
Modell für die USA



PMA-757
Asia Version
Version pour l'Asie
Modell für ASIEN

In order to obtain optimum performance from this amplifier, please read this instruction manual thoroughly before use. Please keep this instruction manual for reference in case you have further questions or problems.



CAUTION

RISK OF ELECTRIC SHOCK

DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user of the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

"SERIAL NO._____

PLEASE RECORD UNIT SERIAL NUMBER ATTACHED TO THE REAR OF THE CABINET FOR FUTURE REFERENCE"

– TABLE OF CONTENTS –

FEATURES

HIGH SPEED DUAL SUPER NON-NEGATIVE FEEDBACK CIRCUIT

Dual super Non-NFB circuit clearly eliminates static distortion generated at output transistors. This technique reduces static distortion to essentially zero. The signal itself is not fed back to the input, and the dynamic characteristcs of the amplifier are greatly improved. High slew rates of ±250 V/μs (PMA-777) and ±200 V/μs (PMA-757) have been achieved.

WIDE FREQUENCY BAND EQUALIZING AMPLIFIER

Conventional NF and CR equalizers have been improved to produce a high quality "wide-frequency-band equalizer". Distortion caused by changes in input impedance is minimized. As a result, a 90 dB S/N ratio for MM cartridges (75 dB for MC) was achieved. Also, a RIAA curve deviation of only ±0.2 dB from 20 Hz to 100 kHz has been attained.

COMPLETE ELIMINATION OF CAPACITORS FROM SIGNAL PATH

Direct DC survo circuitry completely eliminates large-capacity coupling capacitors. These capacitors badly degrade signal quality from signal path. As a result of the new circuitry, the music source can be clearly and accurately reproduced.

A HEAVY DUTY POWER SUPPLY

The PMA-777/757's high capability, stable power supply section consists of a high performance oversized power transformer and a large capacity block capacitor to achieve superb regulation and S/N ratio.

PROTECTION CIRCUIT FOR SAFETY

If an unexpected problem occurs, such as speaker terminal short or generation of direct current in the output, the protection circuit functions simultaneously. This prevents speaker and amplifier damage. A muting circuit is also provided in order to eliminate noise generated at power "on-off".

POWERFUL DRIVING CAPABILITY

The heavy duty power supply can provide adequate power to drive speakers with a low 4 ohm impedance. Output performance is impressive:
120 W + 120 W over 20 Hz to 20 kHz (PMA-777)
100 W + 100 W over 20 Hz to 20 kHz (PMA-757)
Also dynamic headrooms of 3.1 dB (PMA-777) and 3.0 dB (PMA-757) are available.

ELEGANT DESIGN

The DENON design is not only elegant, but also functionally efficient. Due consideration to internal structure and careful selection of parts prevent system components from deteriorating.

OTHER FEATURES

- DAD terminal
- High speed protection circuitry with no deterioration of sound quality
- A high speed protection circuitry
- Easy to operate push-button function selector
- Illuminated functions for improved legibility
- 2 sets of speaker terminals (A or B, A+B, off)
- 2 sets of tape deck I/O terminals
- 2 sets of phono I/O terminals (for PMA-777 only)
- Subsonic filter for eliminating unnecessary low audio frequencies of less than 20 Hz (6 dB/oct)
- Direct couple
- Loudness control

BEFORE USE

Check the following items before use.

MOVING THE UNIT

Before moving the amplifier, unplug it from the AC outlet to prevent damage. Disconnect all connecting cords between the amplifier and other units to prevent broken wires or unit damage.

KEEP THIS INSTRUCTION MANUAL ON HAND

After reading, please keep this instruction manual for future reference.

ILLUSTRATIONS IN THE INSTRUCTION MANUAL MAY DIFFER FROM THE ACTUAL APPEARANCE OF YOUR UNIT

PRECAUTIONS

<AVOID HEAT>

- Do not expose the unit to high temperature. This includes exposure to direct sunlight, placing it near stoves or heaters, etc.
- Keep the unit at least 10 cm from radiant heat sources.

<AVOID MOISTURE AND DUST>

- Do not expose the unit to moisture or dust, as this will damage the circuitry. Do not place containers with water or other liquids on or near the unit. If moisture or other materials enter the unit, contact your DENON dealer immediately.

<HANDLE THE POWER LEAD CAREFULLY>

- Handle the power lead carefully so that it will not be damaged. If the power lead is damaged contact your DENON dealer immediately.
- Be sure to hold the AC supply plug, NOT THE LEAD, when removing the plug from the AC outlet.

<EXTENDED STORAGE>

- When the unit is not used or stored for an extended period of time, be sure to disconnect the power lead from the AC outlet.

<PUT NOTHING INSIDE THE UNIT>

- Do not put any objects inside the unit, such as needles, hair pins, metal, coins, etc. Such objects may severely damage the unit and cause shock or fire.

<CHEMICAL CLEANERS, SOLVENTS AND INSECTICIDES WILL DAMAGE THE CABINET>

- Do not apply solvents, petroleum products, insecticides, paint thinner, etc. to the cabinet. This may result in discoloration, corrosion, and/or deformation. To clean the cover, use a soft cloth with no chemicals.

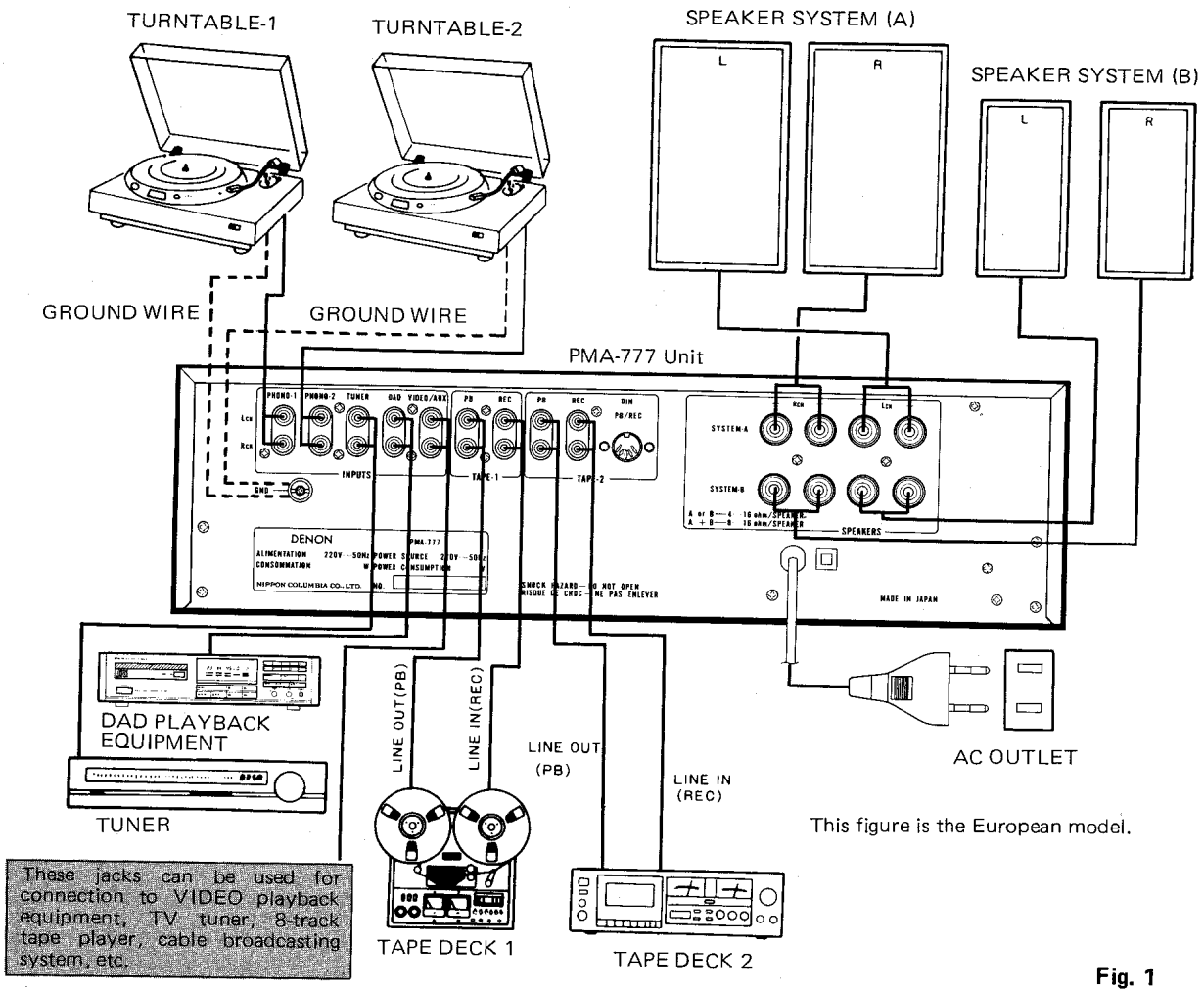
<DO NOT OPEN THE COVER>

- The unit contains no user serviceable parts. Parts within the cover may be live and carry high voltage. If the unit has any problems, disconnect the AC power lead and contact your DEON dealer immediately.

<DO NOT BLOCK VENT>

- Do not block the cooling vent with any object, i.e., cassette cases, etc., or the unit may overheat and cause equipment damage.

CONNECTIONS



This figure is the European model.

Fig. 1

(1) CONNECTIONS

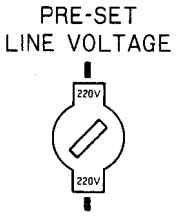
- Do not plug power cord into AC outlet until all connections are completed.
- Connect right (R) channel plug to right (R) channel jack, and left channel plug to left channel jack.
- Insert plugs firmly into corresponding jacks. If connection is incomplete, noise may be generated.
- Plug audio component power cords into AC OUTLET terminal. Do not use this terminal for other electrical appliances, such as hair dryers. (NOT INCLUDED IN SYSTEMS FOR USE IN EUROPE AND AUSTRALIA)
- Do not bundle pin plug cords with power cord. Do not place pin plug cords near power transformer, or hum and other noise may occur.
- Always connect a pin plug cord or shorting pins to "PHONO" input terminals because these terminals are highly sensitive. If these terminal are not connected, induction hum may occur.

(2) AC OUTLETS (NOT INCLUDED IN SYSTEMS FOR USE IN EUROPE AND AUSTRALIA)

AC outlets are used for connecting amplifier component units, such as tuner, turntable, tape deck, etc.

- SWITCHED (Capacity: 100 W):
  This outlet is turned on/off when main power switch is turned on/off.
- UNSWITCHED (Total capacity: 250 W):
  These outlets are always ON whether power switch is on or off.

(3) LINE VOLTAGE (Voltage select switch) . . . NOT INCLUDED IN SYSTEMS FOR USE IN EUROPE, U.S.A., CANADA AND AUSTRALIA



* The desired voltage may be set with the VOLTAGE SELECTOR KNOB on the back panel using a screw driver.

* Do not twist the VOLTAGE SELECTOR KNOB with excessive force. It may be damaged.

* If the voltage select switch does not turn smoothly, see a qualified serviceman.

(4) SPEAKER SYSTEM CONNECTIONS

Connect left channel (left side when viewed from the front) cords to Lch terminals, and right channel cords to Rch terminals, on the BACK PANEL. Two pairs of speaker terminals (SPEAKERS) are located on the BACK PANEL. Use SYSTEM-A terminals when one pair of speaker terminals is connected.

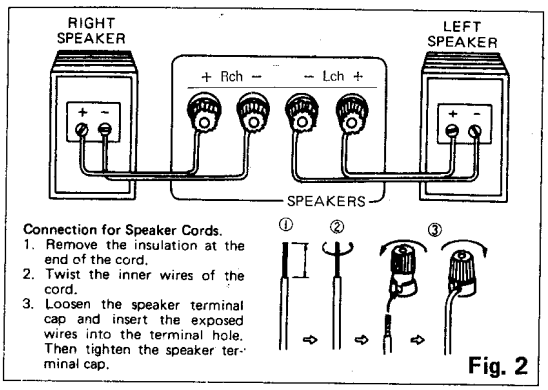


Fig. 2

- Connect the respective speaker terminals to speaker cords with corresponding polarity (positive to positive, and negative to negative). If the polarity is reversed, the reproduced sound is not centered. Thus the predetermined positions of the musical instruments are not correct when the sound is reproduced, and the focus of stereo reproduction is degraded.
- Twist the connected speaker cords to the terminal to ensure that the connecting portions of the cords do not unwind and contact other terminals.

SPEAKER IMPEDANCE

- Use speakers of 4 to 16 ohms impedance when speaker systems A and B are used separately. (A or B)
- Connect speakers of 8 to 16 ohms impedance when two pairs of speaker systems (A + B) are used. To prevent trouble, do not use any speakers with an impedance below 8 ohms.

(5) TURNTABLE CONNECTION

Insert output plugs into the corresponding PHONO jacks. L plug must be inserted into PHONO terminals L jack and R plug intoR jack.

If there is a ground wire, connect this wire to GND terminal.

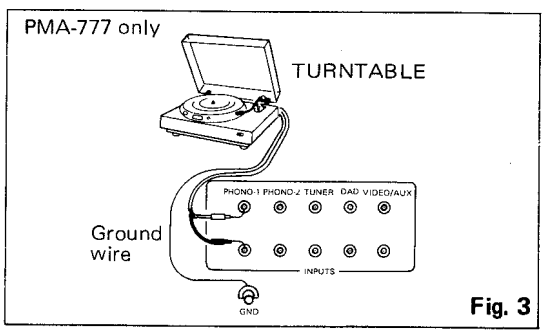


Fig. 3

*If hum occurs when grounding wire is connected to GND terminal, disconnect the grounding wire.

PMA-777

There are two PHONO terminal systems: PHONO-1 and PHONO-2. Use PHONO-1 terminals when only one turntable used.

PMA-757

There is only one PHONO terminal system.

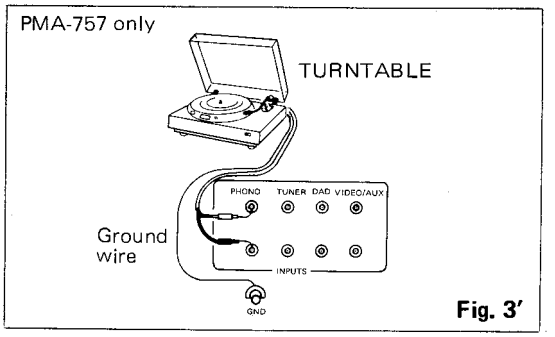


Fig. 3'

(6) TUNER CONNECTION

Connect pin plug cord from tuner OUTPUT terminals to amplifier TUNER terminals.

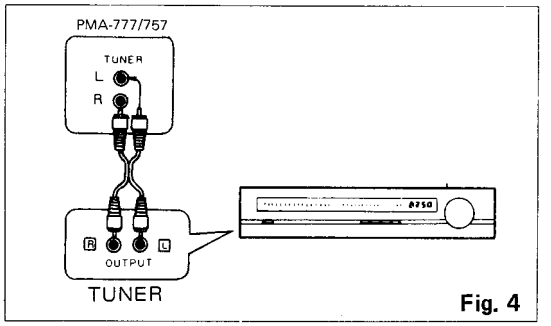


Fig. 4

(7) TAPE DECK CONNECTION

There are two TAPE terminal systems: TAPE-1 and TAPE-2. Tape dubbing and simultaneous recording can be performed.

Recording Connection:

Connect pin plug cords from the tape deck recording input terminals (LINE IN or REC) to the tape recording terminals (REC) of the amplifier.

Playback Connection:

Connect pin plug cords from the playback tape deck output terminals (LINE OUT or PB) to the tape playback terminals (PB) of the amplifier.

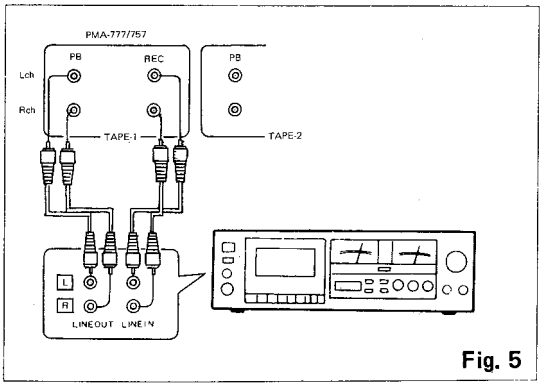


Fig. 5

PB/REC (DIN Standard Tape Record and Playback Terminal):

Connect the special DIN standard cord, then recording and playback is available. This terminal cannot be used simultaneously with the "Tape-2, PB/REC" pin plug terminals. When this DIN terminal is used, do not connect the pin plug terminals.

(8) DAD TERMINAL (DIGITAL AUDIO DISC)

Connect DAD playback equipment to the DAD terminal. The terminal has the same electrical characteristics as the tuner terminal (TUNER) and the tape playback terminal (PB). Connect the output terminal of any desired audio equipment and the DAD terminal with a pin plug cord.

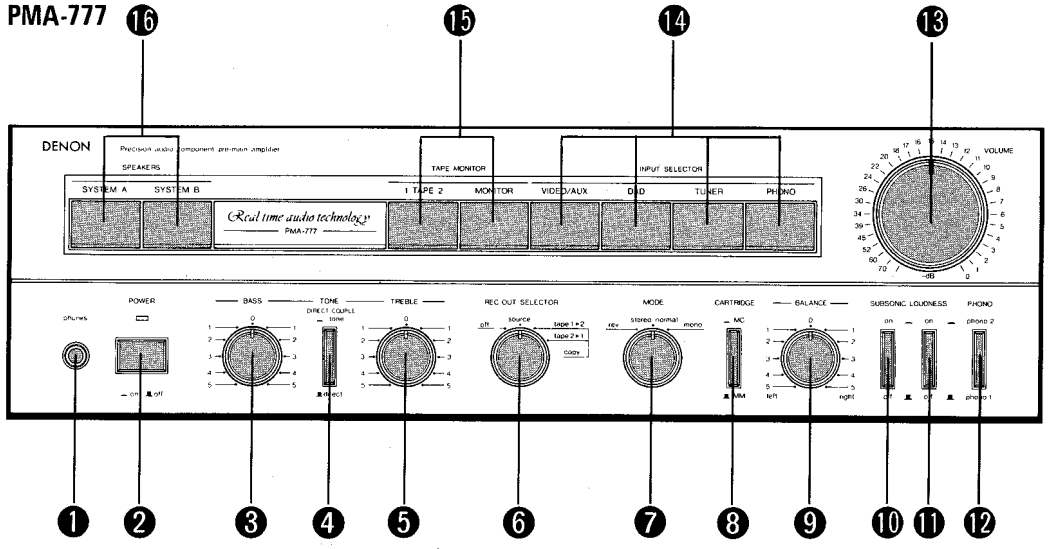
(9) VIDEO/AUX TERMINALS

Connect VIDEO playback equipment, TV tuner, second stereo tuner, tape deck for playback only, etc. to the video/auxiliary input terminals (VIDEO/AUX). These terminals have the same electrical characteristics as the tuner terminals (TUNER) and the tape playback terminals (PB).

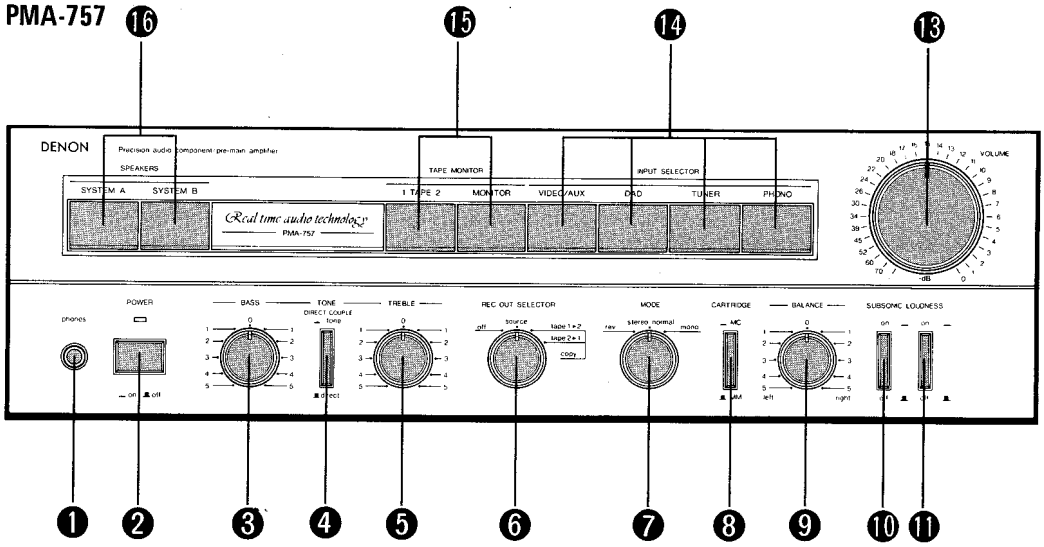
Connect pin plug cords from the output terminals (OUTPUT) of the desired audio equipment to the video/auxiliary input terminals (VIDEO/AUX).

CONTROLS AND FUNCTIONS

PMA-777



PMA-757



❶ PHONES (Headphone Jack)

This jack is used for connecting headphones.

❷ POWER & LED Indicator (Power Switch and LED Indicator)

When the power switch is pressed, power is supplied to the unit and the power LED lights. It takes a few seconds for the unit to warm up after power on. The built-in mute circuit operates to eliminate noise during on/off operation. Press the power switch again to turn power off.

❸ BASS (Bass Control)

Use to control bass sound quality. When the knob is centered, frequency characteristics below 1000 Hz are flattened. When the knob is turned clockwise, bass is emphasized. When it is turned counterclockwise, bass is reduced.

❹ DIRECT COUPLE (Direct Coupling Switch)

The tone control function is not actuated when this switch is in the "direct" position (▬). The transmitting characteristics are flat regardless of the BASS and TREBLE control knob positions. The tone control function is actuated when the direct coupling switch is set to "tone" (▂). (The tone can be varied by turning the BASS and TREBLE controls.)

❺ TREBLE (Treble Control)

Use to control treble. When the control knob is centered, frequency characteristics over 1000 Hz are flattened. When the knob is turned clockwise, treble is emphasized. When it is turned counter-clockwise, treble is reduced.

❻ REC OUT SLECTOR (REC OUT Selector Switch)

A program source selected by the REC OUT SELECTOR switch is output to the output terminal (REC OUT) of tape deck 1 or tape deck 2. "PHONO-1 (PMA-777) or PHONO (PMA-757)", "TUNER", DAD and "VIDEO/AUX" terminals operate independently of the INPUT SELECTOR switch. A desired source can be input at these terminals. For example, an FM signal check can be made, while a record is playing. Tape can be dubbed, while an FM program is received.

When tape dubbing is performed with two cassette decks, set the REC OUT SELECTOR switch to "tape 1 ▶ 2" or "tape 2 ▶ 1". When recording and tape copying are not desired, set the REC OUT SELECTOR switch to off. In this status, "TAPE-1", "TAPE-2" and "REC" terminals are separated from the signal circuit of the unit. No signal is output to these terminals. Therefore, even it a tape deck is connected to the unit, this does not influence the operating mode. (For PMA-777 only)

"PHONO-2" terminal (For PMA-777) cannot be used for both recording and monitoring when a 3-head tape deck is used. This is due to the characteristics of the one-touch reproducing system.

❼ MODE (Mode Switch)

Set the mode switch to "stereo normal" for normal operation.

"rev": The right and left channels are switched and reversed sound is produced from the speakers.

"mono": Monaural reproduction occurs. The same sound is produced on all speakers.

❽ CARTRIDGE (Cartridge Select Switch)

This switch is set according to the type of cartridge used. Press this switch in (▬) when using a moving-coil (MC) type cartridge with output less than 0.5 mV.

Release this switch (▬) when using a moving magnet (MM) type cartridge with output of 2 mV or higher.

❾ BALANCE (Balance Control)

Use to control balance between the two channels. When the knob is centered, the amplitude of the amplifier is equal on both channels.

When there is a difference in the output voltages of the channels, for example due to poor recording, turn this control knob for adjustment.

When volume is low on the right channel, turn the control knob clockwise.

When volume is low on the left channel, turn the control knob counterclockwise.

❿ SUBSONIC FILTER (Subsonic filter switch)

Cuts off low audio frequencies of less than 20 Hz (6 dB/oct). Used for preventing turntable motor vibration or extremely low frequency vibration of the speaker due to a warped record, etc. Therefore, when "PHONO" is used, it is recommended that the switch be turned on (▬).

⓫ LOUDNESS (Loudness switch)

When the volume is low, the human ear cannot clearly distinguish low and high frequencies. Use the LOUDNESS switch to correct this. When the LOUDNESS switch is turned on (▬) at low volume, the low and high frequencies are corrected to produce natural sounds.

⓬ PHONO (Turntable Select Switch) . . . only for PMA-777

Phono 1 (▬): To play PHONO-1 terminal turntable.

Phono 2 (▬): To play PHONO-2 terminal turntable.

⓭ VOLUME (Volume Control)

This controls the overall volume level. When the knob is turned clockwise, volume increases. When it is turned counterclockwise, volume decreases.

⓮ INPUT SELECTOR (Input Select Switch)

This selects the program source.

- PHONO: Use to play a turntable connected to PHONO terminal.
- TUNER: Use with tuner connected to TUNER terminal.
- DAD: Use with DAD playback equipment connected to DAD terminal.
- VIDEO/AUX: Use with VIDEO playback equipment, tuner, tape deck, etc. connected to VIDEO/AUX terminal.

The program source selected by these operations is displayed by the indicator.

⓯ TAPE MONITOR (Tape Monitor Switch)

Use to playback from the tape deck.

When the "MONITOR" switch is pressed, the monitor display LAMP illuminates. The tape deck signal selected by the "1-TAPE-2" switch is played back.

The program source selected by these operations is displayed on the indicator.

⓰ SPEAKER (Speaker Select Switch)

Three speaker systems can be selected: speaker system A, speaker system B, and speaker systems A + B.

- When "System A" is selected, the speakers connected to speaker output terminals A operate.
- When "System B" is selected, the speakers connected to speaker output terminals B operate.
- When "System A + B" are selected, both pairs of speakers connected to speaker output terminals A and B operate.
- When the switch is "off", no sound is produced through the speakers.
- When the switches for output terminals A and B are "off", sound is produced only in the headphones.

* If the unit is used in high temperatures for an extended period of time, the built-in thermostat operates turning off the unit.

This includes direct sunlight, near radiant heat sources, etc.

When equipment temperature drops, the thermostat cycles and the unit restarts.

OPERATING INSTRUCTIONS

PREPARATION BEFORE OPERATION

1. CHECK CONNECTIONS
   - Check all connections for correctness by referring to the connection diagram (Fig. 1).
   - Check connection polarities (positive and negative), and stereo separation (right channel cord to right channel terminal, and left channel cord to left channel terminal).
   - Check all cords for secure connection.

2. CONTROL SETTINGS
   - Turn volume control (VOLUME) counterclockwise, to "∞".
   - Set balance control (BALANCE) to "0" (central position).
   - Set tone control (BASS and TREBLE) to "0" (central position).
   - Set mode switch (MODE) to "stereo normal".
   - Set speaker switch (SPEAKERS) to either "A" or "B", corresponding to speaker terminals A or B.
   - Set direct coupling switch (DIRECT COUPLE) to "tone" (▬).
   - Set recording output changeover switch (RECOUT SELECTOR) to "off".
   - Set loudness switch (LOUDNESS) to "off" (▬).

   After checking the above items, turn power on. The amplifier is ready after the power LED illuminates.

RECORD PLAYING (See Fig. 6)

① Press "PHONO" input selector.
   - When turntable is connected to PHONO-1 terminal, set PHONO switch to "PHONO-1 (▬)". When turntable is connected to PHONO-2 terminal set PHONO switch to "PHONO-2 (▬)" for PMA-777.
   - Press PHONO button for PMA-757.

② Set cartridge switch to either "MM" (▬) or "MC" (▬) according to cartridge type used.
   - When cartridge output voltage is low (0.5 mV or lower), set cartridge switch to "MC". When cartridge output voltage is high (2 mV or higher), set cartridge switch to "MM".

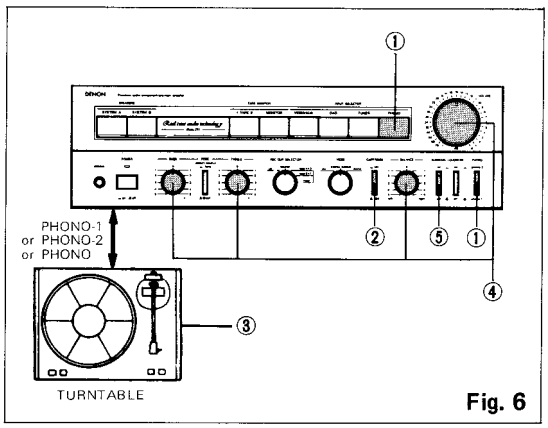


Fig. 6

③ Operate turntable to play record.

④ Adjust volume, balance, and tone with volume, and tone control knobs as required.

⑤ If a warped record is played, noise frequency below the audible frequency range occurs, adversely affecting tone of reproduced music. Press the subsonic switch (SUBSONIC) to cut low frequency noise.

RADIO PROGRAM RECEPTION (See Fig. 7)

① Press "TUNER" input selector switch.
② Adjust the tuner to receive a radio program.
③ Adjust the volume, balance, and tone with the associated controls.
- Select the best antenna and antenna position to optimize reception of the broadcast signal.
  (For further details, refer to the "Tuner Instruction Manual".)

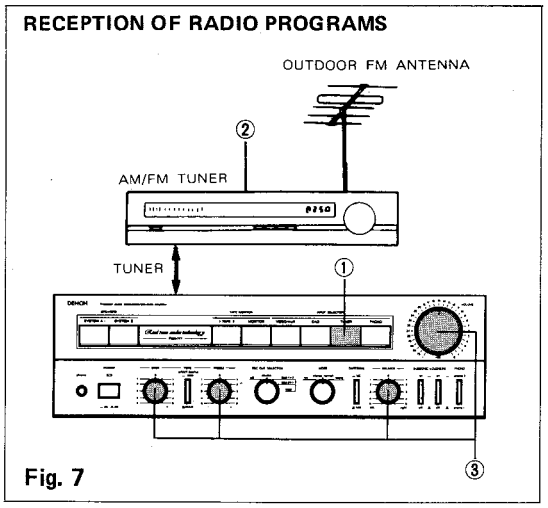


Fig. 7

AUDIO EQUIPMENT CONNECTED TO DAD TERMINAL PLAYBACK (See Fig. 8)

① Press "DAD" input selector switch.
② Make appropriate setting and adjustments of the audio equipment connected to this amplifier.
③ Adjust the volume, balance, and tone with the associated controls.

AUDIO EQUIPMENT CONNECTED TO VIDEO/ AUX TERMINAL PLAYBACK (See Fig. 8)

❶ Press "VIDEO/AUX" input selector switch.
❷ Make appropriate settings and adjustments for audio equipment connected to this amplifier.
❸ Adjust the volume, balance, and tone with the associated controls.

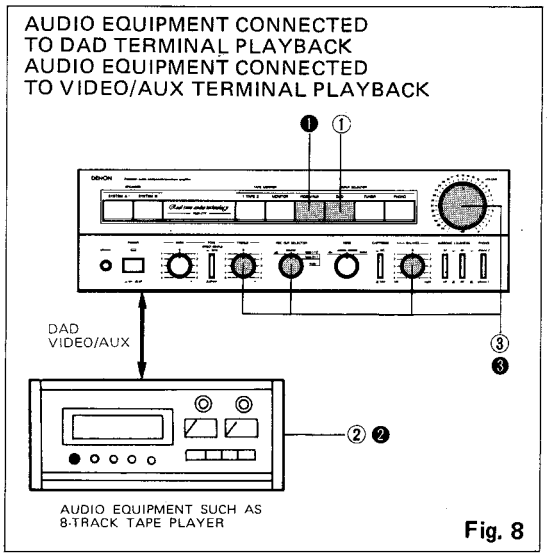


Fig. 8

TAPE PLAYBACK (See Fig. 9)

① Press "MONITOR" switch.
② Set "1-TAPE-2" switch to either "1-TAPE" or "TAPE-2" (indicated by LAMP).
* When a tape deck is connected to TAPE-1 terminals, set "1-TAPE-2" switch to "1-TAPE". When a tape deck is connected to TAPE-2 terminals, set "1-TAPE-2" switch to "TAPE-2".
③ Operate the tape deck for playback. (For further details, refer to "Tape Deck Instruction Manual".)
④ Adjust the volume, balance, and tone with the associated controls.

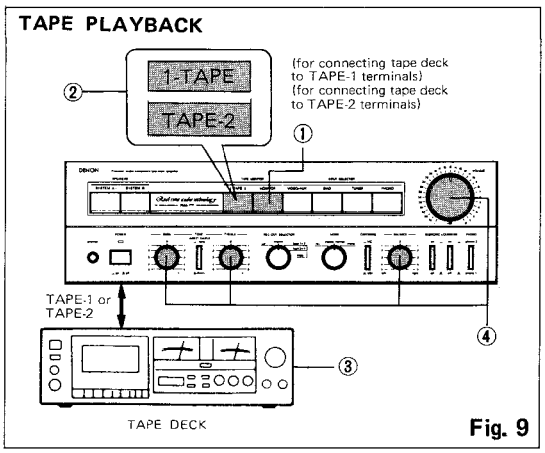


Fig. 9

- After tape deck has been operated for an extended period, head and capstan become dirty, adversely affecting tone quality. To maintain optimal playback performance, clean head surface and capstan periodically.
  (For further details, refer to Tape Deck Instruction Manual".)

TAPE DECK RECORDING (See Fig. 10)

A record, radio program, etc. can be recorded with a tape deck connected to TAPE DECK terminals.

① Set REC OUT SELECTOR switch to "source" position.

② Set INPUT SELECTOR switch to "PHONO". "TUNER", "DAD", or "VIDEO/AUX" position depending on the desire recording program source. (discs, FM/AM etc.)

③ Start source equipment.

④ Adjust recording level of tape deck for recording. (For further details, refer to "Tape Deck Instruction Manual".)

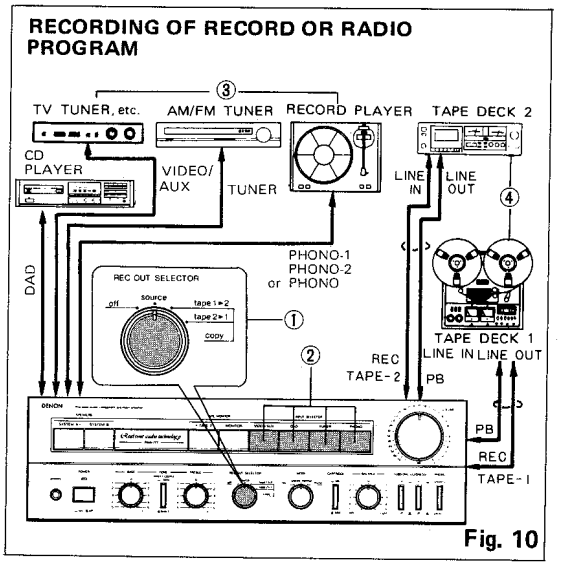


Fig. 10

(For PMA-777 only)

When a source from "PHONO-2" is recorded, set REC OUT SELECTOR switch to "source" and set INPUT SELECTOR switch to "PHONO-2". When INPUT SELECTOR switch is set to different position, recording is interrupted because INPUT SELECTOR switch operates with the one-touch reproduction system. Monitoring is not possible when a 3-head tape deck is used.

- Recording volume and tone are not affected even if amplifier volume and tone control knobs are adjusted.

RECORDING MONITOR (See Fig. 11)

Recording monitor (which indicates recorded sound level) can be used with a 3-head tape deck if recording head is independent of playback head. However, recording monitor cannot be used with a tape deck with a single record-playback head.

- Set "1-TAPE-2" switch to either "1-TAPE" or "TAPE-2", according to type of tape deck used. Recording monitor and program source can be selected with "MONITOR" switch.

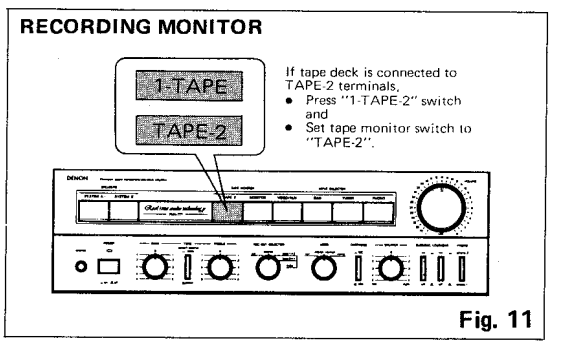


Fig. 11

TAPE TO TAPE DUBBING (See Fig. 12)

When two tape decks are used, a recorded tape can be dubbed onto a blank tape.

① Set REC OUT SELECTOR to either "TAPE-1 ▶ 2" or "TAPE-2 ▶ 1".
* When dubbing from TAPE-1 to TAPE-2, set REC OUT SELECTOR to "TAPE-1 ▶ 2".
When dubbing from TAPE-2 to TAPE-1, set REC OUT SELECTOR to "TAPE-2 ▶ 1".

② Simultaneously press button for tape deck play with recorded tape and record button for tape deck with blank tape.
- While tape is being dubbed, another source can be monitored through the speakers. Turn off tape monitor indicator, and select desired program source with INPUT SELECTOR switch.
- If dubbing is to be monitored: (Turn tape monitor indicator "ON".)
  (1) For "TAPE-1 2", set TAPE MONITOR switch to "TAPE-2".
  (2) For "TAPE-2 1", set TAPE MONITOR switch to "TAPE-1".

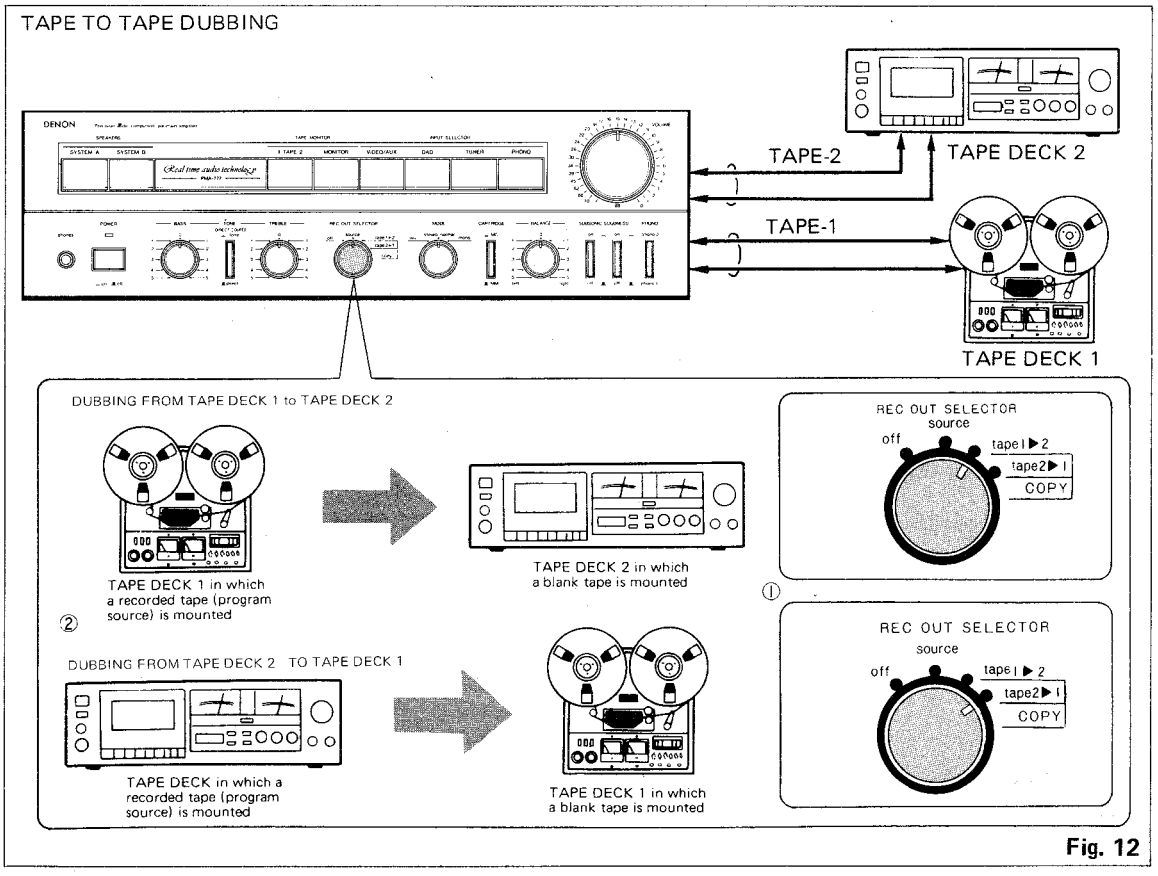


Fig. 12

TONE CONTROLS

Tone controls (BASS and TREBLE) adjust tone, which is influenced by cartridge and speaker characteristics, and room acoustics. These controls are also utilized to produce the desired tone quality.

When direct coupling switch (DIRECT COUPLE) is set to "tone (▬)", tone control activates. BASS knob controls low-frequency tone quality, and TREBLE controls high-frequency tone quality.

When direct coupling switch is set to "direct (■)", tone control does not activate.

In addition, transmission characteristics become flat regardless of BASS and TREBLE control settings.

SEPARATION OF POWER AND EQUALIZER SECTIONS

- If only the power amplifying section of this amplifier is used, use auxiliary input AUX terminals. (Power amplifying section can be used as power amplifier where input voltage is 150 mV).
- When only equalizer section of this amplifier is used, connect a control amplifier (channel divider) from TAPE-1 REC (for TAPE-2 REC) terminals.
- When a graphic equalizer or a control amplifier is connected to this amplifier, connect graphic equalizer or control amplifier to TAPE-1 REC (for TAPE-2 REC) terminals, and connect output of graphic equalizer or control amplifier to TAPE-1 PB (or TAPE-2 PB) terminals of this amplifier. Set input selector to "TAPE-1" (or "TAPE-2").

SPECIFICATIONS (PMA-777)

POWER AMPLIIFIER SECTION

Rated Output Power:
Both channel drives (TUNER → SP OUT)
100 Watts minimum rms per channel
(8 ohm Load) with less than 0.02% total
harmonic distortion from 20 Hz to 20 kHz.
120 W + 120 W (4 ohm Load)
20 Hz to 20 kHz at T.H.D 0.05%
(for U.S.A.)
1 kHz (4 ohm Load) 150 W + 150 W (DIN, T.H.D 1%)
1 kHz (4 ohm Load) 30 W + 30 W (IEC, Subject
to change by temperature test.)
(for outside U.S.A.)

Total Harmonic Distortion:
0.003% (20 Hz – 20 kHz at –3 dB rated output 8 ohm Load)
0.02% (20 Hz – 20 kHz at rated output 8 ohm Load)
(U.S.A.)

Intermodulation Distortion:
Below 7 kHz/60 Hz: 1/4 0.002% (at amplitude
output equivalent to rated output)

Output Bandwidth:
5 Hz – 80 kHz (IHF T.H.D 0.03%)

Transmission Characteristics:
1 Hz – 250 kHz $^{+0}_{-3}$ dB (at 1 W output)

Input Sensitivity:
150 mV

Input Impedance:
47 k ohm

Output Impedance:
0.08 ohm (1 kHz)

Output Terminals:
Speaker: A or B Load 4 – 16 ohm
A + B Load 8 – 16 ohm
Headphone/Stereo headphone (390 mW/8 ohm)

EQUALIZER AMPLIFIER SECTION

Equalizer Amplifier Output:
Maximum Output: 12 V (at 47 k ohm Load)
Rated Output: 150 mV
Total harmonic distortion: less than 0.002%
(at 1 kHz, 8 V output)

Input Sensitivity/Input Impedance:

PHONO-1, 2	MM	2.5 mV	47 k ohm
	MC	200 μV	100 ohm
TUNER		150 mV	47 k ohm
DAD, VIDEO/AUX, TAPE		150 mV	47 k ohm

RIAA Deviation:

PHONO-1, 2	MM	within ±0.2 dB (20 Hz – 100 kHz)
	MC	within ±0.2 dB (20 Hz – 100 kHz)

OVERALL CHARACTERISTICS

SN Ratio (IHFA Network):

PHONO-1, 2	MM	88 dB (input terminals short-circuited for 2.5 mV input)
	MC	72 dB (input terminals short-circuited for 250 μV input)

TUNER, TAPE, DAD, VIDEO/AUX:
110 dB (input terminals short-circuited)

Tone Control Adjustable Range:

BASS	100 Hz ±8 dB
TREBLE	10 kHz ±8 dB

Filtering Characteristics:
SUBSONIC 20 Hz, 6 dB/oct

Loudness Characteristics:

Low frequency	100 Hz + 7 dB
High frequency	10 kHz + 6 dB

AC OUTLET:	SWITCHED x 2, 100 W (Total)
(For U.S.A., Canada and Asia)	UNSWITCHED x 1, 250 W
POWER SOURCE:	Germany and France AC 220 V, 50 Hz; U.K. and Australia AC 240 V, 50 Hz; U.S.A. AC 120 V, 60 Hz; Asia 110/120/220/240 V, 50/60 Hz (Multiple)
POWER CONSUMPTION:	245 W (U.S.A.); 250 W (IEC); 220 W (Multiple) 800 W Maximum Output
DIMENSIONS:	470 mm (18-1/2")W x 136 mm (5-11/32")H x 413 mm (16-1/4")D (with Wood Board) 434 mm (17-5/64")W x 136 mm (5-11/32")H x 413 mm (16-1/4")D (without Wood Board) (including rubber feet, control knobs, and terminals.)
WEIGHT:	12.5 kg (27 lbs 9 oz) (with Wood Board) 11.5 kg (25 lbs 6 oz) (without Wood Board)

Design and specifications are subject to change without prior notice.

SPECIFICATIONS (PMA-757)

POWER AMPLIFIER SECTION

Rated Output Power:	Both channel drives (TUNER → SP OUT) 80 Watts minimum rms per channel (8 ohm Load) with less than 0.03% total harmonic distortion from 20 Hz to 20 kHz. 100 W + 100 W (4 ohm Load) 20 Hz to 20 kHz at T.H.D. 0.05% (for U.S.A.) 1 kHz (4 ohm Load) 110 W + 110 W (DIN, T.H.D 1%) 1 kHz (4 ohm Load) 30 W + 30 W (IEC, Subject to change by temperature test.) (for outside U.S.A. and Canada)
Total Harmonic Distortion:	0.005% (20 Hz – 20 kHz at –3 dB rated output 8 ohms Load) (20 Hz – 20 kHz at rated output 8 ohm Load) (U.S.A.)
Intermodulation Distortion:	Below 7 kHz/60 Hz : 1/4 0.003% (at amplitude output equivalent to rated output)
Output Bandwidth:	5 Hz – 80 kHz (IHF T.H.D 0.03%)
Transmission Characteristics:	1 Hz – 250 kHz $^{+0}_{-3}$ dB (at 1 W output)
Input Sensitivity:	150 mV
Input Impedance:	47 k ohm
Output Impedance:	0.08 ohm (1 kHz)
Output Terminals:	Speaker: A and B Load 4 – 16 ohm A + B Load 8 – 16 ohm Headphone/Stereo headphone (310 mW/8 ohm)

EQUALIZER AMPLIFIER SECTION

Equalizer Amplifier Output:	Maximum Output: 12 V (at 47 k ohm Load) Rated Output: 150 mV Total harmonic distortion: less than 0.002% (at 1 kHz, 8 V output)			
Input Sensitivity/Input Impedance:	PHONO	MM	2.5 mV	47 k ohm
		MC	200 μV	100 ohm
	TUNER		150 mV	47 k ohm
	DAD, VIDEO/AUX, TAPE		150 mV	47 k ohm
RIAA Deviation:	PHONO	MC	within ±0.3 dB (20 Hz – 100 kHz)	

OVERALL CHARACTERISTICS

SN Ratio (IHFA Network):	PHONO	MM	87 dB (input terminals short-circuited for 2.5 mV input)
		MC	70 dB (input terminals short-circuited for 250 μV input)
	TUNER, TAPE, DAD, VIDEO/AUX:		110 dB (input terminals short-circuited)
Tone Control Adjustable Range:	BASS		100 Hz ±8 dB
	TREBLE		10 kHz ±8 dB
Filtering Characteristics:	SUBSONIC		20 Hz, 6 dB/oct
Loudness Characteristics:	Low frequency		100 Hz + 7 dB
	High frequency		10 kHz + 6 dB

AC OUTLET:
(For U.S.A., Canada and Asia)
SWITCHED x 2, 100 W (Total)
UNSWITCHED x 1, 250 W

POWER SOURCE:
Germany and France AC 220 V, 50 Hz; U.K. and Australia AC 240 V, 50 Hz; U.S.A. and Canada AC 120 V, 60 Hz; Asia 110/120/220/240 V, 50/60 Hz (Multiple)

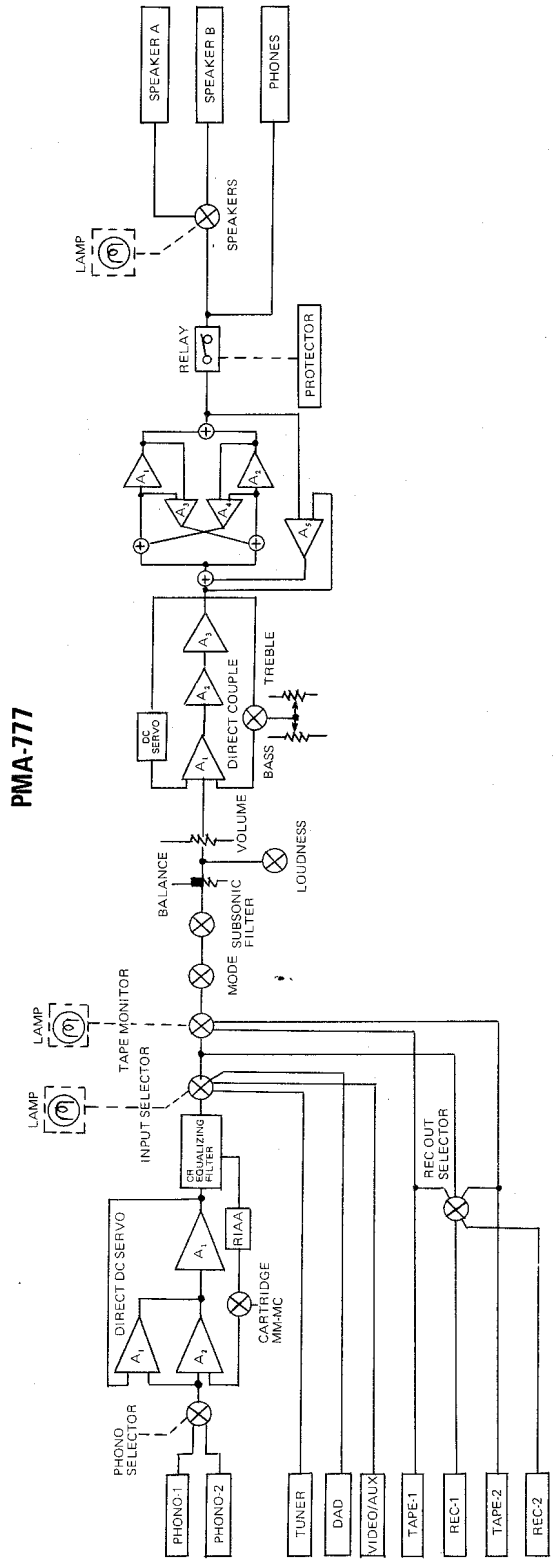
POWER CONSUMPTION:
215 W (U.S.A.); 420 VA (Canada); 240 W (IEC); 190 W (Multiple); 650 W Maximum Output

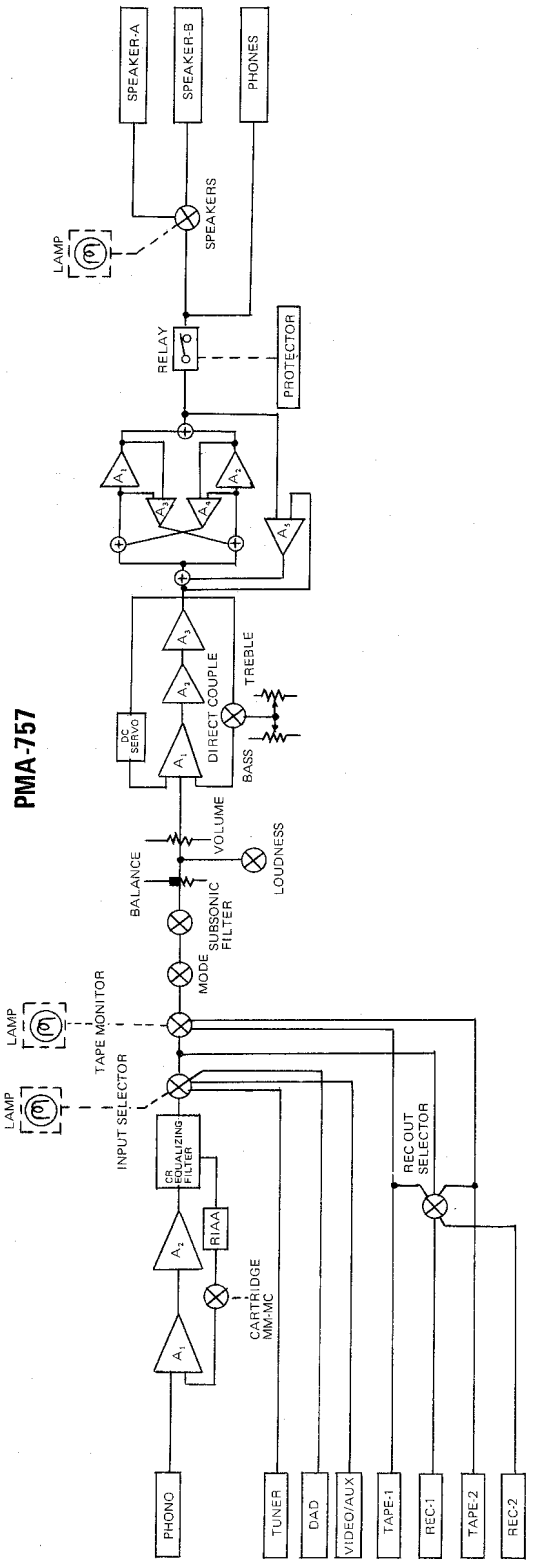
DIMENSIONS:
470 mm (18-1/2")W x 136 mm (5-11/32")H x 413 mm (16-1/4")D (with Wood Board)
434 mm (17-5/64")W x 136 mm (5-11/32")H x 413 mm (16-1/4")D (without Wood Board)
(including rubber feet, control knobs, and terminals.)

WEIGHT:
13 kg (28 lbs 11 oz) (with Wood Board)
12 kg (26 lbs 7 oz) (without Wood Board)
10.5 kg (23 lbs 2 oz) (without Wood Board) (For U.S.A. & Canada)

Design and specifications are subject to change without prior notice.

BLOCK DIAGRAM
DIAGRAMMES SYNOPTIQUES
BLOCKSCHALTBILD

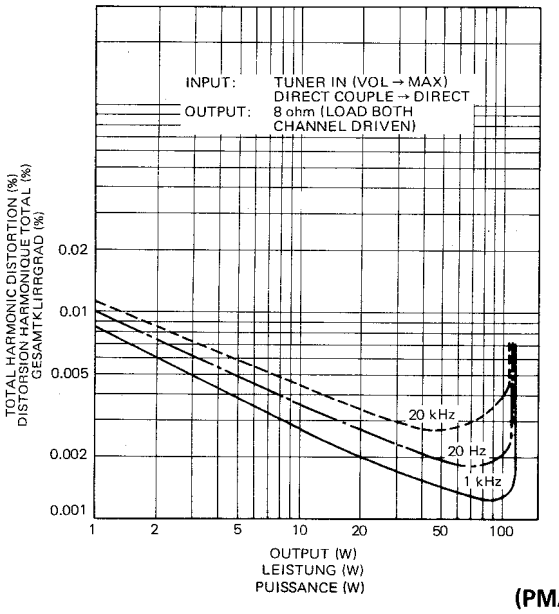




CHARACTERISTIC DIAGRAMS
DIAGRAMMES DE CARACTERISTIQUES
KENNLINIENDIAGRAMME

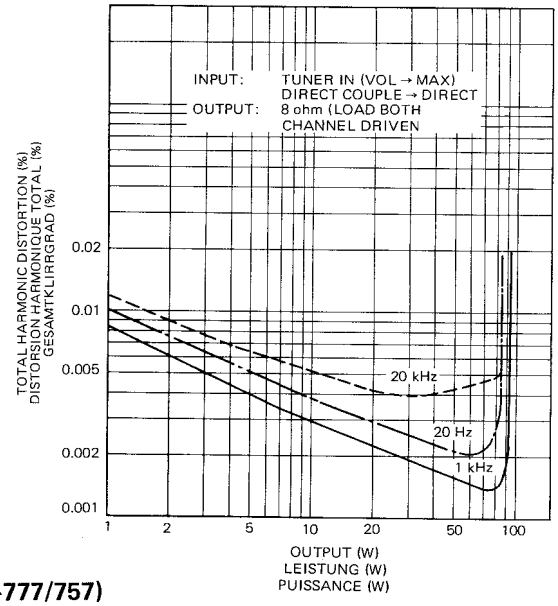
(PMA-777)

POWER AMP. TOTAL HARMONIC DISTORTION
VS OUTPUT CHARACTERISTICS
DISTORSION HARMONIQUE TOTALE DE L'AMP
DE PUISSANCE PAR RAPPORT AUX
CARACTERISTIQUES DE PUISSANCE
KLIRRFAKTOR UND LEISTUNG DES
LEISTUNGSVERSTÄRKERS



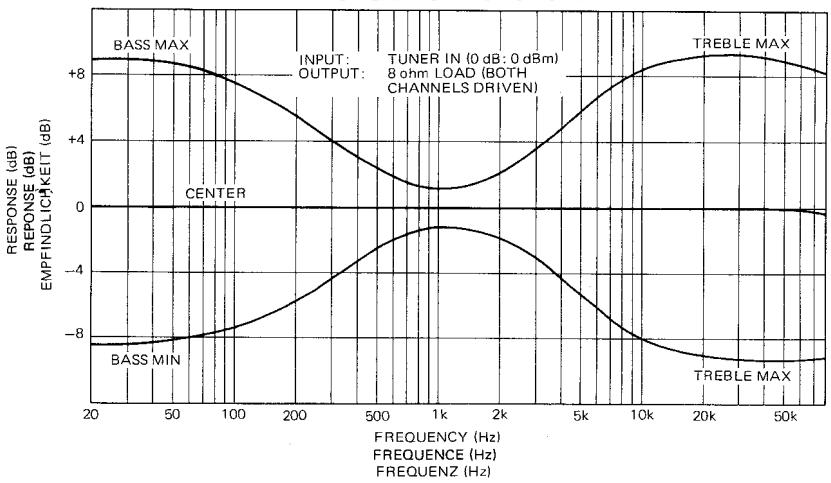
(PMA-757)

POWER AMP. TOTAL HARMONIC DISTORTION
VS OUTPUT CHARACTERISTICS
DISTORSION HARMONIQUE TOTALE
KLIRRFAKTOR UND LEISTUNG DES
LEISTUNGSVERSTÄRKERS



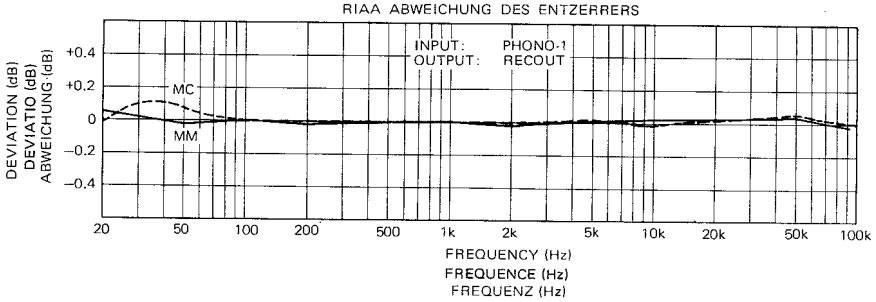
(PMA-777/757)

TONE CONTROL CHARACTERISTICS
CARACTERISTIQUES DE CONTROLE DE TONALITE
KENNLINIEN DER KLANGREGLER



(PMA-777)

EQUALIZER RIAA DEVIATION
DEVIATION RIAA D'EGALISEUR
RIAA ABWEICHUNG DES ENTZERRERS



TROUBLESHOOTING

Trouble? Recheck problem.

1. Are all connections correct?
2. Have you followed all operating instructions correctly?
3. Check speaker and turntable system for proper operation.

When your set does not seem to operate as it should, check the items in the following table. If the problem is not solved by following this table, there may be a fault in the amplifier. Turn off the power immediately, and contact your nearest DENON dealer.

	Symptom	Causes	Remedy
Problems regardless of INPUT SELECTOR PHONO/ TAPE/ TUNER etc.)	No sound and no lights when the power supply is on.	• The power supply cord is not plugged into the socket properly. • Blown fuse.	• Check power supply plug connection. • If the fuse is blown, consult the store where you purchased your set, or DENON.
	Lamp illuminates, but no sound.	• Speaker cords may be loose. • The speaker switch is no set. • The TAPE MONITOR switch is set at "TAPE-1, 2" position. • The INPUT SELECTOR switch is set incorrectly. • Volume control turned down.	• Tighten the connections. • Set the speaker switch to either "SYSTEM A" or "SYSTEM B". • Turn tape monitor indicator off when using source other than from REC/PB terminal. • Select correct position, on the INPUT SELECTOR. • Turn volume up.
	Sound from one side only.	• Speaker cords not connected properly. • Input cord not connected properly. • Left and right channels not balanced.	• Tighten the connections. • Tighten the connections. • Adjust the balance control properly.
	Volumes are different between broadcast and record playback.	• Tuner and turntable output are different.	• Adjust the tuner output to turntable output.
	During stereo reproduction, the location of respective musical instruments are reversed.	• Left and right speaker cords or left and right input cords improperly connected.	• Check cords for proper connections.

	Symptom	Causes	Remedy
Problems only when playing a record.	Hum is heard when playing records.	• Turntable ground connection loose. • PHONO terminals connections faulty. • Interference from near-by TV or radio transmission antenna.	• Tighten the connections. • Tighten the connections. • See your local DENON dealer.
	Howling is produced when volume control is turned up too high while playing records.	• Speakers too close to the turntable. • Floor transmits vibrations from speakers to turntable.	• Keep speakers away from turntable. • Set speakers on cushions to absorb vibration transmitted through the floor. If the turntable does not have an insulator, install a commercial audio insulator.
	Scratchy sound (distorted sound).	• Tracking force too light. • Dust on the stylus tip. • Faulty cartridge.	• Adjust tracking force properly. • Check stylus tip. cleanli- • Try a new cartridge.

CORRECTION LIST
LISTE DE CORRECTION
KORREKTURLISTE

- We have changed the operating instructions for REC OUT SELECTOR as shown below.
- Nous avons modifié les instructions opératoires pour SELECTEUR REC OUT comme ci-dessous.
- Wir haben die Betriebsanweisungen für REC OUT SELECTOR (REC OUT Wahlschalter) wie unten gezeigt geandert.

Operating instructions (10 pages)

⑥ RECOUT SELECTOR

When recording with a tape deck, set to the "source" position. The program source selected by the INPUT SELECTOR switch is produced at the REC terminals of TAPE-1, 2.

For recording tape-to-tape using two decks, set to the COPY position of "tape 1 ▶ 2" or "tape 2 ▶ 1".

When recording or copying is not being done, be sure to set in the "off" position. At the "off" position, the TAPE-1, 2 REC terminals are separated from the signal route inside the set so that no signal is produced.

Instructions opératoires (pages 30)

⑥ SELECTEUR REC OUT

Lors de l'enregistrement à l'aide d'un magnétophone, régler sur la position "Source". La source de programme choisie par le commutateur INPUT SELECTOR est produite au niveau des bornes REC des TAPE-1, 2.

Pour un enregistrement de magnétophone à magnétophone à l'aide de deux magnétophone, régler sur la position COPY de "tape 1 ▶ 2" ou "tape 2 ▶ 1".

S'assurer de bien placer le bouton sur la position "off" lorsque aucun enregistrement ou copie n'est effectué. Sur la position "off", les bornes REC de TAPE-1, 2 sont séparées du signal à l'intérieur de l'unité de manière à ce qu'aucun signal ne soit produit.

Betriebsanweisungen (48 Seiten)

⑥ RECOUT-Wahlschalter (Aufnahmeausgang)

Bei Aufnahmen mit einem Cassettendeck stellt man diesen Schalter auf "source". Damit liegt die mit dem Eingangswahlschalter (INPUT SELECTOR) gewählte Programmquelle an den Aufnahmebuchsen (REC) von TAPE-1, 2 an.

Für das Kopieren von Bändern unter Verwendung von zwei Decks stellt man den Schalter auf COPY, "Tape 1 ▶ 2" bzw. "Tape 2 ▶ 1" riochtig eingestellt werden muß. Wenn keine Aufnahme oder Bänderkopieren durchgeführt wird, stellt man den Schalter auf jeden Fall auf "off". In der "off"-Stellung werden die TAPE-1, 2 REC-Buchsen vom Signalweg innerhalb des Gerätes abgetrennt, so daß kein Signal an den Buchsen anliegt.

Printed in Japan

SAFETY INSTRUCTIONS

1. Read Instructions – All the safety and operating instructions should be read before the appliance is operated.

2. Retain Instructions – The safety and operating instructions should be retained for future reference.

3. Heed Warnings – All warnings on the appliance and in the operating instructions should be adhered to.

4. Follow Instructions – All operating and use instructions should be followed.

5. Water and Moisture – The appliance should not be used near water – for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.

6. Ventilation – The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.

7. Heat – The appliance should be situated away from heat sources such as radiators, heat registeres, stoves, or other appliances (including amplifiers) that produce heat.

8. Power Sources – The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

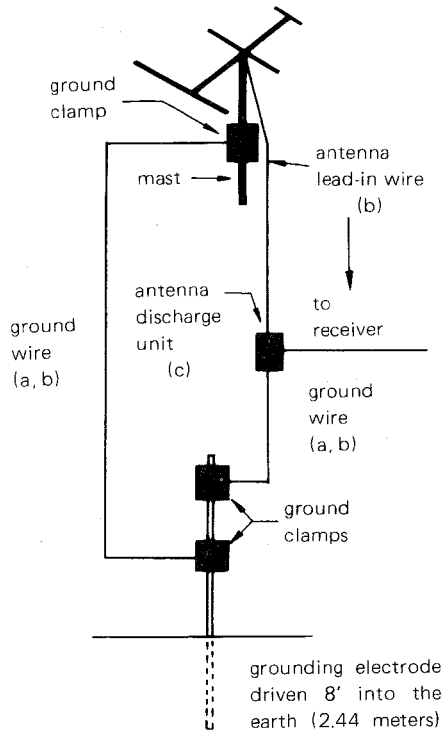
9. Power-Cord Protection – Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

10. Cleaning – The appliance should be cleaned only as recommended by the manufacturer.

11. Power Lines – An outdoor antenna should be located away from power lines.

12. Outdoor Antenna Grounding – If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges. Section 810 of the National Electrical Code, ANSI / NFPA No. 70-1981, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure 1.

Figure 1. Example of antenna grounding as per National Electrical Code instructions



a. Use No. 10 AWG (5.3 mm^2) copper, No. 8 AWG (8.4 mm^2) aluminum, No. 17 AWG (1.0 mm^2) copper-clad steel or bronze wire, or larger, as ground wire.

b. Secure antenna lead-in and ground wires to house with stand-off insulators spaced from 4 feet (1.22 m) to 6 feet (1.83 m) apart.

c. Mount antenna discharge unit as close as possible to where lead-in enters house.

13. Nonuse Periods – The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

14. Object and Liquid Entry – Care should be taken so that objects do not fall liquids are not spilled into the enclosure through openings.

15. Damage Requiring Service – The appliance should be serviced by qualified service personnel when:

    A. The power-supply cord or the plug has been damaged; or
    B. Objects have fallen, or liquid has been spilled into the appliance; or
    C. The appliance has been exposed to rain; or
    D. The appliance does not appear to operate normally or exhibits a marked change in performance; or
    E. The appliance has been dropped,or the enclosure damaged.

16. Servicing – The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

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