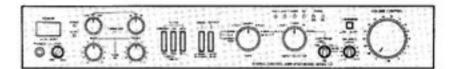
STEREO CONTROL AMPLIFIER

BASIC C2

INSTRUCTION MANUAL



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 to 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 to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.



For your records

Record the serial number, found on the back of the in the spaces designated on the warranty cast, and the space provided below. Refer to the model and make numbers whenever you call upon your dealer for mation or service on this product.

Model BASIC C2 Serial number

Unpacking

Unpack the unit carefully and make sure that a accessories and cables are put aside so they will not be lost.

Examine the unit for any possibility of shipping damage. If your unit is damaged or fails to operate, notify your dealer immediately. If your unit was shipped to you directly, notify the shipping company without delay. Only the consignee (the person or company receiving the unit) can file a claim against the carrier for shipping damage.

We recommend that you retain the original carton and packing materials for use should you transport or ship the unit in the future.

Important!

U.S.A. and Canada

Units shipped to the U.S.A. and Canada are designed for operation on 120 volts AC only. These units are not equipped with an AC voltage selector switch and the discussion of such a switch that follows should be disregarded.

All other countries

Units shipped to countries other than the U.S.A. and Canada are equipped with an AC voltage selector switch on the bottom plate.

Refer to the following paragraph for the proper setting of this switch.

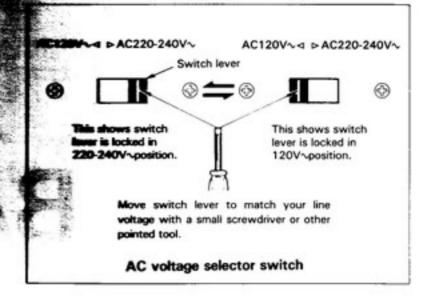
AC voltage selection

This unit operates on 120 volts or 220-240 volts AC. The AC voltage selector switch on the bottom plate is set to the voltage that prevails in the area to which the unit is shipped. Before connecting the power cord to your AC outlet, make sure that the setting position of this switch matches your line voltage. If not, it must be set to your voltage in accordance with the following direction.

Note:

Our warranty does not cover damage caused by excessive line voltage due to improper setting of the AC voltage selector switch.

12:56 K10253



For United Kingdom

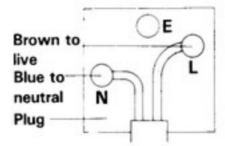
The mains plug must be removed from the wall socket prior to any internal examination.

Important

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

Blue Neutral Brown Live

The wires in this mains lead must be connected to the terminals in the plug as follows:



Notes:

- If a 13-amp plug is used, this must be fitted with a 5-amp fuse.
- If a 3-pin plug with earthing contact is used, no wire must be connected to the E terminal.

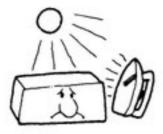
WARNING:

TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS AP-PLIANCE TO RAIN OR MOISTURE.

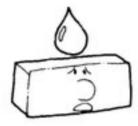
Before operation

Notes on installation

Do not place the unit in a place which is exposed to direct sunlight, near a heating appliance, etc.



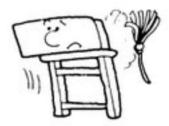
Do not place a vase containing water, makeup, etc. on the unit. Do not use in a humid place.



To maintain good ventilation, do not put records or a table-cloth on the unit. Place the unit at least 10 cm away from the walls.



Choose a location that is relatively free from vibration or excessive dust.



Safety precautions

Never remove the case. If the internal parts are touched, accidently, a serious electric shock might occur.



If a metal object, such as a hair pin or a needle, comes into contact with the power socket on the rear panel, a dangerous electric shock may result. For families with children, never permit children to put anything, especially metal, inside this unit.



Touching the power plug when your hands are wet may result in a serious electric shock.



Never pull, bend or extend the power cord. This could damage the power cord, resulting in a broken cord or short-circuit.



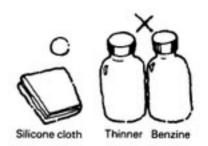
In case of abnormal smell

If an abnormal smell or smoke is detected, immediately turn the power OFF and pull out the power cord. Contact your dealer or nearest Service Station.

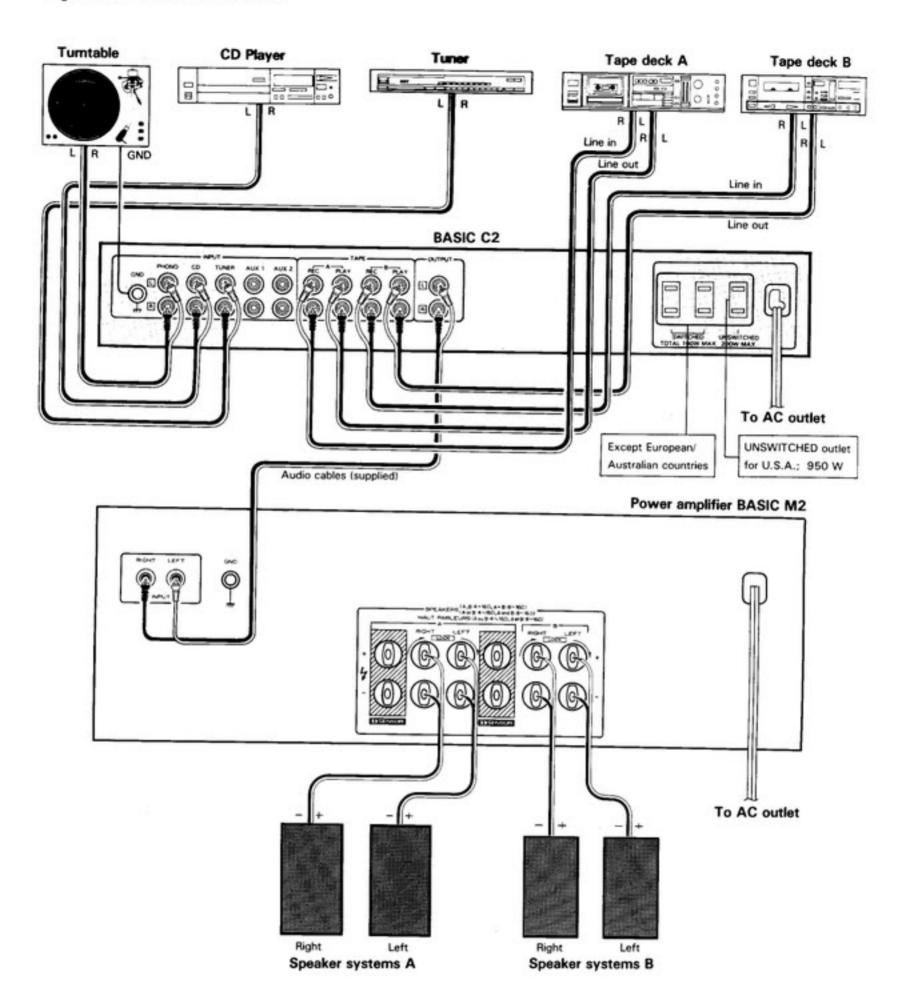


Cleaning

Do not use volatile solvents such as alcohol, paint thinner, gasoline, benzine, etc. to clean the cabinet. Use a silicone cloth or a clean dry cloth.



System connections



Power amplifier

Connect the OUTPUT jacks of this unit and the INPUT acks of a power amplifier with the supplied audio tables.

Notes:-

- The AC cord of the power amplifier should be plugged into a wall AC outlet
- = To prevent possible trouble, always disconnect the power plug or turn off the POWER switch of the power amplifier before connecting or disconnecting the audio cables.
- Energy connecting audio cables, always insert the pin plugs exactinto the connecting jacks. Insufficient insertion may result in nosound trouble or generation of noise.

Turntable

The PHONO jacks of this unit can accept a turntable to either an MM or MC type phono-cartridge. Your stereo turntable has a pair of audio cables that is termated with phono plugs. Plug the left channel plug nto the L and the right channel plug into the R =-ONO jacks.

fire turntable has a ground wire, connect it to the unit's GND terminal to avoid hum.

CD jacks

To these jacks, high-level signal sources such as, C.D. claimer, tuner, extra tape decks, TV, VCR sound outputs, etc. can be connected.

Tuner

⇒se the TUNER jacks for connection to an FM stereo or
 ∴'-FM stereo tuner.

Connect the left channel of the tuner to the L TUNER next jack and the right channel of the tuner to the R LNER input jack.

AUX1, 2

The AUX jacks are used to connect other high-level signal sources, such as extra tuners, tape decks (equipaged with preamps), TV, VTR or VCR sound outputs, mis preamps, etc.

Ground

For maximum safety and minimum interference connect the GND terminal to a good earth ground if practicable. A good earth ground is a cold water pipe or a metal stake driven into moist earth. However, never use a gas pipe for this purpose.

Tape decks

inchiv one tape deck is to be connected to the system it secommended that it be connected to the jacks marked TAPE A.

Table deck input and output cables are normally termated with phono plugs.

Playback

Plug the left and right output cables of the tape deck into the L and R TAPE A PLAY jacks.

Record

Plug the left and right input cables of the tape deck into the L and R TAPE A REC jacks.

Second tape deck

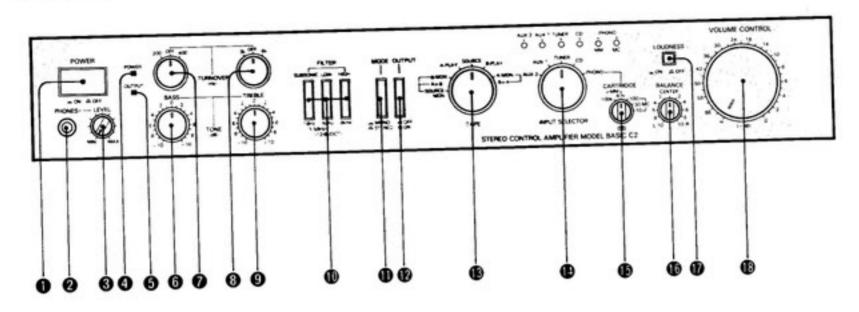
Plug the input and output cables from the second tape deck into the REC and PLAY jacks marked TAPE B.

AC outlets (Except European/Australian countries)

The AC outlets on the rear panel of the unit may be used to supply power to other components in the system, such as turntables, tape decks, etc. Never connect equipment whose power consumption exceeds the maximum value shown at each outlet.

- SWITCHED outlets: These outlets supply power only when the unit is turned on. The maximum total capacity (both outlets) is 100 watts.
- 2. UNSWITCHED outlet: The outlet provides power when the unit is plugged into an active AC wall outlet, regardless of the setting of the POWER switch. The maximum capacity is 200 watts (for U.S.A.; 950 watts).

Controls and indicators



POWER switch

Press the power switch to turn on the power. To turn the power off, press the switch again to set it to the out position.

PHONES jack

Plug stereo headphones into this jack for private listening. The speakers are silenced when the OUTPUT switch is set to OFF.

O PHONES-LEVEL control

This control adjusts left- and right-channel phones level simultaneously. Set it for the desired listening level.

POWER indicator

Lights when the POWER switch is set to on.

6 OUTPUT indicator

Lights when the OUTPUT switch is not pressed (\(\int ON \)).

TONE-BASS control

Turn clockwise to increase bass response, counterclockwise to reduce bass response. The "O" setting provides a flat bass response.

TURNOVER 200 Hz/400 Hz selector switch

This switch is used to change between the 200 Hz or 400 Hz of low frequency range (BASS control). BASS control do not operate when this switch is set to OFF.

TURNOVER 6 kHz/3 kHz selector switch

This switch is used to change between the 6 kHz or 3 kHz of high frequency range (TREBLE control). TRE-BLE control do not operate when this switch is set to OFF.

TONE-TREBLE control

Turn clockwise to increase treble response, counterclockwise to reduce treble response.

The "0" setting provides a flat treble response.

1 FILTER switchs

SUBSONIC On — With the switch in this setting, signals below 18 Hz are attenuated at the rate of 12 dB per octave.

SUBSONIC + LOW On — With the switch in this setting, signals below 58 Hz are attenuated at the rate of 12 dB per octave.

LOW On — With the switch in this setting, signals below 40 Hz are attenuated at the rate of 12 dB per octave.

HIGH On — With the switch in this setting, signals below 8 kHz are attenuated at the rate of 12 dB per octave.

MODE switch

STEREO — This provides stereophonic reproduction of any stereo program source. The left channel is heard from the left speaker, and the right channel is heard from the right speaker.

MONO — Monophonic reproduction. The left and right channel are mixed together and heard from both speakers.

In this setting, when the BALANCE control is turned counterclockwise, left channel level to be mixed is increased. When the BALANCE control is turned clockwise, the right channel level to be mixed is increased.

@ OUTPUT switch

ON — With this setting signals is output from the OUT-PUT jacks.

OFF — With this setting no signal is output from the OUTPUT jacks.

TAPE selector switch

- SOURCE Set the switch to this position when the tape deck is not in use or recording without monitoring. Always set to this position to listen to AM or FM broadcasts, CD or record.
- A-PLAY Set to this position when recording or playing back the tape deck connected to TAPE A (REC, PLAY) jacks.
- B-PLAY Set to this position when recording or playing back the tape deck connected to TABE B (REC, PLAY) jacks.
- A⊳BB-MON Set to this position to dub a tape from the tape deck connected to TAPE A jacks to the tape deck connected to TAPE B jacks. At this setting, monitoring of the tape deck connected to TAPE B jacks is possible.
- A>B SOURCE MON Set to this position to listen to the audio source (AM or FM broadcasts, CD or record) while dubbing a tape from the tape deck connected to TAPE A jacks to the tape deck connected to TAPE B jacks. At this setting, monitoring is not possible.
- BD A A-MON Set to this position to dub a tape from the tape deck connected to TAPE B jacks to the tape deck connected to TAPE A jacks. At this setting monitoring of the tape deck connected to TAPE A jacks is possible.

1 INPUT SELECTOR switch

- AUX1 Selects the program source connected to the AUX1 jacks. The AUX1 indicator will light.
- AUX2 Selects the program source connected to the AUX2 jacks. The AUX2 indicator will light.
- TUNER Selects the tuner connected to the TUNER jacks. The TUNER indicator will light.
- CD Selects the program source connected to the CD jacks. The CD indicator will light.
- PHONO Selects the program source played on the turntable. The PHONO MM or MC indicator will light.

PHONO-CARTRIDGE selector switch

- MM-47 k Set to this position when using 47 k Ω output MM (moving magnet) cartridge. The PHONO MM indicator will light.
- MM-100 k Set to this position when using 100 k Ω output MM (moving magnet) cartridge. The PHONO MM indicator will light.
- MC-10 Set to this position when using 10 Ω output MC (moving coil) cartridge. The PHONO MC indicator will light.
- MC-30 Set to this position when using 30Ω output MC (moving coil) cartridge. THe PHONO MC indicator will light.
- MC-100 Set to this position when using 100Ω output MC (moving coil) cartridge. The PHONO MC indicator will light.

BALANCE control

This control permits balancing of the left and right channels when an imbalance exists from the sound source, or to correct acoustic imbalance due to room conditions.

1 LOUDNESS switch

- ON Bass notes are boosted at low listening levels. This precisely offsets a characteristics of human hearing whereby we are less sensitive to bass notes at very low listening levels.
- OFF The low-level bass boost is removed.

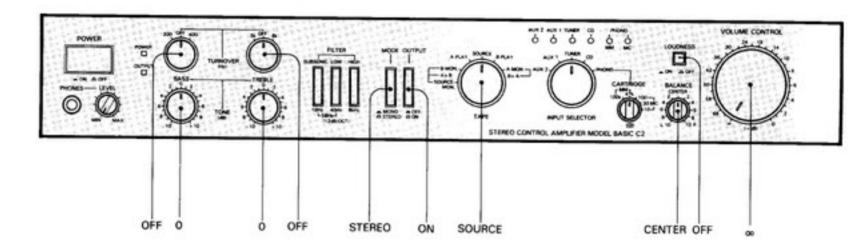
VOLUME CONTROL

This control adjusts left- and right-channel volume simultaneously. Set it for your desired listening level.

Operating instructions

Prior to operation

It is recommended that rarely used controls and switches be preset in accordance with your preference in order to simplify operation. Once these controls and switches have been preset, normal operation is simply turning on the POWER switch and selecting the desired program source by setting the INPUT SELECTOR switch.



Tuner

- With your tuner connected to the TUNER jacks, set the INPUT SELECTOR switch to TUNER.
- 2. Tune to the desired station.
- Adjust the volume and/or tone controls for your preference.

Turntable

- With your turntable connected to the PHONO jacks, set the INPUT SELECTOR switch to PHONO.
- According to the type of phono-cartridge used, set the PHONO-CARTRIDGE selector switch. Operate the turntable.
- Adjust the volume and/or tone controls for your preference.

CD, AUX

- With your additional program source connected to the CD, AUX1 or AUX2 jacks, set the INPUT SELEC-TOR switch to CD, AUX1 or AUX2.
- Operate the equipment connected to the CD, AUX1 or AUX2 jacks.
- Adjust the volume and/or tone controls for your preference.

Tape decks

Tape playback

- Select the tape deck connected to the TAPE A or B jacks with the TAPE selector switch (A-PLAY or B-PLAY).
- Operate the tape deck to play back your recorded tape.
- Adjust the volume and/or tone controls for you preference.

Recording (with one tape deck)

- Set the TAPE switch to SOURCE.
- Set the INPUT SELECTOR switch to PHONO, TUNER, CD, AUX1 or AUX2 in accordance with the desired source.
- Set up the program source component for operation and set up your tape deck for recording.
- Set recording levels with the controls on your tape deck. The controls on the amplifier do not affect the signal output to the tape deck.

Recording (with two tape decks)

- Connect two tape decks to the TAPE A and TAPE B jacks.
- 2. Set the TAPE switch to SOURCE.
- Set the INPUT SELECTOR switch to PHONO, TUNER, CD, AUX1 or AUX2 in accordance with the desired source.
- Set up your two tape decks for recording.
- Recording levels should be set using controls on the individual tape decks.
- For the TAPE selector switch function see page 9.

Note:

When recording with two tape decks and the TAPE selector switch position is changed from A-PLAY to B-PLAY to monitor the source or vice versa, the recording will be disturbed.

Monitoring

' your tape deck is equipped with three heads, you can compare the sound quality of the recording in progress with that of the program source; the source sound can ce heard by setting the TAPE selector switch between SOURCE and A-PLAY or B-PLAY.

Tape-to-tape dubbing

.Vhen two tape decks are connected to the TAPE A and TAPE B jacks, tape recordings may be duplicated easily using one tape deck to play the prerecorded tape and the other tape deck to record the copy. Set the TAPE selector switch as follows:

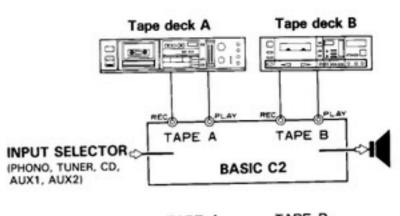
A ⊳ B B-MON — To record a copy on tape deck B from a tape played on tape deck A.

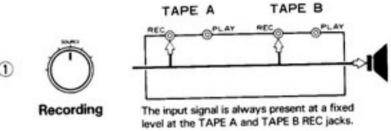
B ⊳ A A-MON — To record a copy on tape deck A from a tape played on tape deck B.

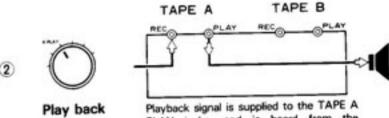
--÷ setting of the INPUT SELECTOR switch does not affect dubbing. = 2;ust the recording level on the deck that is making the copy using that deck's operating controls. Start both decks (play and record) : "ultaneously.

To listen to the source sound while dubbing

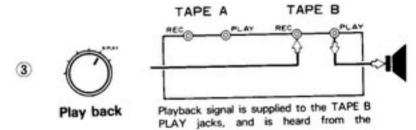
- 1. Set the TAPE selector switch to A ⊳ B SOURCE MON. Set the tape decks for dubbing mode.
- 2. Set the INPUT SELECTOR switch to the appropriate position (PHONO, TUNER, CD, AUX1, AUX2).
- Play the program source.
- -. Adjust the volume and tone.



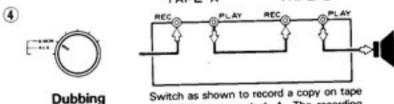




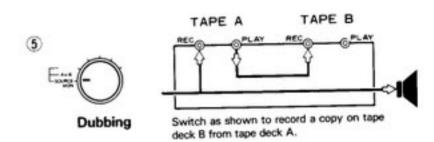
PLAY jacks, and is heard from the speakers.

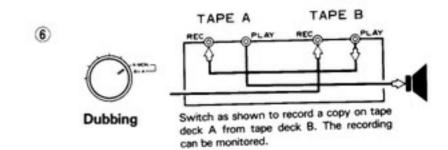






Switch as shown to record a copy on tape deck B from tape deck A. The recording can be monitored.





In case of difficulty

If your unit should not perform as expected, consult the table below to see if the problem can be corrected before seeking help from your dealer or service representative.

AM, FM, PHONO or Tape playback	Cause	Remedy	
Power on but no sound.	Power cord not plugged in. Poor connection at wall outlet. Power outlet inactive. VOLUME CONTROL set fully counterclockwise.	Check plug contact. Check outlet using a lamp or other appliance (outlet may be controlled by a wall switch). Set the control to your preference.	
No sound from left or right.	Speaker cords disconnected. OUTPUT switched off. No INPUT SELECTOR switch is in use.	Check speaker connections. Check OUTPUT switch. Turn the selector switches to select the desired program.	
Sound from left or right, but not both.	Poor speaker connections. Check connections at both ends of speaker cord. Reverse speakers, if problem stays with speaker have speaker checked. BALANCE control set to one extreme or the other.		
PHONO playback only	Cause	Remedy	
No sound from both or one speaker.	Turntable output disconnected.	Check phono cables.	
Loud hum drowns out sound.	Poor ground connection at phono cable connections.	Check phono plugs, particularly outershell connections.	
Low background hum.	Hum Picked up in turntable or turntable cables.		
Background buzz.	TV signal picked up by phono cable (especially near transmitter).	Route phono cables to minimize buzz.	
Howling noise at maximum volume settings.	Acoustic pickup from speaker.	Increase distance between speaker and turntable. Choose speaker loca- tions carefully. Check turntable suspension.	

Specifications

Phono MM	2.5 mV/47 k, 100 k ohms/88 dB
Phono MC	
	100 ohms/70 dB, 250 µV Input short
CD, AUX, TUNER, TAPE	
ignal-to-Noise Ratio Unweighted at	
Phono MM & MC	
CD, AUX, TUNER, TAPE	
Aaximum Input Voltage for Phono MN	
Maximum Input Voltage for Phono MC	4.7° 1.7° (4.7) 4.7° (4.7) 5.7° (4.7) 5.7° (4.7) 5.7° (4.7) 5.7° (4.7) 5.7° (4.7)
requency Response	15 MV, 1.11.D. 0.00270
Phono MM & MC	20 Hz - 20 kHz +0 3 dB
CD, AUX, TUNER, TAPE	
one Control	1 112 - 300 KHZ (-3 db)
BASS turnover: 400 Hz	100 Hz + 10 dB
turnover: 200 Hz	
TREBLE turnover: 3 kHz	
turnover: 6 kHz	
	20 KHZ ± 10 UB
Ter Subsonic	18 Hz 12 dB/Ostava
Low	
Subsonic + Low	
High	8 kHz, 12 dB/Octave
Fransient Response	10
Rise Time	1.0 μs
Total Harmonic Distortion	
CD, AUX, TUNER, TAPE 20 Hz ~ 20 kHz	0.0019/ at 1 V Output
	0.001% at 1 v Output
Phono MM & MC	0.0038/
20 Hz ~ 20 kHz	0.002%
Output Voltage & Impedance	150 mV 220 share
TAPE REC	
PRE OUT	1,000 mv, 100 onms
oudness Control	100 11- 10 40
(at VOLUME - 30 dB)	
(at VOLUME - 40 dB)	100 Hz, +9 dB
General	
ower Requirement	120 V 60 Hz (U.S.A. & Canada models
¥	220 V 50 Hz (European model) or
	120 V/220 (240) V 50/60 Hz switch-
	able
Power Consumption	12 W
	1 Unswitched, 2 Switched (Except Euro
	pean/Australian countries)
Dimensions	W 440 mm (17-5/16")
	H 78 mm (3-1/16*)
	D 320 mm (12-19/32")
Weight (Net)	
Note:	