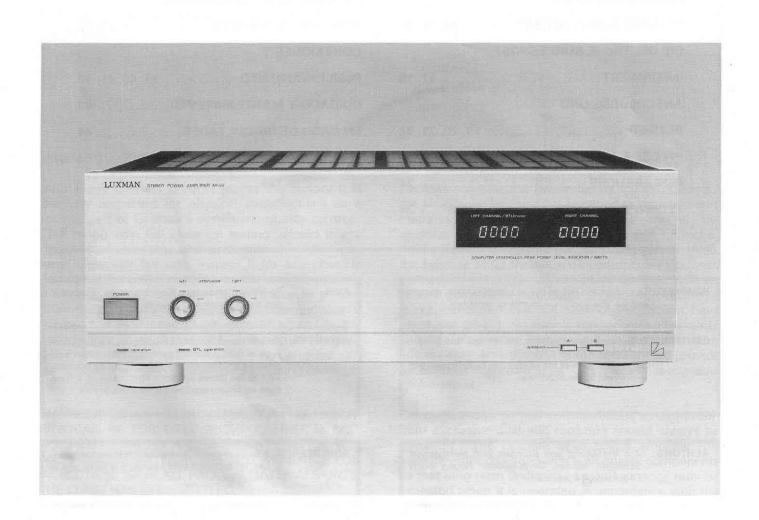
# LUXNAN

OWNER'S MANUAL
BEDIENUNGSANLEITUNG
MODE D'EMPLOI
MANUAL DE OPERACION

**M-03** 

Stereo Power Amplifier



# TABLE OF CONTENTS

CONTENTS	CONTENU
INTRODUCTION 3	INTRODUCTION25
CONTROLS, SWITCHES,	COMMANDES, COMMUTATEURS,
JACKS & TERMINALS 4, 5, 6	PRISES ET BORNES 26, 27, 28
CONNECTIONS AND	CONNEXIONS ET
OPERATION 7, 8, 9, 10	FONCTONNEMENT 29, 30, 31, 32
CARE AND MAINTENANCE 11	SOIN ET ENTRETIEN33
IN CASE OF DIFFICULTY 12	EN CAS DE DIFFICULTÉ 34
SPECIFICATIONS 12	SPÉCIFICATIONS34
INHALT	MATERIAS
EINFÜHRUNG13	INTRODUCCIÓN35
REGLER, SCHALTER,	CONTROLES, INTERRUPTORES,
STECKER & ANSCHLÜSSE 14, 15, 16	
OTEORETI & ANIOGITEOGOETHITITI TI, TO, TO	TOMAS Y TERMINALES 36, 37, 38
DIE DEUTSCHE BUNDESPOST	TOMAS Y TERMINALES 36, 37, 38 CONEXIONES Y
DIE DEUTSCHE BUNDESPOST	CONEXIONES Y
DIE DEUTSCHE BUNDESPOST INFORMIERT	CONEXIONES Y FUNCIONAMIENTO 39, 40, 41, 42
DIE DEUTSCHE BUNDESPOST INFORMIERT	CONEXIONES Y  FUNCIONAMIENTO
DIE DEUTSCHE BUNDESPOST INFORMIERT	CONEXIONES Y  FUNCIONAMIENTO
DIE DEUTSCHE BUNDESPOST         INFORMIERT       17, 18         ANSCHLÜSSE UND         BETRIEB       19, 20, 21, 22         PFLEGE & UNTERHALT       23	CONEXIONES Y  FUNCIONAMIENTO

**WARNING:** To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

CAUTION: To prevent electric shock, do not use this (polarized) plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.

ACHTUNG: Zur Verhütung von Bränden und elektrischen Schlägen, dieses Gerät weder Regen noch Feuchtigkeit aussetzen.

AVIS: Pour éviter tout risque d'électrocution, n'exposez pas cet appareil à l'humidité.

ATTENTION: Pour prévenir les chocs électriques, ne pas utiliser cette fiche polarisée avec un prolongateur, une prise de courant ou une autre sortie de courant, sauf si les lames peuvent être insérées à fond sans en laisser aucune partie à découvert.

ADVERTENCIA: A fin de prevenir incendios y descargas eléctricas, no exponga este aparato a la lluvia ni a la humedad.

## INTRODUCTION

#### WELCOME!

Luxman welcomes you to the growing number of discerning audiophiles who own and operate Luxman Audio and Audio-Video Products. We take great pride in the long tradition of excellence in sonic quality that the Luxman name represents. This manual has been prepared to help you to maximize your enjoyment of the outstanding performance and features of your new Luxman M-03.

This high-quality versatile powerful stereol BTL amplifier represents technological refinements and performance second to none in the industry. High power (200 watts/ch, 480 watts/BTL), Microprosessor Controlled Peak Power Level Indicator, Peak Level Hold Time Selector, Input Level Controls, Speaker Impedance Selector, Thermal Overload Protection, and BTL (Balanced Transformerless) Mode — are just a few examples.

To realize the exceptional performance for which the amplifier is capable, it is necessary that all signal sources and speaker systems used with it are of the highest sonic quality. We recommend complementary Luxman components wherever possible.

Please study this manual carefully and become acquainted with all the special features, operation and capabilities of your new Luxman M-03. Should you have any questions, or desire information on other Luxman products, please contact your local Luxman dealer.

#### WHEN YOU OPEN THE BOX

Before any Luxman product leaves the factory it is carefully inspected for physical imperfections as a routine part of Luxman's systematic quality control. This, along with full electrical testing, should insure quality craftsmanship and performance. After you have unpacked the unit, inspect it for any physical damage. Save the shipping carton and all packing materials, as they are essential to reduce to a minimum the possibility of transportation damage, should the product ever need to be shipped again. In the unlikely event that damage has occurred, notify your dealer immediately and request the name of the carrier so that a written claim to cover shipping damages can be initiated.

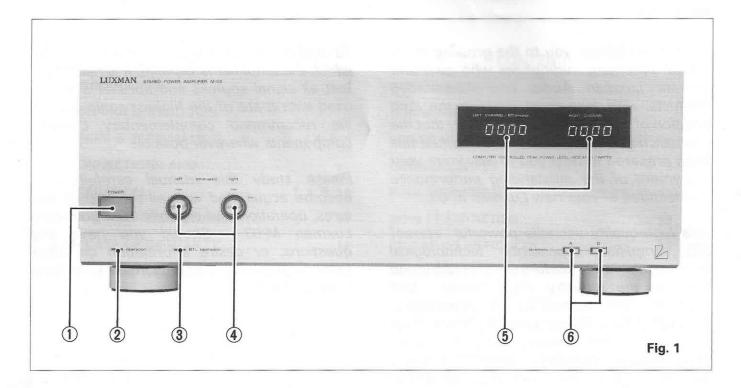
THE RIGHT TO ANY CLAIM AGAINST A PUBLIC CARRIER CAN BE FORFEITED IF THE CARRIER IS NOT NOTIFIED PROMPTLY AND IF THE SHIPPING CARTON AND PACKING MATERIAL ARE NOT AVAILABLE FOR INSPECTION. SAVE ALL PACKING MATERIALS UNTIL THE CLAIM HAS BEEN SETTLED.

#### **INSTALLATION AND PLACEMENT**

Because some heat is generated by the M-03, adequate air circulation must be provided to maintain cool operation. Leave adequate space around the amplifier (at least 4 inches on the top and 1.5 inches on the sides and rear) for proper air circulation. Also, the Luxman M-03 should not be completely enclosed with other heat producing components. If the Luxman M-03 is going to be mounted in an enclosed cabinet, it is recommended that the back of the cabinet have vents and the cabinet door is kept open to allow air to circulate around the amplifier. With these considerations implemented, the Luxman M-03 should provide exceptional performance in any reasonable environment.

Of course, such normal considerations as protection from excessive dust and moisture should always be observed. The Luxman M-03 power amplifier has been carefully designed with high quality components so that long term undiminished performance may be expected when it is operated in accordance with the instructions provided.

## CONTROLS, SWITCHES, JACKS AND TERMINALS



#### **FRONT PANEL (Fig. 1)**

#### 1. POWER Switch

The push-type switch will turn the power on and off. When it is pressed in and the power is on, the OPERATION indicator (2) will illuminate. The built-in time delay muting circuit will be on for approximately 6 seconds. The M-03 will be put into the operational condition in about 6 to 9 seconds.

#### 2. OPERATION Indicator

The OPERATION indicator will light up when the POWER switch is pressed in, indicating that the power is on.

## 3. BTL (Balanced Transformerless) OPERATION Indicator

When the BTL wiring connection is made and the BTL OPERATION switch on the rear panel is set to the ON position for BTL operation of the M-03, the indicator will be on.

**Note:** For stereo operation, be sure the BTL OPERA-TION switch is set to the OFF position and the indicator is not illuminating.

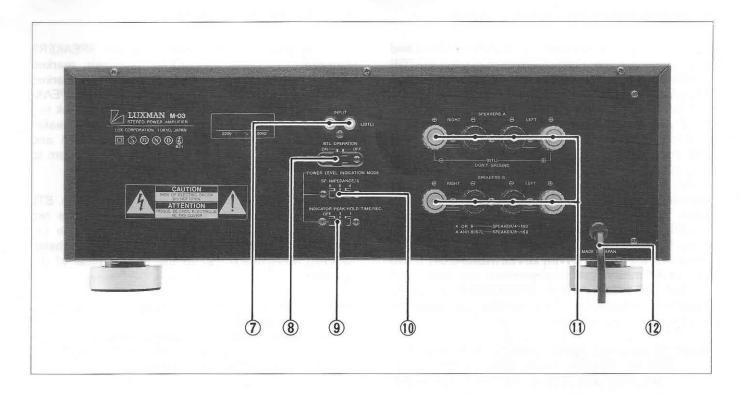
#### 4. ATTENUATORS (LEFT and RIGHT)

For the left and right channels, the ATTENUATORs control the input signal levels. When both ATTENUATORs are turned clockwise all the way to the MAX position, the signal levels are maximum (0 dB); when they are turned all the way counterclockwise to the MIN position, the signal levels are minimum ( $-\infty$ ). When your M-03 is used as a BTL (Balanced Transformerless) monaural amplifier, its input signal level is controlled by the LEFT ATTENUATOR.

## 5. COMPUTER CONTROLLED PEAK POWER LEVEL INDICATORS/WATTS

Digitally indicate the relative power output (watts) of each channel. The indicators light up in approximately six to nine seconds after the POWER is turned on and the SPEAKERS-A and/or SPEAKERS-B switch is depressed. The indicators do not light up if the both SPEAKERS-A and -B switches are left in the out (off) position. When the INDICATOR PEAK HOLD TIME/SEC switch on the rear panel is set to the "1" or "3" position, the indicators show the peak power level for 1 second or 3 seconds respectively for easier reading. For the BTL connection, only the LEFT CHANNEL/BTL (MONO) indicator illuminates.

## CONTROLS, SWITCHES, JACKS AND TERMINALS



#### 6. SPEAKERS Select Switches (A and B)

Allow you to listen to (1) two speaker systems connected when both switches are depressed; (2) one of the two speaker systems when either one of the switches is depressed; (3) or, no speaker system when neither of the two is depressed for private listening through a set of headphones connected to your pre-amplifier.

#### **REAR PANEL (Fig. 2)**

#### 7. INPUT Jacks (R and L(BTL))

Connect the output of your pre-amplifier to the INPUT jacks. Connect the left channel ouput to the INPUT jack marked "L (BTL)" and that for the right channel to the one marked "R". For connection, use the shielded audio cords with pin-plugs attached to both ends, commonly referred to as pin-plug cords. When the output impedance of the pre-amplifier is high, the length of the pin-plug cords should be made as short as possible.

#### 8. BTL OPERATION ON/OFF Switch

Turns BTL on and off. When this switch is set in the ON position, the BTL OPERATION indicator on the front panel lights up and only the LEFT CHANNEL/BTL (MONO) of the PEAK POWER LEVEL INDICATOR illuminates. Also only the LEFT channel of the ATTENUATOR and the INPUT jack are active.

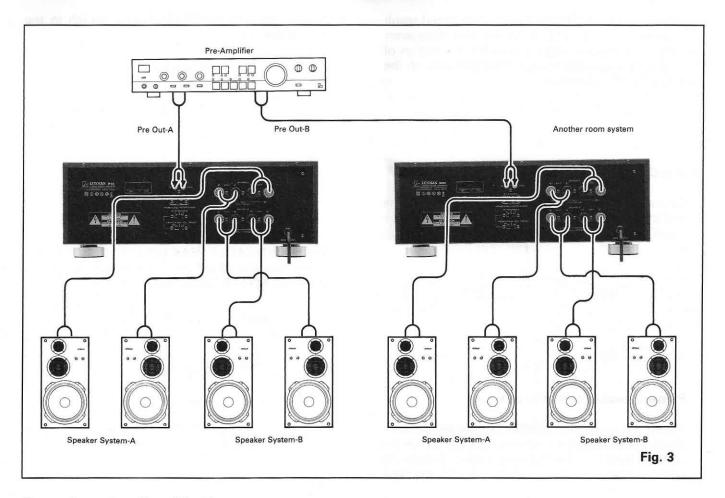
This amplifier comes with the BTL OPERATION switch set and fixed in the OFF position at the factory. To set to the ON position, loosen the screw fixing the small plate and set the switch to the ON position then tighten the screw. Leave the switch in the OFF position when the BTL mode is not in use.

Note: For the BTL monaural operation, use only the L(BTL) channel INPUT jack and do not use the R channel INPUT jack. If the output impedance of your pre-amplifier is too high, this may cause distortion. Connect your speakers only to the red "+" terminals (L and R) of the SPEAKERS-A and do not connect to the black "—" terminals (L and R).

#### 9. INDICATOR PEAK HOLD TIME/SEC Switch

Selects the hold time of the PEAK POWER LEVEL INDICATOR, for one second or three seconds. When this switch is set at the "1" position, the peak level of the output power, in accordance with the setting of the impedance select switch, will be shown for one second on the PEAK POWER LEVEL INDICATOR. The PEAK POWER LEVEL INDICATOR changes every one second to indicate the peak level in the previous one second. When the switch is set at the "3" position, the PEAK POWER LEVEL INDICATOR shows the peak level for three seconds. However, if a higher power output than the peak level shown on the indicator comes in, the indicator will immediately show that higher power output as the peak level. When the peak level holding is not required, set the switch to the OFF position.

## **CONNECTIONS AND OPERATION**



#### Stereo Operation (See Fig. 3)

#### **INPUT Jacks:**

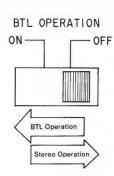
Be sure that the M-03's power cord is unplugged before connecting your pre-amplifier and speakers to the M-03.

 Connect the output terminals of a pre-amplifier (C-03 etc.) to the INPUT jacks of the M-03.

Connect the left and right output terminals of your pre-amplifier to the "L(BTL)" and "R" INPUT jacks of M-03 respectively.

Be sure that the pin-plugs for the connections are fixed firmly into the M-03's INPUT jacks. If the pin-plug is not sufficiently grounded, it will cause hum, noise and general deterioration in the signal-to-noise ratio.

Set the BTL OPERATION switch to the OFF position for stereo operation.



#### **Speaker Connections**

The M-03 accepts two sets of 2-speaker systems (A and B). Connect at least one pair of speakers for stere-ophonic sound reproduction. Using heavy-gauge quality speaker cables (available at most hi-fi stores) but allowing the shortest possible length required, make connection between the right speaker (facing from the listener's position) to the RIGHT SPEAKERS terminals, the left speaker to the LEFT SPEAKERS terminals. Make sure your first 2-speaker system is connected to the "SPEAKERS A" terminals on the M03, matching left to left, right to right, (+) to (+), and

## CONTROLS, SWITCHES, JACKS AND TERMINALS

#### 10. SP IMPEDANCE/Ohm Selector Switch

Selects the speaker impedances (4 ohms, 6 ohms and 8 ohms) so that the PEAK POWER LEVEL INDICATOR shows correct output power for the selected impedance. Set the switch to the position matching with the impedance of your speakers connected (for example, "4" if your speakers' impedance is 4 ohms), then the built-in microprocessor calculates the output power and the PEAK POWER LEVEL INDICATOR shows the output power level. For the BTL operation, also set the switch to the position matching with the speaker impedance to obtain correct output power on the indicator. When 16-ohm speakers are connected to the amplifier, place the switch to the "8" position. In this case, the actual output power is a half of the power shown on the PEAK POWER LEVEL INDICATOR. If two sets of different impedance speakers are connected to the SPEAKERS-A and SPEAKERS-B terminals, select the impedance of the speaker you want the indicator to show the level.

Note: If incorrect switch position is selected, the PEAK POWER LEVEL INDICATOR shows incorrect output level. So this switch should always be set to the correct position.

#### 11. SPEAKERS Terminals (A and B)

Connect your speaker systems to the SPEAKERS terminals. The two SPEAKERS terminals marked "LEFT" are for the left channel, and those marked "RIGHT" are for the right channel. Each set of SPEAKERS terminals has a red (+) terminal and a black (—) terminal. Connect the "+" terminal of your speaker system to the red (+) terminal of the M-03 and connect the "—" terminal of your speaker system to the black (—) terminal of the M-03.

When the wiring connection is made for the BTL (monaural) operation, be sure to connect the red terminal labeled SPEAKERS-A LEFT (+) to the (+) terminal of the speaker and the red terminal labeled SPEAKERS-A RIGHT (+) to the (—) terminal of the speaker.

**Note:** If you are using 4-ohm speakers, connect only one set of speakers, or use only one set of speakers at a time. Do not use A+B if one set is 4-ohm speakers. This will prevent the amplifier from being overloaded.

#### 12. AC Power Cord

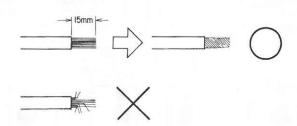
Connect the AC plug into your household power outlet. If any noise or static is noticed, unplug and plug in again reversing the polarities.

## **CONNECTIONS AND OPERATIONS**

(—) to (—), as the incorrect connections would result in improper phase and subdued low frequency response. Follow the steps above for connection of your second 2-speaker system, but this time to the "SPEAKERS B" terminals.

#### **Wiring Connection**

 Cut away about 15mm of insulating shield from the end of speaker cables and twist the exposed loose wires.



Prepare speaker cable end as shown.

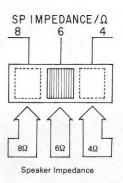
- Rotate the knob on the SPEAKERS terminals counterclockwise. Insert the twisted bare portion of the speaker wire into the opening inside. Secure the wire by rotating the knob clockwise until it is tight.
- When connecting the speaker terminals, be sure no bare portion or stray strands of wire touch a second terminal or the chassis — a harmful short could result.



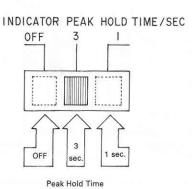
4. Press the A or B (or both) SPEAKERS select switches to activate the speakers.

Speaker Sp. Switch Operation	А	В
A, (BTL)	ON	OFF
В	OFF	ON
A and B	ON	ON

5. Set the SPeaker IMPEDANCE/Ohm switch to the correct position.



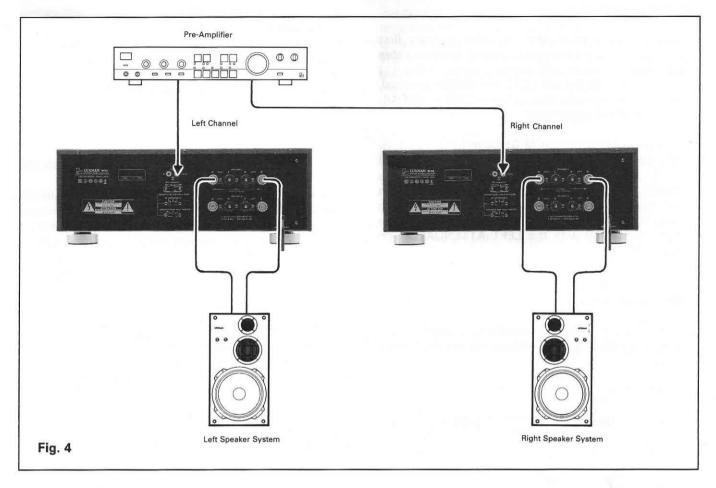
Set the INDICATOR PEAK HOLD TIME/SEC switch to the position where you get the easy reading on the PEAK POWER LEVEL INDICATOR/WATTS.



ATTENUATOR Operation
 Normally, set the ATTENUATORs on the M-03 at the MAX position and adjust the volume control on

the MAX position and adjust the volume control on your pre-amplifier for your desired sound level. Adjust the ATTENUATORs only when the input signal level is too high or not balanced between the channels. Adjust the left and right input sensitivity with the LEFT and RIGHT ATTENUATORs.

## **CONNECTIONS AND OPERATIONS**



#### Connecting the Power Supply

Set the POWER switch of M-03 to the off (out) position and connect the AC plug (to be found at the end of the AC power cord) into your household power outlet. Rotate the volume control on your pre-amplifier counterclockwise to the minimum position. Now, turn on the POWER switch of the M-03. The OPERATION indicator will light up, and the M-03 will be put into the operational condition in about 6 seconds. Set the ATTENUATORs on the M-03 at the MAX position and rotate slowly the volume control on your pre-amplifier clockwise for your desired sound level.

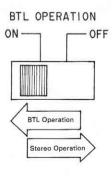
Connect the pre-Amp outputs to the inputs of Surround Processor, noise reduction unit etc. and its output to M-03's inputs, when Surround Processor, noise reduction, etc. is used.

BTL (Balanced Transformerless) Connection and Operation (See Figure 4)

#### **INPUT Terminals:**

 Connect the right channel output from your preamplifier to the L(BTL) INPUT terminal of the M-03 as shown in the Figure 4.

- If you have another M-03 for the left channel, connect the left channel output from your preamplifier to the L(BTL) INPUT terminal of your second M-03.
- Set the BTL OPERATION switch on both M-03s to the ON position. If the M-03s are connected as shown in the Figure 4 the maximum output power of each amplifier will become about double the power in the normal stereo mode.



# CONNECTIONS AND OPERATIONS

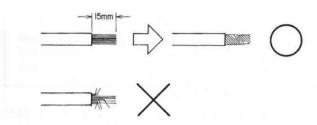
#### **Speaker Connections**

- Connect the right channel speaker to your first M-03. Using a heavy-gauge quality speaker cable (available at most hi-fi stores), connect the (+) speaker lead to the red LEFT SPEAKERS terminal, and the (—) speaker lead to the red RIGHT SPEAK-ERS terminal on the M-03.
- 2. If you are using another M-03 for left channel, connect your left channel speaker leads to the second M-03 following the steps above. Select the INDICATOR PEAK HOLD TIME/SEC switch position for easier reading of the peak power level on the LEFT CHANNEL/BTL (MONO) indicator. Adjust the input sensitivity with the LEFT ATTENUATOR on each M-03.

4. Press the A SPEAKERS select switch to activate the speakers.

#### **Wiring Connection**

 Cut away about 15mm of insulating shield from the end of speaker cables and twist the exposed loose wires.



Prepare speaker cable end as shown.

- Rotate the knob on the SPEAKERS terminals counterclockwise. Insert the twisted bare portion of the speaker wire into the opening inside. Secure the wire by rotating the knob clockwise until it is tight.
- When connecting the speaker terminals, be sure no bare portion or stray strands of wire touch a second terminal or the chassis — a harmful short could result.



## CARE AND MAINTENANCE

#### **CLEANING**

The durable finish of the knobs and heavy aluminum front panel will last indefinitely with proper care and cleaning. Never use scouring pads, steel wool, scouring powders, or harsh chemical agents, such as lye solution. These will mar the finish. Clean with a soft, lint-free cloth or cotton swab slightly dampened with a mild solution of detergent and water.

#### REPACKING FOR SHIPMENT

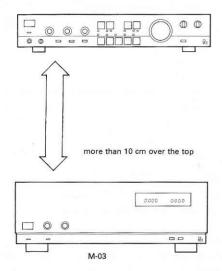
Should it become necessary to ship your M-03 for any reason, use the original packing materials. If these are no longer available, be sure that adequate materials, at least equivalent to the original, are used.

#### REPAIRS

Only the most competent and qualified service technicians should be allowed to service the M-03. The Luxman company and its factory-trained warranty station personnel have the knowledge and special equipment needed for repair and calibration of this precision instrument.

Ventilation is very important for this high-power amplifier, air should circulate freely around the back, under and over the top of the case.

The amplifier has a built-in thermal overload protection circuit to protect against overheating. If internal temperatures rise abnormally during continued operation at a high volume level, the amplifier will silence itself and the PEAK POWER LEVEL INDICATOR goes off. If this happens, check to be sure the amplifier has enough space around it (more than 10 cm over the top) and nothing is placed over the ventilation holes of the amplifier. If not, correct it. It may take a few minutes for the unit to cool down and come back on. When the unit is cooled down, the PEAK POWER LEVEL INDICATOR will light again to indicate the amplifier is operative.



## IN CASE OF DIFFICULTY

If you encounter a problem, please review the items in the following check list. Also, be sure to thoroughly check other connected components, such as speakers, pre-amplifier, turntable, CD player, tuner, cassette deck, equalizer, etc.

PROBLEM	PROBABLE CAUSE AND SOLUTION
Power Does Not Come On	Check line cord to ensure good connection at AC outlet.
No Sound	<ul> <li>Incorrect Input connected. Check input leads on back panel.</li> <li>Input lead wires are loose. Connect firmly.</li> <li>Attenuators are set to minimum position. Rotate them clockwise.</li> <li>Incorrect SPEAKER switch setting or rear panel SPEAKER LEAD connections. (Check for shorted speaker leads.)</li> </ul>
Distorted Sound Shuts off at High Volume levels	<ul> <li>Speaker Impedance too low (less than 3 ohms). Check speaker specifications.</li> <li>Two speaker systems of less than 6 ohms each are in use. Select only one system at a time when playing at high volume levels.</li> </ul>

# SPECIFICATIONS

Power Output	Input Sensitivity/Impedance1V/45kΩ
BTL Power	Rated I.M No more than 0.02%
Frequency Response 10 Hz — 100 kHz	Dimensions 438(W) x 166(H) x 420(D) mm
Signal to Noise Ratio	Weight (Net)
T.H.D 0.02%	Design and specifications are subject to change without notice.



68P83710F08-A Printed in Japan Imprimé au Japon