BA-F1

OPERATING INSTRUCTIONS

MODE D’EMPLOI

BETRIEBSANLEITUNG

Read this manual before use.

Lire cette notice avant l’utilisation.

Vor der Verwendung diese Anleitung durchlesen.

Sansui
We are grateful for your choice of this fine Sansui high fidelity product. Before you operate it, we suggest that you read this booklet once through carefully, familiarizing yourself with the important precautions, operational procedures and every one of the product's features. It will help to ensure that you will avoid possible damage and that the product's superb performance will be yours to enjoy for many years to come.

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**WARNING:** To prevent fire or shock hazard, do not expose this appliance to rain or moisture.

- The Model No. and Serial No. of your unit are shown on its back pad.
- Do not lose the Warranty Card that carries your unit's Model No. and Serial No.
AC outlets

Of the two AC outlets provided on the rear panel, the one marked SWITCHED, is controlled by the front-panel power switch. The other one, marked UNSWITCHED, is not related to the power switch. The former has a capacity of 100 watts and the latter 250 watts. Do not connect any component whose power consumption exceeds these capacities, as it is extremely dangerous.

The power consumption rating is usually listed in the specifications or instructions of the component, or on the equipment itself; be sure to check the rating.

- In case you have connected a component to one of the unit's AC outlets and then another component to the first component's outlet, be sure to add the second component's rated power consumption to the consumption of the component connected to the unit itself.

NOTE: No AC outlet is provided on units sold in some areas owing to local laws and regulations.
Connections

**Preamplifier**
Connect preamplifier OUTPUT terminals with the unit's INPUT terminals, making sure the LEFT and RIGHT channels are correctly connected.

**INPUT-DC:** The unit works as a "DC" amplifier; the amplification range starts with DC (direct current).
- **When a DC component appears at the output of a connected equipment and therefore at the input of the unit, protection will be activated to protect connected speakers.**

**INPUT-AC:** A capacitor is connected at the input of the unit to eliminate DC components.

**Speaker systems**
To SPEAKERS OUTPUT SYSTEM-A or B terminals, connect speaker cords taking care not to confuse the right channel with the left, the plus polarity with the minus.
- **Be sure that exposed leads are firmly secured to the terminals.**
- **Be sure to make correct connections referring to the operating instructions for the speaker system.**
This page folds out for use as reference while reading the rest of the booklet.

Cette page se plie à l'extérieur pour l'utiliser comme référence tout en lisant le reste de la notice.

Bitte klappen Sie diese Seite heraus, wenn Sie den Rest dieser Anleitung durchlesen.
Panel information

1 POWER Switch
POWER switch itself lights up when pushed, showing that power is switched into the unit. Push POWER switch once again to switch power off.

2 PROTECTOR Indicator
PROTECTOR indicator flashes for a few seconds after switching power on. No sound is emitted from speakers during this time; this does NOT indicate malfunction in the unit. When a malfunction due to shorted speaker terminal, etc. occurs, the PROTECTOR circuitry goes into operation immediately and the PROTECTOR indicator flashes. When this happens, switch power off immediately. Eliminate malfunction before switching power on again.

3 OUTPUT Selectors
Permit independent selection of left and right channels (A, B, A + B) of speaker systems connected with terminals on back panel.

- A: To drive the speaker system connected to the rear-panel SPEAKERS OUTPUT SYSTEM-A terminals.
- B: To drive those connected to the SYSTEM-B terminals.
- A + B: To drive both A and B pairs of speaker systems.
- DFF: Speakers are disconnected.
4 LEVEL Controls
Adjust input level for desired output power. LEFT and RIGHT controls can be controlled separately.
- Use caution when turning LEVEL controls; excessive power output can cause damage to speakers.

5 PEAK POWER Meters
Indicate peak levels of power output. The lower scale shows power output for speakers with 8-ohm impedance. The upper scale indicates output in decibels with 0 dB, referenced to 110 W power output.
- The red indicator light at the right of the PEAK POWER meter lights up when output power goes over 110 W (0 dB). When this happens, output waveforms can be distorted and damage the speaker systems the output level should be lowered.
- The indicated peak levels differ from actual peak levels when speaker systems with a nominal impedance other than 8 ohms are used. Special attention should be paid to this when using speaker systems with a nominal impedance below 8 ohms. (See page 18, "Reading the PEAK POWER Meters.")
Operating procedures

1. First turn volume control of connected preamplifier to lowest level. Then switch preamplifier power on.
2. Switch the unit's power on. The PROTECTOR indicator will light up and then go off after a few seconds.
3. Set the OUTPUT selectors to A, B or A + B position as appropriate.
4. Turn LEFT and RIGHT LEVEL controls together to maximum level (10).
5. Operate and play equipment connected with the preamplifier. Slowly adjust preamplifier volume control until desired volume is reached.
6. Adjust balance and tone controls on preamplifier as needed, and enjoy your music.

- For best performance and balance, it is recommended that you set the unit's LEVEL controls at the maximum setting (10), and adjust your system's volume with the volume control on the preamplifier.
Some useful hints

Reading the PEAK POWER Meters
The PEAK POWER Meters on the unit read actual peak levels when connected with a speaker system with an 8-ohm impedance. When impedance is other than 8 ohms, the actual output will differ from output shown on the meters. Conversion is then necessary for correct readings. To do so, multiply the reed value by 8, divided by the connected speaker's impedance. For instance, in case the speaker has a 4-ohm impedance and the meter reads 10 W, the actual power output will be 20 watts:
$$10 \times (8/4) = 20 \text{ (watts)}.$$  

Multi-Amp Systems
In a multi-amp system, the frequency range of sound is divided up into two or more portions, with a separate power amp for each portion. To divide the range into portions and amplify signals of each portion, a channel divider (electronic crossover network) and two or more power amplifiers are necessary. Reduced distortion, accurate frequency crossover, and minimal degradation of the damping factor can make the extra cost of a multi-amp system quite worthwhile.

- To Connect a Multi-Amp Systems
Connect the preamplifier OUTPUT terminals with the channel divider INPUT terminals. Then connect the power amplifier INPUT terminals with the channel divider OUTPUT terminals.
Specifications

Power output
Min. RMS, both channels driven, from 10 to 20,000 Hz, with no more than 0.008% total harmonic distortion
110 watts per channel into 8 ohms

Load impedance ........ 8 ohms

Total harmonic distortion less than 0.008% at or below rated min. RMS power output

Intermodulation distortion (70 Hz : 7 kHz = 4:1 SMPTE method)
.... less than 0.008% at or below rated min. RMS power output

Rise time .............. 0.5 μsec

Slew rate .............. ± 200 V/μsec

Frequency response (at 1 watt) ........ DC to 600,000 Hz ±0 dB -3 dB

Damping factor (1 kHz, both channels driven)
........ 100 into 8 ohms

Input sensitivity and impedance (1 kHz, for rated power output)
........ 1V/25 kilohms

Hum and noise (short-circuit, A-network)
........ better than 125 dB

Channel separation (1 kHz, at rated power output)
........ better than 105 dB
About rack mounting adaptors
Remarques concernant les adaptateurs de montage d'étageres
Zu den Haltekonsolen für die Regalmontage
Power requirements

Power voltage .................................. 100, 120, 220, 240 V (50/60 Hz)
For U.S.A. and Canada .................. 120 V (60 Hz)

Power consumption
Rated consumption .................. 470 watts

Dimensions .......................... 430 mm (16-15/16") W
........................................ 187 mm (7-3/8") H
........................................ 430 mm (16-15/16") D

Weight .................................. 20.4 kg (45.0 lbs) net
........................................ 22.6 kg (50.3 lbs) packed

- Design and specifications subject to changes without notice for improvements.
- In order to simplify the explanation illustrations may sometimes differ from the originals.