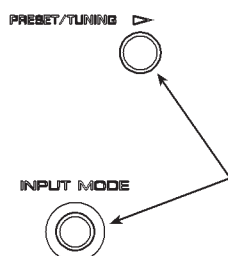


• Starting DIAG

Press the “STANDBY/ON” key while simultaneously pressing those two keys of the main unit as indicated in the figure below.

Keys of main unit



Turn on the power while pressing these keys.

• Starting DIAG in the protection cancel mode

If the protection function works and causes hindrance to trouble diagnosis, cancel the protection function as described below, and it will be possible to enter the DIAG mode. (The protection functions other than the excess current detect function will be disabled.)

Press the “STANDBY/ON” key while simultaneously pressing those two keys indicated in the figure above. At this time, keep pressing those two keys for 3 seconds or longer.

In this mode, the “SLEEP” segment of the FL display of the main unit flashes to indicate that the mode is DIAG mode with the protection functions disabled.

CAUTION!

Using this product with the protection function disabled may cause damage to itself. Use special care for this point when using this mode.

• Canceling DIAG

[1] Before canceling DIAG, execute setting for PRESET of DIAG menu No.9 (Memory initialization inhibited or Memory initialized).

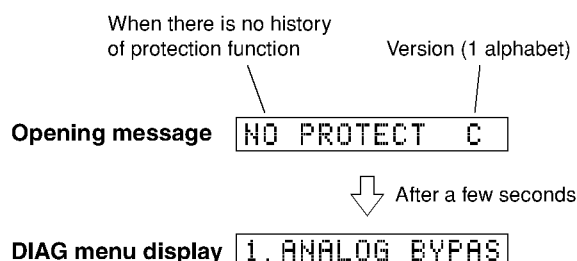
* In order to keep the user memory stored, be sure to select PRESET INHIBITED (Memory initialization inhibited).

[2] Turn off the power by pressing the “STANDBY/ON” key of the main unit.

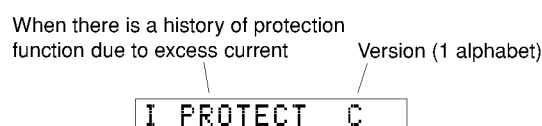
• Display provided when DIAG started

The FL display of the main unit displays the protection function history data and the version (1 alphabet) and the DIAG menu [sub-menu (ANALOG BYPASS) of DIAG menu No.1 DSP THROUGH] a few seconds later.

When there is no history of protection function:



When there is a history of protection function:



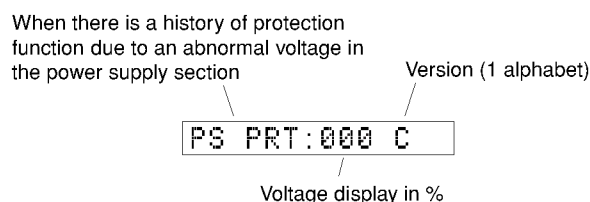
Cause: An excessive current flowed through the power amplifier.

Supplementary information: As the current through the power transistor is detected, the abnormal channel can be identified by checking the current detect transistor.

Turning on the power without correcting the abnormality will cause the protection function to work immediately and the power supply will instantly be shut off.

Note)

- Applying the power to a unit without correcting the abnormality can be dangerous and cause additional circuit damage.
- The output transistors in each amplifier channel should be checked for damage before applying any power.
- The amplifier current should be monitored by measuring across the emitter resistors for each channel.

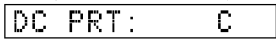


Cause: The voltage in the power supply section is abnormal.

Supplementary information: The abnormal voltage is displayed in % based on 5V as 100%.

Turning on the power without correcting the abnormality will cause the protection function to work 1 second later and the power supply will be shut off.

When there is a history of protection function due to abnormal DC output



Cause: DC output of the power amplifier is abnormal.

Turning on the power without correcting the abnormality will cause the protection function to work 3 seconds later and the power supply will be shut off.

When there is a history of protection function due to excessive heat sink temperature



Cause: The temperature of the heat sink is excessive.

Supplementary information: The abnormal voltage is displayed in % based on 5V as 500%.

Turning on the power without correcting the abnormality will cause the protection function to work 1 second later and the power supply will be shut off.

- * Additional causes of protection can be due to loose connections, associated components, CPU, etc.
- * For the protection voltage value, refer to DIAG menu No.10 described later.

• History of protection function

When the protection function has worked, its history is stored in memory with a backup. Even if no abnormality is noted while servicing the unit, an abnormality which has occurred previously can be defined as long as the backup data has been stored.

The history of the protection function is cleared when DIAG is cancelled by selecting PRESET RESERVED (Memory initialized) of DIAG menu No.9 or when the backup data is erased.

• Display during menu operation

During the DIAG operation, the function at work is indicated on the FL indicator. The contents displayed during the function operation are described in the later section on details of functions.

• Operation procedure of DIAG menu and SUB-MENU

There are 15 MENU items, each of which has some SUB-MENU items.

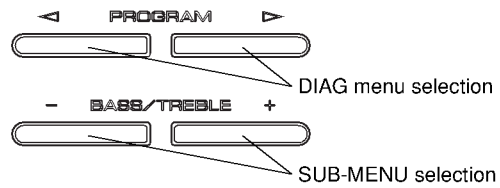
DIAG menu selection

Main unit: Select the menu using ▷ (Forward) and ◁ (Reverse) PROGRAM keys.

SUB-MENU selection

Main unit: Select the sub-menu using - and + BASS/TREBLE keys.

Keys of main unit



• Functions in DIAG mode

In addition to the DIAG menu items, functions as listed below are available.

- Input selection, 6CH input
- Center/Surround/Sub-woofer level adjustment
- Muting
- Power on/off
- Master volume
- * Functions related to the tuner and the set menu are not available.
- * It is possible to confirm Menu No.11 IF STATUS while keeping the signal process (operation status) of each DIAG menu by using the input mode key of the main unit.

• Initial settings used to start DIAG

The following initial settings are used when starting DIAG. When DIAG is canceled, these settings are restored to those before starting DIAG.

- Master volume: -24dB
- Input: DVD (6CH INPUT OFF)
- Effect level: 0dB
- Audio mute: OFF
- Speaker setting: LARGE / BASS OUT = BOTH
- DIAG menu: DSP THROUGH (1. ANALOG BYPASS)