

# SELF DIAGNOSIS FUNCTION

The units in this manual contain a self-diagnostic function. If an error occurs, the Smart Core Red LED will automatically begin to flash.

The number of times the LED flashes translates to a probable source of the problem.

A definition of the Smart Core Red LED flash indicators is listed in the instruction manual for the user's knowledge and reference.

If an error symptom cannot be reproduced, the remote commander can be used to review the failure occurrence data stored in memory to reveal past problems and how often these problems occur.

## DIAGNOSTIC TEST INDICATORS

When an error occurs, the Smart Core Red LED will flash a set number of times to indicate the possible cause of the problem.

If there is more than one error, the LED will identify the first of the problem areas.

Result for all of the following diagnostic items are displayed on screen.

If the screen displays a "0", no error has occurred .

<G>: Power supply board, <B>: Main board, <T>: Tcon board, (LD) board ,  
<P>: Panel module , <S>: Speaker , <A>: Power Adapter

RED LED blinking count	Detection Items
2x	<G/B> Main 12V over voltage [MAIN_POWER]
3x	<B> Main 5.0V failure [DC_ALERT]
	<B/S> Audio amp. protection [AUD_ERR] <B> Tuner or demodulator I2C No ACK [TU_DEMOD] <b>[Note.1]</b> <B> HDMI Switch/Equalizer I2C communication error [HDMI_EQ] <b>[Note.2]</b>  <b>Note.1/Note.2:</b> Both functions were disabled but remains on the Self diagnosis screen like in the next page. <b>Note.2:</b> There are some sets which still enable this HDMI error detection function. Among these, software version updated or installed to PKG2173 or higher have this function disabled.
4x	<LD/P> LED driver failure/LED voltage protection [LD_ERR] <LD/P> <i>Error detection of the I2C communication between the Main device and the LD IC.[BCM_ERR]</i>
5x	<P/T/G/B> <i>Panel ID EEPROM I2C No ACK (Also panel power failure is a suspect)</i> [P_ID_ERR]
	<T> TCon IC I2C communication error [TCON_ERR]
6x	<G/P/B> Backlight failure [BACKLIGHT]
7x	Over temperature protection [TEMP_ERR]
	<B> Temp. sensor I2C No ACK [TEMP_ERR] <B> V By One lock error between Main device and 4KBE device [4KBE_ERR]
8x	<B> Software error [SW_ERR]

*Red italic:* detect at startup sequence only.

[SELF DIAGNOSTIC SCREEN DISPLAY]

**Format of error timestamps**

YYMMDDhhmmss (in UTC)

Example:

120823132523 -> Aug 23 2012 13:25:23 UTC

\* Only when time is set, an error timestamp is saved.

Both of HDMI\_EQ/TU\_DEMOD have been disabled. (Refer the previous page for details.)  
The number indicated here has no meaning.

Smart Core Red LED blinking count

•Panel Operation Time is recorded every 30 min, but Total Operation Time is recorded every 1 hr. Therefore, the panel op. time might become larger than the total op. time.

Total Operation Time [hr] – Boot Count – Panel Operation Time [hr]

SELF CHECK

Back <<

002	MAIN_POWER	000000000000	000000000000	000000000000	000
003	DC_ALERT	000000000000	000000000000	000000000000	000
003	AUD_ERR	150101000018	150101000018	150101000018	003
003	HDMI_EQ	150101000123	150101000045	150101000045	003
003	TU_DEMOD	150101000218	150101000223	150101000105	003
004	LD_ERR	000000000000	000000000000	000000000000	000
004	BCM_ERR	000000000000	000000000000	000000000000	000
005	TCON_ERR	150101000504	000000000000	000000000000	001
005	P_ID_ERR	000000000000	000000000000	000000000000	000
006	BACKLIGHT_ERR	000000000000	000000000000	000000000000	000
007	TEMP_ERR	150101000200	150101000002	000000000000	002
007	4KBE_ERR	000000000000	000000000000	000000000000	000
008	SW_ERR	000000000000	000000000000	000000000000	000

00005 00414 00002

[Home]Exit

Error timestamp for last recorded error

Error timestamp for second last recorded error

Error timestamp for 3rd last recorded error

Error item Naming

Error count

Back

<<

00005 00414 00002

[Home]Exit

Error timestamp for last recorded error

Error timestamp for second last recorded error

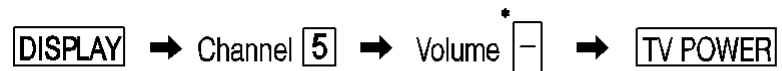
Error timestamp for 3rd last recorded error

**SELF-DIAGNOSTIC SCREEN DISPLAY**

For errors with symptoms such as “power sometimes shuts off” or “screen sometimes goes out” that cannot be confirmed, it is possible to bring up past occurrences of failure for confirmation on the screen:

**[To Bring Up Screen Test]**

In standby mode, press buttons on the remote commander sequentially in rapid succession as shown below:



\* : Note that this differs from entering the service mode (volume +)

Since the diagnostic results displayed on the screen are not automatically cleared, always check the self-diagnostic screen. After you have completed the repairs, clear the result display to “0”.

**Clearing the Self Check Diagnostic List**

Panel operation time :

Press the Channel 7 => Channel 0 .

\*Note that this model does not have the function to clear the result display to “0” ,which was possible in the conventional models by the operation of “press the Channel 8=>Channel 0”

**Exiting the Self-diagnostic screen**

To exit the Self Diagnostic screen, Power off & on or Push the <Home> button.