

SECTION 3 TEST MODE

COLD RESET

The cold reset clears data except BD/DVD data stored in the RAM to initial conditions. Execute this mode when returning the set to the customers.

Procedure:

1. Press the [I/⏻] button to turn the power on.
2. Press the [■] and [VOLUME -] buttons simultaneously and hold down (around 5 seconds).
3. The message “COLD RESET” appears on fluorescent indicator tube, then becomes standby states.

DEMO MODE

This mode let you lock the disc tray. When this mode is activated, the disc will not eject when the [▲] button is pressed. The message “LOCKED” will be displayed on the fluorescent indicator tube.

Procedure:

1. Press the [I/⏻] button to turn the power on.
2. Press the [FUNCTION] button to select the “BD/DVD”.
3. Press the [■] and [▲] buttons simultaneously and hold down until “DEMO ON” or “DEMO OFF” displayed on the fluorescent indicator tube (around 5 seconds).

S-AIR ID SETTING CHANGE

Procedure:

1. Press the [I/⏻] button to turn the power on.
2. Press the [FUNCTION] and [VOLUME +] buttons simultaneously and hold down (around 5 seconds).
3. S-AIR ID setting is changed (A → B → C → A...).

PANEL TEST

Procedure:

1. Press the [I/⏻] button to turn the power on.
2. Press button in order of the [RETURN] → [0] → [0] → [1] → [SUBTITLE] on the remote commander (Make the interval when each button is pressed within two seconds).
3. All segments in fluorescent indicator tube are lighted up. And half segments in fluorescent indicator tube are lighted up, others half segments in fluorescent indicator tube are lighted up, then LEDs and all segments in fluorescent indicator tube are lighted up. This operation is repeated.
4. When all segments in fluorescent indicator tube are lighted up in the state of step 3, press the [VOLUME +] button on the remote commander and model information is displayed on the fluorescent indicator tube.

Each time the [VOLUME +] button on the remote commander is pressed, the display changes from destination information, STR version, SYS version, UI version, BDLIB version, ST version, TA version, DSP version, TM version, CEC version, SAIR version, PF version in this order, and returns to the model information display.

Each time the [VOLUME -] button on the remote commander is pressed, the version and date are switched.

5. In the state of step 3, press the [FUNCTION] button on the remote commander and “K 0” is displayed on the fluorescent indicator tube.
“K 0” value increases whenever a button on the set is pressed. However, once a button has been pressed, it is no longer taken into account.
All buttons on the set are pressed, “OK” and “K 7” are alternately displayed on the fluorescent indicator tube.
6. To release from this mode, press the [I/⏻] button.

AMP TEST

Procedure:

1. Press the [I/⏻] button to turn the power on.
2. Press button in order of the [RETURN] → [0] → [1] → [1] → [SUBTITLE] on the remote commander (Make the interval when each button is pressed within two seconds).
3. The message “MEASURE” appears on the fluorescent indicator tube and enter the AMP test mode.
4. Press the [BLUE] button on the remote commander, the state of D.C.A.C. microphone is displayed on the fluorescent indicator tube.

*** @@ \$\$\$

*** : Either of “IN”/“NON” is displayed by the state of detection of the microphone.

@@ : Either of “OK”/“NG” is displayed by the state of digital audio data input.

\$\$\$: Microphone input audio data A/D value (0 – 255).

5. Press the [MUTING] button on the remote commander, “VOL N” (The change in the volume is usual)/“VOL MSM” (The change in the volume is a switch of MIN/1/20/MAX) can be switched.
6. Press the [SUBTITLE] button on the remote commander, the message “VACS ON” or “VACS OFF” appears on the fluorescent indicator tube and thus the VACS on/off are changed.
7. To release from this mode, press the [I/⏻] button.

BD SERVICE MODE

Note: The operation in this mode must use a remote commander.

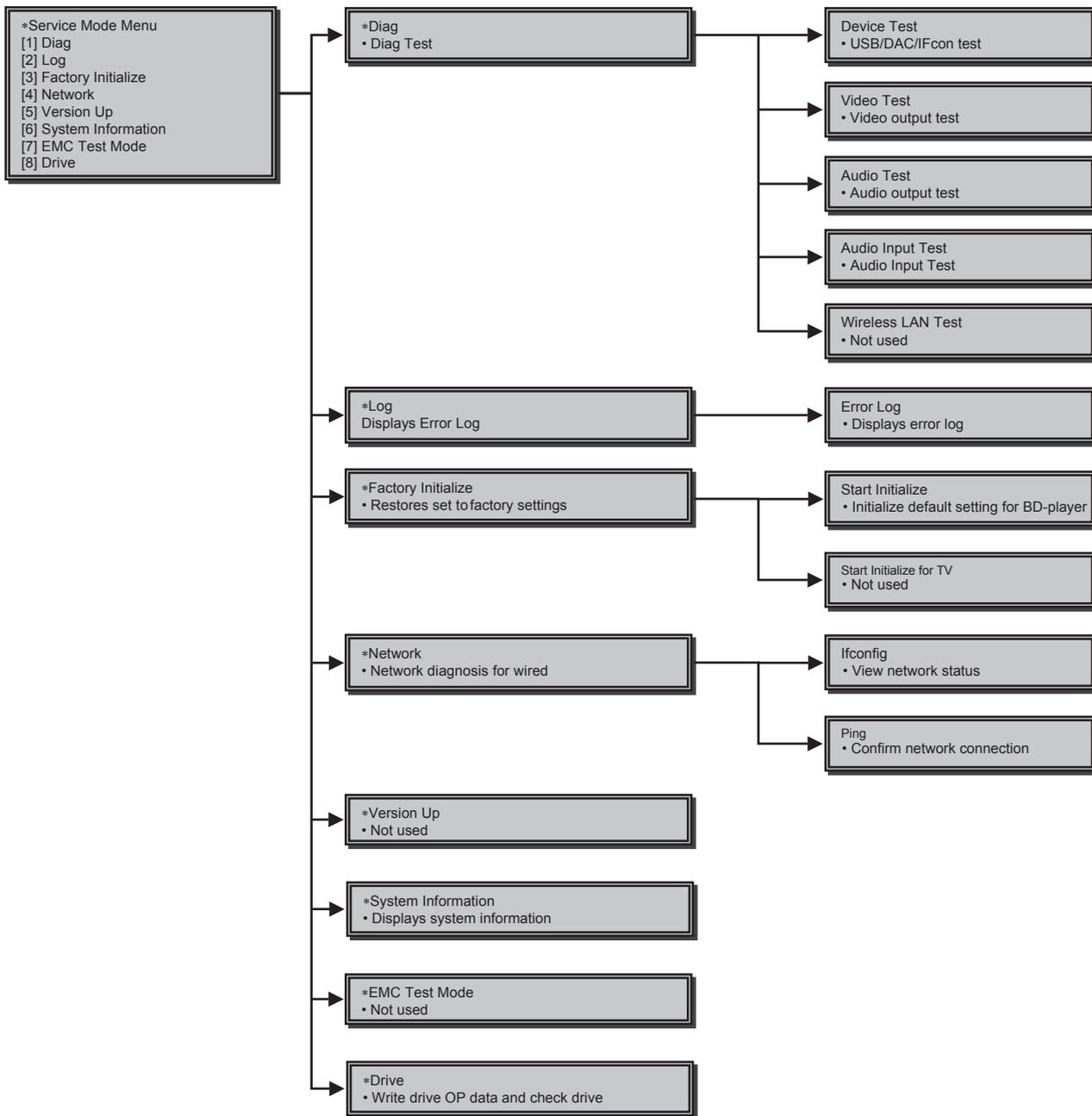
Setting method of the BD service mode:

1. Press the [I/⏻] button to turn the power on.
2. Press button in order of the [RETURN] → [0] → [2] → [1] → [SUBTITLE] on the remote commander. (Make the interval when each button is pressed within two seconds)
3. Enter the BD service mode.

1. Main Functions

- ErrorLog display
Display the error log. Displayed contents can also be saved in an USB memory device.
- Diag
Performs unit test of devices installed on the board.
- Factory Initialize
Restores the set to its factory settings.
- Network
Checks the wired network connection.
- Version Up (version update)
Not used.
- System Information
Displays the system information of the set.
Displays information such as the software version, drive information, etc.
- EMC Test Mode
Not used.
- Drive
Write drive OP data and check drive.

2. Menu Tree



HBD-E370/E470/E570/E870/T57

3. Service Mode Menu (Top Menu)

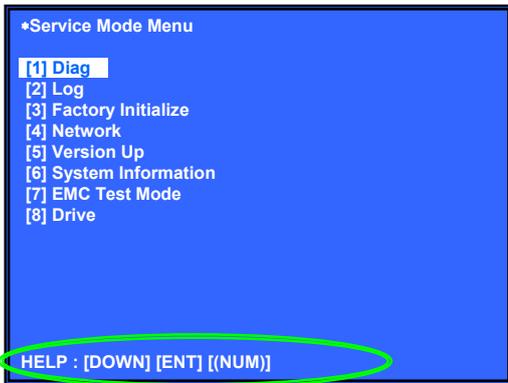
This is the top menu of service mode.

Each function is accessed from this screen.

Operation:

- [1] Moves to Diag screen
- [2] Moves to Log screen
- [3] Moves to Factory Initialize screen
- [4] Moves to Network screen
- [5] Moves to Version Up (DISC version update) screen (Not used)
- [6] Moves to System Information screen
- [7] Moves to EMC test mode screen (Not used)
- [8] Moves to Drive screen
- [↑]/[↓] Moves the cursor
- [⊕] Moves to the screen of the item selected with the cursor

* Cursor is not displayed when the menu is first displayed.



HELP (currently available keys, etc.) is displayed

4. Diag (Device Test)

This screen is used to test devices mounted on the board.

Screen 1: Selects the test category

Operation:

- [←]/[→] Selects the category
- [↓]/[⊕] Moves to the selected category

Screen 2: Device test

Selects the device to test after selecting Device Test in screen 1.

Operation:

- [←]/[→] Selects the device to test
- [⊕] Executes the test
- [↑] Returns to selection of test category
- Selects the cursor during IFCOn and D terminal tests
- [↓] Selects the cursor during IFCOn and D terminal tests

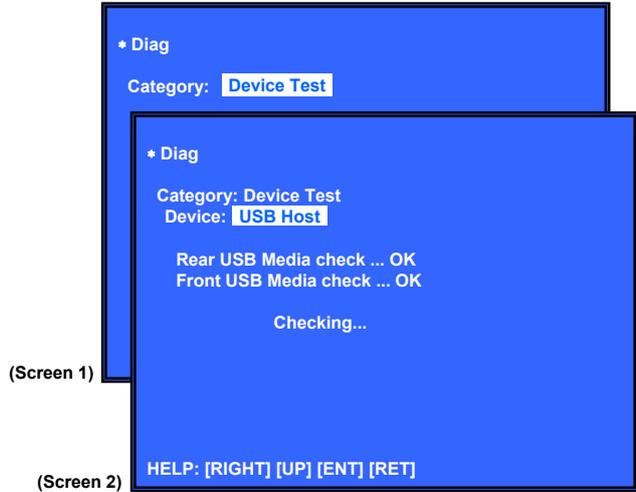
• List of test categories

- Device Test
- Video Test
- Audio Test
- Audio Input Test
- Wireless LAN Test (not used)

- Device Test: List of devices
USB Host (*1)

*1) USB media check (front and rear). Only one time.

* For details concerning device test, see the Diag reference.



5. Diag (Video/Audio Test)

This screen performs video and audio tests.

Screen 1: When video test category is selected

Operation:

- [⊕] Shows/hides the color bar
- [↑]/[RETURN] Returns to the selection of test category

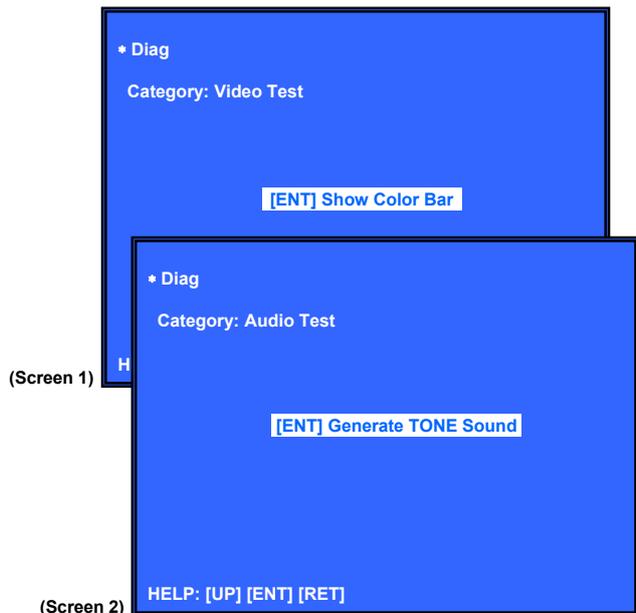
Screen 2: When audio test category is selected

Operation:

- [⊕] Plays back/stops the tone sound
- [↑]/[RETURN] Returns to the selection of test category

- Video test:
Outputs a color bar (composite & component & HDMI).

- Audio test:
TONE sound output (speaker (8 ch) & HDMI (2 ch)).



6. Diag (Audio Input Test)

This screen performs audio input test.

Screen 1: Selects the test category

Operation:

[←]/[→] Selects the category

[↓]/[⊕] Moves to the selected category

Screen 2: Select Audio Input Test

Operation:

[↑]/[↓] Select test

[⊕] Start/stop input sound

[RETURN] Returns to the selection of test category

- Digital Input

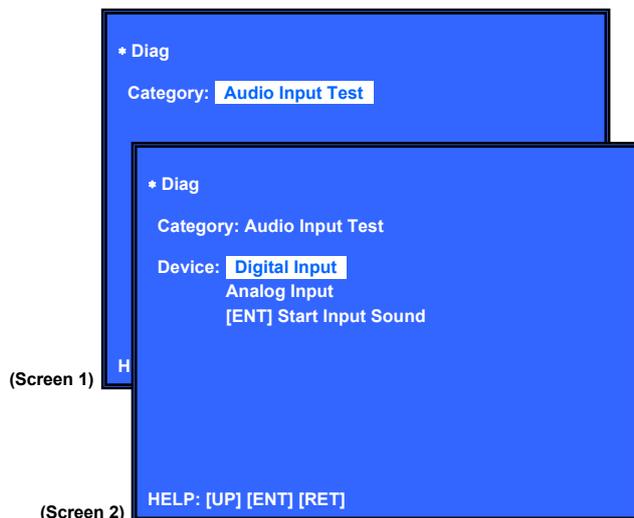
Input : SPDIF (optical, 48 kHz, 2 ch only).

Sound output : Speaker (2 ch).

- Analog Input

Input : Line In (2 ch).

Sound output : Speaker (2 ch).



7. Diag (Wireless LAN Test)

This screen performs wireless LAN test.

Note: Not used for the servicing.

8. Log: Error Log (Output of each Log)

This screen displays the contents of each log.

Note: Do not refer to the displayed date.

Screen 1: Selects log

Operation:

[1]/[⊕] Moves to the Error Log output screen

[RETURN] Returns to the top menu of the service mode

Screen 2: Displays the Error Log

Operation:

[←] Returns to the previous page

[→] Moves to the next page

[RETURN] Returns to the screen (screen 1) that selects the log type

[RED] Writes the log contents to an USB memory device

- Viewing the log display

Error Log:

001 08/01/01 00: 53: 19: [ErrCode: 080400000000]

[Number (starting from old log)] [date] [time] [error code]

About copying log to USB memory device:

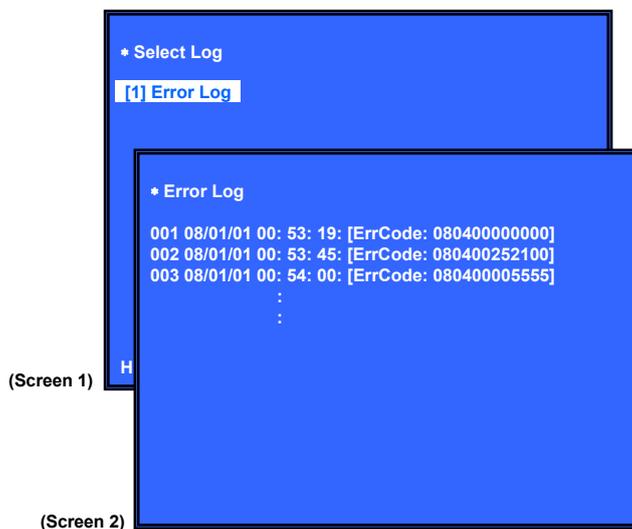
Press the [RED] button in each log display screen with the USB memory device inserted into the set

Note: Please do not press the [RED] button immediately after USB memory is inserted.

Please do not pull out USB memory immediately after the [RED] button was pressed.

Error Log:

When “getErrLogFile.trm file” exists in the USB memory device, errlog.log file is output.



HBD-E370/E470/E570/E870/T57

9. Factory Initialize (Factory Settings)

Return all of the player setting to their factory defaults.

Operation:

Screen 1

Press the [1] button in this screen when restoring the set to its factory settings.

All saved titles will also be deleted.

- [1] Start Factory Initialize
- [2] Start Factory Initialize for TV (Not used)
- [↑]/[↓] Moves the cursor
- [⊕] Activate the selected cursor
- [RETURN] Returns to the top menu of the service mode

Screen 2

It is a screen of the end of initialization.

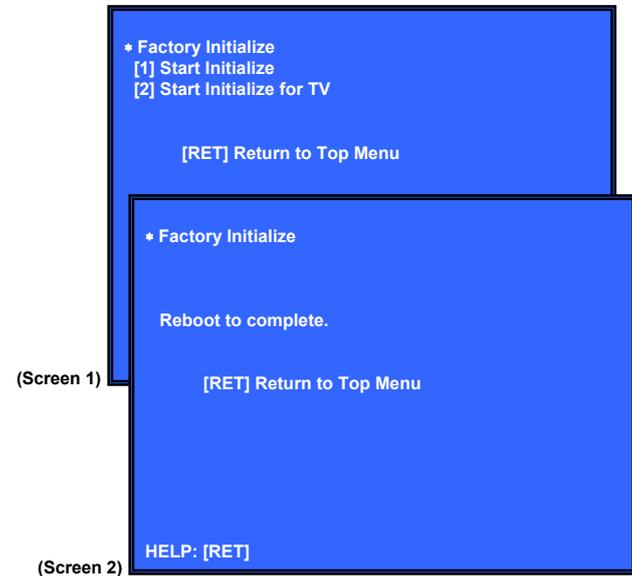
[RETURN] Returns to the top menu of the service mode

To complete factory initialize, process COLD RESET subsequently.

Please disconnect AC power cord, and connect AC again. Then press the [I/⏻] button to turn the power on, and press the [■] and [VOLUME -] buttons simultaneously and hold down (around 5 seconds) to execute COLD RESET.

Remove the AC power cord and insert the AC power cord again.

* Operations in other service menus can also be performed.



10. Network (Network Test Diagnosis Screen: Ifconfig)

Network menu for the wired ethernet.

Screen 1: Ifconfig Test

Operation:

- [⊕] Activate Ifconfig (Display network setting)
- [→] Select ping test
- [RETURN] Returns to the top menu of the service mode

Screen 2: Ping Test

Operation:

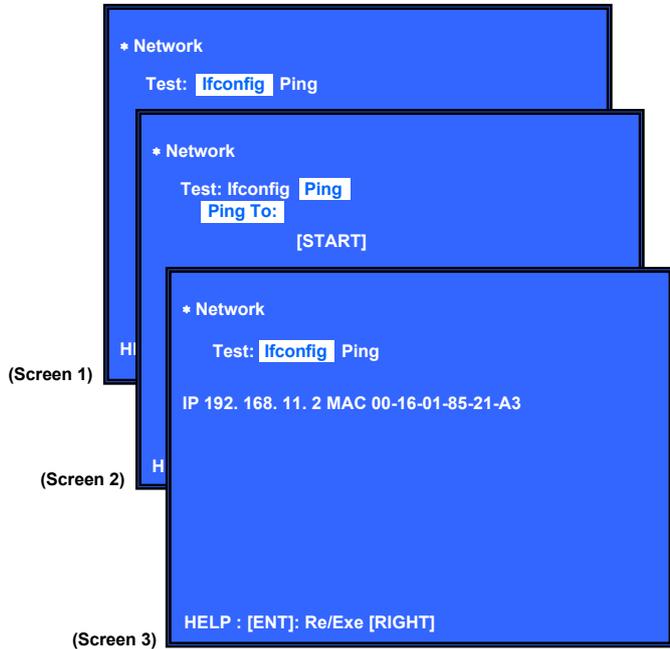
- [←] Select Ifconfig test
- [RETURN] Returns to the top menu of the service mode (The details of a Ping test are "11. Network (Network Test Diagnosis Screen: Ping)")

Screen 3: Ifconfig Test Active

Display Ifconfig command results.

Operation:

- [⊕] Ifconfig retry
- [→] Select ping test
- [RETURN] Returns to the top menu of the service mode



11. Network (Network Test Diagnosis Screen: Ping)

Ping test for the wired ethernet.

Screen 1: Ping Test

Operation:

- [←] Select Ifconfig test
- [↓] Ping execution preparation
- [RETURN] Returns to the top menu of the service mode

Screen 2: The IP address of the Ping point is set up (IP address input mode)

When “Ping to :>” is reversed, the [⊕] button is pressed and IP is inputted.

Operation:

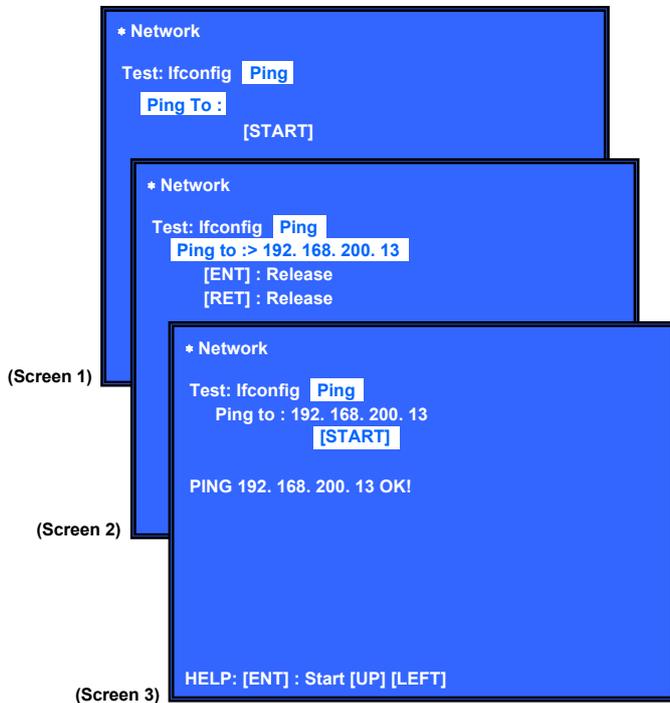
- [⊕] Finish to input
- [RETURN] Finish to input
- [←] Finish to input and Select Ifconfig Test
- [0] to [9] Input Character sting ‘0-9’
- [TIME] Input Character sting ‘.’
- [CLEAR] Backspace

Screen 3: Ping Test Active

When [START] is reversed, the [⊕] button is pressed and execute ping .

Operation:

- [⊕] Activate ping test
- [↑] The IP address of the ping point is set up
- [RETURN] Returns to the top menu of the service mode



12. System Information (System Information Display)

This screen displays system information.

Screen 1: Basic Information

Operation:

- [→] Drive information (delta IOP of a drive is measured) displayed (go to screen 2)
- [RETURN] Returns to the top menu of the service mode

Screen 2: Drive Information Menu

Operation:

- [←] Basic Information displayed (go to screen 1)
- [RETURN] Returns to the top menu of the service mode

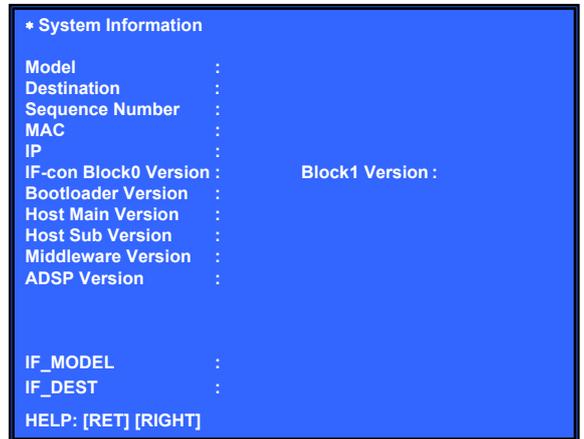
When delta IOP is measured, it becomes impossible to use the Version Up function.

Contents List:

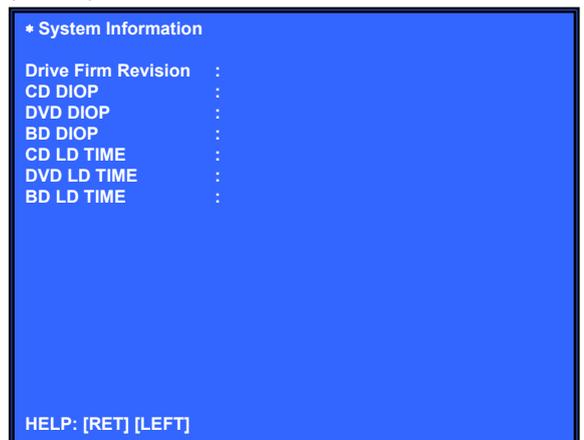
- Model
- Destination
- Sequence Number
- MAC
- IP
- IFCON IFCON Version
- Bootloader Bootloader Version
- Host Main Host Main Version
- Host Sub Host Sub Version
- Middleware Middleware Version
- ADSP ADSP Version
- IF Model
- IF Dest

- Drive Firm Revision
- CD DIOP Delta IOP
- DVD DIOP Delta IOP
- BD DIOP Delta IOP
- CD LD TIME LD Time
- DVD LD TIME LD Time
- BD LD TIME LD Time

(Screen 1)



(Screen 2)

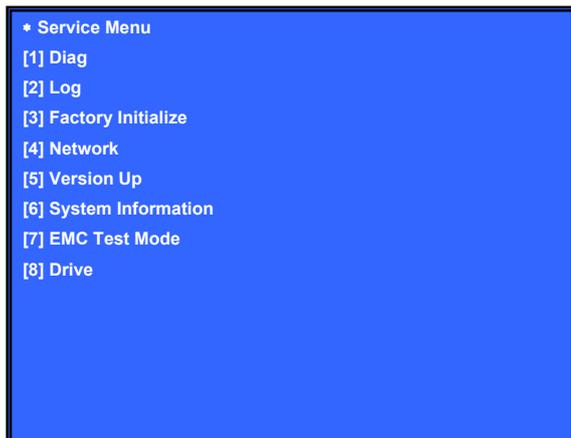


13. Drive

This menu is used to operate the drive using drive-related diagnostic and tools.

Screen 1: Selecting items under *Service Menu

(Screen 1)



Screen 3: *Drive OP data Write

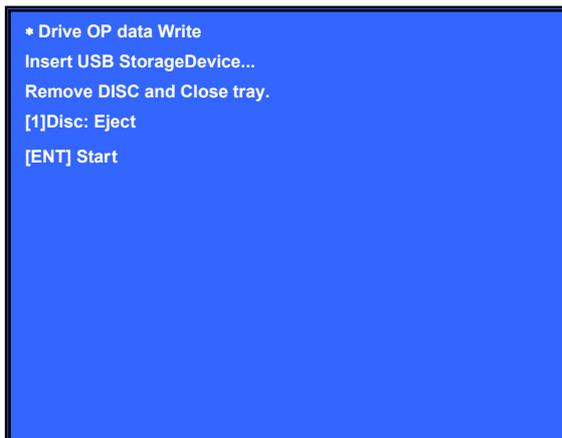
Purpose: Write OP data into flash IC

[↑]/[↓] Move the cursor up and down

[⊕] Start the selected cursor item

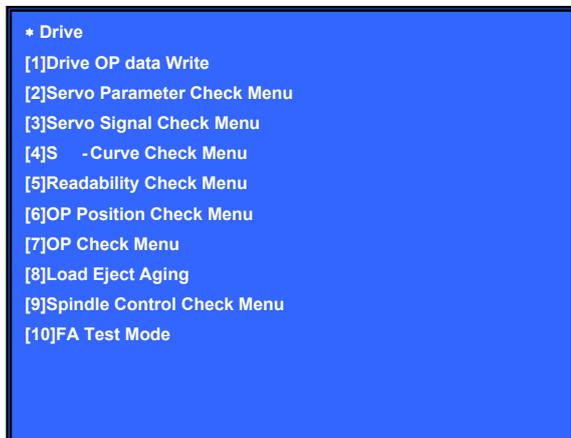
[RETURN] Returns to the top menu of the service mode

(Screen 3)



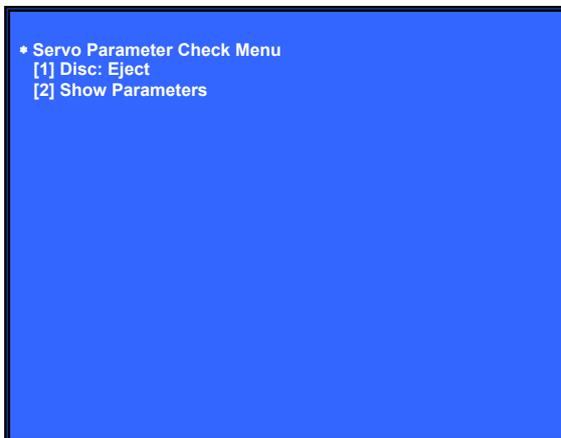
Screen 2: Selecting items under *Drive

(Screen 2)



Screen 4: *Servo Parameter Check Menu (Not Used)

(Screen 4)



Operation:

[↑]/[↓] Move the cursor up and down

[⊕] Open the selected cursor item

[RETURN] Returns to the top menu of the service mode

• Test item list

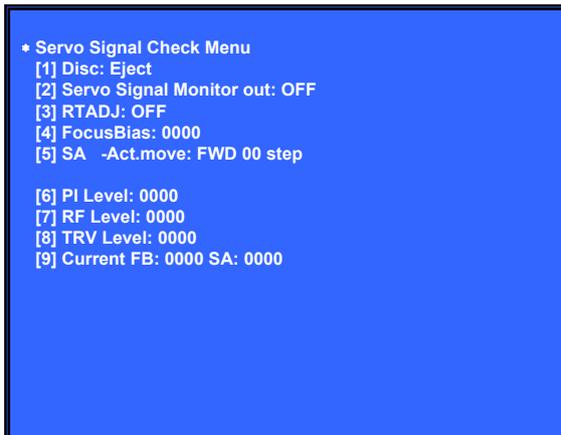
- [1] Drive OP data Write
- [2] Servo Parameter Check Menu
- [3] Servo Signal Check Menu
- [4] S-Curve Check Menu
- [5] Readability Check Menu
- [6] OP Position Check Menu
- [7] OP Check Menu
- [8] Load Eject Aging
- [9] Spindle Control Check Menu
- [10] FA Test Mode

Not used for the servicing.

Press the [RETURN] button if having entered this mode.

Screen 5: *Servo Signal Check Menu (Not Used)

(Screen 5)

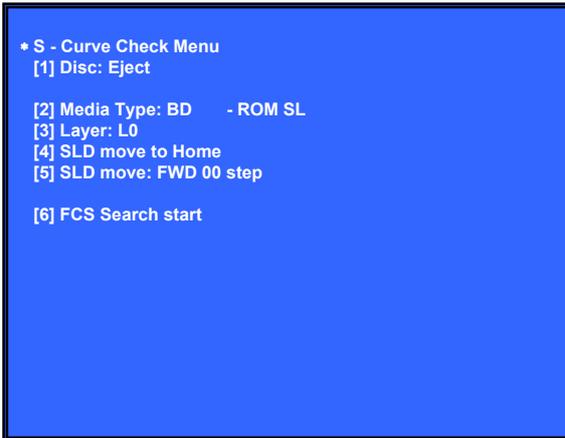


Not used for the servicing.

Press the [RETURN] button if having entered this mode.

Screen 6: *S-Curve Check Menu (Not Used)

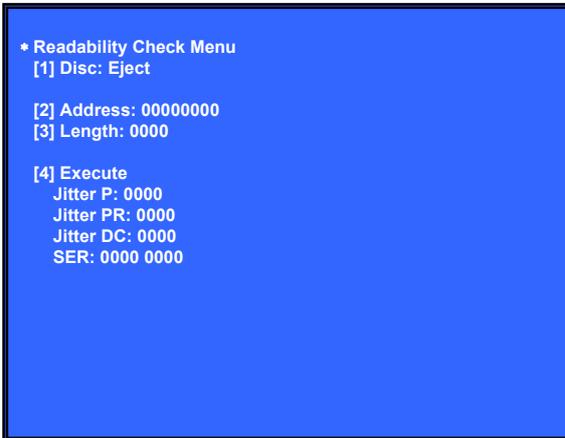
(Screen 6)



Not used for the servicing.
Press the [RETURN] button if having entered this mode

Screen 7: *Readability Check Menu (Not Used)

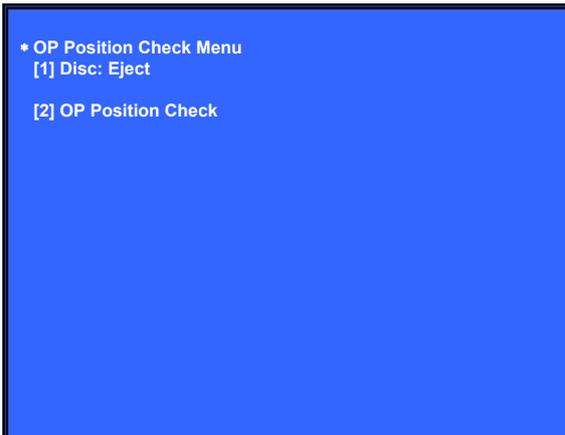
(Screen 7)



Not used for the servicing.
Press the [RETURN] button if having entered this mode.

Screen 8: *OP Position Check Menu (Not Used)

(Screen 8)

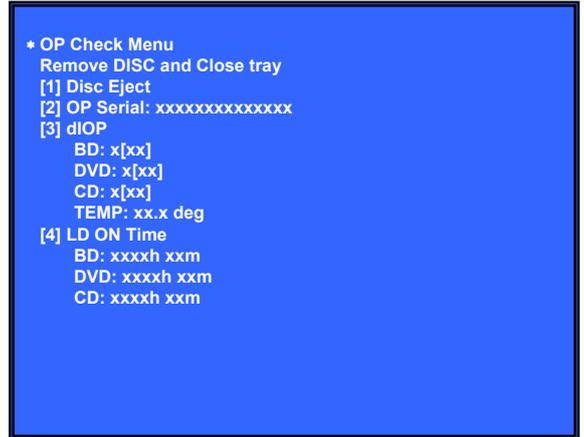


Not used for the servicing.
Press the [RETURN] button if having entered this mode.

Screen 9: *OP Check Menu

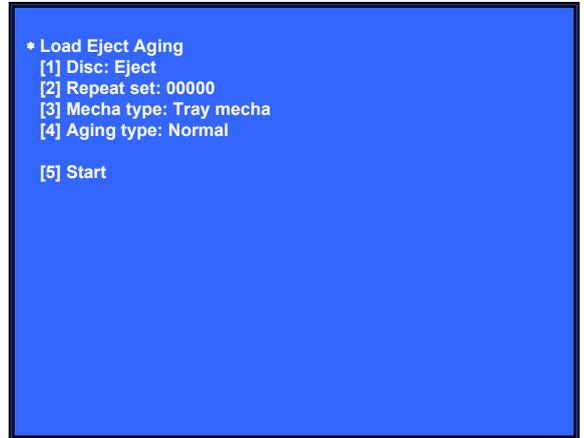
Purpose: Verify OP related such as delta IOP and LD time
 [↑]/[↓] Move the cursor up and down
 [⊕] Start the selected cursor item
 [RETURN] Returns to the top menu of the service mode

(Screen 9)



Screen 10: *Load Eject Aging (Not Used)

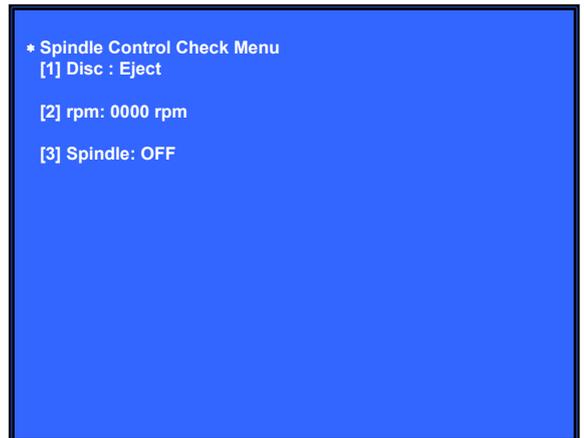
(Screen 10)



Not used for the servicing.
Press the [RETURN] button if having entered this mode.

Screen 11: *Spindle Control Check Menu (Not Used)

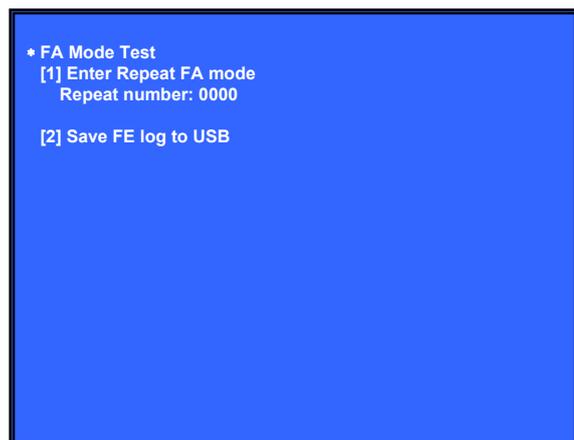
(Screen 11)



Not used for the servicing.
Press the [RETURN] button if having entered this mode.

Screen 12: *FA Mode Test (Not Used)

(Screen 12)



Not used for the servicing.

Press the [RETURN] button if having entered this mode.

CONFIRMATION ITEM

1. Playback Operation Confirmation

1-1. Test Disc

Part No.	Description	Layer
J-6090-199-A	BLX-104	Single Layer
J-6090-200-A	BLX-204	Dual Layer
J-2501-307-A	CD (HLX-A1)	
J-2501-305-A	HLX-513	Single Layer (NTSC)
J-2501-306-A	HLX-514	Dual Layer (NTSC)
J-6090-077-A	HLX-506	Single Layer (PAL)
J-6090-078-A	HLX-507	Dual Layer (PAL)

Note: Refer to the service manual of BDP-BX1/S350 (Part No. 9-883-989-1□) (page 1-3 to 1-14E) for the use of BLX-104/204.

Operation and Display:

1. BLX-104

Procedure:

1. Select 23.976Hz/1080p.
2. Play "4.Motion picture".
3. Check whether player can play back or not.
4. Check each outputs.

Video:

Composite/S Video/component/HDMI.

Audio:

Speaker out.

- * When 1080/24p monitor is nothing, 1080i (59.94Hz or 50Hz) can use instead of 1080/24p.

However this is temporary correspondence.

- * When the output of HDMI is 1080p, the signal of Composite/S Video/Component are not output.

It is necessary to lower the output of HDMI to 1080i or less.

2. BLX-204

Procedure:

1. Select 1080i (59.94Hz or 50Hz).
2. Play "4.Motion picture".
3. Check whether player can play back or not.
(Check the picture and sound output)

3. CD (HLX-A1)

Procedure:

Check whether player can play back or not.

(Check the sound output)

4. HLX-513/514 (NTSC), HLX-506/507 (PAL)

Procedure:

1. After displayed Main Menu, select "1.Video Signal".
2. Play "1.Color bar 100%".
(Check the picture and sound output)
3. Return to Menu.
4. Play "Demonstration 4:3" or "Demonstration 16:9".
(Check the picture and sound output)

1-2. Playback operation confirmation

Confirm operation in each signal/output mode of test disc (BLX-104/204) according to the content of the repair.

Note: "AV Sync." doesn't operate.

2. Networking Confirmation

Confirm it according to the following procedure when you confirm the connection of the network.

Note: Do not execute "Network Connection Diagnostics" of "Network Settings" of the home menu with only the router connected.

Procedure:

1. Connect the router with the set with LAN cable.
2. Turn on the power of the set and the router.
3. Press the [HOME] button on the remote commander, and the home menu is displayed.
4. Select "Setup" → "Network Settings" → "Internet Settings", and press the [⊕] button on the remote commander.
5. Select "View Networks Status" and press the [⊕] button on the remote commander.
6. Confirm IP address are displayed in "IP Address", "Subnet Mask" and "Default Gateway".

Physical Connection:	XXXX
Internet Access:	XXXX
IP Address Setting:	XXXX
IP Address:	XXX.XXX.XXX.XXX
Subnet Mask:	XXX.XXX.XXX.XXX
Default Gateway:	XXX.XXX.XXX.XXX
DNS Settings:	XXXX
Primary DNS:	XXX.XXX.XXX.XXX
Secondary DNS:	XXX.XXX.XXX.XXX
MAC Address:	XXX.XXX.XXX.XXX