SERVICE MODE

1. Heat run mode

1.1. preparation

(1) Equipment used : Heat run disc (This operation may not work with any discs other than the heat run discs listed below.)
CD : CD TEST DISC (TCD-HR01)
DVD : DVD TEST DISC (TDV-HR01)
BD : BD TEST DISC (TBD-HR01)

(2) Unit setting : No spec other than the following procedure.

1.2. procedure

<Playback mode>

(1) Pressing the ⏏ and ► buttons simultaneously, plug the AC cord into a power outlet.
When the heat run mode is set, the "►" and "❚❚" indicators light.

(2) Press the ⏏ button and open a tray.

(3) Set a disc to the tray and press the ► button once. The "►" and "❚❚" indicators blink at the same time and heat run operation starts.

DVD : After playback title-1 and title-10 of the disc, the tray opens and closes automatically, then playback the title-1 and title-10 again.

CD/BD : The disc is played through once from title 1 through the last title, the tray opens and closes automatically, then the disc is played through again from title 1 through the last title.

(4) This heat run operation continues automatically or it stops caused by an error. In case of some error, the following error messages are displayed on the FL tube.

<Tray open/close mode>

(1) Pressing the ⏏ and ► buttons simultaneously, plug the AC cord into a power outlet.
When the heat run mode is set, the "►" and "❚❚" indicators light.

(2) Press the ⏏ button and open a tray.

(3) Set a disc to the tray and press the ► button twice. The "►" and "❚❚" indicators blinks alternately and heat run operation starts.

CD/DVD/BD : After disc loading is complete, the tray opens and closes automatically, and disc loading is carried out again.

(4) This heat run operation continues automatically or it stops caused by an error. In case of some error, the following error messages are displayed on the FL tube.

※ If the Manual Search.FWD button is pressed during heat run, the repeat count of heat run operations is displayed as (Cnt *********). Press the Manual Search.FWD button once more and the display returns to its original state.

No.	Error contents	FL display
1	Tray Error	ERROR 01
2	Bad Disc	ERROR 02
3	Search Error	ERROR 03
4	Read Error	ERROR 04
5	Communications error	ERROR 05
6	Other (Front end error)	ERROR 06

2. Initial setting mode

2.1. preparation

(1) Equipment used: None

(2) Unit setting: No spec other than the following procedure.

2.2. procedure

※ Initialize the BD player when µcom, peripheral parts of µcom, or MAIN P.W.B. unit has been replaced in servicing.

※ All user setting will be lost and its factory setting will be restored when this initialization is made. Be sure to memorize your setting for restoring again after the initialization.

(1) Turn on the DBP-4010UDCI/DBP-4010UD's power. "NO DISC" is displayed on the fluorescent tube.

(2) Press the DBP-4010UDCI/DBP-4010UD's PLAY, EJECT and Disc layer buttons simultaneously. "INITIALIZING" is displayed on the fluorescent tube.

(3) The display on the fluorescent tube switches to "INITIALIZED", the "NO DISC" display reappears and initialization is completed.

3. µcom firm, H/W version, and Sereal number mode

3.1. preparation

(1) Equipment used: None

(2) Unit setting: No spec other than the following procedure.

3.2. procedure

※ System µcom and other µcom firm check mode.
This mode is for displaying the status of each µcom employed.

(1) Pressing the ⏏ and ► buttons simultaneously, plug the AC cord into a power outlet.

(2) "NO DISC" is displayed on the fluorescent tube.

(3) Press remote contraller "3265".

(4) Each time the POP UP MENU button or Cursor buttons(▲ or ▼) on the remote control unit is pressed, version information of µcom firm, version of H/W and serial number is displayed one after another.
Ex.: [Sys Ver000103, Sys Day090219, Sys GEN100000……, H/W Ver000000, S/N **********]

4. Tray lock mode

4.1. preparation

(1) Equipment used: None

(2) Unit setting: No spec other than the following procedure.

4.2. procedure

[Setting]

(1) Pressing the ► and ❚❚ buttons for simultaneously, plug the AC cord into a power outlet.

(2) "TRAY LOCK" is displayed on the fluorescent tube and tray opening/closing is invalidated.

[Cancel]

(1) Unplug the DBP-4010UDCI/DBP-4010UD's AC cord from the power outlet.

(2) Pressing the ► and ❚❚ buttons simultaneously, plug the AC cord into a power outlet.

(3) "PLEASE WAIT" is displayed on the fluorescent tube and tray opening/closing is enabled.

※ The tray lock mode is also canceled when the product is initialized.

5. Remote lock mode

5.1. preparation

(1) Equipment used: None

(2) Unit setting: No spec other than the following procedure.

5.2. procedure

[Setting]

(1) Pressing the PURE DIRECT, ⏏ and SOURCE buttons for simultaneously.

(2) “Lock-On” is displayed on the FL tube, and operations with the remote control and the REMOTE CONTROL input terminal on the back of the DBP-4010UD are disabled.

[Cancel]

(1) Pressing the PURE DIRECT, ⏏ and SOURCE buttons for simultaneously.

(2) "Lock-Off" is displayed on the fluorescent tube and remote lock mode is made canceled.

6. All Lit / All Off mode for the FL tube

6.1. preparation

(1) Equipment used: None

(2) Unit setting: No spec other than the following procedure.

6.2. procedure

[Setting]

(1) Pressing the Manual Search RVS and ► buttons for simultaneously, plug the AC cord into a power outlet. If All Lit / All Off mode is set for the FL tube, the FL tube’s display area is fully lit.

(2) Press the Pure Direct button to switch between ‘all lit’ and ‘all off’ display.

[Cancel]

(1) Remove the power cable for 5 seconds or more to cancel All Lit / All Off mode for the FL tube.

7. Forced Tray Open mode.

7.1. preparation

(1) Equipment used: None

(2) Unit setting: No spec other than the following procedure.

※ Operation cannot be guaranteed after executing Forced Tray Open mode.

7.2. procedure

[Setting]

(1) To forcibly open the tray, press the ⏏ for 5 seconds or more.

[Cancel]

(1) Remove the power cable for 5 seconds or more to cancel Forced Tray Open mode.

8. Test mode

8.1. Entering the test mode

The test mode is entered by pressing the ⏏ and ■ buttons simultaneously, plug the AC cord into a power outlet. When the test mode is set, the "▶" and "❚❚" indicators light.

FL tube display when test mode entered

FL Display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
		T	E	S	T		M	O	D	E		

When the test mode is set, a color bar appears on the monitor.

8.2. Selecting the mode

- The following modes are available.

(1) Laser on/off (CD/DVD/BD) mode : T2
(2) Servo adjustment value display mode : T3
(3) Error rate (skew) measurement mode : T7
(4) Accumulated laser on time display mode : TC
(5) Track buffer output mode : TE
(6) Picking up No. display mode : TG
(7) Error log display mode : TH
(8) Test mode cancel : TI

① When the ▶▶❙ button is pressed after entering the test mode, the display switches in the order: "T2, T3, T7, TC, TE, TG, TH, TI, T2 …"

FL Display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	2		L	a	s	e	r	O	n	O	f	f

FL Display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	3		S	e	r	v	o		A	d	j	.

FL Display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	7		E	r	r	o	r		R	a	t	e

FL Display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	C		L	a	s	e	r	O	n	T	i	m

FL Display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	E		T	r	a	c	k		B	u	f	

FL Display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	G		O	P	U		N	u	m	b	e	r

FL Display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	H		E	r	r	o	r		L	o	g	

FL Display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	I		T	e	s	t		E	x	i	t	

② When the ❙◀◀ button is pressed, the display switches in the opposite order fromq above, starting from the current position (for example, if currently at "TA", it switches as follows: "T2, T3, T7, TC, TE, TG, TH, TI, T2 …").

8.3. About each mode

- With the mode selected, press the ► button to set that mode.

(1) Laser on/off (CD/DVD/BD) mode

Press the I◄◄ or ►►I button to select [X] and press the 1 button to set it.
Laser on/off control is executed and the laser current is displayed.

FL Display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	2	X		m	m	m	m		n	n	n	n

(X=1 : CD laser mode, 2 : DVD laser mode, 3 : BD(SL) laser mode, 4 : BD(DL) laser mode)
(mm.mm[mA] : Stored data, nn.nn[mA] : Current value)

※ When the current value is more that ± 12.00[mA] of saved data, it becomes the pickup transducer's target. In this case, replace the mechanism unit.

If stored value is not

FL Display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	2	X	—	—	—	—	—	—	n	n	n	n

(X=1 : CD laser mode, 2 : DVD laser mode, 3 : BD(SL) laser mode, 4 : BD(DL) laser mode)
(nn.nn[mA] : Current value)

When the ■ button is pressed, the layer above the current layer is displayed. See "8.4 Stopping the mode" (page 22).

(2) Servo adjustment value display mode

Press the I◄◄ or ►►I button to select [XXX]. Refer to [Table 1 - Servo adjustment value display mode details] (page 22).

FL Display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	X	X	X									

(XXX : Servo adjustment value)

Press the ► button to set. The contents indicated on "Table 1: Details of the servo adjustment value display mode" (page 22) are displayed.

FL Display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	X	X	X	m	m	m	m	m	m		n	n

(XXX : Selection mode, mmmmmm : Address(HEX), nn:Data(HEX))

The first time, the address specificiation position is the uppermost position (5th place). The address specificiation position moves downwards each time the ► button is pressed.
The address specificiation position flashes (at an interval of about 0.5 seconds). If the 1 button is pressed after moving to the lowermost position (10th place), the position moves to the uppermost position
Use the I◄◄ or ►►I button to change the display at the address specification position.

When the ■ button is pressed, the layer above the current layer is displayed. See "8.4 Stopping the mode" (page 22).

(3) Error rate measurement mode

Press the ⏮ or ⏭ button to select [YY] .
Refer to [Table 2 - Error rate details]. (page 23)

FL Display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	Y	Y	F	F	F	F	F	F	F	F	F	F

(X : measurement mode, F : Address and error rate (When not set, "F" is displayed.)

Press the ▶ button to begin error rate measurement. The address and error rate are displayed.
For a description of the displayed measurement results, see "Table 2: Error rate details" (page 23).

FL Display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	Y	Y	m	m	m	m	m	m	l	l	l	l

(YY : selection mode [71 to 94], m : address [PBA][HEX], l : error rate [COUNT/SEC] [HEX])

(Note) CD (4x-speed) : Renewal of data is carried out for every 300 frame.
Error rate of 75 frames is displayed.
DVD (2x-speed) : Renewal of data is carried out for every 80ECC block.
Error rate of 8ECC block is displayed.
BD (2x-speed) : Renewal of data is carried out for every 136LDC clusters block.
Error rate of 8LDC clusters block is displayed.

The mode chosen when selection mode was changed into the trace execution and the ▶ button was pushed is performed from the beginning.
When the ▶ button is pushed without changing selection mode, the mode under selection is performed from the beginning.
(If the ▶ button is pushed, the address corresponding to the chosen mode will be searched again.)

The pause mode is set after tracing is completed.

When the ■ button is pressed, the layer above the current layer is displayed. See "8.4 Stopping the mode" (page 22).

(4) Accumulated laser on time display mode

Press the ⏮ or ⏭ button to select [Y] and press the ▶ button to set it.
The accumulated laser on time is displayed.

FL Display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	C	Y				m	m	m	m	m	m	h

(Y=1 : CD, 2 : DVD , 3 : BD, mmmmmm : Time(Fractions of hours are counted up one hour on the display.)

When the ■ button is pressed, the layer above the current layer is displayed. See "8.4 Stopping the mode" (page 22)

---To clear the accumulated laser on time---

Press the ▶ button while the accumulated laser on time is displayed ("TC1, "TC2", "TC3") until " ＊ " appears at the fourth position.

FL Display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	C	Y	＊				m	m	m	m	m	m

Press the ⏮ or ⏭ button to select "TC4"

FL Display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	C	4	＊									

If the ▶ button is pressed while "TC4" is displayed, the accumulated laser on time of CD, DVD and BD is cleared.

FL Display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	C	1				0	0	0	0	0	0	h

When "TC1", "TC2" or "TC3" is selected with the ⏮ or ⏭ button, "mmmmmm" is displayed as "0" so you can check.

(5) Track buffer output mode

Press the ⏮ or ⏭ button to select "Y" and switch the track buffer output.

FL Display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	E	Y	T	r	a	c	k		B	u	f	f

(Y=1 : Track buffer being output, 0 : Track buffer output off)

When the ■ button is pressed, the layer above the current layer is displayed. See "8.4 Stopping the mode" (page 22).

(6) Picking up No. display mode

Press the ⏮ or ⏭ button to switch to the pickup number display.
The pickup number is a 14-digit number, so it is displayed in two sections.

FL Display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	G	X		Y	Y	Y	Y	Y	Y	Y		

(X (display position) = 1 : Lower digits, 2 : Upper digits. YYYYYYY: Pickup number)

When the ■ button is pressed, the layer above the current layer is displayed. See "8.4 Stopping the mode" (page 22).

(7) Error log display mode

Press the ⏮ or ⏭ button to switch to the error log display.
For Error log No. and description of the displayed measurement results, see "Table 3: Error log details" (page 25).

FL Display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
n	T	H	X									

(n : Error information No.(1 ～ 5), X : Error log No.)

Display when there is no error

FL Display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
n	T	H	1		N	o		E	r	r	o	r

When the ■ button is pressed, the layer above the current layer is displayed. See "8.4 Stopping the mode" (page 22).

(8) Test mode cancel

A confirmation message is displayed. Press the ▶ button to set, canceling the test mode.

FL Display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	I	1		R	e	a	1	1	y	?		

When the ■ button is pressed, the layer above the current layer is displayed. See "8.4 Stopping the mode" (page 22).

8.4. Stopping the mode

When the ■ button is pressed, the layer above the current layer is displayed. The relationship between the different modes and the display of the different layers is shown on the table below.

Mode	1 layer	2 layer	3 layer
Laser on/off (CD/DVD/BD) mode	T2 LaserOnOff	T2X mmmm nnnn	Non
Servo adjustment value display mode	T3 Servo Adj.	TXXX	TXXXmmmmmm nn
Error rate (skew) measurement mode	T7 Error Rate	TYYFFFFFFFFFF	TYYmmmmmmllll
Accumulated laser on time display mode	TC LaserOnTim	TCY mmmmmmh	TCY* mmmmmmh TC4*
Track buffer output mode	TE Track Buf	TEYTrack Buff	Non
Picking up No. display mode	TG OPU Number	TGX YYYYYYY	Non
Error log display mode	TH Error Log	nTHX nTH1 No Error	nTHX dddddd nTHAyyy dddd
Test mode cancel	TI Test Exit	TI1 Really?	Non

8.5. About the OPEN/CLOSE (5)button

Even during the test mode, the tray is opened and closed when the ⏏ button is pressed.

8.6. Test mode detailed table

Table 1: Servo adjustment value display mode details

No	XXX	Name	Address range	Meaning
0	T30	BUF_ID_SDRAM	0x000000 ～ 0x3FFFFF	SDRAM
1	T31	BUF_ID_MPU_ALL	0x000000 ～ 0xBEFF3F	MPU(Abs Access)
2	T32	BUF_ID_MPU_RMCR	0x000000 ～ 0x00FFFF	ROMCOR
3	T33	BUF_ID_MPU_SYSCFG	0x000000 ～ 0x000FFF	SystemConfigration
4	T34	BUF_ID_MPU_DMAC	0x000000 ～ 0x0004FF	DMAC
5	T35A	BUF_ID_MPU_ITIM0	0x000000 ～ 0x0000FF	ITIM 0
6	T35B	BUF_ID_MPU_ITIM1	0x000000 ～ 0x0000FF	ITIM 1
7	T35C	BUF_ID_MPU_ITIM2	0x000000 ～ 0x0000FF	ITIM 2
8	T35D	BUF_ID_MPU_ITIM3	0x000000 ～ 0x0000FF	ITIM 3
9	T35E	BUF_ID_MPU_ITIM4	0x000000 ～ 0x0000FF	ITIM 4
10	T35F	BUF_ID_MPU_ITIM5	0x000000 ～ 0x0000FF	ITIM 5
11	T36	BUF_ID_MPU_RSV2	0x000000 ～ 0x0079FF	Reserved
12	T37	BUF_ID_MPU_WDT	0x000000 ～ 0x000FFF	WDT
13	T38	BUF_ID_MPU_UART0	0x000000 ～ 0x0000FF	UART 0
14	T39	BUF_ID_MPU_UART1	0x000000 ～ 0x0000FF	UART 1
15	T40	BUF_ID_MPU_CSIO0	0x000000 ～ 0x0000FF	CSIO 0
16	T41	BUF_ID_MPU_CSIO1	0x000000 ～ 0x0000FF	CSIO 1
17	T42	BUF_ID_MPU_GPIO0	0x000000 ～ 0x0000FF	GPIO 0
18	T43	BUF_ID_MPU_GPIO1	0x000000 ～ 0x0000FF	GPIO 1
19	T44	BUF_ID_MPU_GPIO2	0x000000 ～ 0x0000FF	GPIO 2
20	T45	BUF_ID_MPU_RSV5	0x000000 ～ 0x00BCFF	Reserved
21	T46	BUF_ID_MPU_HEXBIU	0x000000 ～ 0x000FFF	HEXBIU
22	T47	BUF_ID_MPU_HCSC	0x000000 ～ 0x000FFF	HCSC
23	T48	BUF_ID_MPU_RSV6	0x000000 ～ 0x7DDFFF	Reserved
24	T49	BUF_ID_MPU_RSV7	0x000000 ～ 0x3DFEFF	Reserved
25	T50	BUF_ID_MPU_INT	0x000000 ～ 0x00003F	INT
26	T51	BUF_ID_IRAM	0x000000 ～ 0x003FFF	IRAM(internal SRAM))
27	T52	BUF_ID_DSP	0x000000 ～ 0x001FFF	DSP Register
28	T53	BUF_ID_AFE	0x000000 ～ 0x0000FF	AFE Register
29	T54	BUF_ID_SVO_ALL	0x000000 ～ 0x001FFF	SVO REG ABS ACCESS
30	T55	BUF_ID_SVO_REG	0x000000 ～ 0x0007FF	SVERVO REG

No	XXX	Name	Address range	Meaning
31	T56	BUF_ID_SVO_SVRAM	0x000000 ～ 0x0005FF	SVRAM
32	T57A	BUF_ID_SVO_CRAM0	0x000000 ～ 0x0001FF	CRAM0
33	T57B	BUF_ID_SVO_CRAM1	0x000000 ～ 0x0001FF	CRAM1
34	T57C	BUF_ID_SVO_CRAM2	0x000000 ～ 0x0001FF	CRAM2
35	T57D	BUF_ID_SVO_CRAM3	0x000000 ～ 0x0001FF	CRAM3
36	T58A	BUF_ID_SVO_ZRAM0	0x000000 ～ 0x0001FF	ZRAM0
37	T58B	BUF_ID_SVO_ZRAM1	0x000000 ～ 0x0001FF	ZRAM1
38	T58C	BUF_ID_SVO_ZRAM2	0x000000 ～ 0x0001FF	ZRAM2
39	T58D	BUF_ID_SVO_ZRAM3	0x000000 ～ 0x0001FF	ZRAM3
40	T59	BUF_ID_EPRM	0x000000 ～ 0x000FFF	EEPROM
41	T60	BUF_ID_PUCONT_LDD	0x000000 ～ 0x000007	LDD
42	T61	BUF_ID_SVRESULT	0x000000 ～ 0x0002C3	SvResult
43	T62	BUF_ID_LD_TIME	0x000000 ～ 0x00000D	LD ON Time Integrated value
44	T63	BUF_ID_IOP	0x000000 ～ 0x000007	IOP(Stored value)

Table 2: Error rate details

YY	Measurement position	Error rate display details for each media type			Remarks
		BD	DVD	CD	
71	The inner circumference of 1-layer	BIS error detection signed number	It is invalid.	It is invalid.	When this is selected for DVD or CD, it shifts to YY=73.
72	The inner circumference of 1-layer	BIS error uncorrectable signed numbe	It is invalid.	It is invalid.	When this is selected for DVD or CD, it shifts to YY=73.
73	The inner circumference of 1-layer	LDC error detection signed number	PI error detection number	C1 error detection number	
74	The inner circumference of 1-layer	LDC error uncorrectable signed numbe	PO uncorrectable error number	C2 uncorrectable error number	
75	The central circumference of 1-layer	BIS error detection signed number	It is invalid.	It is invalid.	When this is selected for DVD or CD, it shifts to YY=77.
76	The central circumference of 1-layer	BIS error uncorrectable signed numbe	It is invalid.	It is invalid.	When this is selected for DVD or CD, it shifts to YY=77.
77	The central circumference of 1-layer	LDC error detection signed number	PI error detection number	C1 error detection number	
78	The central circumference of 1-layer	LDC error uncorrectable signed numbe	PO uncorrectable error number	C2 uncorrectable error number	
79	The outer circumference of 1-layer	BIS error detection signed number	It is invalid.	It is invalid.	When this is selected for DVD or CD, it shifts to YY=81.
80	The outer circumference of 1-layer	BIS error uncorrectable signed numbe	It is invalid.	It is invalid.	When this is selected for DVD or CD, it shifts to YY=81.
81	The outer circumference of 1-layer	LDC error detection signed number	PI error detection number	C1 error detection number	
82	The outer circumference of 1-layer	LDC error uncorrectable signed numbe	PO uncorrectable error number	C2 uncorrectable error number	

YY	Measurement position	Error rate display details for each media type			Remarks
		BD	DVD	CD	
83	The inner circumference of 2-layer	BIS error detection signed number	It is invalid.	It is invalid.	When this is selected for 2-layer DVD, it shifts to YY=85. When this is selected for 1-layer DVD or CD, it shifts to YY=73.
84	The inner circumference of 2-layer	BIS error uncorrectable signed number	It is invalid.	It is invalid.	When this is selected for DVD 2-layer, it shifts to YY=85. When this is selected for DVD 1-layer or CD, it shifts to YY=73.
85	The inner circumference of 2-layer	LDC error detection signed number	PI error detection number	It is invalid.	When this is selected for 1-layer DVD or CD, it shifts to YY=73.
86	The inner circumference of 2-layer	LDC error uncorrectable signed numbe	PO uncorrectable error number	It is invalid.	When this is selected for 1-layer DVD or CD, it shifts to YY=73.
87	The central circumference of 2-layer	BIS error detection signed number	It is invalid.	It is invalid.	When this is selected for DVD 2-layer, it shifts to YY=89.When this is selected for DVD 1-layer or CD, it shifts to YY=77.
88	The central circumference of 2-layer	BIS error uncorrectable signed numbe	It is invalid.	It is invalid.	When this is selected for DVD 2-layer, it shifts to YY=89. When this is selected for DVD 1-layer or CD, it shifts to YY=77.
89	The central circumference of 2-layer	LDC error detection signed number	PI error detection number	It is invalid.	When this is selected for DVD 1-layer or CD, it shifts to YY=77.
90	The central circumference of 2-layer	LDC error uncorrectable signed numbe	PO uncorrectable error number	It is invalid.	When this is selected for DVD 1-layer or CD, it shifts to YY=77.
91	The outer circumference of 1-layer	BIS error detection signed number	It is invalid.	It is invalid.	When this is selected for DVD 2-layer, it shifts to YY=93. When this is selected for DVD 1-layer or CD, it shifts to YY=81.
92	The outer circumference of 1-layer	BIS error uncorrectable signed numbe	It is invalid.	It is invalid.	When this is selected for DVD 2-layer, it shifts to YY=93. When this is selected for DVD 1-layer or CD, it shifts to YY=81.
93	The outer circumference of 1-layer	LDC error detection signed number	PI error detection number	It is invalid.	When this is selected for DVD 1-layer or CD, it shifts to YY=81.
94	The outer circumference of 1-layer	LDC error uncorrectable signed numbe	PO uncorrectable error number	It is invalid.	When this is selected for DVD 1-layer or CD, it shifts to YY=81.

* The inner circumference of the layer refers to the physical inner circumference for DVD parallel, the physical outer circumference for the opposite case.
* The inner circumference of the layer refers to the physical outer circumference for DVD parallel, the physical inner circumference for the opposite case.

Table 3: Error log details

Error log No.	Contents (Error log overall layout)	Remarks
1	LD On Time (4Byte)	
2	Error type (2Byte)	See "Table 3-1: Error type details"
3 (31 to 34 displayed in 4-byte units)	Reserve (16Byte)	
4	Media type (2Byte)	See "Table 3-2: Media type details"
5	Reserve (4Byte)	
6	Reserve (4Byte)	
7	Reserve (2Byte)	
8	HyBrid Disc layer (2Byte)	See "Table 3-3: HyBrid Disc current layer details"
9 (91 to 92 displayed in 7-digit units) (Matched to TG pickup number display)	PU# (16Byte)	
A (A000 to A161 displayed in 2-digit units)	Reserve (708Byte)	
B (B1 to B3 displayed in 4-digit units)	Reserve (11Byte)	
C	Reserve (1Byte)	
D (D1 to D3 displayed in 4-digit units)	Reserve (12Byte)	

Table 3-1: Error type details

Error type	Error code
NoError	0x0000
Focus does not turn on.	0x0001
Tracking does not turn on.	0x0002
CLV does not turn on.	0x0003
ID cannot be read.	0x0004
Loader error	0x0005
Thread error	0x0006
Expander error	0x0007
Other error	0x0008
Error disc (Failure to recognition of disc)	0x0009
Seek error	0x0010
Lead error	0x0020
Other	Reserved

Table 3-2: Media type details

Media type	Media code
DVD-ROM	0x0001
DVD-R	0x0002
DVD-RW	0x0003
DVD-PLUS-R	0x0004
DVD-PLUS-RW	0x0005
DVD-ROM DL	0x0006
DVD+R DL	0x0007
DVD-R DL	0x0008
DVD+RW DL	0x0009
DVD-RW DL	0x000A
CD-ROM	0x000B
CD-R	0x000C
CD-RW	0x000D
BD-RE SL	0x000E
BD-RE DL	0x000F
BD-R SL	0x0010
BD-R DL	0x0011
BD-R SL LTH	0x0012
BD-ROM SL	0x0013
BD-ROM DL	0x0014
BD-Hybrid	0x0015
SACD-Hybrid	0x0016
SACD DL	0x0017
SACD SL	0x0018
DVD-Hybrid	0v0019
Unknown	0xFFFF
Other	Reserved

Table 3-3: HyBrid Disc current layer details

HyBrid Disc current layer	Current layer code
SACD layer	0x0000
CD layer	0x0001
DVD layer	0x0002
BD layer	0x0003
Other	Reserved