

## Blu-ray TEST DISC ABD-500 Explanatory Material

## 1. Purpose of use, Features

ABD-500 is a Test Disc designed for confirmation of playback ability of BD Players etc. for various kind of codec. Both NTSC and PAL system Contents are included.

## 2. Specifications

- Disc type : BD-Video Disc Single Sided Dual Layer
- Capacity : 50 Gbytes
- Recorded Time : 2hrs 44min 4sec
- Physical Characteristics : Complies with BD-ROM Part 1 Basic Format Specifications Ver. 1.3
- File System : UDF2. 5
- Application : Complies with BD-ROM Part 3 Audio Visual Basic Specifications Ver. 2.0
- Content Protection
  - AACS : Exist
  - ROM Mark : Exist
  - BD+ : None
- BCA : None

## 3. Overview of Content

## (1) Menu

a. When this disc is inserted to BD Players, the 1<sup>st</sup> page of the Menu is displayed.

※ Title No.1 is selected.

b. The Menu consists of two pages. When **NEXT ►** button is selected then push Enter of the remote, or the button of right column is selected then push the right button of the remote, the 2<sup>nd</sup> page of the Menu is displayed.

c. On the 2<sup>nd</sup> page, when **◀ BACK** button is selected then push Enter of the remote, or the button of left column is selected then push left button of the remote, returns to the 1<sup>st</sup> page.

d. Content buttons of yellow color on Menu display are NTSC pictures, blue buttons are PAL pictures.

e. Title No., Video Codec, Pixel, Frame frequencies, Audio Codec and Supplementary Notes are shown on all Contents buttons.

f. In Supplementary Notes, PinP=Picture in Picture, TP=Test Pattern and CC=Closed Caption are described.

g. **50Hz/60Hz ALL PLAY ON/ OFF** button is to select playing only NTSC, PAL or all pictures.

※ON = All play is set as default

- It plays in order from selected Title No. (Content) to Title No.74 (last content), after playing No.74 then return to the Menu.

- In case setting "OFF", only NTSC or PAL pictures play.

- Selection of NTSC or PAL pictures depends on first selected button after setting "OFF".

[Example 1] Playing only NTSC pictures (23.976Hz, 29.97Hz, 59.94Hz)

In case selecting "OFF" by 50Hz/60Hz ALL PLAY ON/OFF button and then select Title No.1 (NTSC content), it plays

Title No.1→2→3→7→8→9→...21→31→...44→51→...63→67→...74→The Menu.

[Example 2] Playing only PAL pictures (25Hz, 50Hz)

In case selecting "OFF" by 50Hz/60Hz ALL PLAY ON/OFF button and then select Title No.4 (PAL content), it plays

Title No.4→5→6→22→...30→45→...50→64→...66→The Menu

h. When **Picture in Picture ON/ OFF** button is set "ON", Picture in Picture function operates and show the secondary video at pertinent Title No.. And the secondary audio that is set for the secondary video also plays.

※OFF= Picture in Picture function does not operate (does not show the secondary vide and does not play the secondary audio) is set as default.

※PinP of Title No.36 is optional specification. Only the player that complies with this specification shows the secondary video and audio.

## (2) Pop-up Menu

a. During HD content playing

The same operation as Main Menu is available.

button is to cancel of Pop-up Menu.

b. During SD content playing

When **MAIN MENU** button is selected then push Enter of the remote, the Menu is displayed. Content selection etc., becomes available.

button is to cancel of Pop-up Menu.

## (3) Subtitle

In each content, Title No., Video Codec, Pixel, Frame frequencies, Audio Codec and Supplementary Notes are displayed/ not displayed by Subtitle ON/ OFF (depends on the setting of player).

a. In case Motion picture content (except Title No.37, 73)

From the start of content, displays for 9 seconds, not display for 1 second, then repeats.

b. In case Still picture content (Title No.37, 73)

After 0.8 second from the start, displays for 9 seconds, not display for 1 second, then repeats.

ABD-500 Contents

Layer No.	Title No.	Chapter No.	Time sec	Video										Audio						
				Picture name	Frame Freq Hz	Progressive /Interlace	Pixel	Codec	Aspect ratio	VBR /CBR	rate Mb/s	PinP	C.C.	Contents	Codec	Channel no	Channel	rate kbps	Fs/Qb Hz/bit	
L1	Menu	1	60	Motion Picture 0	59.94	Progressive	1280 x 720	MPEG-2 MP@HL	16:9	CBR	28	x	x	Music menu	Dolby Digital	2	L,R	192	48k	
		2	1	60	Motion Picture 1	23.976	Progressive	1920 x 1080	MPEG-2 MP@HL	16:9	CBR	38	x	x	Music 1	Dolby Digital	2	L,R	192	48k
		3	1	60	Motion Picture 2	23.976	Progressive	1920 x 1080	MPEG-4 AVC HP@4.1	16:9	VBR	35	x	x	Music 6	DTS	5.1	L,R,Ls,Rs,C,LFE	1,509	48k
		4	1	60	Motion Picture 3	23.976	Progressive	1920 x 1080	SMPT VC-1 AP@3	16:9	VBR	34	x	x	Music 10 70Hz -10dB *1	Dolby Digital Plus	7.1	L,R,Ls,Rs,C,LFE,SBL,SBR	896	48k
		5	1	60	Motion Picture 4	25	Interlace	1920 x 1080	MPEG-2 MP@HL	16:9	VBR	38	x	x	Music 1	Dolby Digital	2	L,R	192	48k
		6	1	60	Motion Picture 5	25	Interlace	1920 x 1080	MPEG-4 AVC HP@4.1	16:9	VBR	35	x	x	Music 6	DTS	5.1	L,R,Ls,Rs,C,LFE	1,509	48k
		7	1	60	Motion Picture 6	25	Interlace	1920 x 1080	SMPT VC-1 AP@3	16:9	VBR	33	x	x	Music 10 70Hz -10dB *1	Dolby Digital Plus	7.1	L,R,Ls,Rs,C,LFE,SBL,SBR	896	48k
		8	1	60	Motion Picture 7	29.97	Interlace	1920 x 1080	MPEG-2 MP@HL	16:9	CBR	38	x	x	Music 3	DTS96/24	5.1	L,R,Ls,Rs,C,LFE	1,509	96k
		9	1	10	Motion Picture 7	29.97	Interlace	1920 x 1080	MPEG-2 MP@HL	16:9	CBR	38	x	x	Music 3	LPCM	2	L,R	1,536	48k/16
		10	1	2	10															
		11	1	3	10															
		12	1	4	10															
		13	1	5	10															
		14	1	6	10															
		9	1	60	Motion Picture 7	29.97	Interlace	1920 x 1080	MPEG-2 MP@HL	16:9	CBR	38	x	x	Music 4	Dolby Digital	5.1	L,R,Ls,Rs,C,LFE	448	48k
		10	1	60	Motion Picture 7	29.97	Interlace	1920 x 1080	MPEG-2 MP@HL	16:9	CBR	25	O	x	Music 5	DTS	2	L,R	1,509	48k
		11	1	60	100% Color Bars	29.97	Interlace	1920 x 1080	MPEG-2 MP@HL	16:9	CBR	38	x	x	L:250Hz 0dB,R:500Hz 0dB	LPCM	2	L,R	1,536	48k/16
		12	1	60	Multi Burst 1-10MHz	29.97	Interlace	1920 x 1080	MPEG-2 MP@HL	16:9	CBR	25	x	x	250Hz~6kHz,70Hz 0dB *3	LPCM	7.1	L,R,Ls,Rs,C,LFE,SBL,SBR	15,360	96k/20
		13	1	60	Ramp	29.97	Interlace	1920 x 1080	MPEG-2 MP@HL	16:9	CBR	38	x	x	1kHz 0dB	Dolby Digital	2	L,R	384	48k
		14	1	60	Limit Ramp	29.97	Interlace	1920 x 1080	MPEG-2 MP@HL	16:9	CBR	38	x	x	250Hz~3kHz,70Hz 0dB *4	Dolby Digital	5.1	L,R,Ls,Rs,C,LFE	448	48k
		15	1	60	75% Blue Field	29.97	Interlace	1920 x 1080	MPEG-2 MP@HL	16:9	CBR	38	x	x	1kHz 0dB	DTS	2	L,R	1,509	48k
		16	1	60	75% Green Field	29.97	Interlace	1920 x 1080	MPEG-2 MP@HL	16:9	CBR	38	x	x	1kHz 0dB,70Hz 0dB *2	DTS	5.1	L,R,Ls,Rs,C,LFE	1,509	48k
		17	1	60	75% Red Field	29.97	Interlace	1920 x 1080	MPEG-2 MP@HL	16:9	CBR	38	x	x	1kHz 0dB,70Hz 0dB *2	DTS-HD (lossy)	7.1	L,R,Ls,Rs,C,LFE,SBL,SBR	5,760	96k
		18	1	60	100% Sweep 1-15MHz	29.97	Interlace	1920 x 1080	MPEG-2 MP@HL	16:9	CBR	38	x	x	Music 7	DTS-HD (lossy)	7.1	L,R,Ls,Rs,C,LFE,SBL,SBR	5,760	96k
		19	1	60	Multi Burst 10-20MHz	29.97	Interlace	1920 x 1080	MPEG-2 MP@HL	16:9	CBR	25	x	x	1kHz 0dB,70Hz 0dB *2	DTS-HD Lossless (DTS-HD Master Audio)	7.1	L,R,Ls,Rs,C,LFE,SBL,SBR	24,500	96k
		20	1	60	SMPT Color Bars	29.97	Interlace	1920 x 1080	MPEG-2 MP@HL	16:9	CBR	25	x	x	1kHz 0dB,70Hz 0dB *2	Dolby Lossless (Dolby TrueHD)	7.1	L,R,Ls,Rs,C,LFE,SBL,SBR	18,000	96k
		21	1	60	5step Staircase	29.97	Interlace	1920 x 1080	MPEG-2 MP@HL	16:9	CBR	38	x	x	1kHz 0dB,70Hz 0dB *2	Dolby Digital Plus	7.1	L,R,Ls,Rs,C,LFE,SBL,SBR	896	48k
		22	1	60	100% Color Bars	25	Interlace	1920 x 1080	MPEG-2 MP@HL	16:9	VBR	38	x	x	L:250Hz 0dB,R:500Hz 0dB	LPCM	2	L,R	1,536	48k/16
		23	1	60	Ramp	25	Interlace	1920 x 1080	MPEG-2 MP@HL	16:9	VBR	38	x	x	1kHz 0dB	Dolby Digital	2	L,R	384	48k
		24	1	60	SMPT Color Bars	25	Interlace	1920 x 1080	MPEG-2 MP@HL	16:9	VBR	25	x	x	1kHz 0dB,70Hz 0dB *2	Dolby Lossless (Dolby TrueHD)	7.1	L,R,Ls,Rs,C,LFE,SBL,SBR	18,000	96k
		25	1	10	Motion Picture 8	50	Progressive	1280 x 720	MPEG-2 MP@HL	16:9	CBR	28	x	x	Music 2	Dolby Digital	2	L,R	192	48k
		26	1	2	10															
		27	1	3	10															
		28	1	4	10															
		29	1	5	10															
		26	1	60	Motion Picture 9	25	Interlace	720 x 576	MPEG-2 MP@ML	4:3	VBR	15	x	x	Music 6	DTS96/24	5.1	L,R,Ls,Rs,C,LFE	1,509	96k
		27	1	60	Motion Picture 8	50	Progressive	1280 x 720	MPEG-4 AVC HP@4.1	16:9	VBR	40	x	x	Music 7	DTS-HD (lossy)	7.1	L,R,Ls,Rs,C,LFE,SBL,SBR	5,376	48k
		28	1	60	Motion Picture 10	25	Interlace	720 x 576	MPEG-4 AVC HP@3.2	4:3	VBR	8	x	x	Music 8	DTS-HD Lossless (DTS-HD Master Audio)	7.1	L,R,Ls,Rs,C,LFE,SBL,SBR	24,500	96k
		29	1	60	Motion Picture 8	50	Progressive	1280 x 720	SMPT VC-1 AP@3	16:9	VBR	28	x	x	Music 9	Dolby Lossless (Dolby TrueHD)	7.1	L,R,Ls,Rs,C,LFE,SBL,SBR	18,000	96k
		30	1	60	Motion Picture 11	25	Interlace	720 x 576	SMPT VC-1 AP@2	4:3	VBR	8	x	x	Music 10 70Hz -10dB *1	Dolby Digital Plus	7.1	L,R,Ls,Rs,C,LFE,SBL,SBR	896	48k
		31	1	60	Motion Picture 7	29.97	Interlace	1920 x 1080	MPEG-2 MP@HL	16:9	CBR	38	x	x	Music 2	Dolby Digital	2	L,R	192	48k
		32	1	60	Motion Picture 12	29.97	Interlace	720 x 480	MPEG-2 MP@ML	4:3	VBR	8	x	x	Music 6	DTS96/24	5.1	L,R,Ls,Rs,C,LFE	1,509	96k
		33	1	60	Motion Picture 12	29.97	Interlace	720 x 480	MPEG-4 AVC HP@3.2	4:3	VBR	24	x	O	Music 7	DTS-HD (lossy)	5.1	L,R,Ls,Rs,C,LFE	3,840	48k
		34	1	60	Motion Picture 12	29.97	Interlace	720 x 480	SMPT VC-1 AP@2	4:3	VBR	7	x	x	Music 8	DTS-HD Lossless (DTS-HD Master Audio)	5.1	L,R,Ls,Rs,C,LFE	24,500	192k
		35	1	60	Motion Picture 13	59.94	Progressive	1280 x 720	MPEG-4 AVC HP@4.1	16:9	VBR	27	x	x	Music 9	Dolby Lossless (Dolby TrueHD)	5.1	L,R,Ls,Rs,C,LFE	18,000	192k
		36	1	60	Motion Picture 13	59.94	Progressive	1280 x 720	SMPT VC-1 AP@3	16:9	VBR	20	O	x	Music 10 70Hz -10dB *1	Dolby Digital Plus	7.1	L,R,Ls,Rs,C,LFE,SBL,SBR	896	48k
		37	1	60	Still Picture 1	23.976	Progressive	1920 x 1080	MPEG2	16:9	CBR	4	x	x	1kHz 0dB,70Hz 0dB *2	LPCM	5.1	L,R,Ls,Rs,C,LFE	13,824	96k/24
		38	1	2762	Motion Picture 7	29.97	Interlace	1920 x 1080	MPEG-2 MP@HL	16:9	CBR	38	x	x	Music 3	LPCM	2	L,R	4,608	96k/24
		39	1	60	Motion Picture 14	29.97	Interlace	720 x 480	MPEG-2 MP@ML	4:3	VBR	15	x	x	Music 4	Dolby Digital	2	L,R	192	48k
		40	1	60	Motion Picture 14	29.97	Interlace	720 x 480	MPEG-4 AVC HP@3.2	4:3	VBR	23	O	O	Music 8	DTS96/24	5.1	L,R,Ls,Rs,C,LFE	1,509	96k
41	1	60	Motion Picture 14	29.97	Interlace	720 x 480	SMPT VC-1 AP@2	4:3	VBR	7	x	x	Music 12	DTS-HD (lossy)	5.1	L,R,Ls,Rs,C,LFE	3,840	48k		
42	1	60	Motion Picture 15	59.94	Progressive	1280 x 720	MPEG-4 AVC HP@4.1	16:9	VBR	20	x	x	Music 7	DTS-HD Lossless (DTS-HD Master Audio)	5.1	L,R,Ls,Rs,C,LFE	24,500	192k		
43	1	60	Motion Picture 15	59.94	Progressive	1280 x 720	SMPT VC-1 AP@3	16:9	VBR	20	x	x	Music 11	Dolby Lossless (Dolby TrueHD)	5.1	L,R,Ls,Rs,C,LFE	18,000	192k		
44	1	60	Motion Picture 7	29.97	Interlace	1920 x 1080	MPEG-2 MP@HL	16:9	CBR	25	O	x	Music 2 70Hz -10dB *1	Dolby Digital Plus	7.1	L,R,Ls,Rs,C,LFE,SBL,SBR	896	48k		
45	1	10	Motion Picture 8	50	Progressive	1280 x 720	MPEG-2 MP@HL	16:9	CBR	28	x	x	Music 2	Dolby Digital	2	L,R	192	48k		
46	1	2	10																	
47	1	3	10																	
48	1	4	10																	
49	1	5	10																	
46	1	60	Motion Picture 9	25	Interlace	720 x 576	MPEG-2 MP@ML	4:3	VBR	15	x	x	Music 6	DTS96/24	5.1	L,R,Ls,Rs,C,LFE	1,509	96k		
47	1	60	Motion Picture 8	50	Progressive	1280 x 720	MPEG-4 AVC HP@4.1	16:9	VBR	28	x	x	Music 7	DTS-HD (lossy)	7.1	L,R,Ls,Rs,C,LFE,SBL,SBR	5,376	48k		
48	1	60	Motion Picture 10	25	Interlace	720 x 576	MPEG-4 AVC HP@3.2	4:3	VBR	8	x	x	Music 8	DTS-HD Lossless (DTS-HD Master Audio)	7.1	L,R,Ls,Rs,C,LFE,SBL,SBR	24,500	96k		
49	1	60	Motion Picture 8	50	Progressive	1280 x 720	SMPT VC-1 AP@3	16:9	VBR	28	x	x	Music 9	Dolby Lossless (Dolby TrueHD)	7.1	L,R,Ls,Rs,C,LFE,SBL,SBR	18,000	96k		
50	1	60	Motion Picture 11	25	Interlace	720 x 576	SMPT VC-1 AP@2	4:3	VBR	8	x	x	Music 10 70Hz -10dB *1	Dolby Digital Plus	7.1	L,R,Ls,Rs,C,LFE,SBL,SBR	896	48k		

Layer No.	Title No.	Chapter No.	Time sec	Video										Audio						
				Picture name	Frame Freq Hz	Progressive /Interlace	Pixel	Codec	Aspect ratio	VBR /CBR	rate Mbps	PinP	C.C.	Contents	Codec	Channel no	Channel	rate kbps	Fs/Qb Hz/bit	
L1	51	1	10	Motion Picture 7	29.97	Interlace	1920 × 1080	MPEG-2 MP@HL	16:9	CBR	38	×	×	Music 1	LPCM	2	L,R	1,536	48k/16	
			2																	
			3																	
			4																	
			5																	
			6																	
	52	1	60	60	Motion Picture 7	29.97	Interlace	1920 × 1080	MPEG-2 MP@HL	16:9	CBR	17	×	×	Stream 1: Music 2	LPCM	5.1	L,R, Ls, Rs, C, LFE	27,648	192k/24
				Stream 2: 1kHz 0dB											Dolby Digital	2	L,R	384	48k	
	53	1	60	100% Color Bars	29.97	Interlace	1920 × 1080	MPEG-2 MP@HL	16:9	CBR	38	×	×	1kHz 0dB	LPCM	2	L,R	1,536	48k/16	
	54	1	60	Multi Burst 1-10MHz	29.97	Interlace	1920 × 1080	MPEG-2 MP@HL	16:9	CBR	25	×	×	250Hz~6kHz, 70Hz 0dB *3	LPCM	7.1	L,R, Ls, Rs, C, LFE, SBL, SBR	15,360	96k/20	
	55	1	60	Shallow Ramp	29.97	Interlace	1920 × 1080	MPEG-2 MP@HL	16:9	CBR	38	×	×	1kHz 0dB	Dolby Digital	2	L,R	384	48k	
	56	1	60	Shallow Ramp Matrix	29.97	Interlace	1920 × 1080	MPEG-2 MP@HL	16:9	CBR	38	×	×	250Hz~3kHz, 70Hz 0dB *4	Dolby Digital	5.1	L,R, Ls, Rs, C, LFE	448	48k	
	57	1	60	75% Blue Field	29.97	Interlace	1920 × 1080	MPEG-2 MP@HL	16:9	CBR	38	×	×	1kHz 0dB	DTS	2	L,R	1,509	48k	
	58	1	60	75% Green Field	29.97	Interlace	1920 × 1080	MPEG-2 MP@HL	16:9	CBR	38	×	×	1kHz 0dB, 70Hz 0dB *2	DTS96/24	5.1	L,R, Ls, Rs, C, LFE	1,509	96k	
	59	1	60	75% Red Field	29.97	Interlace	1920 × 1080	MPEG-2 MP@HL	16:9	CBR	38	×	×	1kHz 0dB, 70Hz 0dB *2	DTS-HD (lossy)	7.1	L,R, Ls, Rs, C, LFE, SBL, SBR	5,760	96k	
	60	1	60	100% Flat Field	29.97	Interlace	1920 × 1080	MPEG-2 MP@HL	16:9	CBR	38	×	×	Music 7	DTS-HD (lossy)	5.1	L,R, Ls, Rs, C, LFE	4,224	96k	
	61	1	60	Valid Ramp	29.97	Interlace	1920 × 1080	MPEG-2 MP@HL	16:9	CBR	25	×	×	1kHz 0dB, 70Hz 0dB *2	DTS-HD Lossless (DTS-HD Master Audio)	7.1	L,R, Ls, Rs, C, LFE, SBL, SBR	24,500	96k	
	62	1	60	75% Color Bars	29.97	Interlace	1920 × 1080	MPEG-2 MP@HL	16:9	CBR	25	×	×	1kHz 0dB, 70Hz 0dB *2	Dolby Lossless (Dolby TrueHD)	7.1	L,R, Ls, Rs, C, LFE, SBL, SBR	18,000	96k	
	63	1	60	5step Staircase	29.97	Interlace	1920 × 1080	MPEG-2 MP@HL	16:9	CBR	38	×	×	1kHz 0dB, 70Hz 0dB *2	Dolby Digital Plus	7.1	L,R, Ls, Rs, C, LFE, SBL, SBR	896	48k	
	64	1	60	100% Color Bars	25	Interlace	1920 × 1080	MPEG-2 MP@HL	16:9	VBR	38	×	×	L:250Hz 0dB, R:500Hz 0dB	LPCM	2	L,R	1,536	48k/16	
	65	1	60	Ramp	25	Interlace	1920 × 1080	MPEG-2 MP@HL	16:9	VBR	38	×	×	1kHz 0dB	Dolby Digital	2	L,R	384	48k	
	66	1	60	SMPTE Color Bars	25	Interlace	1920 × 1080	MPEG-2 MP@HL	16:9	VBR	25	×	×	1kHz 0dB, 70Hz 0dB *2	Dolby Lossless (Dolby TrueHD)	7.1	L,R, Ls, Rs, C, LFE, SBL, SBR	18,000	96k	
	67	1	60	Motion Picture 7	29.97	Interlace	1920 × 1080	MPEG-2 MP@HL	16:9	CBR	38	×	×	Music 2	Dolby Digital	2	L,R	192	48k	
	68	1	60	Motion Picture 7	29.97	Interlace	1920 × 1080	MPEG-2 MP@HL	16:9	CBR	38	×	×	Music 6	DTS96/24	5.1	L,R, Ls, Rs, C, LFE	1,509	96k	
69	1	60	Motion Picture 7	29.97	Interlace	1920 × 1080	MPEG-2 MP@HL	16:9	CBR	38	×	×	Music 7	DTS-HD (lossy)	7.1	L,R, Ls, Rs, C, LFE, SBL, SBR	5,376	48k		
70	1	60	Motion Picture 7	29.97	Interlace	1920 × 1080	MPEG-2 MP@HL	16:9	CBR	25	×	×	Music 8	DTS-HD Lossless (DTS-HD Master Audio)	5.1	L,R, Ls, Rs, C, LFE	24,500	192k		
71	1	60	Motion Picture 7	29.97	Interlace	1920 × 1080	MPEG-2 MP@HL	16:9	CBR	25	×	×	Music 9	Dolby Lossless (Dolby TrueHD)	5.1	L,R, Ls, Rs, C, LFE	18,000	192k		
72	1	60	Motion Picture 7	29.97	Interlace	1920 × 1080	MPEG-2 MP@HL	16:9	CBR	38	×	×	Music 10 70Hz -10dB *1	Dolby Digital Plus	7.1	L,R, Ls, Rs, C, LFE, SBL, SBR	896	48k		
73	1	60	Still Picture 2	23.976	Progressive	1920 × 1080	MPEG2	16:9	CBR	4	×	×	Music 1	LPCM	5.1	L,R, Ls, Rs, C, LFE	13,824	96k/24		
74	1	2702	Motion Picture 7	29.97	Interlace	1920 × 1080	MPEG-2 MP@HL	16:9	CBR	38	×	×	Music 3	LPCM	2	L,R	4,608	96k/24		

C.C.=Closed Caption

Display text : TEST BD-Video/ABD-500

The text is displayed after starting content 1 to 10sec, 11 to 20sec, 21 to 30sec, 31 to 40sec, 41 to 50sec, 51 to 59sec.

PinP=Picture in Picture

Secondary Video

Title No.	Time Sec	Video	Pixel	Scaling	Codec	Codec	Channel Number	Fs kHz	rate kbps	Contents
10	60	Motion Picture 12	640x480	x1	MPEG-2	DD Plus	2 L,R	48	192	1kHz -10dB
36	60	Motion Picture (8sec shift)	640x360	x0.5	VC-1	Dolby Digital Plus	5.1 L,R, Ls, Rs, C, LFE	48	256	1kHz -10dB LFE only contains 70Hz -10dB
40	60	Motion Picture 14(9sec shift)	360x240	x0.5	MPEG-4	DTS-HD	2 L,R	48	192	1kHz -10dB
44	60	Motion Picture 12	640x480	x1	MPEG-2	DTS-HD	5.1 L,R, Ls, Rs, C, LFE	48	256	1kHz -10dB LFE only contains 70Hz -10dB

This disc also contains JPEG file of IMAGE\_1920x1080.jpg at Route directly.

are contents of PAL type (25Hz, 50Hz).

Bitrate of Video stream is average of file size after encoding by calculation. Actual value is changing.

Bitrate of Audio is the set value when encoding, actual value may change depending on codec type.

In order to make FWD skip search, each title has dummy chapter.

The dummy chapter is only 0.5sec Black (No picture and No music).

Ex: Title number 1 is Title number 1 contains dummy chapter next to the chapter 1.

Number of chapter at title number 1 is 2.

\*1 LFE only 70Hz -10dB

\*2 LFE only 70Hz 0dB

\*3 L:250Hz R:500Hz Ls:1kHz Rs:2kHz C:3kHz SBL:4kHz SBR:6kHz LFE:70Hz All 0dB

\*4 L:250Hz R:500Hz Ls:1kHz Rs:2kHz C:3kHz LFE:70Hz All 0dB

Channel

L: Left

R: Right

Ls: Left Surround

Rs: Right Surround

C: Center

LFE: Low Frequency Effect

SBL(Rls): Surround Back Left

(Rear surround left)

SBR(Rrs): Surround Back Right

(Rear surround right)