



# Information technology — Digitally recorded media for information interchange and storage — 120 mm Triple Layer (100,0 Gbytes per disk) BD Rewritable disk

## TECHNICAL CORRIGENDUM 1

*Technologies de l'information — Supports enregistrés numériquement pour échange et stockage d'information — Disques BD réinscriptibles de 120 mm triple couche (100,0 Go par disque)*

RECTIFICATIF TECHNIQUE 1

Technical Corrigendum 1 to ISO/IEC 30193:2013 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 23, *Digitally Recorded Media for Information Interchange and Storage*.

Page 23, 10.7

Replace the third paragraph:

"If the step from the top surface in the area to the top surface in the Information Area is  $> h_{16} = 0,2$  mm, then the slope down to the top surface of the Information Area shall be smooth and  $l_1 < 1,8$  mm as indicated in Figure 14. If the top surface in the Information Area is stepped down from the top surface in the Second transition Area, then the step shall end within diameter  $d_8 = 40,0$  mm."

with:

"The step from the top surface in the area to the top surface in the Information Area is  $h_{16}$ . The distance between the start and the end diameter of the step is  $l_1$ . If  $h_{16} > 0,2$  mm, then the slope down to the top surface of the Information Area shall be smooth and  $l_1$  shall be  $> 1,8$  mm as indicated in Figure 14. If the top surface in the Information Area is stepped down from the top surface in the Second transition Area, then the step shall end within diameter  $d_8 = 40,0$  mm."

Page 24, 10.7

Replace the forth paragraph:

- On Recording Layer L2
- Inner Zone 2
- Inner Zone 2
- Lead-out Zone ( Outer Zone 2)

with

- On Recording Layer L2
- Inner Zone 2
- Data Zone 2
- Lead-out Zone ( Outer Zone 2)

Page 51, 13.13

Replace the top sentence:

Some conclusions:

All information bytes of the BIS Block are found in the first 15 rows of each Address Unit.  
 All parity bytes of the BIS Block are found in the last 16 rows of each Address Unit.  
 Each Address Field is found in the first 3 rows of each Address Unit (see Figure 34)

with

Unit <i>u</i>	row <i>r</i>	byte number <i>N,C</i> from BIS Block			shift right (= mod( <i>t</i> ,3))	filling in upward direction
		0	column <i>e</i> 1	2		
8	0	1,0	1,1	1,2	0	start of Block row <i>N</i> = 1
	1	3,5	3,3	3,4	1	
	2	5,7	5,8	5,6	2	
	3	7,9	7,10	7,11	0	
	:					
	8	17,1	17,2	17,0	2	start of Block row <i>N</i> = 17
	:					
	30	61,18	61,19	61,20		
9	0	1,21	1,22	1,23		end of Block row <i>N</i> = 1
10	0	1,18	1,19	1,20		
11	0	1,15	1,16	1,17		
12	0	1,12	1,13	1,14		
13	0	1,9	1,10	1,11		
14	0	1,6	1,7	1,8		
15	0	1,3	1,4	1,5	0	↑ continuation of Block row <i>N</i> = 1
	1	3,8	3,6	3,7	1	
	2	5,10	5,11	5,9	2	
	:					
	7	15,2	15,0	15,1	1	start of Block row <i>N</i> = 15
	:					
	30	61,21	61,22	61,23	0	end of Block row <i>N</i> = 61

Figure 32 – Example of mapping (partial) of BIS bytes into last 8 Units

Some conclusions:

All information bytes of the BIS Block are found in the first 15 rows of each Address Unit.  
 All parity bytes of the BIS Block are found in the last 16 rows of each Address Unit.  
 Each Address Field is found in the first 3 rows of each Address Unit (see Figure 34)

Page 74, Figure 66

Replace the Figure:

nibble	bit 3	bit 2	bit 1	bit 0	
n <sub>0</sub>	AS23	AS22	AS21	AS20	↑ 6 ADIP nibbles address ↓
n <sub>1</sub>	AS19	AS18	:	:	
:	:	:	:	:	
n <sub>5</sub>	AS3	:	:	AS0	
n <sub>6</sub>	AX11	:	:	:	↑ 3 nibbles AUX data ↓
:	:	:	:	:	
n <sub>8</sub>	AX3	:	:	AX0	

with

nibble	bit 3	bit 2	bit 1	bit 0	
n <sub>0</sub>	AS23	AS22	AS21	AS20	↑ 6 ADIP nibbles symbol ↓
n <sub>1</sub>	AS19	AS18	:	:	
:	:	:	:	:	
n <sub>5</sub>	AS3	:	:	AS0	
n <sub>6</sub>	AX11	:	:	:	↑ 3 nibbles AUX data ↓
:	:	:	:	:	
n <sub>8</sub>	AX3	:	:	AX0	

Page 157 to 159, Figure 105 to 108

Replace these 4 Figures

byte position	bits	INFO 1 / PAC 1 location PAA
64	b <sub>7</sub> b <sub>6</sub>	01 FF 80h
64	b <sub>5</sub> b <sub>4</sub>	01 FF 84h
64	b <sub>3</sub> b <sub>2</sub>	01 FF 88h
64	b <sub>1</sub> b <sub>0</sub>	01 FF 8Ch
65	b <sub>7</sub> b <sub>6</sub>	01 FF 90h
:	:	:
:	:	:
70	b <sub>1</sub> b <sub>0</sub>	01 FF ECh
71	b <sub>7</sub> b <sub>6</sub>	01 FF F0h
71	b <sub>5</sub> b <sub>4</sub>	01 FF F4h
71	b <sub>3</sub> b <sub>2</sub>	01 FF F8h
71	b <sub>1</sub> b <sub>0</sub>	01 FF FCh

Figure 105 – Status bits and related INFO1/PAC1 address locations on Layer L0

byte position	bits	INFO 2 / PAC 2 location PAA
72	b <sub>7</sub> b <sub>6</sub>	01 BA 00h
72	b <sub>5</sub> b <sub>4</sub>	01 BA 04h
72	b <sub>3</sub> b <sub>2</sub>	01 BA 08h
72	b <sub>1</sub> b <sub>0</sub>	01 BA 0Ch
73	b <sub>7</sub> b <sub>6</sub>	01 BA 10h
:	:	:
:	:	:
78	b <sub>1</sub> b <sub>0</sub>	01 BA 6Ch
79	b <sub>7</sub> b <sub>6</sub>	01 BA 70h
79	b <sub>5</sub> b <sub>4</sub>	01 BA 74h
79	b <sub>3</sub> b <sub>2</sub>	01 BA 78h
79	b <sub>1</sub> b <sub>0</sub>	01 BA 7Ch

Figure 106 – Status bits and related INFO2/PAC2 address locations on Layer L0

byte position	bits	INFO 1 / PAC 1 location PAA
80	b <sub>7</sub> b <sub>6</sub>	3E 00 00h
80	b <sub>5</sub> b <sub>4</sub>	3E 00 04h
80	b <sub>3</sub> b <sub>2</sub>	3E 00 08h
80	b <sub>1</sub> b <sub>0</sub>	3E 00 0Ch
81	b <sub>7</sub> b <sub>6</sub>	3E 00 10h
:	:	:
:	:	:
86	b <sub>1</sub> b <sub>0</sub>	3E 00 6Ch
87	b <sub>7</sub> b <sub>6</sub>	3E 00 70h
87	b <sub>5</sub> b <sub>4</sub>	3E 00 74h
87	b <sub>3</sub> b <sub>2</sub>	3E 00 78h
87	b <sub>1</sub> b <sub>0</sub>	3E 00 7Ch

Figure 107 – Status bits and related INFO1/PAC1 address locations on Layer L1

byte position	bits	INFO 2 / PAC 2 location PAA
88	b <sub>7</sub> b <sub>6</sub>	3E 45 80h
88	b <sub>5</sub> b <sub>4</sub>	3E 45 84h
88	b <sub>3</sub> b <sub>2</sub>	3E 45 88h
88	b <sub>1</sub> b <sub>0</sub>	3E 45 8Ch
89	b <sub>7</sub> b <sub>6</sub>	3E 45 90h
:	:	:
:	:	:
94	b <sub>1</sub> b <sub>0</sub>	3E 45 ECh
95	b <sub>7</sub> b <sub>6</sub>	3E 45 F0h
95	b <sub>5</sub> b <sub>4</sub>	3E 45 F4h
95	b <sub>3</sub> b <sub>2</sub>	3E 45 F8h
95	b <sub>1</sub> b <sub>0</sub>	3E 45 FCh

Figure 108 – Status bits and related INFO2/PAC2 address locations on Layer L1

with:

byte position	bits	INFO 1 / PAC 1 location PAA
64	b <sub>7</sub> b <sub>6</sub>	0 01 FF 80h
64	b <sub>5</sub> b <sub>4</sub>	0 01 FF 84h
64	b <sub>3</sub> b <sub>2</sub>	0 01 FF 88h
64	b <sub>1</sub> b <sub>0</sub>	0 01 FF 8Ch
65	b <sub>7</sub> b <sub>6</sub>	0 01 FF 90h
:	:	:
:	:	:
70	b <sub>1</sub> b <sub>0</sub>	0 01 FF ECh
71	b <sub>7</sub> b <sub>6</sub>	0 01 FF F0h
71	b <sub>5</sub> b <sub>4</sub>	0 01 FF F4h
71	b <sub>3</sub> b <sub>2</sub>	0 01 FF F8h
71	b <sub>1</sub> b <sub>0</sub>	0 01 FF FCh

Figure 105 – Status bits and related INFO1/PAC1 address locations on Layer L0

byte position	bits	INFO 2 / PAC 2 location PAA
72	b <sub>7</sub> b <sub>6</sub>	0 01 BA 00h
72	b <sub>5</sub> b <sub>4</sub>	0 01 BA 04h
72	b <sub>3</sub> b <sub>2</sub>	0 01 BA 08h
72	b <sub>1</sub> b <sub>0</sub>	0 01 BA 0Ch
73	b <sub>7</sub> b <sub>6</sub>	0 01 BA 10h
:	:	:
:	:	:
78	b <sub>1</sub> b <sub>0</sub>	0 01 BA 6Ch
79	b <sub>7</sub> b <sub>6</sub>	0 01 BA 70h
79	b <sub>5</sub> b <sub>4</sub>	0 01 BA 74h
79	b <sub>3</sub> b <sub>2</sub>	0 01 BA 78h
79	b <sub>1</sub> b <sub>0</sub>	0 01 BA 7Ch

Figure 106 – Status bits and related INFO2/PAC2 address locations on Layer L0

byte position	bits	INFO 1 / PAC 1 location PAA
80	b <sub>7</sub> b <sub>6</sub>	0 7E 00 00h
80	b <sub>5</sub> b <sub>4</sub>	0 7E 00 04h
80	b <sub>3</sub> b <sub>2</sub>	0 7E 00 08h
80	b <sub>1</sub> b <sub>0</sub>	0 7E 00 0Ch
81	b <sub>7</sub> b <sub>6</sub>	07 E 00 10h
:	:	:
:	:	:
86	b <sub>1</sub> b <sub>0</sub>	0 7E 00 6Ch
87	b <sub>7</sub> b <sub>6</sub>	0 7E 00 70h
87	b <sub>5</sub> b <sub>4</sub>	0 7E 00 74h
87	b <sub>3</sub> b <sub>2</sub>	0 7E 00 78h
87	b <sub>1</sub> b <sub>0</sub>	0 7E 00 7Ch

Figure 107 – Status bits and related INFO1/PAC1 address locations on Layer L1