

“BDC-202BK”

Serial ATA
BD-ROM, DVD-R/RW/RAM, +R/RW, CD-R/RW
DRIVE UNIT

General Product Specifications (Ver. 1.00)

Appearance:



Features:

- Multi-effect Liquid Crystal Tilt Servo Compensator
- Low vibration mechanism employed by Ultra-DRA system
- Supports “Buffer Under Run” protection (DVD & CD)
- Data Buffer Size: 4Mbyte
- Interface: Serial ATA Revision 1.0a
- Data Transfer Mode: Generation1, 1.5Gbits/s
- Mounting Orientation: Horizontal and Vertical (+/- 5 degrees)
- Dimensions: W = 148mm x D = 185mm x H = 42.3mm (inc. height of front bezel)
- Net Weight: 980g
- Operating Temperature: min. +5°C to max. +45°C
- Operating Humidity: 5% to 85% RH (no condensation)
- Supported Disc Size Diameter: 120mm / 80mm^(*)
- Complies to RoHS Directive and WEEE Directive

^(*) 80mm discs cannot be used when the drive is vertically orientated. This case remains even when an adapter is used.
(Non-standard discs such as ‘custom-shaped’ or ‘business card’ size discs are not supported).

Supported Media Types:

Disc Format	Write	Read
BD-ROM Ver.1.0 (Single layer 25GB, Dual layer 50GB)	N/A	Y ^{(*)2}
BD-ROM (BD9)	N/A	Y
BD-R Ver.1.1 (Single Layer / Dual Layer)	N/A	Y
BD-RE Ver.2.1 (Single Layer / Dual Layer)	N/A	Y
DVD (DVD-5; Single layer, Single side 4.7GB)	N/A	Y
DVD (DVD-9; Dual layer, Single side 8.54GB)	N/A	Y
DVD (DVD-10; Single layer, Dual side 9.4GB)	N/A	Y
DVD (DVD-18; Dual layer, Dual side 17.09GB)	N/A	Y
DVD-R Ver.1.0 (for authoring 3.95GB)	N	Y
DVD-R Ver.2.0 (for authoring 4.7GB)	N	Y
DVD-R Ver.2.0 (for general 4.7GB)	Y	Y
DVD-R DL (Dual Layer) Ver.3.0, (8.54GB)	Y ^{(*)3}	Y
DVD-RW Ver.1.0, 1.1 and 1.2 (4.7GB)	Y	Y
+R Ver.1.0, 1.1 and 1.2	Y	Y
+R DL (Double Layer) Ver.1.0 (8.54GB)	Y ^{(*)3}	Y
+RW Ver.1.1, 1.2 and 1.3	Y	Y
+RW High-Speed Ver.1.0	Y	Y
DVD-RAM Ver.2.0, 2.1 and 2.2 (Class0)	Y ^{(*)4}	Y
DVD-RAM Ver.2.2 [RAM2(Class1)]	N ^{(*)4}	Y
CD-ROM Mode1	N/A	Y
CD-ROM XA Mode2 (form 1, form2)	N/A	Y
Photo CD (single and multiple session)	Y ^{(*)3}	Y
Video-CD, CD-DA, CD-Extra, CD-Text	Y ^{(*)3}	Y
CD-R	Y	Y
CD-RW (Supports AM2)	Y	Y
HS CD-RW (Supports AM2)	Y	Y
US CD-RW (Supports AM2)	Y	Y
US+ CD-RW (Supports AM2)	Y	Y

(*)2 Copy protected discs are supported.

(*)3 Recording software support is required.

(*)4 Please refer to the table below:

	Class0 Media	RAM2 Class1 Media
Write Speed	2X, 3X, 5X	Not Supported

Write Speed:

Media Type		Data Transfer (Maximum)	Mbytes/sec (Maximum)
DVD-R		1X CLV ^{(*)5}	1.385
		2X CLV ^{(*)5}	2.77
		4X CLV ^{(*)5}	5.54
		6X CLV ^{(*)6}	8.31
		8X Zone-CLV ^{(*)6}	11.08
		12X Zone-CLV ^{(*)6}	16.62
DVD-R DL (Dual Layer)		2X CLV	2.77
		4X CLV	5.54
DVD-RW		1X CLV ^{(*)5}	1.385
		2X CLV ^{(*)5}	2.77
		4X CLV ^{(*)5}	5.54
		6X CLV ^{(*)6}	8.31
+R		2.4X CLV	3.324
		4X CLV	5.54
		6X CLV ^{(*)6}	8.31
		8X Zone-CLV ^{(*)6}	11.08
		12X Zone-CLV ^{(*)6}	16.62
+R DL (Double Layer)		2.4X CLV	3.324
		4X CLV	5.54
+RW		2.4X CLV	3.324
		3.3X CLV	4.57
		4X CLV	5.54
		6X CLV	8.31
DVD-RAM		2X CLV	2.77
		3X CLV	4.15
		5X CLV	6.92
CD-R		4X CLV ^{(*)5}	0.60
		10X CLV ^{(*)6}	1.50
		16X CLV ^{(*)6}	2.40
		24X Zone-CLV ^{(*)6}	3.60
CD-RW	Normal & HS	4X CLV ^{(*)5}	0.60
	HS, US & US+	10X CLV ^{(*)6}	1.50
	US & US+	16X CLV ^{(*)6}	2.40
	US & US+	24X Zone-CLV ^{(*)6}	3.60

(*)5 The specification for 8cm media is identical.

(*)6 This specification is only for 12cm media. The specification for 8cm media is up to 4X CLV.

Read Speed:

Disc Format	Data Transfer (Maximum)	Mbytes/sec (Maximum)
BD-ROM (Single layer)	5X CAV	22.5
BD-ROM (Dual layer)	2X CLV	9.00
BD-ROM (BD9)	8X CAV	11.08
BD-R (Single layer)	5X CAV	22.5
BD-R (Dual layer)	2X CLV	9.00
BD-RE (Single layer)	5X CAV	22.5
BD-RE (Dual layer)	2X CLV	9.00
DVD-ROM (Single Layer)	12X CAV	16.62
DVD-ROM (Dual Layer)	8X CAV	11.08
DVD-Video (Single layer, Dual Layer)	5X CAV	6.92
DVD-R / +R	12X CAV	16.62
DVD-R DL / +R DL (Dual / Double Layer)	8X CAV	11.08
DVD-RW / +RW	8X CAV	11.08
DVD-RAM	5X CLV	6.92
CD-ROM	32X CAV	4.80
Video CD	9.3X CAV	1.39
CD-DA, CD-TEXT, Mixed-CD, CD-Extra (Play audio)	9.3X CAV	1.39
CD-DA, CD-TEXT, Mixed-CD, CD-Extra (Data Extraction)	24X CAV	3.60
CD-R	32X CAV	4.80
CD-RW	24X CAV	3.60

Note: The read speeds for Recordable / Rewritable media listed here are for when the disc has been finalised.

In the case that the inserted disc has not been finalised, or if an uncorrectable read error occurs during normal read operations, then the disc rotation speed will be reduced to 1X CLV for BD or DVD reading.

Applicable Write Format:

DVD-R / DVD-R DL (Dual Layer)	Disc at Once Incremental Recording (Multi-Border Recording)
DVD-RW	Restricted Overwriting Disc at Once Incremental Recording (Multi-Border Recording)
+R / +R DL (Double Layer)	Sequential Recording (Multi-Session Recording)
+RW	Random Recording
DVD-RAM	Random Recording
CD-R / CD-RW	Disc at Once Track at Once Session at Once Packet Recording (Multi-Session Recording)

ADDITIONAL NOTES:

RPC setting (for DVD):

The BDC-202BK includes Regional Playback Control (RPC Phase II Mode). Region changes can be made up to five (5) times including the initial setting. Be aware that the fifth (5th) change will be PERMANENT. Therefore, please use caution when changing the region code. The method of changing the region code number may vary on the decoder or operating system used.

Due to continued improvements, design and specifications are subject to possible change and/or modifications without prior notice.

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