



Specifications

DIAMOND DATA CD-ROM drives are currently available in a 52X maximum speed model. They are Multi Read Compliant and support Ultra DMA data transfer.

The CD-ROM drives employ advanced hybrid CAV/CLV (Constant Angular Velocity/Constant Linear Velocity) technology for faster data transfer rates and lower power consumption compared with conventional CLV drives. This feature ensures less stress on the spindle motor leading to better reliability. Data seeking and reading performance is also improved in most areas of the disc.



Operating System Compatibility:

Outstanding performance is combined with complete compatibility. The drives are compatible with the Windows 3.1, 95, 98, NT, 2000 and Me, Linux, Solaris, MS-DOS, and most other Operating Systems. Its high speed makes it ideal for applications where performance is essential.

Additional Features

The CD-ROM drives are equipped with AGC/AOC (Automatic Gain Control/Automatic Offset Control), which uses digital servo control to maintain consistent reading quality throughout the life of the product.

Software Drivers

ATAPI standard software drivers suitable for use with all DIAMOND DATA CD-ROM drives are included with most PC operating systems, including Windows 95, 98, 2000, Me and NT and Linux. However, a real-mode device driver is required to allow operation with MS-DOS or in DOS mode with operating systems such as Windows 95. The device driver is provided with each CD-ROM drive or may be downloaded from File Download Page.

Data Transfer	
Sustained rate:	Model 652A-123 (52X max): 3.3 - 7.8 MB/sec
Direct Audio Extraction Rate:	1.5 MB/sec (10X typical)
Burst rate:	33.3 MB/sec (Ultra DMA mode 2)
Access time (1/3 stroke):	100 ms (typical)
Buffer size:	128 KB

Interface	
Drive Interface Type:	IDE (conforms to SFF8020 v2.6)
Disc Formats:	CD-audio, CD-ROM (mode 1 and mode 2), CD-ROM XA (mode 2, form 1 & form 2). CD-Extra, CDI/FMV, Video CD, Photo CD (single- & multi-session), I-TRAX, Enhanced CD, Karaoke CD, CD-R, CD-RW
Disc Size:	80 mm and 120 mm
Audio Performance	
Signal to Noise Ratio:	75 dB min.
Distortion:	< 2%
Line output:	> 0.7 Vrms
Sampling frequency:	44.1 kHz
Output ports:	3 stereo channels - 3.5 mm headphone jack, 4 pin line-out, digital audio output.
Power Requirements	
5 VDC +/- 5%, 450 mA typical.	
12 VDC +/- 5%, 650 mA typical.	
Reliability Characteristics	
MTBF	60,000 POH (20% duty cycle at room temperature)
Error rate	10 ⁻¹² after error correction
	10 ⁻⁹ hardware read error
Environmental Conditions	
Operating temperature	5 ~ 45 Degrees
Non-operating temperature	-20 ~ 60 Degrees
Non-operating Humidity	20%-90% RH
Physical Characteristics	
Dimensions:	148 x 42 x 198 mm (WHD) typical
Weight:	1.0 kg
Front Panel:	Busy LED indicator, Rotary Volume control, Play/Skip button, Disk Eject, Headphone jack, Emergency Disc Eject
Rear panel	Power supply connector, IDE interface connector, Audio line output, Digital audio output, testing jumper
Electronic Characteristics	
Laser diode wavelength:	780 nm typical
Laser diode power:	0.2-0.3 mW CW typical