

Specimen for reference CRD-BPDV2

Drive specification

- DVD+RW/+R x2.4 x4 x12
- HD-BURN read speed x72, write speed x24
- CD-R/RW x24 x10 x40
- BURN-Proof, FlexSS-BP, Safe-BP

"HD-BURN", which doubles the recording capacity (1.4GB) of conventional CD-R media (700MB). A recorded disc by "HD-BURN" technology is compatible with a DVD player, and allows the player to read the disc with some modification of firmware.

As a result, the need for intermediate range capacity between CD-R and DVD is steadily increasing as users demand easy to use and affordable type of large volume media.

"HD-BURN" technology meets these needs and realizes the recording of large volume data at a moderate price.

Feature

- Can record twice the capacity of a conventional CD-R media.
- Write and read speeds, capable of Maximum data write speed of 24 times and Max data reading speed of 72 times.
- BURN-Proof prevents recording fault due to Buffer Under Run errors.
- CD-RW media will be supported by firmware modification in the future.
It will be available to record the data on ordinary CD-RW media at a maximum speed of 24 times in HD-BURN mode.
- With regard to the recording application software, the "B's Recorder GOLD" (BHA) and the "Nero" (AHEAD) will support "HD-BURN". So the users can easily use "HD-BURN" recording by the use of Video authoring feature and DVD Video recording feature using the above application software.

Why can you write it in CD-R/RW by two double densities?

In general, the following technique is used to achieve it high density.

1. The minimum pit length is shortened.
2. The track pitch is shortened.
3. The record area on the disk side is expanded.
4. Efficiency improvement of modulation method.
5. Efficiency improvement of error correction method.

Item	CD	HD-BURN	HD-BURN (Improvement ratio/times)
Minimum pit length	0.83 μ m	0.62 μ m	1.343
Track area	1.6 \pm 0.1	1.6 \pm 0.1	1.0
Record area	25mm in radius	25mm in radius	1.0
Error correction method	CIRC	RS-Product Code	1.40
Storage capacity	700MB(Type80)	1400MB(Type80)	2.0

The optics system of the reproduction and the mechanism system designed by the above 1, 4 and 5 techniques in consideration of for CD the existing use of the CD-R/RW disk for HD-BURN.