

# DVD +R/ +RW Recordable Loader DRL-100



## \* FEATURES

- ATAPI Interface
- DVD+RW(4.7GB), DVD+R(4.7GB), DVD-RW(4.7GB Closed Session), and DVD-R(4.7GB)
- Readable DVD-5, DVD-9, DVD-10, DVD-18 Readable
- Video-CD, CVD, SVCD, DVCD, CD-R, CD-RW and CD-Audio Readable
- 250ms Average Access Time in DVD & CD Mode
- Supports 4.2X CAV Read Speed in DVD Mode
- Supports 12X CAV Read Speed in VCD, CVD, SVCD and DVCD Mode
- Supports 12X CAV Read Speed in CD-Audio Mode
- Supports 2.4x CLV Write Speed in DVD+R/DVD+RW
- Maximum 5,775KB/sec Transfer Rate in DVD Read Mode
- Maximum 1,800KB/sec Transfer Rate in VCD, CVD, SVCD and DVCD Read Mode
- 3,324KB/sec Transfer Rate in DVD+R, DVD+RW Write Mode
- Power Tray Loading/Ejecting Mechanism
- Built-in ATAPI Interface Controller
- Built-in MODE-1 ECC/EDC
- MTBF (T.B.D)
- PIO Mode 4, UDMA 66 (T.B.D)
- Sleep Mode for Energy Saving



## SPECIFICATIONS

### Performance

- Applicable Disc Format for Writing**  
DVD+R(ver 1.0), DVD+RW(ver 1.0, ver 1.1)
- Applicable Disc Format for Reading**  
DVD-5, DVD-9, DVD-10, DVD-18, DVD+RW(4.7GB), DVD+R(4.7GB), DVD-RW(4.7GB Closed Session), DVD-R(4.7GB), CVD, SVCD, DVCD, CD-R, CD-RW, VCD, CD-Audio
- Recordability**  
DVD+RW Jitter : Maximum 10% (Blank ALMEDIO disc, ADVP-WTP Manufactured by Ricoh Measured on ref player DVD CATS SA300)  
DVD+R Jitter : Maximum 11% (Blank ALMEDIO disc, ADVP-RTP4 Manufactured by Ricoh Measured on ref player DVD CATS SA300)
- DVD Writable Media**  
DVD+RW Media (2.4x) : RICOH, Sony, Imation, Ridata, Melody  
DVD+R Media (4x/2.4x) : RICOH, Sony, Imation, Verbatim(Mitsubishi), That's(Taiyo Yuden), Mitsubishi, Melody  
DVD+RW Rewrite : 1000times
- Rotational Speed**  
DVD Read : 4.2X(CAV) 2400 rpm CD Read : 12X(CAV) 2400 rpm  
DVD+R/+RW Write : 2.4X(CLV)  
Approx. 1,379 rpm to 3,333 rpm
- Data Transfer Rate for Reading**  
\* Sustained Data Transfer Rate  
DVD : Approx. Max 5,775KB/sec VCD : Approx. Max 1,800 KB/sec  
\* Burst (ATAPI)  
16.7 Mbytes/sec (PIO Mode 4) T.B.D : 66 Mbytes/sec (UDMA 66)
- Data Transfer Rate for Writing**  
DVD+R/+RW : Approx 3,324 KB/sec

- Average Access Time**  
Random Access DVD : 250 ms Typical CD : 250 ms Typical
- Data Buffer Capacity** : 2Mbytes
- Error Rate**  
DVD Hard Error Rate : 10E-15 max.  
Seek Error Rate : 10E-6 max.  
CD Hard Error Rate : 10E-12 max. (Mode 1)  
10E-9 max. (Mode 2)  
Seek Error Rate : 10E-6 max.

### Environmental Conditions

This Loader should be used under the conditions listed below.

Temperature and Humidity	
Operating Temperature	5 C° to 45 C°
Storage Temperature	-25 C° to 60 C°
Operating Humidity	10% to 80%
Storage Humidity	0% to 90%
Condensation	No condensation of the conditions above
Vibration	
Operating	No unrecoverable error 10-500Hz sine sweep rate in 1 octave/min Read 0.25G, Write 0.1G 30 min/each direction
Non-Operating	No damage, No unrecoverable error 10-500Hz sine sweep rate in 1 octave/min 2G in X, Y and Z directions 30 min/axis
Shock	
Operating (at a level surface)	No unrecoverable error 10 msec half-sine wave Read 3G, Write 1G in 3 directions 1 pulse 10sec interval (6 each direction)
Non-Operating	No damage, No unrecoverable error 10 msec half-sine wave 50G 1 time in each direction
Drop (Packaged)	No damage, No unrecoverable error Free drop at 70 cm (1corner, 3edges, 6surface)

### Quality and Reliability

- MTBF (Mean Time Between Failures) : T.B.D
- Tray Cycle Test  
No fatal problem in the mechanical part after 10,000 times open/close cycle test.
- Actuator Mechanism  
The drive will be capable of seeking at least 1,000,000 full strokes.
- MTTR (Mean Time to Repair) : 30 minutes

