

Convenient Recordable Digital Disc Format: New Sony PRMD-74 MiniDisc

With professional applications in mind, Sony's PRMD-74 recordable MiniDiscs offer even greater reliability than the consumer model. Unlike tape, MiniDisc provides direct access and virtually instant playback, making it convenient for sound effects and other broadcasting and stage applications. Since it is packed in the CD-type case associated with pre-recorded MiniDiscs, the PRMD series are also ideal for small-lot demo or sampler discs.



Reliable media for audio archives

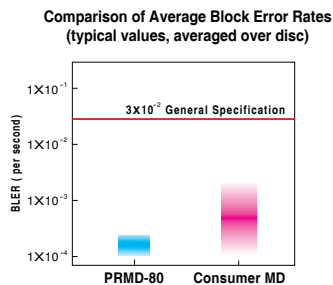
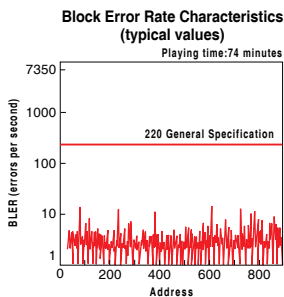
MiniDisc is a non-contact digital audio format employing magneto-optical technology. Therefore, repeated use has virtually no effect upon performance. It also resists even strong magnetic fields which would ruin a tape recording. These factors make MiniDisc an excellent choice for audio archives.

Quick Random Access

Sound effects, musical themes, commercial messages, and announcements can be recorded in stereo or mono on up to 255 tracks for individual, rapid access. Playback begins immediately, without the delay of tape formats. Maximum recording/playback time is 74 minutes.

Professional quality

The block error rate (BLER) of the PRMD series remain extremely low, unaffected by even one million erase/read/write cycles. The PRMD series have a BLER ten times better than that of the consumer MD, and comes in a CD-type case, with professional index sheet and label sheet.



Disc Specifications

Item	Unit	Typical value
		PRMD-74
Diameter of disc	mm	64
Thickness	mm	1.2
Diameter of center ring	mm	11
Diameter from start of program area	mm	32
Diameter from start of lead-in area	mm	29
Track pitch	μm	1.6
Disc linear velocity	m/second	1.22

Audio Characteristics

Item	Unit	Typical value
Number of channels	∅	2 (stereo/monaural)
Frequency bandwidth	Hz	5 to 20,000
Dynamic range	dB	105
Wow and flutter	∅	Accuracy of crystal oscillator

Signal Format

Item	Unit	Typical value
Sampling frequency	kHz	44.1
High efficiency coding system	∅	ATRAC *1
Modulation system	∅	EFM *2
Error correction system	∅	CIRC *3

Optical Parameters

Item	Unit	Typical value
Laser wavelength	nm	780 (typical)
Aperture of object lens	∅	0.45 (typical)
Recording laser power	mW	5 Maximum
Recording system	∅	Magnetic field modulation overwrite system

*1 Adaptive Transform Acoustic Coding. *2 Eight-to-fourteen Modulation. *3 Cross Interleave Reed-Solomon Code.