

SONY



## PCM-D50 Linear PCM Recorder

## The portable possibilities are plentiful.

The latest addition to Sony's family of portable audio recorders, the PCM-D50 recorder adopted many of its features and style from the highly acclaimed PCM-D1 model, including rugged construction and cool design. And its affordable price point makes it highly attainable as well as highly attractive.

The PCM-D50 is a 96 kHz/24-bit recorder fitted with two-position (X-Y or Wide) stereo microphones, 4 GB of internal flash memory and a Memory Stick Pro-HG Duo™ slot for additional storage. Operating on four AA alkaline batteries, it provides 14 hours of record operation at 44.1kHz 16bit recording. Among its many unique features are flexible microphone rotation, a pre-record buffer that records five seconds of audio before hitting the record button, digital pitch control and A/B segment/repeat. It's the ideal choice for making live musical, nature sound and field recordings. And the portable possibilities for songwriters, musicians and journalists are plentiful.



Sampling Rate and Quantization	Memory Stick PRO-HG Duo			Built-in Flash Memory
	1 GB	2 GB	4 GB	4 GB
22.05 kHz 16 bit	3 hrs 5 min.	6 hrs 25 min.	12 hrs 50 min.	12 hrs 55 min.
44.10 kHz 16 bit	1 hr 30 min.	3 hrs 10 min.	6 hrs 25 min.	6 hrs 25 min.
44.10 kHz 24 bit	1 hr 0 min.	2 hrs 5 min.	4 hrs 15 min.	4 hrs 15 min.
48.00 kHz 16 bit	1 hr 25 min.	2 hrs 55 min.	5 hrs 55 min.	5 hrs 55 min.
48.00 kHz 24 bit	55 min.	1 hr 55 min.	3 hrs 55 min.	3 hrs 55 min.
96.00 kHz 16 bit	40 min.	1 hr 25 min.	2 hrs 55 min.	2 hrs 55 min.
96.00 kHz 24 bit	25 min.	55 min.	1 hr 55 min.	1 hr 55 min.

\*Times noted are approximate.

## Highlights

- 96 kHz-24 bit, virtually noise-free, recording quality
- Built-in, X-Y or Wide configuration electret condenser microphones for superb stereo sound
- 4GB internal Flash Memory, free of drive mechanisms
- Memory Stick Pro-HG Duo™ slot for up to 4GB expandable memory
- Built-in USB port compatible with Macintosh® and Windows®/PC operating systems
- Operates with easily replaceable AA size batteries and offers exceptional battery life
- Versatile recording and playback functions including a pre-record buffer, digital pitch control and A/B segment/repeat
- Rugged metal construction with lightweight design
- Optional accessories include remote control, wind screen and tripod

## Features and benefits

### Superb Recording Quality

The PCM-D50 is a 96kHz/24 bit linear recorder that records in standard .WAV file format and surpasses standard DAT sound quality. A low signal-to-noise ratio provides virtually noise-free recording quality.

### Expandable Memory

With a 4GB built-in memory, the PCM-D50 records up to six hours when recording in 44.1kHz 16 bit CD quality mode. And the Memory Stick PRO-HG Duo Slot provides up to 4GB memory expandability.



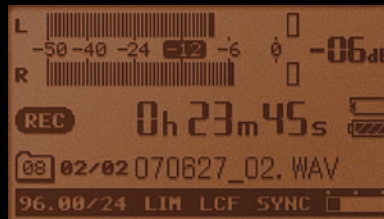
### Built-in Microphones

The PCM-D50 recorder comes equipped with a high sensitivity, built-in, two-position electret condenser stereo microphone with flexible rotation for either X-Y or Wide stereo positions.



### Versatile Recording Functions

The Dual Digital Limiter feature helps prevent distortion, a pre-record buffer records five seconds of audio before hitting the record button, and Super Bit Mapping technology helps achieve wide dynamic range.



### Playback Functions

The PCM-D50 recorder provides MP3 playback, a special Digital Pitch Control feature that slows down playback without changing pitch, and an A/B segment/repeat feature that allows you to mark and repeat a segment.

### PC/Macintosh Compatible

The PCM-D50 utilizes a simple drag and drop file transfer via high-speed USB connection.

### Rugged Construction

Constructed of lightweight metal (aluminum), the recorder is built rugged to withstand the demands of pro applications.

# PCM-D50 Specifications

## Built-in Microphones

Electret condenser microphones offering X-Y or Wide stereo positions  
 High sensitivity (-35.0dB /Pa 1 kHz) (Typical)  
 Maximum input level 120dB SPL  
 Noise level 20.0dB SPL(A) (Typical)

## Recording Media

Built-in 4GB flash memory, Memory Stick Pro-HG Duo™ (optional),  
 Memory Stick Pro Duo (High Speed) (optional), Stereo Recording

## Sampling Rates

22.05kHz, 44.1kHz, 48kHz and 96kHz

## Quantization

16-bit linear, 24-bit linear

## Recording Format

.WAV

## Playback Format

.WAV / MP3

## Maximum Record Time using Internal 4GB Flash Memory

22kHz 16-bit Recording Mode: 12 hours and 55 minutes  
 44.1kHz 16-bit Recording Mode: 6 hours and 25 minutes  
 44.1kHz 24-bit Recording Mode: 4 hours and 15 minutes  
 48kHz 16-bit Recording Mode: 5 hours and 55 minutes  
 48kHz 24-bit Recording Mode: 3 hours and 55 minutes  
 96kHz 16-bit Recording Mode: 2 hours and 55 minutes  
 96kHz 24-bit Recording Mode: 1 hour and 55 minutes

## Frequency Response (Line Input to Line Output)

For Fs = 22.05kHz: Frequency Response = 20Hz to 10kHz (0 to -2dB)  
 For Fs = 44.1kHz: Frequency Response = 20Hz to 20kHz (0 to -2dB)  
 For Fs = 48kHz: Frequency Response = 20Hz to 22kHz (0 to -2dB)  
 For Fs = 96kHz: Frequency Response = 20Hz to 40kHz (0 to -2dB)

## Signal-to-Noise Ratio (Line Input to Line Output)

93dB or greater (1kHz IHF-A) when set to 24-bit

## Total Harmonic Distortion (Line Input to Line Output)

0.01% or below (1kHz, 22kHz LPF)

## Wow and Flutter

Below measurable limit (less than +/-0.001%W.Peak)

## Microphone Input (Stereo Mini Jack)

Input impedance: 22k ohm, Rated input level: 2.5 mV; Minimum input level: 0.7 mV  
 Supports external mic plug-in power

## Headphone Output (Stereo Mini Jack)

Rated output level: 400 mV; Maximum output level: 25 mW + 25 mW or more  
 Load impedance: 16 ohms

## Line Input (OPT)

Analog input: Input impedance: 40K ohms; Rated input level: 2.0V; Minimum input level: 450 mV  
 Optical digital input: Input level -24.5dBm to -14.5dBm. Absorption wavelength: 630nm to 690nm

## Line Output (OPT)

Analog output: Output impedance: 220 ohms, Rated output level: 1.7V load impedance: 22k ohms  
 Optical digital output: Output level -21dBm to -15dBm. Emission wavelength: 630 nm to 680nm

## USB Connection

High-speed USB, mass storage class

## Memory Stick® Slot

Memory Stick Pro-HG Duo™ media, NOTE: Standard Memory Stick® media not supported

## Power Requirements

DC in 6V. Four AA size alkaline batteries (supplied)  
 Four AA NiMH rechargeable batteries (optional)

## Power Consumption

0.75w

## Approx. Battery Life

14 Hours @44.1/16 recording or 12 Hours @ 96/24 recording

## Dimensions (W x H x D)

2 7/8" x 6 1/8" x 1 5/16" not including projecting parts and controls

## Weight

12.88 oz (including batteries)

## Supplied Accessories

Sound Forge® Audio Studio LE Software CDROM, AC Power Adapter (6V) model AC-ES608K,  
 USB Cable, 4x Alkaline Batteries (AA size) Operating Instructions

# Optional Accessories

**RMPCM1** – Remote Commander®  
 Remote Control



**VCTPCM1** – Tripod Stand



**ADPCM1** – Wind Screen



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A-1169  
 Printed in USA (1/08)