

Pro-Installation Solid-State Recorder

PMD570



For years, Marantz Professional has led the industry in the recording and gathering of audio for every application from Houses of Worship to Corporate Boardrooms to Municipalities to Courthouses and beyond. Not afraid of moving forward with technology, the new PMD570 pro-installation solid state recorder from Marantz Professional will lead the charge in audio data acquisition. Replacing the traditional cassette tape with readily available and affordable CF (compact flash) cards may be scary; but after all of the benefits of doing so have been realized, you'll know why Marantz Professional and the PMD570 are out in front again.



Features RS-232

Key Features

- Record Directly to Compact Flash Cards
- RS-232c Control of Functions
- Easy One Touch Record
- No Moving Parts
- MP3, MP2, WAV, and BWF Format Compatible
- Over 40 Assignable Quality Settings
- Security for Media (Door)
- 16-48 kHz Sample Rate Selections
- 32-384 Bit Rate Selectable
- Menu Driven Contact Closure for Remote Operation:
Start-Pause, Mark EDL/Create New File/Start-Pause with New File/
Mark EDL
- Digital Input and Output
- Balanced XLR Line inputs with Trim
- Unbalanced Line In and Out

Extensive Capability

Designed with compatibility for MP3, MP2, BWF, and WAV formats, the PMD570 boasts an impressive 40 assignable quality settings as well as a FAT32 file allocation table for future multi-gig file compatibility.

Simple Operation

With one button press, users can record audio files to affordable and widely available microdrives or compact flash cards.

RS-232c Control of Functions and Presets

The PMD570 is the first installation solid-state recorder in a history of innovative recorders to feature true installation quality and full two-way RS-232 control. Users can also setup, change, and replace all preset settings via RS-232 and their PC (see graphic on page 2), which is ideal for install with multiple units. One can simply "flash" the units with the desired settings, parameters, and recording algorithms.

On Demand Marking

Expanding on the marking capabilities of the Marantz Professional PMD670, the PMD570 allows the end-user to mark and divide files in many different manners. Just like the PMD670, one can make an EDL mark or create a new file (track) either by the front panel or by a contact closure signal. The PMD570 will also be able to mark a file or create a new file by RS-232 control or by utilizing a new Marantz Professional wired remote to be released in the near future. And just like the PMD670, the PMD570's files and EDL marks are recognized by PMDEdit for those desiring easy file management, archiving, and editing.

"Minute Track Mode" Recording

While recording, the PMD570 has the ability to create new files while recording at a number user definable increments for easy navigation through hours of audio. A new file (track increment) can be created by the PMD570 at 1, 5, 10, 15, and 30 minutes as well as 1, 2, 6, 8, 12, and 24 hour intervals for long-term, unattended audio recording.

Transfer Audio Files to PC

The PMD570 features a computer I/O connection that allows it to be easily linked for rapid file transfer to your PC or MAC computer. Users can drag and drop recorded audio files to their computer's hard drive in minutes—without the real-time delay disadvantages of cassette, mini disc, or DAT recording. The optional PMDEdit software (PC only) enables easy file management and editing.

Compact Flash - the Media

Record it right the first time and avoid all of the timely transfers and expensive conversions associated with cassette, mini disc, and DAT recordings to your PC or server. Archiving meetings on cassettes is expensive and space consuming. With the Marantz Professional PMD570 and one inexpensive Compact Flash card, you can archive over 50 hours on one 700MB compact disc. That's over 33 - 90 minute cassettes worth of recording!!! And with compact flash media being used in so many digital cameras, it is a format that is here to stay.

PMD570

Specifications

General

System Solid-state recorder
 Number of Channels 2 (stereo), 1 (mono)
 Usable Media CF memory cards, Microdrives

Recording and Media Methods
 .mp2 MPEG1 layer II compression
 .mp3 MPEG1 layer III compression
 .mp3 MPEG2 layer III compression*
 *for all half sample rates

PCM 16-bit linear PCM
 Power Consumption 5.3 W
 Headphone Output Power 20 mW/32 ohms

Dimensions (Maximum)
 Width 483 mm
 Height 52 mm
 Depth 298 mm
 Weight 3.0 kg

Audio

Recording Bit rate (Selectable)
 MP2 Stereo 384, 256, 192, 128, 96, 64 kbps
 MP2 Mono 192, 128, 96, 64, 48, 32 kbps
 MP3 Stereo 320, 256, 160, 128, 80, 64 kbps
 MP3 Mono 160, 128, 80, 64, 40, 32 kbps
 Sampling Frequency Analog 48, 44.1, 32, 24*, 22.05*, 16* kHz
 *except MP2

Digital 48, 44.1 kHz
 Frequency Response (PCM 44.1 kHz) 20,000 Hz (-0.5 dB)
 Signal-to-Noise Ratio IEC-A Weighted 91 dB

Total Harmonic Distortion at 0 VU (PCM) 0.01%
 Dynamic Range 94dB

Inputs/Outputs

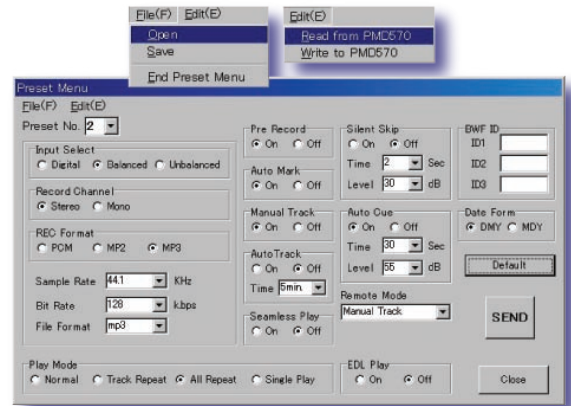
Balanced LINE IN L/R
 Type XLR (1:GND, 2:HOT, 3:COLD)
 Input Sensitivity +16dBu/@ 0dBFS (+4dBu/@-12dBFS)
 /24 k ohms
 0dB - +24dB Trim Control

Unbalanced LINE IN L/R
 Type RCA jack
 Input Sensitivity 500 mVrms/22 k ohms

LINE OUT L/R
 Type RCA jack
 Standard Level 2 Vrms max./300 ohms

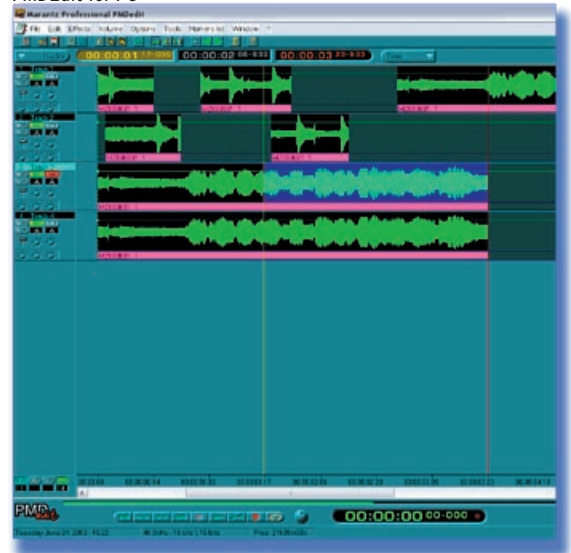
DIGITAL IN/OUT
 Type RCA jack
 Impedance 75 ohms
 Standard Level 0.5 Vp-p
 Sampling Frequency 44.1/48 kHz
 Format SPDIF (IEC-958 type II)

PLEASE NOTE: Specifications are based on measurement conditions and proper care for the machine, and are subject to change without notice.



RS-232 Application/Preset screen for PC programming

PMDEdit for PC



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DENON marantz
 PROFESSIONAL PROFESSIONAL

1 2 3 4 5 6 7 8 9
 min | max
 LEVEL

Introduction

Thank you for selecting the Marantz Professional PMD570 Solid State Recorder. The PMD570 is an audio recorder that records in digital audio formats onto a Compact Flash™ memory card (CF card) or Microdrive™.

Compact flash memory cards, also used in digital cameras, are widely available at consumer electronics retailers and computer resellers.

Computer compatible

The PMD570 records directly onto CF cards. Recordings can be transferred to your desktop or laptop computer by removing the CF card from the PMD570 or by connecting the PMD570 to your computer via the I/O port. Audio recorded in the popular MP3 compression format is directly available for intranet or internet file sharing.

On your computer you can then:

- log and archive audio files
- play audio files
- save audio files to:
 - your hard drive
 - a floppy
 - a CD-R disc
- post streaming audio files on your web site
- use software and your computer to transcribe digital recordings
- An editing program (Marantz Professional's PMDEdit application software, available from Marantz Professional for PC users) lets you convert and edit audio files that were recorded on the PMD570.

Setup

- Three menu selectable Presets make it easy to switch between your commonly used input, recording format, playback parameters and other menu selections.

Audio inputs may be from:

- line level sources connected to the BALANCED IN XLR jacks,
- line level audio sources connected to the ANALOG IN RCA jacks, or
- digital audio sources in SPDIF format connected to the DIGITAL IN jack.

Audio outputs may be from:

- headphones connected to the HEADPHONE jack,
- analog audio devices such as an amplifier or other device connected to the ANALOG OUT jacks, and/or
- digital audio devices using SPDIF format connected to the DIGITAL OUT jack.

External control

- RS-232C control codes enable full external control of the PMD570.
- Suggested Presets that are downloadable to the PMD570 via the RS-232C control port are available at d-mpro.com.
- An optional wired Remote Marantz Model RC600 connects via a TRRS connector and permits:
 - starting, stopping, or pausing recording
 - adding EDL marks (see next page) to a track
- A second wired remote connection accepts a mono Phone jack (remote control not supplied). Depending on the menu selection a simple contact closure connected here permits:
 - Start Pause: pause and resume
 - StrtPausTR: restart after pause while recording initiates a new track
 - EDL Mark: add a silent EDL mark
 - Manual TRK: initiate a new track while recording (if Seamless Play is off during playback adds a small audio gap)

Security - CF cards

For security the CF card compartment door can be secured with a screw. Requiring a tool to open the CF card compartment reduces casual removal of the CF card.

Automatic recording

The PMD570 can be set to stop recording when there is silence (Silent Skip) and automatically start when sound resumes. The PMD570 can be set to automatically add an EDL mark to the track at each such starting point.

Playback aids

A common problem with lengthy recordings is difficulty in locating one or more specific passages for playback. The PMD570 has several ways to mark or tag specific record starting and/or ending points.

- **Date and time**

A built-in date and time generator marks the beginning of each track.

• Tracks

- A new track (file) is automatically started each time you begin a recording.
- It is not possible to record over a previously recorded track unless it is first erased.
- An Auto Track feature can add tracks every minute or other selectable recording interval. (**Minute track:** Setting the interval to one minute provides a new track every minute of a recording, permitting navigating a large audio recording by time.)
- A new track can be started during recording by pressing the Record button. (Manual TR, Manual Track incrementing, On.)

EDL marks

EDL marks are silent during playback but locatable.

EDL (Edit Decision List) marks can be created during recording manually or automatically. EDL marks help you find those specific points in the recording.

*The EDL marking system is proprietary to Marantz Professional solid state recorders.

- During playback you can instantly locate EDL marks.
- You can change an EDL mark into a skip mark or an A-B repeating point. That lets you create custom playback sequences which include skipping audio between EDL marks or repeating audio between EDL marks.
- EDL marks are specific to the CF card, not to Tracks. That lets you create custom playback sequences across Tracks.
- Up to 255 EDL marks can be added to a CF card. EDL marks are numbered consecutively starting at one.
 - During recording you can manually add an EDL mark by pushing and holding **SHIFT** while you push the **MARK** button.
 - EDL marks can also be added automatically.
- Marantz Professional's PMDEdit application software, is specifically designed by Marantz. Marantz Professional's PMDEdit application software recognizes EDL marks generated by the PMD570. This is especially useful for editing audio files on your PC. For more information visit www.d-mpro.com.

Features

- Stereo (2 channels) and mono (1 channel) audio recording and playback.
- Records onto various types of CF cards. (Please refer to the Marantz Professional web site at www.d-mpro.com for what kind of media are recommended.)
- Three different recording formats.
 - Compressed recording using MPEG1 Layer II (MP2) or MPEG1 Layer III (MP3) mono and stereo.
 - Uncompressed recording using 16-bit linear Pulse Code Modulation (PCM).
- MS-DOS™, Windows and Macintosh compatible audio files.
- Selectable file types:
 - Wave
 - Broadcast Wave Format
 - RAW MP2/MP3.
- recording bit rate is selectable
 - MP2/MP3 compressed at 32kbps (recommended for dictation), 32, 48, or 64kbps (recommended for voice recording), or 128, or 192 kbps (recommended for recording music)
 - PCM uncompressed at 768kbps (mono) (very high quality mono audio recording)
 - PCM uncompressed at 1536kbps (stereo) (recommended for very high quality audio recording)
- Pre-Recording memory buffer that records 2 seconds of audio before recording is started.
- Portions of multiple recordings can be played back in sequence using EDL marks.
- Built-in Time and Date generator marks the beginning of each track.
- Three remote options, including RS-232C, permit wired remote control.

Recording time chart

Recording time chart

The recording time available on a CF card depends on the size of the card in MB, the recording type (.mp3, .mp2 or PCM), the bitrate of the recording and if recording in mono or stereo.

This Recording time chart lists approximate recording times based on those factors.

CARD SIZE	32 kbps		64 kbps		80 kbps		128 kbps		160 kbps		128kbps		256 kbps		160 kbps		320 kbps		
	mono	stereo	mono	stereo	mono	stereo	mono	stereo	mono	stereo	mono	stereo	mono	stereo	mono	stereo	mono	stereo	
.mp3	32 MB	2:13:00	1:06:30	1:46:24	0:53:12	0:33:15	1:06:30	0:33:15	0:53:12	0:26:36	0:33:15	0:33:15	0:16:38	0:26:36	0:13:18				
	64 MB	4:26:00	2:13:00	3:32:48	1:46:24	1:06:30	0:33:15	1:06:30	0:53:12	0:33:15	0:33:15	0:33:15	0:16:38	0:26:36	0:13:18				
	128 MB	8:52:00	4:26:00	7:05:36	3:32:48	2:13:00	1:06:30	2:13:00	1:46:24	1:06:30	1:06:30	1:06:30	0:53:12	0:26:36	0:13:18				
	256 MB	17:44:00	8:52:00	14:11:12	7:05:36	4:26:00	2:13:00	4:26:00	3:32:48	2:13:00	2:13:00	2:13:00	1:06:30	0:53:12	0:26:36				
	340 MB	23:33:08	11:46:34	18:50:30	9:25:15	5:53:17	2:56:38	5:53:17	4:42:38	2:56:38	2:56:38	2:56:38	1:46:24	1:06:30	0:53:12				
	512 MB	35:28:00	17:44:00	28:22:24	14:11:12	8:52:00	4:26:00	8:52:00	7:05:36	4:26:00	4:26:00	4:26:00	2:13:00	1:06:30	0:53:12				
(1 GB) 1024 MB	70:56:00	35:28:00	56:44:48	28:22:24	17:44:00	8:52:00	17:44:00	14:11:12	8:52:00	8:52:00	8:52:00	4:26:00	2:13:00	1:06:30					
(2GB) 2048MB	141:52:00	70:56:00	113:29:36	56:44:48	35:28:00	17:44:00	35:28:00	28:22:24	17:44:00	17:44:00	17:44:00	8:52:00	4:26:00	2:13:00					
(4GB) 4096MB	283:44:00	141:52:00	226:59:12	113:29:36	70:56:00	35:28:00	70:56:00	56:44:48	35:28:00	35:28:00	35:28:00	17:44:00	8:52:00	4:26:00					

CARD SIZE	32 kbps		48 kbps		96 kbps		128 kbps		192 kbps		128 kbps		256 kbps		192 kbps		384 kbps		
	mono	stereo	mono	stereo	mono	stereo	mono	stereo	mono	stereo	mono	stereo	mono	stereo	mono	stereo	mono	stereo	
.mp2	32 MB	2:13:00	1:06:30	1:39:45	0:49:53	0:33:15	1:06:30	0:33:15	0:49:53	0:24:56	0:33:15	0:33:15	0:16:38	0:24:56	0:12:28				
	64 MB	4:26:00	2:13:00	3:19:30	1:39:45	1:06:30	0:33:15	1:06:30	0:49:53	0:24:56	0:33:15	0:33:15	0:16:38	0:24:56	0:12:28				
	128 MB	8:52:00	4:26:00	6:39:00	3:19:30	2:13:00	1:06:30	2:13:00	1:39:45	1:06:30	1:06:30	1:06:30	0:53:12	0:26:36	0:13:18				
	256 MB	17:44:00	8:52:00	13:18:00	6:39:00	4:26:00	2:13:00	4:26:00	3:19:30	2:13:00	2:13:00	2:13:00	1:06:30	0:53:12	0:26:36				
	340 MB	23:33:08	11:46:34	17:39:51	8:49:55	5:53:17	2:56:38	5:53:17	4:42:38	2:56:38	2:56:38	2:56:38	1:46:24	1:06:30	0:53:12				
	512 MB	35:28:00	17:44:00	26:36:00	13:18:00	8:52:00	4:26:00	8:52:00	7:05:36	4:26:00	4:26:00	4:26:00	2:13:00	1:06:30	0:53:12				
(1 GB) 1024 MB	70:56:00	35:28:00	53:12:00	26:36:00	17:44:00	8:52:00	17:44:00	13:18:00	8:52:00	8:52:00	8:52:00	4:26:00	2:13:00	1:06:30					
(2GB) 2048MB	141:52:00	70:56:00	106:24:00	53:12:00	35:28:00	17:44:00	35:28:00	26:36:00	17:44:00	17:44:00	17:44:00	8:52:00	4:26:00	2:13:00					
(4GB) 4096MB	283:44:00	141:52:00	212:48:00	106:24:00	70:56:00	35:28:00	70:56:00	53:12:00	35:28:00	35:28:00	35:28:00	17:44:00	8:52:00	4:26:00					

CARD SIZE	16 kHz		22.050kHz		24kHz		32kHz		44.1 kHz		48 kHz	
	mono	stereo	mono	stereo	mono	stereo	mono	stereo	mono	stereo	mono	stereo
PCM	32 MB	0:16:40	0:08:20	0:12:06	0:06:03	0:11:07	0:05:33	0:08:20	0:04:10	0:06:03	0:03:01	0:05:33
	64 MB	0:33:20	0:16:40	0:24:11	0:12:06	0:22:13	0:11:07	0:16:40	0:08:20	0:12:06	0:06:03	0:11:07
	128 MB	1:06:40	0:33:20	0:48:23	0:24:11	0:44:27	0:22:13	0:33:20	0:16:40	0:24:11	0:12:06	0:11:07
	256 MB	2:13:20	1:06:40	1:36:45	0:48:23	1:28:54	0:44:27	1:06:40	0:33:20	0:48:23	0:24:11	0:22:13
	340 MB	2:57:05	1:28:33	2:08:30	1:04:15	1:58:04	0:59:02	1:28:33	0:44:16	1:04:15	0:32:07	0:29:31
	512 MB	4:26:40	2:13:20	3:27:01	1:36:45	2:55:34	1:28:54	2:13:20	1:06:40	1:36:45	0:48:23	0:44:27
(1 GB) 1024 MB	8:53:21	4:26:41	6:27:01	3:13:30	5:55:34	2:57:47	4:26:41	2:13:20	3:13:30	1:36:45	1:28:54	
(2GB) 2048MB	17:46:42	8:53:21	12:54:01	6:27:01	11:51:08	5:55:34	8:53:21	4:26:41	6:27:01	3:13:30	2:57:47	
(4GB) 4096MB	35:33:24	17:48:42	25:48:04	12:54:01	23:42:16	11:51:06	17:46:42	8:53:21	12:54:01	6:27:01	5:55:34	

These figures are an average of 4 cards of various sizes and manufacturers.

All times are approximated record times for the PMD570/PMID670.

Different media manufacturers allow more or less space for error correction and such on their respective products.

ALL TIMES ARE APPROXIMATE