# Professional MP3/CD Recorder Workstation

# **CDR420**

Unique (yoo-nek) adj. 1. Being the only one of its kind. 2. Without an equal or equivalent; unparalleled.\*

Marantz is no stranger to innovation. For decades, we've written and rewritten the book on professional field recording—and we are doing it again with the new CDR420. Never before has a CD recorder been so flexible or so powerful. Record to hard disc as .WAV or .MP3. Perform cut-and-paste editing in the field. Upload to a PC through USB 2.0, or burn CDs — right there in the field. Edit ID3 information and rip MP3 discs. Copy redbook or MP3/.WAV data discs. Error check and defrag the hard drive using USB and standard Windows XP® disc utilities. You can even name files and access commands with a standard PS/2 keyboard.

The CDR420 is the right recorder to capture and record almost any application. Recording a court proceeding? All parties walk away with a standard, non-erasable audio CD. Recording a concert? Sell CDs minutes after it ends. Need more than 80 minutes on a CD? Record and burn in MP3 mode. Need to use good mics? The CDR420 has dual XLRs with +48v phantom power. Don't have any mics? The CDR420 has one built-in. There's more, but sit back. The list is long.

\*The American Heritage® Dictionary of the English Language, Fourth Edition Copyright © 2000 by Houghton Mifflin Company.



## **Key Features**

- Record to the 20GB hard disc in 44.1kHz mono or stereo as .WAV or .MP3
- On-board editing includes: cut, copy, paste, insert silence and split track
- CDs can be burned in standard audio format, or as a data CD (directory of .WAV and/or .MP3 files) (ISO9660)
- Multiple MP3 bitrates allow you to select the best combination of quality and record time
- WAV files can be converted to MP3 files at your choice of bitrates
- Read, display, and edit ID3 tag information from MP3 files
- Data from the hard drive can be written to CD or uploaded to computer via USB2.0 interface
- Auto Track Increment function can automatically create new files at user selected intervals
- Record Timer allows you to program recording start and stop times for unattended operation
- PS2 keyboard support provides easy text editing of ID3 tags, and provides shortcuts to system functionality and transport control
- Windows XP disc tools (error check, defragment) can be performed through the system's USB2.0 port
- Upgradeable firmware via CD or USB2.0 the CDR420 gets even better with age

#### **Extensive Audio Support**

- Balanced XLR Mic/Line inputs
- Unbalanced Line Inputs (RCA)
- SPDIF Digital I/O
- Built-in Condenser Mic

- +48v Phantom Power
- Built-in Speaker
- Stereo Headphone Jack
- ALC, Limiter, and Manual Record Level Setting
- -20dB pad for mic/line attenuation
- Recording filters help minimize background noise
- Audible FF and REW at multiple speeds
- Three band playback equalizer

#### Hard Drive Recording

Until now, field CD recording was a dicey proposition. Long silence between speakers? Long silence on your CD. And what if the event went long? You have the first 80 minutes, but the rest is lost, or divided among multiple discs. With the CDR420, the initial recording is made to the internal 20 GB hard drive. You can edit out silences, put track numbers where you need them, even record long events in .MP3 format. When it's done, burn your complete audio or .MP3 disc in minutes.

#### CDs-Audio or Data

The CDR420 has more CD-recording functionality than anything else out there. Once you're done recording and editing, you can burn your disc in standard Red-Book audio format, or as a CD-ROM data disc, with any combination of .WAV and .MP3 files.

#### **Copying Capability**

Because of the CDR420's unique combination of hard drive and CD recording, you can even make multiple copies of a CD in the field. Once audio is on the hard drive, burn to your heart's content. You can even make copies of audio or MP3/.WAV data.

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#### Connectivity

The USB 2.0 port is more than just a way to shuttle files back and forth to your PC. You can use disc maintenance utilities from Microsoft Windows® XP to keep the CDR420's hard drive in optimum shape. Defragmenting and error checking ensures that your drive is fast and reliable—even with heavy use and extensive editing. You can even use a standard PS/2 keyboard to edit ID3 and other text information—as well as to control functions of the CDR420 itself! Last, but not least, the CDR420 is built with longevity in mind. You can upgrade the firmware as new versions become available through CDs or USB.

#### Audio Capability-Marantz Style

And what would a Marantz Professional field recorder be without a host of professional audio features? Balanced XLR mic inputs with +48v phantom power allow you to use professional microphones. If you're caught without mics, the CDR420 has one built in. A variety of filters and level control options condition your signal for the clearest audio possible—and if you're not much of a technician, turn on the ALC (Automatic Level Control), and the CDR420 will do it for you. There's also analog line I/O, and SPDIF digital I/O, and USB 2.0, allowing you to connect the CDR420 to virtually anything in the world. An internal speaker and headphone jacks offer you multiple monitoring options, and the list goes on.

#### Outstanding in the Field

And just as you'd expect, the CDR420 is rugged. Like all Marantz Professional field recorders, it's designed for years of use in real-world field recording applications, and even offers a real-time clock so you can program the CDR420 to turn on, record, and then stop—all unattended.

**D&M Professional** 1100 Maplewood Drive Itasca, Illinois 60143 Tel: 630.741.0330 Fax: 630.741.0652 www.d-mpro.com

#### **Specifications**

#### **Digital Audio System**

Hard Disk Recorder Recording media 2.5-inch 20GB HDD Burning CD media CD-R. CD-RW discs

Recording audio format .mp3 MPEG Layer III compression 16 bit linear PCM .wav

Recording bit rate

320, 256, 160, 128, 80, 64 kbps MP3 Stereo MP3 Mono 160, 128, 80, 64, 40, 32 kbps 44.1 kHz

Sampling frequency Number of channels 2 (stereo), 1 (mono) 20,000 Hz (-0.5dB) Frequency response

### Inputs/Outputs

MIC/LINE IN L/R

Type XLR (1:GND, 2:HOT, 3:COLD) 1/4" T-R-S phone jack

Line level

Input sensitivity/Impedance 500 mVrms/2k ohms

Signal-to-Noise ratio (IEC-A weighted) 80 dB Total Harmonic Distortion (OdB, PCM) 0.05%

MIC level

Input Sensitivity/Impedance 1 mVrms/2k ohms

Signal-to-Noise ratio (IEC-A weighted) 60 dB Total Harmonic Distortion (OdB, PCM) 0.2%

AUX IN L/R

Input Sensitivity/Impedance 1 Vrms/23k ohms

Signal-to-Noise ratio (IEC-A weighted) 87 dB Total Harmonic Distortion (OdB, PCM) 0.05% LINE OUT L/R

RCA jack 1 Vrms/2k ohms

Standard level/Impedance MIX OUT I/R

RCA jack

Standard level/Impedance 1 Vrms/2k ohms DIGITAL IN/OUT RCA jack Type

Standard output level/Impedance 0.5 Vp-p/75 ohms Sampling frequency 44.1 kHz KEYBOARD PS2 USB Type B **USB** 

#### General

Headphone Output (10% THD) 70 mW/32 ohms Speaker Output 1.7 W/8 ohms Phantom power +48V, 10mA

AC100V-240V, 50/60 Hz Power requirement

Power consumption (maximum) 12V 14A

Dimensions (maximum)

Width 11.0" (279 mm)

4.0" (102 mm)

Depth 9.0" (229 mm)

5 lbs. 8 oz. (2.5 kg) Weight

Included accessories AC adaptor Stereo audio cable User Guide 1

Optional accessories\*\*

Rechargeable Lead Acid Battery System **RPS420** 

Additional Rechargeable

Lead Acid Battery Pack RB4200 Carrying bag PRC300 Attaché carrying case CA300

\*\* See www.d-mpro.com for details.

Specifications subject to change without notice.

