



CD-RW901

Technical Documentation

PRODUCT OVERVIEW

Starting with the features of the CD-RW900 the CD-RW901 adds XLR balanced I/O, a wired remote and features AES/EBU digital I/O, RS-232, and a timed track increment (selectable from 1 to 10 minutes) for adding CD track ID markers during recording.



The CD-RW901 provides dedicated input level controls and the digital inputs are equipped with automatic sample rate conversion for compatibility with nearly any signal. Pitch Control (16% +/-) on playback is a standard feature along with Key Control, MP3 Audio Playback, and Power-on-Play. The front panel PS/2 keyboard input offers the ability to name tracks and provide the user one-key access to frequently accessed menu functions.

MSRP \$1,125.00

2U rack-mount CD Recorder

XLR balanced and RCA unbalanced analog I/O with dedicated input controls

AES/EBU and S/PDIF digital I/O

Included wired remote control

RS-232C serial control port and Parallel control port

Timed track increment feature can automatically add a CD track ID every 1 to 10 minutes

±16% pitch control in 0.1% steps (CD audio discs only)

MP3 Audio Playback

Power on play

CD Text and MP3 ID3 tag display

Key Control (CD audio discs only): Change the pitch without changing the playback speed.

Dedicated analog input level controls

Fade in/fade out recording features

PS/2 keyboard input

Auto track increment by level with trim function

Automatic sample rate converter (to 44.1kHz, defeatable)

Un-finalize for CD-RW

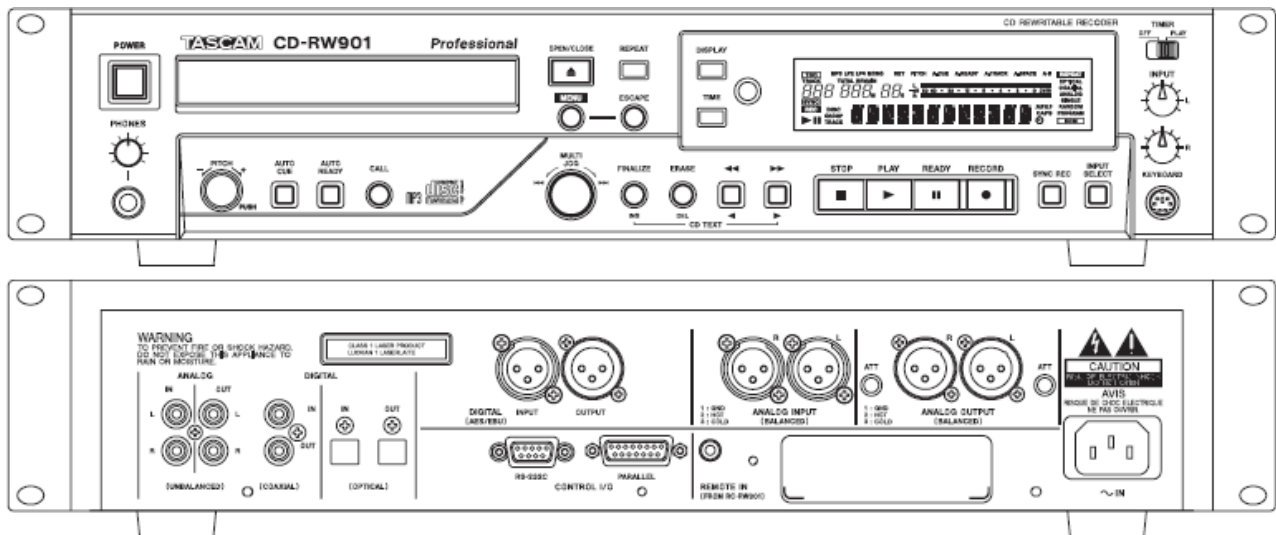
All, single, program, random play and repeat play modes

CONSULTANT'S AND SYSTEM DESIGN SPECIFICATIONS

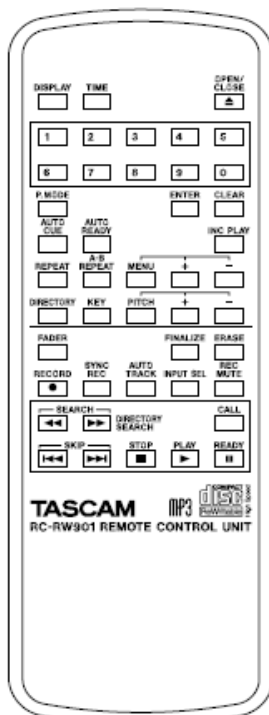
The TASCAM CD-RW901 is a 2U rack-mountable CD Recorder equipped with MP3 audio playback, Pitch Control (16 %+/-), and CD Text. The CD Recorder provides Key Control (changes pitch w/o changing the speed), front PS/2 keyboard input, "Power-on-Play", dedicated analog input level controls, and digital input level control (via multi-job wheel). The CD-RW901 adds RS-232 serial control and a timed track increment (selectable from 1 to 10 minutes) for adding CD track ID markers during recording.

Analog inputs and outputs are unbalanced RCA jacks and balanced XLR. Digital I/O via XLR-AES/EBU, Coax and Optical S/PDIF. Wired Remote Control is included.

PANELS



APPROVED MEDIA



Notes on CD-R Media:

Quality and recording characteristics of media from different manufacturers will vary from brand to brand. This has to do with the manufacturing processes of both the CD-R media and CD-R mechanism. Some media that does not work well with one CD-R mechanism may work reasonably well with another.

In order to take the guesswork out of selecting media, we are posting an approved list of media for use with the CD-RW901. At the time of this writing, media from each of these manufacturers was written to and verified.

CD-R / CD-R-DA approved manufacturers:

Sony, TDK, Taiyo Yuden, AMT, CMC, Ritek, Prodisc, Mitsubishi Chemical

CD-RW / CD-RW-DA approved manufacturers:

Sony, Ritek, Prodisc, AMT, CMC, Ricoh, Mitsubishi Chemical. High-speed media is approved for use, meaning that the unit is not limited to 1x speed media. Music discs with copy control, a copy-protection system, have been released from several record companies in an attempt to protect the copyright.

Since some of these discs do not comply with the CD specifications, they may not be playable on the CD-RW901.

SPECIFICATIONS

Performance Specifications:

| | |
|---------------------------|--|
| Recording Media | CD-R, CD-RW, CD-RDA, CD-RWDA (high-speed CD-RW is supported) |
| Recording Resolution | 16-bit, 44.1kHz |
| Sample Rate Conversion | 32kHz – 48kHz (with bypass) |
| Frequency Response | 20Hz to 20kHz +/- 0.8 playback +1dB (recording). |
| S/N Ratio | > 95dB playback, 90dB recording |
| Total Harmonic Distortion | < 0.006% playback, < 0.0008% recording |
| Channel Separation | > 90 dB playback, > 80dB recording |
| Wow and Flutter | Below measurable limits (less than 0.001%) |

Audio Inputs/Outputs:

| | |
|---------------------------|---|
| Analog Inputs: | XLR Balanced, level +4dBu, minimum input level -5 dBu, input impedance 14 k-ohm +/-5% |
| Unbalanced RCA in, level | -10dBu, minimum input level -19dBV, input impedance 22 k-ohm +/-10% |
| Analog outputs: | XLR Balanced, level =4dBu, maximum output level +20dBu +/-2dB, output impedance 75 k-ohm +/-5%. |
| Unbalanced RCA pin, level | -10dBV, maximum output level +6dBV, output impedance 600 ohm +/- 10%. |
| Phones Output: | Stereo (6.3), 20 mW, 32-ohm |
| Digital Input and Output | Coaxial RCA, Optical TOSLINK< AES/EBU XLR |
| Control I/O | Parallel D-Sub 15-pin, RS-232C D-Sub 9 pin, Remote in jack (for RCRW901 only) |

General Specifications:

| | |
|-----------------------|---|
| Power Requirements | USA/CANADA 120 CVAC, 60Hz U.K. / Europe 230 VAC, 50Hz Australia 240 VAC, 50Hz |
| Power Consumption | 16 W (USA/Canada), 18W (Europe) |
| Dimensions | 482.6mm W x 99mm H x 308 mm D 19" W x 3 7/8 H x 12" D |
| Weight | 4.9 kg (10.8 lbs) |
| Operating Temperature | 5 to 40 degrees C (41 Degrees F to 104 Degrees F) |

EXTERNAL SYNC PLAYBACK WITH 48kHz ADJUSTMENT

When External Sync and 48kHz Adjustment is enabled, the CD-RW901 can play back an audio CD at 44.1kHz when the digital input is receiving a 48kHz clock signal. This feature allows the unit to play back a standard audio CD when connected to a digital console set up for a 48kHz workflow. The CD-RW901 automatically adjusts to the incoming clock and employs sample rate conversion to correct the playback speed, so the Pitch and Key functions are disabled when 48k Adjust is turned on.