TASCAM®

SS-CDR250N
Technical Information

PRODUCT OVERVIEW

INTRODUCTION

TASCAM's SS-CDR250N meets and exceeds the demands of modern installations. It offers powerful features like networking, scheduled recording, and optional Dante support via the IF-DA2 Dante card.

Users have a choice of media to record to – SD cards, USB removable media, or CD. Two SD card slots are available for redundant or consecutive recording, and high-capacity SDXC media is supported.

The rear panel offers a wide range of choices for audio and control I/O. Balanced and unbalanced analog connectors are available, and the balanced inputs include a microphone preamp with phantom power. Digital AES/EBU and S/PDIF I/O are also provided. The system can be controlled through RS-232 serial, parallel, or Ethernet commands.

The Ethernet jack also allows files to be pushed or pulled from the unit. Recordings can be scheduled then automatically uploaded to a server. Alternatively, a new playlist can be pushed to units without a visit to the facility.

The SS-CDR250N has also been designed to pair with the innovative RC-SS150 Flash Remote controller. Built for years of use, the RC-SS150 features a full color LCD screen, Start and Stop control and 12 flash play buttons.

Designed for the professional installation, sound reinforcement and House of Worship markets, TASCAM's latest solid-state recorders advance the art of recording on modern networks.

FEATURES

- Stereo recording up to 96kHz/24-bit BWAV
- Balanced and unbalanced Mic/line inputs
- Simultaneous recording to dual SDXC cards
- Network feature allows files to be uploaded or downloaded from an FTP server
- Optional Dante networking option card (IF-DA2)
- Balanced and unbalanced analog I/O
- AES/EBU and S/PDIF digital I/O
- Sample rate converter on digital inputs
- RS-232C Serial and 25-pin parallel control ports
- Records to SD Card or USB media
- Automatic file close saves file every 2 seconds to prevent data loss if power is interrupted while recording
- Power-on play and record
- Free app for iOS and Android allows the recorder to be operated from a smartphone
- Password protection and file encryption prevent stolen data assets
- Scheduled recording triggers recording or playback at a certain time each week, etc. Can be used together with automatic uploads for instant availability.
- SNTP function allows the internal clock to be set using internet time servers
- Link playback function allows two units to be operated simultaneously for redundant backup
- Compressor and limiter on input
- Auto level control monitors and adjusts the input signal
- Dual format recording simultaneously captures files as WAV and MP3 format
- Record or dub to CD-R media (44.1k/16-bit)

All specifications subject to change without notice. Contact your local TASCAM representative for the latest information

PANELS AND REMOTE

SS-CDR250N rear panel

IF-DA2
Optional Dante I/O

RC-SS150
Direct play remote

25-PIN PARALLEL CONTROL PINOUT

1	GND	10 Ready Tally (Out)	19 Pitch/Flash 10 (In)
2	PLAY/Flash 1 (In)	11 Record Tally (Out)	20 Flash Page (In)
3	STOP/Flash 2 (In)	12 Stop Tally (Out)	21 EOM Tally (Out)
4	RECORD/Flash 3 (In)	13 Play Tally (Out)	22 Device Select Tally 1(Out)
5	(Next)/Flash 4 (In)	14 Remote Select (In)	23 Ducking Tally (Out)
6	(Previous)/Flash 5 (In)	15 Ready/Flash 6 (In)	24 Device Select Tally 2 (Out)
7	Flash Load (In)	16 Call/Flash 7 (In)	25 +5V
8	Fader Start (In)	17 Auto Cue/Flash 8 (In)	
9	Flash Tally (Out)	18 Auto Ready/Flash 9 (In)	

SPECIFICATIONS

Media and formats

Recording media
SD cards (512MB–2GB)
SDHC cards (4GB–32GB)
SDXC cards (64GB–128GB)
USB flash drives (512MB–64GB)

Recording and playback file formats
MP3: 44.1/48kHz, 64/128/192/256/320kbps
WAV: 44.1/48/96 kHz, 16/24-bit

Number of channels
2 channels (stereo)
1 channel (mono)

Input and Output

Analog out connectors (unbalanced)
Analog input (unbalanced) jacks
Connectors: RCA pin jacks
Rated input level: -10 dBV (0.316 Vrms)
Maximum input level: +6 dBV (2.0 Vrms)
Input impedance: 10 kΩ or higher

Analog input (balanced) jacks
Connectors: XLR-3-31 (1: GND, 2: HOT, 3: COLD)

Nominal line input level (line)
+4dBu (1.23Vrms, when Ref. Level set to other than −9dBFS)
+6dBu (1.55Vrms, when Ref. Level set to −9dBFS)
Maximum input level (switchable):
+15dBu (4.36Vrms, Ref. Level: −9dBFS)
+18dBu (6.16Vrms, Ref. Level: −14dBFS)
+20dBu (7.75Vrms, Ref. Level: −16dBFS)
+22dBu (9.76Vrms, Ref. Level: −18dBFS)
+24dBu (12.28Vrms, Ref. Level: −20dBFS)
Input impedance: 10 kΩ or higher

Nominal line input level (mic)
Maximum input level: +4 dBu (1.23 Vrms)
Minimum input level: -70 dBu (245 μVrms) or higher
Input impedance: 2.2 kΩ or higher
Analog output (unbalanced) jacks
Connectors: RCA pin jacks
Rated output level: -10 dBV (0.316 Vrms)

Maximum output level: +6 dBV (2.0 Vrms)
Output impedance: 200 Ω

Analog output (balanced) jacks
Connectors: XLR-3-32 (1: GND, 2: HOT, 3: COLD)
Nominal output level:
+4dBu (1.23Vrms, when Ref.Level set to other than −9dBFS)
+6dBu (1.55Vrms, when Ref. Level set to −9dBFS)
Maximum output level (switchable):
+15dBu (4.36Vrms, Ref.Level: −9dBFS)
+18dBu (6.16Vrms, Ref.Level: −14dBFS)
+20dBu (7.75Vrms, Ref.Level: −16dBFS)
+22dBu (9.76Vrms, Ref. Level: −18dBFS)
+24dBu (12.28Vrms, Ref.Level: −20dBFS)
Output impedance: 200 Ω

Phones jack
Connector: 6.3mm (1/4") standard stereo jack
Maximum output level: 45 mW + 45 mW or higher (THD+N 0.1% or less, into 32 Ω load)

Digital input (AES/EBU) jack
Connector: XLR-3-31
Input impedance: 110 Ω
Format: AES3-2003/IEC60958-4 (AES/EBU)
Supported sampling frequencies: 44.1, 48, 96 kHz
When SRC ON, 32kHz–192kHz can be received

Digital input (S/PDIF) jack
Connector: RCA pin jack
Format: IEC60958-3
Supported sampling frequencies: 44.1, 48, 96 kHz
When SRC ON, 32kHz–192kHz can be received

Digital output (AES/EBU) jack
Connector: XLR-3-32
Output impedance: 110 Ω
Format: AES3-2003/IEC60958-4 (AES/EBU)
Supported sampling frequencies: 44.1, 48, 96 kHz

Digital output (S/PDIF) jack
Connector: RCA pin jack
Format: IEC60958-3

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SPECIFICATIONS (cont)

Control I/O

Remote jack
Connector: 2.5mm (3/32") TRS jack (for TASCAM RC-3F or RC-20 (sold separately))

USB port
Connector: 4-pin USB A-type
Protocol: USB 2.0 HIGH SPEED (480 Mbps)

RS-232C connector
D-sub 9-pin

Parallel connector
D-sub 25-pin
Maximum input voltage: +5.5 V
High level minimum input voltage: +2.31 V
Low level maximum input voltage: +0.99 V
Output format: Open collector (10Ω output impedance, 20V withstand voltage, 35mA maximum)
Low level maximum output voltage: 0.5 V
+5V power supply maximum supplied current: 100mA

Ethernet connector
Connector: RJ45
Compatible standard: 100BASE-TX

Audio performance

Frequency response
20 Hz – 20 kHz: ±0.5dB (LINE IN or MIC IN to LINE OUT, Fs =44.1/48 kHz, JEITA)
20 Hz – 40 kHz: +0.5/-3 dB (LINE IN or MIC IN to LINE OUT, Fs = 96 kHz, JEITA)

Distortion
0.002% or less (LINE IN to LINE OUT, Ref. Level: −16dBFS, Fs = 44.1/48/96 kHz, JEITA)

S/N ratio
106 dB or more (LINE IN to LINE OUT, Fs = 44.1/48/96 kHz, JEITA)

Dynamic range
106 dB or more (LINE IN to LINE OUT, Fs = 44.1/48/96 kHz, JEITA)

Crosstalk between channels
100 dB or more (LINE IN to LINE OUT, Fs = 44.1/48/96 kHz, JEITA)

Equivalent input noise (EIN)
−125 dBu or less (150 Ω, 20kHz LPF, A-weighted)

Note: JEITA indicates compliance with JEITA CP-2150

General / Power supply

AC: 100-240 V, 50-60 Hz
Power consumption: 20 W
Dimensions (W x H x D): 19" x 1.76" x 11.8" (482.6 x 44.9 x 300.5 mm)
Weight: 6.4 lbs. (2.9 kg)
Operating temperature range: 41°-104° F (5°–95° C)

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