

Oct, 2013

# Product Spec Sheet

Stereo Master Recorder/ADDA Converter

## DA-3000



### ■ Main Features

#### ● High-Performance Master Recorder

- >Stereo recording at high sampling frequencies of up to 192kHz PCM and 5.6MHz DSD
- >Variety of inputs and outputs to handle diverse recording situations
- >Upgraded user interface
- >Simultaneous multitrack recording and playback with multiple cascaded units

#### ● High-Quality Audio Circuits Enable Use for the DA-3000 as an ADDA Converter

- >Dual mono circuits eliminate interference between left and right channels
- >Low noise achieved with fully balanced circuitry and high-quality AD converter
- >Numerous high-quality parts selected carefully using evaluation tests
- >Power supply section and high-precision TCXO supports high audio quality
- >Fanless design eliminates unwanted noise during monitoring and operation

- ※ Don't use a wireless remote controller when you use multiple units except using the cascade function.
- ※ Please take 1U or more of blank space above the DA-3000 for ventilation.

### ■ Features at a glance

- Stereo recording to SDHC card or CF card
- PCM recording format: BWF (44.1/48/88.2/96/176.4/192kHz, 16/24bit)
- DSD recording format: DSDIFF/DSF (2.8/5.6MHz)
- SD card slot (supports 4 to 32GB SDHC cards)
- CF card slot (supports UDMA)
- WAV file playback
- Cascade function enables simultaneous operation of multiple units
- Recording 2 mono files from stereo input possible
- Mark functions can be used set up to 99 points per file (mark information can be used in software that supports BWF format)
- When recording, designation of the recording file folder possible
- Synchronized recording using level, stop time and recording start delay time setting

- Input level can be adjusted in 0.5dB step
- Using automatic track incrementing function, new files can be created automatically while continuing to record when a condition (level, file size, digital input) set in advance occurs
- Manual track incrementing function can be used whenever you like to create a new track while continuing to record
- Automatic mark functions can be used to easily check problems (levels, word clock unlocking) detected during recording
- File name format can be set to either a user-defined word or the date and time
- Repeat playback function (all files or single file)
- Folder playback function can be used to play all files in a folder
- Playlist function allows files to be programmed in advance for playback
- Divide and delete functions can be used to manage files that are already recorded
- UNDO function can be used to cancel the previous operation
- USB host port supports copying between USB flash drives and CF/SDHC cards
- File names can be changed
- Direct location possible when a USB keyboard is connected
- Word clock master can be set to Internal, Word input or Digital inputs
- Analog input and output reference levels can be set to -9/-14/-16/-18/-20dBFS
- Digital input has a sampling rate converter (supports 32 to 216kHz)
- Audio files prepared on a computer can be played back (if in a format supported for playback by this unit)
- Oscillator function (440Hz, 1kHz, 10kHz)
- Input monitoring function allows input signals to be output without recording
- Updating is possible
- EI core transformer used in power supply section
- Dual mono circuits eliminate interference between left and right channels
- Fully-balanced circuits realize low noise
- 128x64 OEL display with a wide viewing angle
- 24-dot stereo LED level meters with adjustable brightness make checking levels easy
- TCXO with 1ppm precision
- Backup memory stores settings even when the power is off
- Fanless design eliminates unwanted noise
- Aluminum front panel harmonizes with other studio equipments design
- Operation possible using included RC-10 wireless remote control
- Standard 1/4" headphones jack provides 45mW/ch output
- USB port for USB keyboard (supports USB 1.1)
- USB port for USB flash drive (supports USB 2.0)
- XLR digital input/output (supports AES3-2003 and IEC60958-4:AES/EBU formats)
- RCA Coaxial digital input/output (supports IEC60958-3:S/P DIF format)
- BNC digital input/output for DSD (supports SDIF-3 and DSD-raw formats)
- RCA analog unbalanced input/output
- XLR analog balanced input/output
- EIA 1U rackmount size
- RoHS compliant

※ Don't use a wireless remote controller when you use multiple units except using the cascade function.  
Please take 1U or more of blank space above the DA-3000 for ventilation.

## ■ Specifications

### Media and formats

Supported media	
SD	Supports 4GB to 32GB SDHC cards (Media ejection method: push-push)
CF	Supports 1GB to 64GB Type I CF cards
USB (Playback and copying only)	Supports 2GB to 64GB USB flash drives
Recording and playback formats	
PCM	BWF (rec/play) / WAV (playback only), 44.1/48/88.2/96/176.4/192kHz, 16/24bit
DSD	DSDIFF / DSF, 2.8224/5.6448MHz
Number of channels	2 mono (or 1 stereo)

### Inputs and outputs

<i>ANALOG INPUTS (UNBALANCED)</i>	<i>RCA pin jacks</i>
Standard input level	-10dBV
Maximum input level	+6dBV
Minimum input level	-22dBV
Input impedance	22kΩ or greater
<i>ANALOG INPUTS (BALANCED)</i>	<i>XLR-3-31 (1:GND, 2:HOT, 3:COLD)</i>
Standard input level	+4dBu, +6dBu (only when maximum input level is +15dBu)
Maximum input level	+15/+18/+20/+22/+24dBu (switchable in menu)
Minimum input level	-8dBu, -6dBu (only when maximum input level is +15dBu)
Input impedance	10kΩ or greater
<i>ANALOG OUTPUTS (UNBALANCED)</i>	<i>RCA pin jacks</i>
Standard output level	-10dBV
Maximum output level	+6dBV
Output impedance	200Ω or less
<i>ANALOG OUTPUTS (BALANCED)</i>	<i>XLR-3-31 (1:GND, 2:HOT, 3:COLD)</i>
Standard output level	+4dBu, +6dBu (only when maximum input level is +15dBu)
Maximum output level	+15/+18/+20/+22/+24dBu (switchable in menu)
Output impedance	100Ω or less
<i>PHONES</i>	<i>Standard 6.3mm (1/4" ) stereo jack</i>
Maximum output	45mW + 45mW (into 32Ω load, 0.1% distortion)
<i>DIGITAL IN (COAXIAL)</i>	<i>RCA pin jacks</i>
Format	IEC60958-3 (S/P DIF)
Input frequency	44.1/48/88.2/96/176.4/192kHz (when SRC OFF), 32~216kHz (when SRC ON)
Allowable frequency deviation	+/-100ppm (when SRC OFF)
<i>DIGITAL OUT (COAXIAL)</i>	<i>RCA pin jacks</i>
Format	IEC60958-3 (S/P DIF)
<i>DIGITAL IN (AES/EBU)</i>	<i>XLR-3-31 (1:GND, 2:HOT, 3:COLD)</i>
Format	AES3-2003/IEC60958-4 (AES/EBU)
Input frequency	44.1/48/88.2/96/176.4/192kHz (when SRC OFF), 32~216kHz (when SRC ON)
Allowable frequency deviation	+/-100ppm (when SRC OFF)
<i>DIGITAL OUT (AES/EBU)</i>	<i>XLR-3-32 (1:GND, 2:HOT, 3:COLD)</i>
Format	AES3-2003/IEC60958-4 (AES/EBU)
<i>DIGITAL IN (SDIF-3)</i>	<i>BNC connectors</i>
Format	SONY SDIF-3/DSD-raw
Clock synchronization frequency	44.1kHz
<i>DIGITAL OUT (SDIF-3)</i>	<i>BNC connectors</i>
Format	SONY SDIF-3/DSD-raw
Clock synchronization frequency	44.1kHz

<i>WORD SYNC IN</i>	BNC connectors
Input level	5V TTL equivalent
Input impedance	75Ω +/-10% (built-in terminal ON/OFF switch)
Input frequency	44.1/48/88.2/96/176.4/192kHz
Allowable frequency deviation	+/-100ppm
<i>WORD SYNC THRU/OUT</i>	BNC connectors
Output level	5V TTL equivalent
Output impedance	75Ω +/-10%
Output frequency	44.1/48/88.2/96/176.4/192kHz (built-in THRU/OUT switch)
Frequency stability	+/-1ppm 以下 (Ta=25°C)
<i>USB (DEVICE)</i>	4-pin USB A-type
Protocol	USB2.0 HIGH SPEED (480Mbps)
Power rating	DC5.0V 0.5A
<i>USB (KEYBOARD)</i>	4-pin USB A-type
Protocol	USB1.1 HIGH SPEED (12Mbps)
Power rating	DC5.0V 0.2A

### **Audio performance (rec/play)**

Distortion (THD+N, 1kHz)	0.003% or less (Ref:-16dB/BALANCE, JEITA), 0.005% or less (UNBALANCE, JEITA)
S/N	
PCM	113dB or higher (Ref:-20dB/BALANCE, JEITA), 111dB or higher (UNBALANCE, JEITA)
DSD	106dB or higher (Ref:-20dB/BALANCE, AES-17, 20k LPF), 104dB or higher (UNBALANCE, AES-17, 20k LPF)
Frequency response	(UNBALANCE, AES-17, 20k LPF)
Fs 44.1/48kHz	20Hz - 20kHz, +0.1/-0.5dB (JEITA)
Fs 88.2/96kHz	20Hz - 40kHz, +0.1/-1dB (JEITA)
Fs 176.4/192kHz	20Hz - 80kHz, +0.1/-6dB (JEITA)
DSD	20Hz - 50kHz, +0.1/-3dB (JEITA) / 20Hz - 100kHz, +0.1/-12dB (JEITA)
Crosstalk	108dB or higher (JEITA)

### **Audio performance (playback)**

Distortion (THD+N, 1kHz)	0.003% or less (BALANCE, JEITA), 0.001% (UNBALANCE, JEITA)
S/N	
PCM	118dB or higher (Ref:-20dB/BALANCE, JEITA), 116dB or higher (UNBALANCE, JEITA)
DSD	116dB or higher (Ref:-20dB/BALANCE, AES-17, 20k LPF), 114dB or higher (UNBALANCE, AES-17, 20k LPF)
Frequency response	(UNBALANCE, AES-17, 20k LPF)
Fs 44.1/48kHz	20Hz - 20kHz, +0.1/-0.1dB (JEITA)
Fs 88.2/96kHz	20Hz - 40kHz, +0.1/-0.3dB (JEITA)
Fs 176.4/192kHz	20Hz - 80kHz, +0.1/-3dB (JEITA)
DSD	20Hz - 50kHz, +0.1/-3dB (JEITA) / 20Hz - 100kHz, +0.1/-12dB (JEITA)

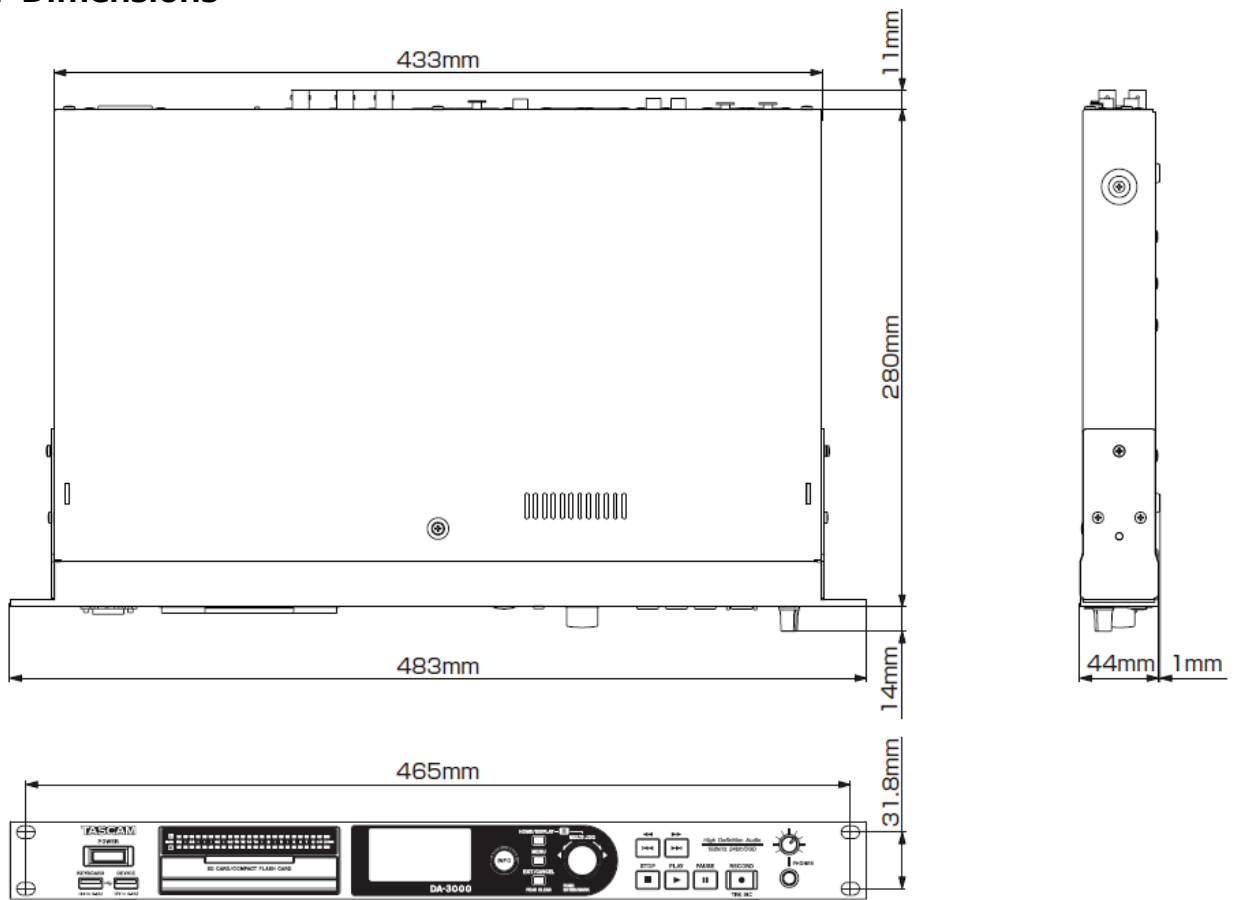
### **Control input and output**

Infrared receiver	TASCAM RC-10 wireless remote controller
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### **General**

Power	AC120V, 60Hz (US/Canada Version) AC220-240V, 50-60Hz (UK/EUR/Australia Version)
Power consumption	24W
Dimensions (WxHxD mm)/weight	483 x 45 x 305 / 4.2kg
Operating temperature range	0 ~ +40°C
Standard accessories	3P power cord, Wireless remote controller (TASCAM RC-10), coin battery for testing remote control (preinstalled), screw kit for rack-mounting, warranty card, Owner's manual

■ Dimensions



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