TASCAM DA-3000 High Definition and DSD Solid State Recorder

Stereo Recording at High Sampling Frequencies Up to 192kHz PCM and 5.6MHz DSD

The DA-3000 is perfectly designed for stereo PCM/DSD recordings at high sampling frequencies suitable for archival masters. This magnificent unit is capable of recording analog and digital signals up to 192kHz PCM or 5.6MHz DSD. The unit records to both SDHC cards and UDMA supported CF cards.

Variety of Inputs and Outputs to Handle Diverse Recording Situations

The variety of inputs and outputs enable connection with all types of studio equipment, including audio interfaces and mic preamps. The analog inputs and outputs include both XLR and RCA jacks. The digital connections include S/PDIF RCA coaxial and XLR jacks to support AES/EBU. The BNC SDIF-3 inputs and outputs support DSD digital connections.

Upgraded User Interface

With the goal of making a high-quality audio recorder and ADDA converter easy to use, we designed the front panel with all of the necessary external controls and included long, brightly lit meters and display. The 128x64 OEL display allows you to check necessary information quickly, and the 24-dot level meters allows you to confidently monitor levels at all times.

Simultaneous Multitrack Recording and Playback with Multiple Cascaded Units

You can synchronize the operation of multiple DA-3000 units by interconnecting their digital inputs and outputs. Files that have been recorded in sync will have sample-level synchronization as well. In addition to stereo DSD recording of Jazz and classical music, this also makes simple DSD multitrack recording of bands possible.

Dual Mono Circuits Eliminate Interference Between Left and Right Channels

Use of a dual mono structure for the output circuit eliminates interference between the left and right channels and achieves high audio quality by maximizing the performance of the components. Two high-quality mono circuits are built into the unit. The left/right channels each use one highly-acclaimed BurrBrown PCM1795 D/A converter chip.
The TASCAM DA-45HR, which is still used in many studios, uses a dual mono structure with NE5532 ope amps and BurrBrown D/A converters. By using an equivalent output circuit structure including DA converters of even higher quality that support DSD, the DA-3000 provides a portable high-quality monitoring system.

Low Noise with Fully-Balanced Circuitry and High-Quality AD Converters

The internal circuit uses a fully-balanced structure that is completely resistant to noise from the inputs and outputs. This has a great effect on the output and input stage impacting the recorded audio. The input audio is digitalized by the BurrBrown PCM4202 ADC after it passes through the analog input circuit.

Numerous High-Quality Parts Selected After Month of Evaluation Tests

Operational amplifiers have a great impact on audio quality, so we carefully selected the NJM2114 and NE5532. In addition, we selected low-impedance capacitors featuring low resistance, low noise and high precision to emphasize audio quality.

Power Supply Section and High-Precision TCXO Support High-Audio Quality

In order to assure high-quality audio input and output, a stable power supply is indispensable. The EI core transformer incorporated into this unit has separate coils – one for the digital circuits and control panels and one for the analog circuits – making it possible to capture even higher-quality signals by suppressing noise. In addition, for the clock generator, we have used a temperature-compensated crystal oscillator (TCXO) that boasts 1-ppm precision.

Fanless Design Eliminates Unwanted Noise

Cooling fans inside equipment generate noise and can cause loss of accuracy when monitoring at low volume levels. With the DA-3000, we have achieved high performance in a fanless design, allowing you to maintain a comfortable monitoring environment that is free of fan noise.

Features

- 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