

# 744T

SOUND DEVICES

Portable, Four-Track Audio Recorder with Time Code

4-TRACK FIREWIRE COMPACTFLASH INTERNAL HARD DRIVE TIMECODE



## Description

The 744T is a powerful four input, four-track file-based digital audio recorder. The super-compact 744T records and plays high-quality audio to and from hard drive (80 GB internal), CompactFlash, and external FireWire drives, making field recording reliable and fast. It reads and writes uncompressed PCM audio at 16 or 24 bits at sampling rates from 32 kHz to 192 kHz. Lossless compression using FLAC is supported, as well as MP2/MP3 compress formats at 64 kb/s to 320 kb/s. The full-features time code features makes the 744T perfect for dual-system sound applications—from over-the-shoulder to cart-based production.

The 744T implements a no-compromise audio path that includes Sound Devices' next generation microphone preamplifiers.

*Description continued on next page*

## 744T Key Features

- Two-channels of Sound Devices next generation microphone preamps with phantom, limiters, and high-pass filters
- Channel 3 and 4 line-level inputs on TA3 connectors
- Two-channel, balanced mic/line level outputs on TA3 connectors
- Input-to-track assignment with 256 possible routing combinations
- Records to internal 40 GB hard drive, removable Compact Flash, or both storage medium
- AES3 (XLR) or AES3id (unbalanced AES on BNC) digital inputs and AES3id outputs
- Programmable, sunlight-viewable LED level metering
- WAV or BWF format, mono or poly files, uncompressed PCM audio
- 16-bit or 24-bit and sampling at 32 kHz–192 kHz
- Ultra-stable Ambient time code circuitry, tuneable to <0.2 PPM accuracy with all relevant TC rates
- MP3 playback capability
- FireWire (IEEE-1394) port for high-speed data transfer to computers
- 6-pin modular C. Link serial input and output for unit linking and future control and expansion
- Removable Li-ion rechargeable battery compatible with Sony M- and L-mount Li-ion batteries
- 10–18 VDC external input powers and charges on-board battery
- Aluminum & stainless-steel chassis for exceptional durability and light weight
- Class-defining compact size
- Designed for the same operational environmental extremes as Sound Devices field mixers

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Discover more about Sound Devices products at [www.sounddevices.com](http://www.sounddevices.com)



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## Specifications

### Analog Inputs:

- Inputs 1 and 2 are balanced mic/line inputs using Sound Devices high-performance, discrete microphone preamps, XLR, selectable 48 V phantom, adjustable high-pass, peak limiters
- Inputs 3 and 4 are line-level only, TA3-balanced connections, adjustable in 0.1 dB increments

### Digital Inputs:

- AES3 input, channels 1 and 2 on XLR
- AES3 input channels 3 and 4 on XLR
- AES3id (S/PDIF) input channels 1 and 2 on BNC
- AES3id (S/PDIF) input channels 3 and 4 on BNC

### Outputs:

- Two-channel, analog, balanced mic/line level outputs on TA3 connectors
- AES3id (S/PDIF) output L/R (1) on BNC
- AES3id (S/PDIF) output L/R (2) on BNC
- Outputs assigned signal source from inputs, tracks, or post-record tracks
- Headphone output on 3.5-mm jack with level control
- Headphone source selection for monitoring any input or track

### Display/Metering/Control:

- Sunlight-viewable LED level metering, selectable sources
- Front panel, back lit LCD viewable in all lighting conditions
- Extended temperature range LCD display
- PPM, VU or combination PPM/VU level metering
- LED peak indication per channel

### Data Storage

- Internal hard drive, ATA interface, FAT32 volume
- 2.5-inch and 1.8-inch HD compatible internal drive bay (2.5-inch drive included)
- CF (CompactFlash) slot (type I, II, and micro drive compatible) for removable secondary recording medium
- External FireWire volume, FAT32-formatted, including hard drives and DVD-RAM drives
- Recording to HD, CF, or external drives or any combination of multiple destinations

- File transfer between all available storage volumes
- Record buffer (pre-roll), 10 seconds at 24/48 x 4

### File Formats:

- Selectable track arming of 1, 2, 3, or 4 channels
- Broadcast Wave format (.WAV), mono or poly files, uncompressed PCM audio
- 24-bit or 16-bit (with or without dither)
- Sampling rate selection of 32, 44.1, 47.952, 48, 48.048, 88.2, 96, 176.4, or 192 kHz
- FLAC (lossless compression) records and plays back files up to 96 kHz sampling
- MP3 record and playback of 64, 128, 192, 256, or 320 kb/s, stereo file

### External Data Interface/Transfer/Control:

- 1394a (FireWire 400) port for high-speed data transfer to computers and external drive connectivity
- Internal drive, CF, and FireWire volume appear as separate FAT32 volumes
- Mac OS X, Windows XP/Vista, and Linux compatible mass storage device
- RJ-12 serial input and output for multi-unit linking and CL-1 remote control
- Firmware upgradeable via downloads

### Timecode/Word Clock:

- Ultra-stable crystal clock generator, tuneable to <math><0.2\text{ ppm}</math> accuracy
- Broadcast Wave and iXML Metadata TC stamp in WAV and FLAC file formats
- User bit assignment and selection in setup menu
- TC reader and generator co-developed by Ambient
- TC rates of 23.976, 24, 25, 29.97DF, 29.97, 30, 30DF
- Word clock input and output, 32 – 200 kHz

### Powering:

- Battery powering using removable rechargeable Li-ion cells
- Compatible with Sony M and L mount camcorder batteries
- 10–18 VDC external input powers and charges on-board battery with built-in 1A Li-ion battery charger

- Internal and external voltage display on LCD panel

### Mechanical Construction:

- Class-defining compact size
- 1.65" x 7.58" x 4.41" – without connectors
- 1.65" x 8.08" x 4.41" – with connectors
- 2.75 lbs (1.6 kg) with hard drive and included 1850 mAh Li-ion battery
- Aluminum & stainless steel chassis for exceptional durability and low weight
- Tested for the same environmental extremes as Sound Devices field mixers

## Description Continued

Designed specifically for high bandwidth, high bit rate digital recording, the preamps set a new standard for frequency response linearity, low distortion performance, and low noise.

No other recorder on the market matches its size or feature set. In addition, its learning curve is short—powerful does not mean complicated. While the 744T is a very capable recorder by itself, it truly excels when used in conjunction with an audio mixer such as Sound Devices' own 302 or 442 field mixers.

Its recording media (hard drive, CompactFlash, and external FireWire drives) are reliable, industry standard, and easily obtainable storage. The removable, rechargeable battery is a standard Sony-compatible Li-ion camcorder cell. The 744T interconnects with Windows and Mac OS computers for convenient data transfer and backup.

Discover more about Sound Devices products at [www.sounddevices.com](http://www.sounddevices.com)

Features, nomenclature, and specifications subject to change.  
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