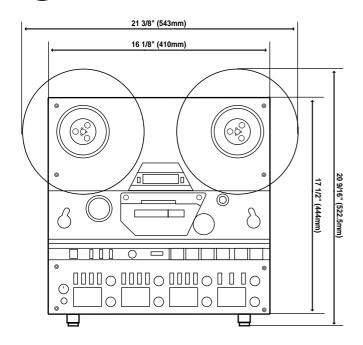
# TASCAM TEAC Professional Division

# 34B

4-Track Recorder/Reproducer



### 34B



## 

alignment controls. This includes tapes recorded at 7.5 ips or 15 ips speeds, using NAB or IEC equalization, or on 7.5" or 10.5" reels. Rear panel inputs and outputs readily interconnect the TASCAM 34B with a wide array of studio gear: mixing consoles, video editing suites, multi-image presentations and other recorders.

#### Intuitive Operation Speeds

#### Recording & Editing Sessions

A straightforward, no-nonsense design makes setting up the TASCAM 34B simple: spool up a reel, calibrate the VU levels for up to four tracks with your source, and roll tape. Input and output dials for each track allow you to perform critical gain-staging functions with ease. Bright, color-coded LEDs report record-ready status for each track, and whether they're set up to accept MIC or LINE level input. Input and Output select switches for INPUT, SYNC and REPRO, also augmented by LED status indicators, make monitoring, alignment and mixdown simple and quick. And the 34B features a complete headphone center/mono monitoring capability — with a front-panel headphone jack and 4-button track selector, you can comfortably monitor whatever combination of tracks you need, without affecting the output calibration.

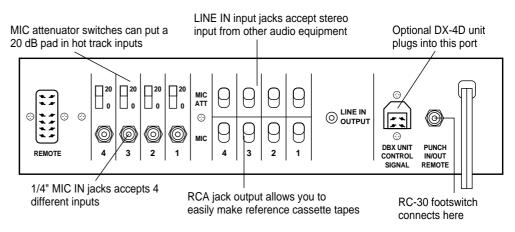
#### A Production Workhorse

Every studio or production facility needs a reliable, clean-sounding 4 track reel-to-reel multitrack deck. Whether it's for mastering audio recordings, recording radio broadcasts, radio spots, laying down video soundtracks, or multi-image production and presentations. The requirements are almost always the same: a serviceable, hard-working deck that will stand up to the daily grind, delivering faithful reproductions every time.

The TASCAM 34B is a high-performance machine, combining a rugged precision transport and exceptional audio electronics with a complement of performance features which meet and exceed the demands of the modern studio environment.

### Adaptable To The Job At Hand

The TASCAM 34B enables you to connect, interact and work in tandem with a full range of related studio equipment and accepted audio standards. Any 1/4" tape can be edited on the TASCAM 34B, thanks to its responsive



Rear Panel-34B

For editing, the TASCAM 34B offers several features that reduce time jogging back and forth for splice points. A manually adjustable CUE arm lets you listen to playback, even during fast forward, to quickly locate editing points. Dump Edit transport mode enables you to effortlessly edit a tape and listen for the end of a segment without tedious manual searching and "tape spilling". And the Zero Return button adds a handy, search-to-cue autolocator you can use during playback to easily find the beginning or end of an editing point.

For a high-quality 4-track reel-to-reel recorder that addresses the specialized requirements of audio production and presentations, look no further than the TASCAM 34B.

- Reel Tables and hub adaptors facilitate use of 7" or 10.5" reels
- Choose from 15 ips and 7.5 ips tape speeds
- Fine tune tape speed with ±12% pitch variation control
- Logical, intuitive tape transport controls
- LED supported INPUT, OUTPUT and FUNCTION controls keep you in control of hectic recording sessions
- Independent input/output level for each track
- Separate VU meter for each track
- · 4-digit reference counter
- Zero Return and counter reset buttons combine to offer single-point autolocator
- Shut off arm interrupts power in the event of tape breakage
- 1/4" MIC IN jacks accept 4 inputs from recording consoles, video equipment and more. This also allows optional direct mic input for multi-image presentation to talk in sync or over pre-recorded material.
- MIC attenuator switches can put a 20 dB pad on hot track inputs
- LINE IN input jacks accept stereo input from audio equipment
- Use the optional RC-30 footswitch, connected here, to perform hands-free punch in/out
- Utilize dbx Type I noise reduction by plugging the optional DX-4D unit into the dbx port

#### **SPECIFICATIONS**

#### MECHANICAL CHARACTERISTICS

Tape: 1/4 inch, 1.5 mil low noise,

high output

Track Format: 4-track, 4-channel, track width,

0.036 inch

Reel Size (max): 10.5 inch, NAB hub

Tape Speeds: 15 ips (38 cm/s) and 7.5 ips

(19 cm/s);

 $\begin{array}{c} \text{Variable } \pm 12\% \\ \text{Speed Accuracy}^1): & \pm 0.8\% \text{ deviation} \end{array}$ 

Wow and Flutter1):

15 ips:  $\pm 0.06\%$  peak

(DIN/IEC/ANSI weighted)

±0.1% peak

(DIN/IEC/ANSI unweighted)

±0.05% RMS (JIS/NAB weighted) ±0.07% RMS

(JIS/NAB unweighted)

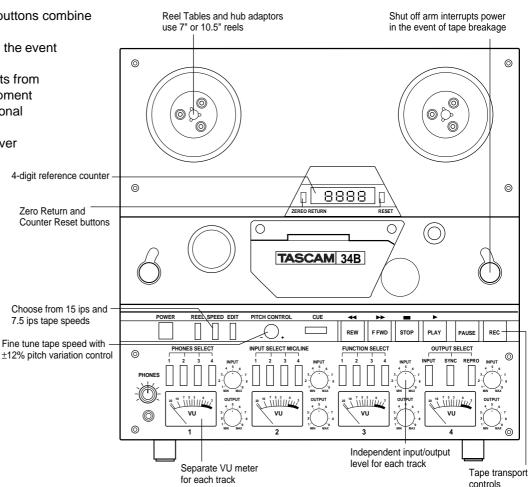
7.5 ips:  $\pm 0.09\%$  peak

(DIN/IEC/ANSI weighted)

±0.12% peak

(DIN/IEC/ANSI unweighted) ±0.07% RMS (JIS/NAB weighted) ±0.09% RMS (JIS/NAB unweighted)

#### Front Panel-34B



34B

Fast Wind Time: 90 sec. or less

(10.5 inch reel, 2,400-ft tape)

Start Time: 0.8 sec. to reach standard

Wow and Flutter

Capstan Motor: FG (frequency generator)

DC servo motor

Reel Motors: Slotless DC x2

Head Configuration: 1 erase, 1 record/sync, 1 reproduce

Tape Cue: Manual

Weight: 49 lbs (22 kg) net

#### **ELECTRICAL CHARACTERISTICS**

Line Input:

Input impedance: 50 kohms, unbalanced

Maximum source

impedance: 2.5 kohms Nominal input level: -10 dBV (0.3 V) Maximum input level: +18 dBV (8.0 V)

Nominal input

source impedance: 1 kohm

Mic Input:

Source impedance: 10 kohms or less 10 kohms, unbalanced

Nominal input level: -60 dBV (1 mV)
Maximum input level: -3 dBV (700 mV), with mic ATT

(20 dB) engaged

Line Output:

Output impedance: 1 kohm, unbalanced

Minimum load

impedance: 10 kohms

Nominal load

impedance: 50 kohms Nominal output level: -10 dBV (0.3 V) Maximum output level: +18 dBV (8.0 V)

Headphone output: 100 mW maximum at 8 ohms

Bias Frequency: 150 kHz

Equalization: NAB (USA/Canada/General Export)

 $3180 + 50 \,\mu\text{sec.}$ 

IEC-1 (Europe/UK/Australia)

 $\infty$  + 35 µsec.

Record Level Calibration: 0 VU reference; 250 nWb/m tape

flux level

Frequency Response:

Overall:3)

15 ips: 40 Hz to 22 kHz ± 3dB (at 0 VU) 40 Hz to 22 kHz ± 3dB (at -10 VU)

7.5 ips: 40 Hz to 16 kHz  $\pm$  3dB (at 0 VU) 40 Hz to 20 kHz  $\pm$  3dB (at -10 VU) Playback, both

Sync/Reproduce Heads:2)

15 ips: 40 Hz to 22 kHz ± 3dB 7.5 ips: 40 Hz to 20 kHz ± 3dB

Total Harmonic

Distortion (THD) $^3$ ): 0.8% or less at 1,000 Hz, 0 VU,

250 nWb/m

Signal to Noise Ratio<sup>3</sup>): At a reference of 1 kHx,

at 13 dB above 0 VU, 1,116 nWb/m

15 ips: 68 db A weighted (NAB),

60 dB unweighted 7.5 ips: 66 db A weighted (NAB),

58 dB unweighted

92 dB A weighted (NAB),

with dbx\*

82 dB unwieghted, with dbx

Adjacent Channel Crosstalk (Overall):3)

Better than 50 dB down at 1,000 Hz, 0 VU

Erasure: Better than 65 dB at 1 kHz,

+10 VU reference

Headroom (Record amp): 25 dB or more (1,000 Hz, 0 VU)

Connectors:

Line inputs and outputs: RCA jack

Mic input: Phone jack (Tip-Sleeve)

Remote control: Multi-pin jack

Punch in/out remote: Phone jack (Tip-Sleeve)

dbx unit: Multi-Pin jack

Power Requirement: 100/120/220/240 V AC,

50/60 Hz, 70 W

(General Export model) 120 V AC, 60 Hz, 70 W (USA/Canada model) 220 V AC, 50 Hz, 70 W

(Europe model) 240 V AC, 50 Hz, 70 W

(UK/Aus model)

Note: In these specifications, 0 dBV is referenced to 1.0 volt. Actual voltage levels are also given in parenthesis.

To calculate the 0 dB = 0.775 Volt reference level (i.e., 0 dBm in a 600-ohm circuit), add 2.2 dB to the listed dB value; i.e., -10 dB re: 1 V = -7.8 dB re: 0.775 V

- 1) Specifications determined using TEAC Test Tape YTT-2004/YTT-2003
- 2) Specifications determined using TEAC Test Tape YTT-1004/YTT-1003 (NAB equalization), YTT-1004/YTT-10434B (IEC Equalization)

\*dbx is a registered tradmark of AKG Acoustics, Inc.

Specifications and features subject to change without notice or obligation.



For more information about other TASCAM FAXBACK literature, call 1-800-827-2268.



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