

Some old ideas about new tape recorders

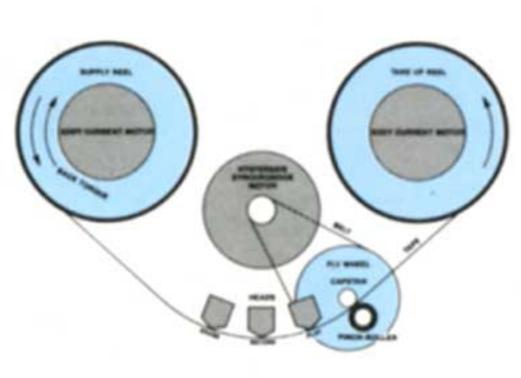
Ideas like quality and reliability, performance and value. Maybe they are clichés. But they are the underlying concepts that have gone into every blueprint and schematic since the first TEAC was built almost twenty-five years ago. And they will be the substance of every TEAC for a long time to come. Because we still maintain that every TEAC product must work well for a long time. And in doing so, give you that extra measure of value even beyond a number on a price tag.

Common Features.

Each TEAC open reel tape recorder has a personality all its own—an array of features and functions designed to fit your specific requirements. There are eleven decks described in this brochure, and while there are many differences, there are also many similarities. The similarities are listed below. The differences and exceptions follow. But no matter how our tape decks appear to differ from one another, each is a logical extension and specific example of our common viewpoint: make it work well for a long time.



Solenoid operated transport controls with special circuitry to prevent tape spills and jams.



Three motors: 1
hysteresis synchronous capstan
motor, and 2 eddy
current induction
reel motors.
Separate microphone and line input level controls
for mic/line mixing.

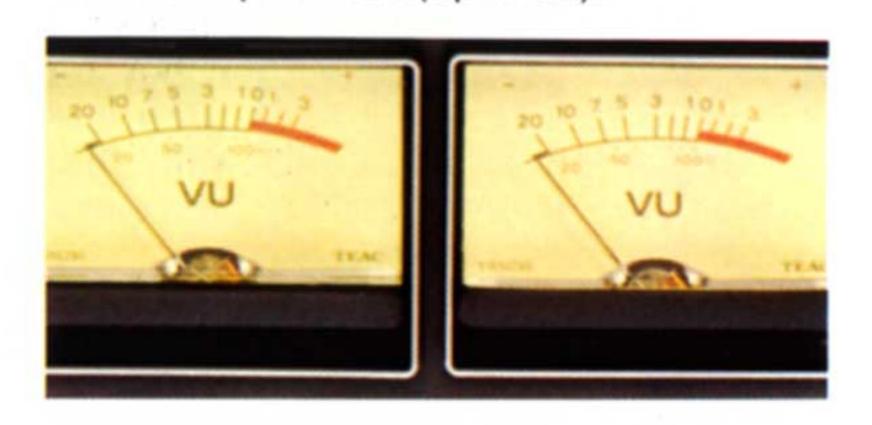
Independent output level controls.

Individual dual-position bias and equalization selectors to maintain optimum compatibility with any of the newest types of tape.

Left and right channel Record Mode selectors for mono recording and added safety.

Record and Pause Mode indicator lights. Two large VU-type level averaging meters.

Quik-Lok reel holders. Remote capabilities (optional).





A-2300SX

1/4 -track, 2-channel stereo. FORMAT: HEADS: 3 (erase, record, playback).

REEL SIZE: Up to 7".

TAPE SPEED: $7\frac{1}{2}$, $3\frac{3}{4}$ ips ($\pm 0.5\%$).

Manual Cue lever for fast search, cueing and editing. • Independent left and right channel tape/ source selectors for improved monitoring capabilities and to provide sound-on-sound capability (with some repatching).

A-2300SD

The features and functions of the A-2300SX PLUS: Integral Dolby noise reduction for a S/N of 74dB (WTD at 3%, THD). • Dolby FM and FM/Copy switches for complete flexibility when recording Dolby-encoded FM broadcasts or copying other Dolby-encoded sources. Switches allow you to record encoded and monitor decoded for better references. • Built-in Dolby calibration tone. • Dolby record level controls for each of the bias and equalization positions. • Dolby FM/Copy level controls. . No manual cue lever.





A-3300SX

FORMAT: 1/4-track, 2-channel stereo.
HEADS: 3 (erase, record, playback).

REEL SIZE: Up to 10½".

TAPE SPEED: $7\frac{1}{2}$, $3\frac{3}{4}$ ips ($\pm 0.5\%$).

Manual Cue lever for fast search, cueing and editing. Independent left and right channel tape/source selectors for improved monitoring capabilities and to provide sound-on-sound capability (with some repatching).

A-3300SX-2T

FORMAT: ½-track, 2-channel stereo.
HEADS: 3 (erase, record, playback).

REEL SIZE: Up to $10\frac{1}{2}$ ".

TAPE SPEED: 15, $7\frac{1}{2}$ ips ($\pm 0.5\%$).

All the features and functions of the A-3300SX in a mastering recorder format — $\frac{1}{2}$ -track, 15 ips. Manual Cue lever for fast search, cueing and editing. • Independent left and right channel tape/source selectors for improved monitoring capabilities and to provide sound-on-sound capability (with some repatching).

A-6100

FORMAT: ½-track, 2-channel stereo.
HEADS: 4 (erase, record, playback,

1/4 -track playback).

REEL SIZE: Up to 10½".

TAPE SPEED: 15, $7\frac{1}{2}$ ips ($\pm 0.5\%$).

Two peak reading LED level indicators. • Mic attenuation (0/15/30dB, selectable). • Switchable line output levels (0.775/0.3V). • Meter select switches to track higher record levels. • Manual Cue lever which defeats the tape lifters during fast modes for fast search, cueing and editing. • Flip-up hinged head cover. • Memory stop function.



A-43005X

FORMAT: ¼-track, 2-channel stereo. HEADS: 4 (erase, record, playback,

reverse playback).

REEL SIZE: Up to 7".

TAPE SPEED: $7\frac{1}{2}$, $3\frac{3}{4}$ ips ($\pm 0.5\%$).

Automatic reverse (with sensing foil) • Automatic repeat play. • Meter select switch for recording higher levels.

A-6300

FORMAT: ¼-track, 2-channel stereo. 4 (erase, record, playback,

reverse playback).

REEL SIZE: Up to 10½".

TAPE SPEED: $7\frac{1}{2}$, $3\frac{3}{4}$ ips ($\pm 0.5\%$).

And all the features and functions of the A-4300SX.





FORMAT: 1/4-track, 2-channel stereo.
HEADS: 3 (erase, record, playback).

REEL SIZE: Up to 101/2".

TAPE SPEED: $7\frac{1}{2}$, $3\frac{3}{4}$ ips ($\pm 0.5\%$).

Direct drive DC servo capstan motor. • Full IC logic transport controls. • Built-in 4-in/2-out mixer. • Four balanced, low impedance mic inputs with XL-type connectors. • Mic attenuation (0/20dB, selectable).

Cue lever for fast search, cueing and editing.

Three pinch roller settings for fast, precisely timed starts and play cue.
Pitch control for approximately 8% variable speed operation.
Three-position bias and equalization selectors.
"Tape only" outputs completely independent of output level controls for use with external signal processing equipment.
Memory stop function.
Meter range switch for recording higher levels.
Uniform wind control for better tape packs.
NAB reel hub adaptors.
Hinged head cover.
Digital tape counter.

A-7300-2T

FORMAT: ½-track, 2-channel stereo.
HEADS: 3 (erase, record, playback).

REEL SIZE: Up to 10½".

TAPE SPEED: 15, $7\frac{1}{2}$ ips ($\pm 0.5\%$).

All the features and functions of the A-7300 in a mastering recorder format — ½-track, 15 ips — PLUS: Edit button which defeats the take-up reel motor for spooling unwanted tape into the wastebasket.

- Precise minute/second elapsed time indicator.
- No uniform wind control.

A-3340S



FORMAT: 1/4-track, 4-channel with

Simul-Sync.

HEADS: 3 (erase, record/sync, playback).

REEL SIZE: Up to 10½".

TAPE SPEED: 15, $7\frac{1}{2}$ ips ($\pm 0.5\%$).

Simul-Sync for multitrack recording and overdubbing. • Manual cue lever for fast search, cueing and editing. • Independent tape/source selectors for each channel. • Separate microphone and line input level controls for mic/line mixing. • 2-channel play switch for playing ¼-track stereo tapes. • Independent output level controls for each channel. • Front panel microphone inputs. • Two stereo headphone jacks (front and rear). • Four large VU-type level averaging meters. • To get the most out of any multitrack tape recorder use an audio mixer (like the TEAC Model 2).

A-2340SX

FORMAT: 1/4-track, 4-channel with

Simul-Sync.

HEADS: 3 (erase, record/sync, playback).

REEL SIZE: Up to 7".

TAPE SPEED: $7\frac{1}{2}$, $3\frac{3}{4}$ ips ($\pm 0.5\%$).

All the features and functions of the A-3340S in a smaller, less expensive package.



Exclusive vertical transport system.

Mechanically interlocked twin rotary lever controls.

Dolby noise reduction.

DC servo-controlled motor.

Individual dual-position bias and equalization selectors.

Two large VU-type loudness meters.

Peak reading LED level indicator.

Individual input and output level controls.

Automatic stop function.

Tape stop indicator.

Digital tape counter.

Front panel microphone inputs.

Lighted cassette compartment.

SPECIFICATIONS

Wow & Flutter: 0.08% WRMS

(NAB Weighted)

Signal-to-noise ratio: Without Dolby 55 dB (3% THD)

With Dolby @ 1 kHz 60 dB With Dolby over 5 kHz 65 dB

Frequency response:

CrO2/FeCr tape 30-16,000 Hz Hi-energy tape 30-13,000 Hz

Inputs:

Line (2) 60mV, 50k Ohms or more.

Mic (2) 0.25mV/-72 dB (600 Ohms or

more).

Outputs: (2 line) 0.775 V/ load impedance:

50k Ohms or more.

Dimensions: 61/8" x 173/8" x 111/4"

(HWD) 155 x 440 x 285 mm

Power: 117V AC, 60 Hz, 11W



All the features of the A-400

PLUS:

Separate mic and line input level controls for mic/line mixing.

Mono mic function to place the signal from one mic on both channels.

New 3-position bias and equalization selectors.

Two peak reading LED level indicators.

Timer control function.

Push-button eject control.

SPECIFICATIONS

Wow & Flutter: 0.07% WRMS

(NAB Weighted)

Signal-to-noise ratio:

Without Dolby 55 dB (3% THD)

With Dolby @ 1 kHz 60 dB With Dolby over 5 kHz 65 dB

Frequency response:

CrO2/FeCr tape 30-16,000 Hz Hi-energy tape 30-13,000 Hz

Inputs:

Line (2) 60mV, 50k Ohms or more.

Mic (2) 0.25mV/-72 dB (600 Ohms or

more).

Outputs: (2 line) 0.775 V/ load impedance:

50k Ohms or more.

Dimensions: 61/8 " x 173/8 " x 111/4 "

(HWD) 155 x 440 x 285 mm

Power: 117V AC, 60 Hz, 8W



Two motor transport system: Phase Locked Loop DC servo capstan motor. DC reel motor. Full logic-controlled, solenoid-operated transport controls.

LED transport mode indicators.

Dolby noise reduction with FM decode function and MPX filter.

New 3-position bias and equalization selectors. Record mute function to make intervals in programs.

Separate mic and line input level controls for mic/line mixing.

Independent output level control.

Record limiter.

Mono mic function to place the signal from one mic on both channels.

Two VU-type loudness meters, each equipped with a peak reading LED level indicator.

Memory stop/play function.

Digital tape counter.

Front panel microphone inputs.

Stereo headphone jack.

SPECIFICATIONS

Wow & Flutter: 0.06% WRMS

(NAB Weighted)

Signal-to-noise ratio:

Without Dolby 57 dB (3% THD)

With Dolby @ 1 kHz 62 dB With Dolby over 5 kHz 67 dB

Frequency response:

CrO2/FeCr tape 30-16,000 Hz **Hi-energy tape** 30-13,000 Hz

Inputs:

Line (2) 60mV, 50k Ohms or more.

Mic (2) 0.25mV/-72 dB (600 Ohms or

more).

Outputs: (2 line) 0.3V/ load impedance:

50k Ohms or more.

Dimensions: 7" x 17-5/16" x 12-13/16" (HWD) 177 x 440 x 325 mm

Power: 117V AC, 60 Hz, 26W

TWC-6 (wooden cabinet for A-650) is optional.



Dolby noise reduction.

DC servo-controlled motor.

Individual dual-position bias and equalization selectors.

Timer control function.

Lighted cassette compartment.

Digital tape counter.

Front panel microphone inputs.

Two VU-type loudness meters.

Stereo headphone jack.

SPECIFICATIONS

Wow & Flutter:

0.10% WRMS

(NAB Weighted)

Signal-to-noise ratio:

Without Dolby 50 dB (3% THD)

With Dolby @ 1 kHz 55 dB With Dolby over 5 kHz 60 dB

Frequency response:

CrO2/FeCr tape 30-14,000 Hz Hi-energy tape 30-11,000 Hz

Inputs:

Line (2) 60mV, 50k Ohms or more.

Mic (2) 0.25mV/-72 dB (600 Ohms or

more).

Outputs: (2 line) 0.3 V/ load impedance:

50k Ohms or more.

Dimensions: 6%" x 16%" x 11%" (HWD) 160 x 410 x 300 mm

Power: 117V AC, 60 Hz, 13W



All the features of the A-100

PLUS:

Separate mic and line input level controls for mic/line mixing.

Mono mic function to place the signal from one mic on both channels.

Peak reading LED level indicator for better visual monitoring.

Memory stop function.

TWC-1 (wooden cabinet for A-100/A-150) is optional.

SPECIFICATIONS

Wow & Flutter:

0.09% WRMS

(NAB Weighted)

Signal-to-noise ratio:

Without Dolby 50 dB (3% THD)

With Dolby @ 1 kHz 55 dB With Dolby over 5 kHz 60 dB

Frequency response:

CrO2/FeCr tape

30-15,000 Hz

Hi-energy tape

30-12,000 Hz

Inputs:

Line

(2) 60mV, 50k Ohms or more.

Mic

(2) 0.25mV/-72 dB (600 Ohms or

more).

Outputs:

(2 line) 0.3 V/ load impedance:

50k Ohms or more.

Dimensions:

63/8" x 161/8" x 117/8"

(HWD)

160 x 410 x 300 mm

Power:

117V AC, 60 Hz, 13W



Dolby noise reduction.

DC servo-controlled motor.

Individual dual-position bias and equalization selectors.

Top loading format.

Separate variable slide controls for input/output level adjustments.

Two VU-type loudness meters. Front panel microphone inputs.

Stereo headphone jack.

Digital tape counter.

SPECIFICATIONS

Wow & Flutter:

0.09% WRMS

(NAB Weighted)

Signal-to-noise ratio:

Without Dolby 50 dB (WTD 3% THD)

With Dolby @ 1 kHz 55 dB With Dolby over 5 kHz 60 dB

Frequency response:

CrO2/FeCr tape 30-14,000 Hz Hi-energy tape 30-11,000 Hz

Inputs:

Line (2) 60mV, 50k Ohms or more.

Mic (2) 0.25mV/-72 dB (600 Ohms

or more).

Outputs: (2 line) 0.775V/ load impedance:

50k Ohms or more.

Dimensions: 5\%" x 17" x 10"

(HWD) 136 x 430 x 255 mm Power: 117V AC, 60 Hz, 11W

[&]quot;Dolby" is a trademark of Dolby Laboratories, Inc.

	Wow & Flutter (WRMS) (Playback)	Signal to- Noise Ratio (WTD at 3% THD)	Frequency Response (±3dB, Hi-Energy tape)	Power
A.23005X	0.08% (7½ ips)	65dB	40-24k (7½ ips)	117V AC, 60 Hz, 95W
A.23005D	0.08% (7½ ips)	65dB 74dB with Dolby	40-24k (7½ ips)	117V AC, 60 Hz, 95W
A.33005X	0.06% (7½ ips)	65dB	40-24k (7½ ips)	117V AC, 60 Hz, 145W
.33005X 2T	0.04% (15 ips)	67dB	30-26k (15 ips)	117V AC, 60 Hz, 145W
A.6100	0.04% (15 ips)	67dB	30-26k (15 ips)	117V AC, 60 Hz, 122W
A.43005X	0.06% (7½ ips)	65dB	40-24k (7½ ips)	117V AC, 60 Hz, 105W
A.6300	0.06% (7½ ips)	65dB	40-24k (7½ ips)	117V AC, 60 Hz, 122W
A.7300	0.05% (7½ ips)	65dB	40-24k (7½ ips)	117V AC, 60 Hz, 110W
A.7300 2T	0.04% (15 ips)	67dB	30-26k (15 ips)	117V AC, 60 Hz, 110W
A.3340S	0.04% (15 ips)	65dB	35-22k (15 ips)	117V AC, 60 Hz, 138W
A.23405X	0.08% (7½ ips)	62dB	40-18k (7½ ips)	117V AC, 60 Hz, 140W

*Harmonic distortion: Less than 1% at 1kHz normal operating level.

Changes in Specifications and Features may be made without notice.

MB=20 Meter bridge ideally suited for Model 2. Peak reading LED level indicators on

each of the four VU-type level averaging meters. Built-in 4 x 2 monitor mixer. Internal 1W headphone amplifier with its own level control. Independent buss/ tape monitor switches for each channel.

Model 2

6-in/4-out audio mixer for recording and mixdown. Channel assign with pan. 20dB mic attenuation, switchable. High cut filter (5kHz and 10kHz, selectable).

Low cut filter (100Hz and 200Hz, selectable). Master output level control.

ME-120



From our ME-Series professional quality electret condenser microphones.

Interchangeable omnidirectional and cardioid pick-up patterns.

10dB attenuation pad, switchable.

Voice/music equalization selector.

Low impedance, balanced operation.

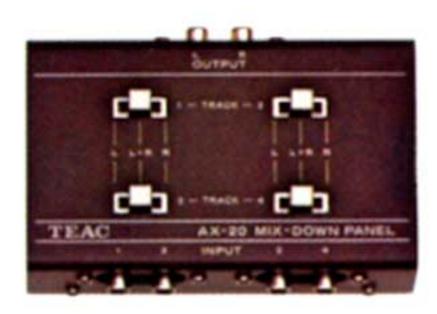
XL-type connector.



From our new MM-Series dynamic microphones. Shock-mount housing.

Die-cast metal windscreen.

Low impedance, balanced with XLR-type connector.



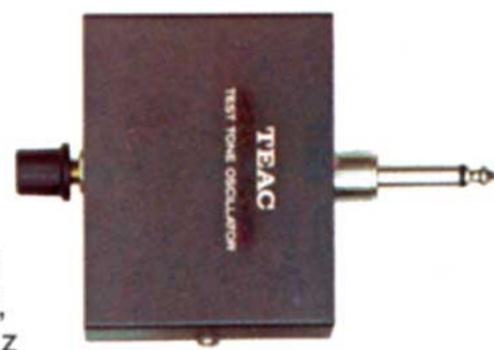
AX-20

4-in/2-out line level mixer. Select any of four inputs and route them to left, right or both outputs.

Ideal as a stereo monitor mixer for a 4-track recording rig.

TO-122A

Test tone oscillator for calibration and set-up. Output level: -10dB and —40dB. Generates 40Hz. 400Hz, 1kHz, 4kHz, 10kHz



and 15kHz frequencies. Suitable for mic or line input.



Input transformer.

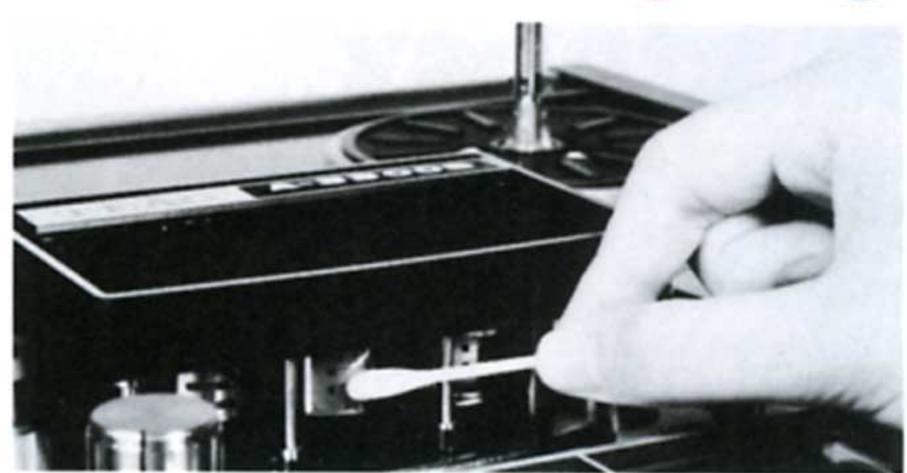
Matches low impedance, balanced mics to high impedance, unbalanced inputs.

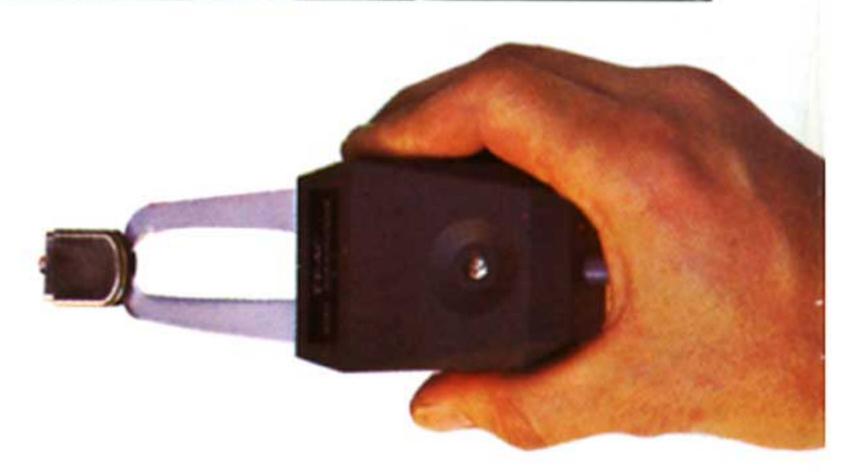
CLEAN OFTEN! Your tape recorder's life depends on it.

Proper cleaning of your tape recorder isn't just a good idea. It's absolutely essential to preserve optimum sound quality and long recorder life. We believe TEAC tape recorders are the best in the world (most recording enthusiasts agree). So we have selected and blended these chemicals in this same tradition: to help you get the best audio results for the longest time.

Cleaning kits.
Specially formulated chemicals to clean tape heads and all surrounding surfaces that come into contact with the tape.







E-1.

Head demagnetizer completely removes residual magnetism from heads.



TEAC

The leader. Always has been.

TEAC Corporation of America 7733 Telegraph Road, Montebello, Calif. 90640