Tascam's Studio 8 is the easiest-to-operate 8-track production system you can buy. Its full function mixer combines with its 1/4" open reel transport to provide a complete, integrated signal processing and recording machine for musicians, composers, commercial producers, and video/film professionals.

The Studio 8 starts with a remarkably sophisticated mixing console whose internal network of submix systems lets you set it up for almost any job without patching. The elimination of time consuming and confusing patching was the first design criterion for Tascam engineers, who achieved the Studio 8 by marrying the mixer section with a solid tape drive system. Now sophisticated mixing and 8-track recording can be done on a single unit, complete with a single connector SMFTE:EBU/computer interface for control by external devices.

The most obvious benefits of the Studio 8's integrated design are speed and ease of operation.

Some 8-track recording setups seem to stress complexity as an unavoidable evil in the creative process of getting sounds on tape. At Tascam, we believe that simplicity is the key to unlocking creativity and letting it flow. The Studio 8 is a device whose whole reason for being is efficient simplicity, and the elegance of its design is apparent to a first time or veteran recordist.

A Worldwide Standard Tape Format.
A World Class Transport.

A world of recording expertise won't help you if you've done your recording on a non-standard tape format. The Studio 8's 7-inch reels of 1/4-inch tape can be found almost anywhere anytime. And for the pro and his splicing block, nothing beats hands-on editing for speed, convenience, and first generation quality.

The all new microprocessor-controlled three motor transport design assures precise control and the tape motion stability so critical to low wow and flutter. Tascam designed. Tascam made Hard...
malley heads wrap it up with excellent sound, long life and “stay put” alignment. The higher 7½ ips tape speed helps to provide flat response and enhanced signal-to-noise and dynamic range.

The Studio 8’s unique “LOAD” menu feature allows you to thread it while recording, the Studio 8’s automatic tape transport will give you the playback that’s virtually indistinguishable from the source. Use it on all tracks, or switch it on selectively to tracks 1-4 and/or 5-8, as your desired characteristics. The Studio 8’s effect and delay control will give you the effects you want, with or without recording.

The fully assignable 8-channel mixer includes 8 program buses and a separate 8-channel automatic monitor section. Talk about on-board flexibility! Eight assign buttons on each channel act as a routing matrix to instantly route (patch) any mixer channel or combination of channels to any of 16 track output channels or re hearing monitors.

The versatility of the Studio 8’s signal routing is due to its balanced network of submix systems. The monitor mix signals (from the program buses or the recorder’s output) can be automatically routed through separate and individual input for separate and individual level and pan controls. No patching to let your talent hear the tape while laying down tracks or rehearsing overdub tracks.

The Effect and Auxiliary outputs into your Studio 8 send the signals from any combination of input channels to the Effect and Auxiliaries outputs on your back panel. These outputs can be connected to your signal processor(s) and brought back through the Effect Return, Program Bus Input, or the Stereo Bus Input. Two independent effects returns can be fed to the stereo bus through gain and pan controls, enabling you to process signals and then be separately placed in the stereo perspective with appropriate levels immediately.

The 110V does full flexibility to apply signal processing to multiple channels in varying amounts, or to create new effects. Chain and/or parallel mix whenever you need them.

All 8 input channels have balanced mic inputs (XLR) and balanced line inputs (1/4"), and each channel has a 3-band sweep-type parametric equalizer to give you precise control of center frequencies from 50 Hz to 15 kHz.

A Versatile 8X8X2 Mixer with 8 Track Monitor. No Patching. No Foiling. The Studio 8 is a complete pre-wired system which virtually eliminates the hassle of patching and cable juggling previously inherent in multichannel recording. It is an easy-to-use design which allows you to concentrate on your objectives, not on your hardware.

Separate tape outputs mean you can dub any or all channels to another machine easily.

The Studio 8’s sophisticated mixer is perfectly capable of standing on its own for recording, mixing, or sub mixing. A combination of input channels to a separate recorder, but combined with the Studio 8, is a powerful pre-wired system that’s ready to move anywhere and go. Right now!

Easy “One Plug” SMPTE/EBU Interface The Accessory interface plug on the 110V of the Studio 8 is your gateway to the word of synchronization and computer transport control. For post production professionals, the Studio 8 will interlock via a synchronizer to SMPTE/EBU code, and maintain perfect synchronization with video while you lay down tracks of music, vocals, voices, or effects.

The accessory port is also used to accept commands from Telecast’s AQ-65 multifunction Auto Locator/Tape Transport Controller. Use the AQ-65 to program up to ten tape locations into your Studio 8. Then engage the AQ-65 to quickly “go to” any programmed point on the tape with repeatable precision. Why worry about hardware? You are an audio pro — not a mechanic. With your Studio 8 as the centerpiece of your system, you are free to concentrate on the task at hand, not on the intricacies of unfriendly electronics.

Electronic music is a natural for Studio 8 owners. With time code on Track 8, a SMPTE/MIDI device producing a MIDI clock output, along with a MIDI sequence, will drive a wide variety of musical instruments including synthesizers. Now you can record multiple passes with absolute confidence that you will never run a beat.

Full Microprocessor Control The Studio 8’s specially designed 3 motor transport system is fully servo-controlled, under the guidance of a microprocessor. It can remember your decisions and anticipate your commands — or those of an external editor/controller. Press search/locate and play and watch the tape rapidly find its mark and go right into play. In the heat of the creative moment, every second and movement wasted is a distraction — sometimes a fatal one to the creative process.

The microprocessor monitors and controls mechanical tape handling. There is nothing you can do to cause the Studio 8’s microprocessor to “forget” to protect your tape. In editing the toughest piece of tape manipulation, the Studio 8’s servo-controlled reel motors will go from highest speed in one direction to highest speed in the other direction or anything in between, never stretching or breaking tape, while you feverishly heat up the buttons of the master controller or synchronizer.

The Studio 8’s unique LOAD function works this way: simply thread the tape (must be 1/4”, 1300 feet (450 meters) in length) and press the LOAD button on the top panel. When the tape stops turn past the leader and stop. The Studio 8 “knows” where the ends of the tape are. Now press RESET to zero the counter and you may proceed with confidence in knowing tape off of either reel — cassette convenience with open reel performance.

The microprocessor also controls such memory functions as repeat, cue, and return to zero, to create playback loops, etc., with speed and repeatability.

Pitch control allows you to vary the speed, and thereby the pitch, of your program by up to 15% plus or minus. This has a variety of uses from copied with an instrument with slightly different tuning, to cutting a few seconds from narration without losing content.
Electronic Music Studio

Need remote control? Just plug in the optional RC-71 to duplicate transport controls from 16 ft away. Add the AG-65 Auto Locator for an additional 10-point memory, programmable pre-rolls and two-point repeat. Or select the RC-30P foot pedal for hands-free punch-ins or punch-outs.

The Electronic Music Studio

Lay down tracks of live music, vocals, and electronic music, then add voice-overs and effects, overdub and mix...with speed and convenience that will delight the talent and enhance your reputation.

Each of eight channels has both mic and line inputs, plus Effects insert for applying signal processing on an individual-channel basis. Or use Effects Send bus to distribute effects to any or all channels.

Monitor Mix lets you set up the cue mix that's just right to guide the next track, but with no effect on the actual recording. The auxiliary submix system's controls make it easy to build a second cue mix or second effects chain.

With a MIDI sequencer and a SMPTE/MIDI Synchronizer, you can work with synthesizers, drum machines, and other automated electronic music systems in perfect sync. Working to picture, the Studio 8 will interlock to the video master if a controller (from a simple chase-lock device to a full computer editor) is plugged into the Accessory jack.

Video/Film Production

Interlocked to a SMPTE/EBU controller or a control track editor/synchronizer, Studio 8 becomes an obliging servant, speeding directly to any cue point the controller names, and staying precisely synchronized with the VCR. A tachometer signal from the Accessory jack lets the controller monitor the tape position, even in fast-wind mode, to reduce search time and guard against loss of sync.

Adding tracks and audio sweetening, whether off-line or under computer control, Studio 8 is ready for multilingual dialog tracks, effects, electronic music, audience tracks and source tapes. Individual channel equalizers let you shape single tracks or groups of tracks for ear-pleasing audio.

In a commercial studio, in a location van or in your private sanctuaries, Studio 8 is designed to meet virtually any application that you— as an audio or music specialist—might encounter. And it does it with style, with TASCCAM full-pro appearance, and with the performance and reliability you'll come to love.

Mixer Section

- 8 input channels, each with 3 band EQ and Mic. Line and Tape (remix) inputs help eliminate patching.
- Send and receive jacks on all 8 input channels for independent effects processing on each channel.
- 8 program buss selection for direct track assignments.
- Automatic Monitor Switching means no patching or switching to hear tape or source.
- 2 send and return systems for 2 independent or stereo effects.
- Stereo buss (L/R) with Mono switch.
- 3 switchable VU meters with peak-reading LED's.
- 2 switchable VU meters for stereo or aux/effects.

Recorder Section

- 8-track, 3-channel.
- Standard tape format means tape stock is always readily available; simplifies life in the studio.
- Switchable dbx noise reduction with track 8 defeat switch.
- Accessory terminal for SMPTE/EBU code synchronizer/editor/computer interface and/or optional AG-65 Auto Locator.
- Full 3 meter servo controlled transport for gentle tape handling.
- LOAD mode to prevent accidental tape runout in either direction.
- Tape Cut for each of B tracks.
- Memory functions: Return-to-Zero, Search-to-Cue.
- Precise PLL speed control with ±15% pitch control.
- Insert switches for convenient punch-in and punch-out.
- Real time tape counter (milliseconds and seconds).
**AQ-65**
The optional AQ-65 is a programmable multipoint autolocator that allows computer-precise transport control from a distance. It features (among other capabilities) a ten-digit keypad for writing up to ten cue points in memory, pre-roll programming of up to 19 seconds, two-point repeat, and duplication of the Studio 8's transport controls.

Use the AQ-65 to enable fast access to any point on the tape by programming actual tape locations before or during your session, or "mark" locations on the fly so that you can easily and quickly come back to them. The AQ-65 automatically loads these marks in order of input to a 0-9 register activated by Memory buttons (0-9) on its front panel.

Essential for work involving repetition, the AQ-65 connects via the Studio 8's multipin accessory jack.

**RC-30P**
The RC-30P is a durable electronic footswitch which connects to the Punch In/Out Remote jack on the Studio 8's front panel. The RC-30P provides "hands-free" entry to and exit from the Record mode, allowing you to play an instrument while overdubbing or recording separate tracks.

**RC-71**
The RC-71 is a remote control for the transport functions of the Studio 8. The basic commands Rewind, Fast Forward, Play, Stop, Pause, and Record are parallels of the Studio 8's top panel controls. The RC-71 connects to the remote jack on the Studio 8.
### Specifications

#### MECHANICAL CHARACTERISTICS
- **Tape**: 1/4 inch, 1 ml
- **Track Format**: 8-track, 8-channel
- **Head Size (max.)**: 7" (7/16"
- **Head Configuration**: 1 Erase, 1 Record/Reproduce, 2 DC servo head motors
- **Tape Speed**: 7-1/2 ips (19 cm/s) ± 1% deviation
- **Pitch Control**: ±15% deviation
- **Fast Wind Time**: Less than 100 seconds for 7" reel, 1,800 feet
- **Dimensions (WxHxD)**: 8.87" x 22.0 x 4.11 mm (32-15/16" x 8-1/16" x 25-4/16")
- **Weight (net)**: 38 kg (86.3 lbs)

#### ELECTRICAL CHARACTERISTICS

##### MIXER SECTION
- **MIX Input**: XLR, balanced
- **Input Impedance**: 2.4 kohms
- **Mic Impedance**: Less than 600 ohms
- **Nominal Input Level**: -60 dB (1 V)
- **Minimum Input Level**: -70 dB (0.3 V)
- **Maximum Input Level**: 0 dB (0.3 V)
- **LINE Input**: 1/4" phone, unbalanced
- **Input Impedance**: 50 kohms
- **Nominal Input Level**: -60 dB (0.3 V)
- **Maximum Input Level**: +14 dB (5 V)

##### BUS Input (PGM/STEREO/AUX/EFFECT)
- **Input Impedance**: 22 kohms
- **Nominal Input Level**: -60 dB (0.3 V)
- **Maximum Input Level**: +14 dB (5 V)

##### EFFECT RETURN
- **Input Impedance**: 22 kohms
- **Nominal Input Level**: 0 dB (0.775 V)
- **Maximum Input Level**: +16 dB (5 V)

#### ACCESS RCV
- **Input Impedance**: 10 kohms
- **Nominal Input Level**: -10 dB (0.3 V)
- **Maximum Input Level**: +14 dB (5 V)

#### PGM/MONITOR Output
- **Input Impedance**: 100 ohms
- **Nominal Output Level**: -10 dB (0.3 V)
- **Maximum Output Level**: +14 dB (5 V)

#### STEREO Output
- **Input Impedance**: 100 ohms
- **Nominal Output Level**: -10 dB (0.3 V)
- **Maximum Output Level**: +14 dB (5 V)

#### HEADPHONES Output
- **Input Impedance**: 10 kohms
- **Nominal Output Level**: 100 mW, 8 ohms
- **Maximum Output Power**: 100 mW, stereo

#### Equalizer
- **Type**: 3-band, peak/dip sweepable
- **Frequencies**: Low/Mid, 50 Hz to 1 kHz
- **Mid/Low**: 500 Hz to 2 kHz
- **Mid/High**: 2.5 kHz to 15 kHz
- **Boost/Cut Range**: ±15 dB
- **Input/Output Indicator**: Activates at 25 dB above nominal
- **Meter Peak Indicator**: Activates at 18 dB above nominal

#### RECORDER SECTION
- **Tape Out Impedance**: 100 ohms
- **Nominal Output Level**: 10 kohms
- **Minimum Load Impedance**: 2 kohms
- **Nominal Output Level**: -10 dB (0.3 V)
- **Maximum Output Level**: +14 dB (5 V)
- **Bias Frequency**: 100 kHz
- **Equalization**: 3,180 Hz ± 50 Hz (NAB/IEC)
- **Record Level Calibration**: 250 mVb/m (0 VU reference)
- **Noise Reduction**: 8-channel, dbx I, dual process
- **Power Consumption**: 120 W

#### TOTAL HARMONIC DISTORTION
- **1 Mic to PGM Out**: 0.03%
- **1 Line to PGM Out**: 0.03%
- **Crosstalk**: -60 dB

#### RECORDER SECTION
- **Wow and Flutter**: 0.05% (NAB weighted)
- **Frequency Response**: 30 Hz to 16 kHz, ±3 dB
- **Signal-to-Noise Ratio**: 95 dB/90 dB with dbx
- **Total Harmonic Distortion**: 0.05%, 0.1% above nominal
- **Adjacent Channel**: 75 dB, 0 VU, with dbx
- **Erasure**: 70 dB at 1 kHz

#### TEST CONDITIONS
- (1) 50 dB above nominal input level, 1 kHz, with 30 kHz LPF
- (2) Nominal input level, 1 kHz, with 30 kHz LPF
- (3) Referenced to 3% THD level
- (4) ±1 kHz
- (5) 1 Mic Test Tape YTT-2003
- (6) TEAC Test Tape YTT-8013

In these specifications, 0 dB is referenced to 1.0 Volt rms; 0 dB/0 dBm is referenced to 0.775 Volt. Actual voltage levels are also given in parentheses. Changes in specifications and features may be made without notice or obligation.

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