

STUDER

A807 PROFESSIONAL TAPE RECORDER



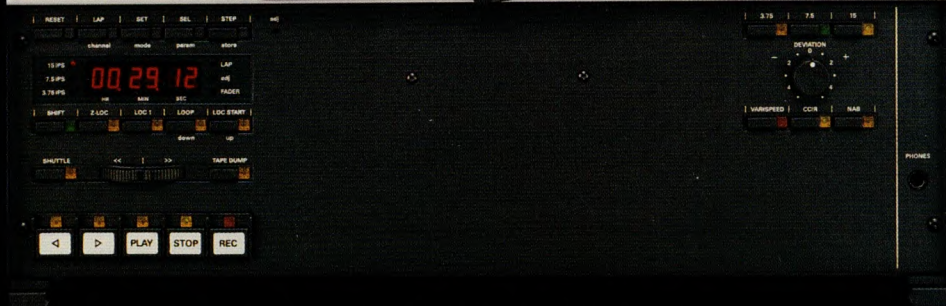
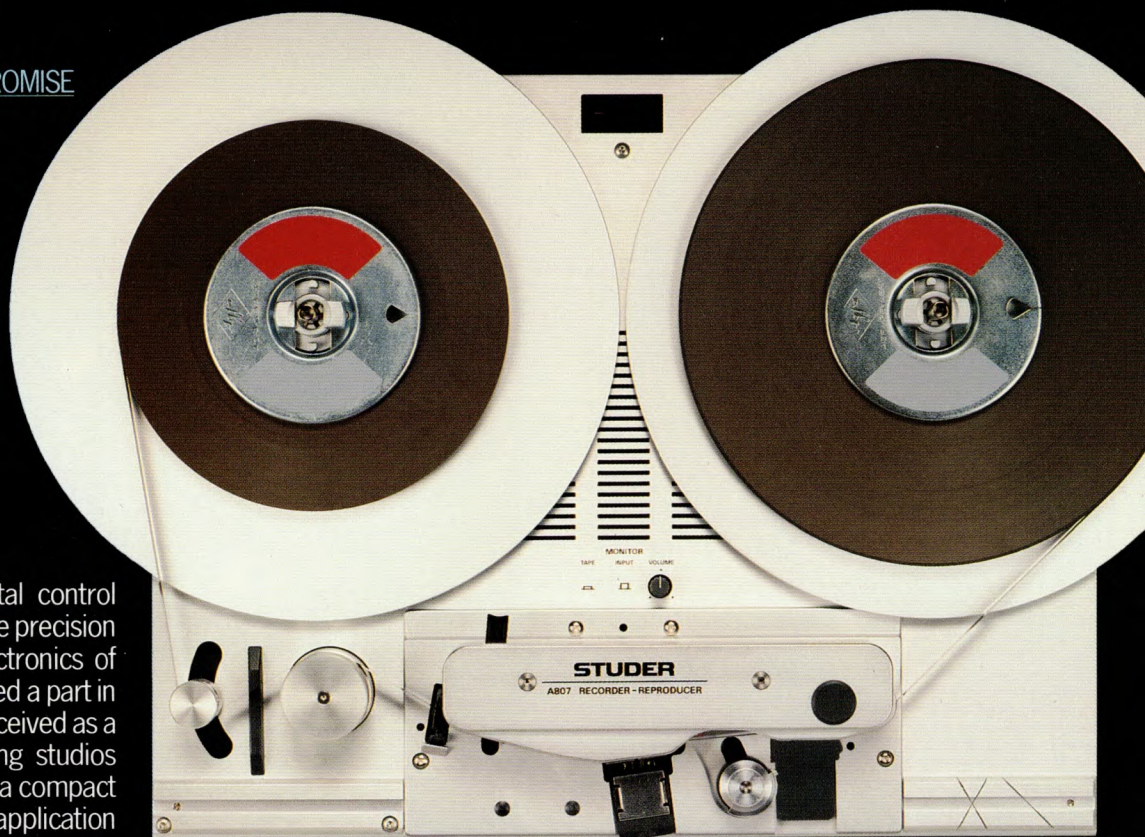
STUDER A807 – unlimited innovation

FLEXIBILITY WITHOUT COMPROMISE

Innovative application of digital control electronics, a traditionally stable precision tape transport, and audio electronics of exemplary quality have all played a part in creating the Studer A807. Conceived as a multipurpose tool for recording studios and broadcasters, the A807 is a compact tape recorder with unlimited application spectrum. This machine demonstrates that extraordinary flexibility can be achieved without compromise – with no loss of efficiency, operating convenience, or ease of maintenance. The A807 embodies ingeniously applied processor controls, and space-saving electronics layout. The highly perfected tape transport design with advanced drive technology features:

Two rugged, direct drive AC spooling motors driven by three phase switched motor drive amplifiers with automatic frequency control for optimum motor torque in all operation modes. Low heat dissipation and high efficiency are combined thanks to switched motor drive amplifiers.

Brushless DC capstan motor with Hall element commutation. Wide operating temperature range and guaranteed motor start in extreme ambient temperatures down to 0 °C, made possible by incorporating the latest developments in special alloys for capstan shaft bearings.



A807-CAL, studio version with calibrated line input and line output



A807-VU, universal version with output meters. Line input and output either calibrated or uncalibrated. Microphone input with phantom supply. Mixable microphone and line input.

Small in size but large in performance

COMPREHENSIVE FUNCTION SELECTION USER-FRIENDLY OPERATION

The strictly user-oriented operating concept, based on processor coordinated tape transport logic, ensures optimum performance for error-free tape handling. In addition, the A807 offers a comprehensive range of selectable functions, far more than usual in a compact tape recorder. The multifunction tape timer provides measurement of the lap time, stop, and total running time with split second accuracy. A number of convenient locator functions for selective tape positioning are also provided: zero locator (Z-LOC), address locator (LOC1), and LOOP function for repetitive playback of a predefined tape segment. LOC START searches the last PLAY (or REC) start position, and stops or starts selectively either in PLAY or REC mode.

In addition to the primary tape transport commands, highly practical special functions are available:

BACKSPACE initiates momentary rewind with play. LIBRARY WIND produces a perfectly smooth pancake at reduced spooling speed. REVERSE PLAY permits playback in the rewind direction and with VARISPEED it is possible to alter the speed in PLAY mode. SHUTTLE is used for moving the tape forward or backward with a delicate touch, either under motor drive and directed by the tip of your finger, or one-handed by turning the right-hand tape reel. TAPE DUMP establishes waste basket edit mode.

Two programmable keys can be assigned alternative functions such as LOC2/LOC3 for two additional locator addresses; FADER READY for fader start operation, and LIFTER for playback during spooling. The main tape transport functions can be remote controlled via the parallel and serial interface.

A PROFESSIONALLY TAILORED AUDIO CONCEPT

Versatility and reliability are the principal requirements for a universal tape recorder, and this applies equally to the audio electronics. Close attention has been paid, therefore, to the design of the A807's record and reproduce electronics. In view of the recorder's broad application spectrum, two basic versions have been created: a studio version (CAL) that can be calibrated to nominal studio level, and a VU version for switch-selectable calibrated or uncalibrated operation. The following outstanding features are common to both versions:

- High-quality, phase-compensated amplifier circuits.
- Balanced and floating inputs and outputs with transformers.
- DOLBY HX PRO[®] circuit for optimum treble dynamic range.
- Separately controlled amplifiers for erase and bias current to assure smooth, accurate drop-in and drop-out.
- Switch-selectable CCIR/NAB equalization
- Insert points in the input and output amplifier paths for decoupling additional circuits such as mono/stereo switch with booster amplifier.

The most demanding requirements for stand alone operation are satisfied by the A807 VU version, which offers a comprehensive range of selectable functions: LINE input with adjustable input sensitivity or studio level calibration. MIC input with switch-selectable 28 dB attenuator and phantom powering for microphone.

Audio channel control with READY key for record preselection and INPUT/SYNC/REPRO channel mode selector. Output control for uncalibrated operation. VU meters and three-stage peak level indicator for 6 dB, 9 dB, and 12 dB above 0 VU.



Multifunctional: Tape timer and tape transport functions



Standard features: three tape speeds, varispeed, and equalization preselection

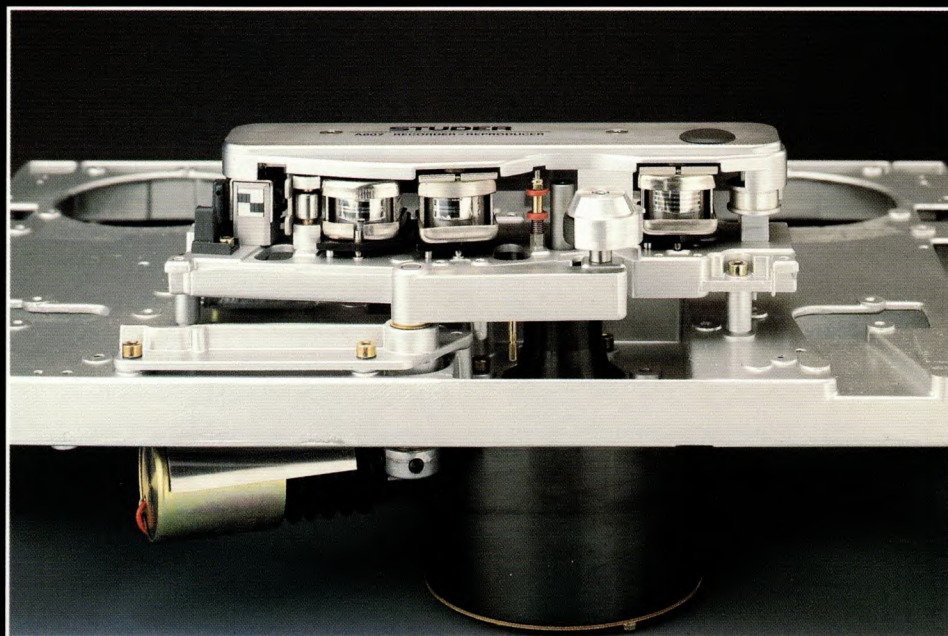


Comprehensive: Output control and audio channel mode selectors

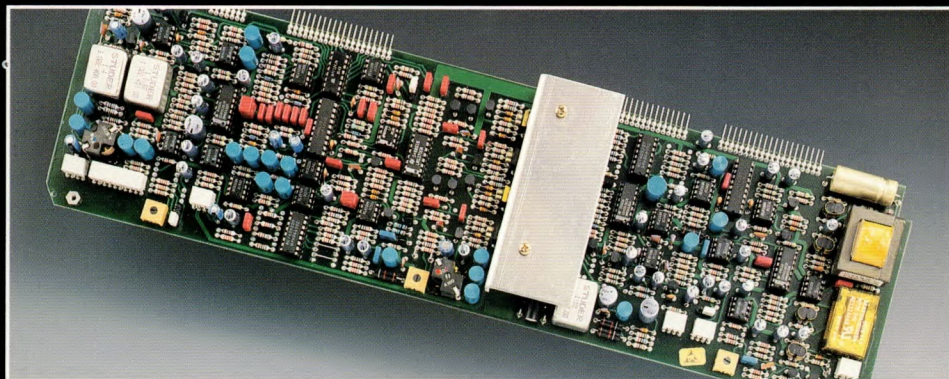
Innovations implemented down to the last detail

PRECISION WITH A LONG-STANDING TRADITION

Mechanical stability and precision – still a major determining factor on the quality of any tape recorders – is a long standing Studer tradition. The A807 is no exception. Careful selection of materials, advanced manufacturing methods, and generous reserves in load bearing capacity ensure continuity of typical Studer quality features. The extremely stable, rigid, die-cast aluminum alloy chassis serves as the base for the high-precision, technically advanced mechanical tape transport subsystems. This guarantees consistent performance to specifications as well as gentle tape handling even in not-so-gentle applications.



Stability and precision, the guarantee for continuous performance to demanding specifications. Illustrated: headblock with additional quarter-track/stereo reproduce head.



Electronics design that is not only functional but also aesthetical. The entire audio circuit of a channel is implemented on a plug-in module.

DIGITALLY CONTROLLED ANALOG TECHNOLOGY

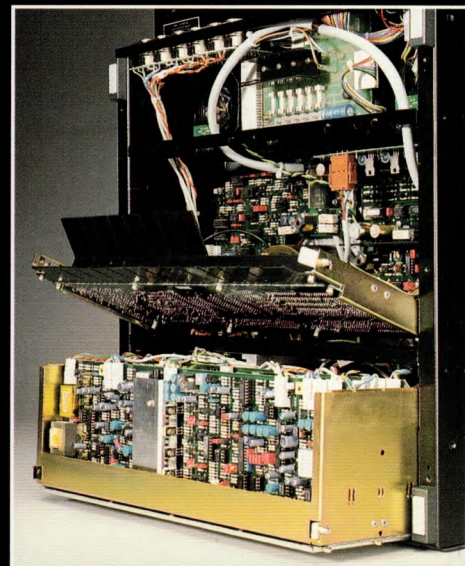
A comprehensive system of digital control electronics, including fully processor-coordinated tape deck control and digitally defined audio parameters, ensure that the highly demanding analog sonic performance specifications are easily satisfied. Potentiometers for amplifier alignment are, for the A807, a thing of the past. Instead, all audio parameters are determined by D/A converters. Calibration is performed via the tape timer keypad in reproducible, digital values, or – via serial interface – from an external storage medium. All alignment elements for optimizing the tape tension are arranged centrally and are readily accessible after the left-hand splicing rail has been removed.

EASY MAINTENANCE, EASILY VISIBLE

In view of the limited space, it was possible to accommodate the sophisticated electronic circuits only by resorting to unconventional mechanical designs. Each electronic functional assembly (e.g. the processor control, servo electronics, and the audio electronics of each channel) is modularly implemented on a separate printed circuit board. But, because of clever slide-out and tilt-down devices, optimum accessibility and ease of maintenance is still ensured.



Calibration center: multifunctional keypad and display serve as the calibration instrument



Obviously easy to maintain, also "behind the facade"

Diversification included



Elegant functionality: consoles for mobility and ergonomic work in the studio. With or without penthouse and base rack.

THE VERSATILE RECORDER

With its compact design, multiplicity of functions, and user-oriented range of models, the A807 tape recorder achieves outstanding flexibility.

The CAL version without output meter is designed for operation with calibrated studio level.

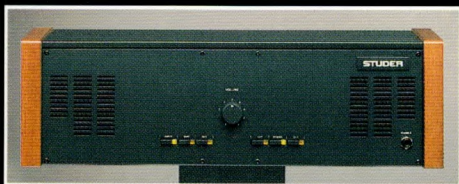
The VU version, with a comprehensive output metering section is equipped with (mixable) line and microphone inputs and can operate selectively in calibrated or uncalibrated mode.

The basic model of both versions offers outstanding autonomy:

- Complete monitoring facility
- Three nominal tape speeds
- Variable tape speed
- Switch-selectable CCIR/NAB equalization
- Parallel and serial interface for total remote control.

THE ADAPTABLE RECORDER

When built into a console, the A807 becomes a mobile, ergonomic studio workstation. The tape recorder can be tilted



Monitor expansion for prelistening the mono/stereo, reproduce, or auxiliary input signal

and locked in finely adjustable increments from the personally preferred angle for convenient operation, to the position that provides optimal service accessibility.

Regardless of the application, the A807 demonstrates outstanding adaptability: as a portable, autonomous unit with wooden side trim and carrying handles or mounted in a rugged carrying case; for stationary applications mounted in a 19" rack, or taking up minimal space in the OB van.



Transportable and presentable: A807 with wooden side trim and carrying handles

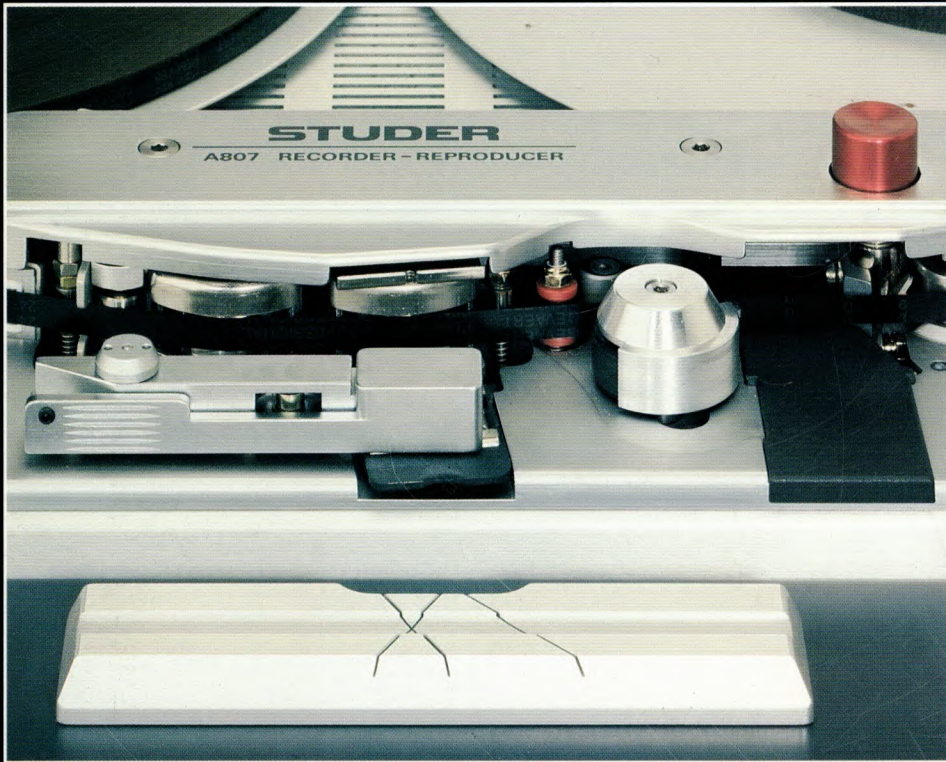


For rough assignments: A807 in the extremely rugged carrying case



Compatible for 19" rack mounting

From the universal to the specialized machine with practical accessories



Three options for convenient editing: tape marker, tape scissors, and splicing block

PROFESSIONAL EDITING

The A807 is destined for fame as a fast, comfortable editing machine. The reasons: Exemplary accessibility of the soundheads thanks to extremely simple tape guidance design, special tape transport functions, and a complete range of field-proven splice editing accessories. The EURO version, with its generous work surface, is highly ergonomic and allows installation of a large splicing block. Two additional options round out the editing facility: A tape marker for head-gap-accurate identification of the cueing position without any possibility of the reproduce head becoming damaged or contaminated, and precision tape scissors for controlled tape cutting at the proper angle.

With its built-in monitoring system, the A807 maintains exceptional mobility and autonomy in all editing applications.



Precise tape marking, with correct tape guidance



Accurate tape cutting at the correct angle for immaculate splices

A807 REMOTE CONTROL

Studer offers a complete line of remote control devices, from the single tape deck remote control to the comprehensive remote system for serial or parallel control, either as a desk model or built-in module.

For detailed information please refer to the special brochure
REMOTE CONTROLS FOR A807/A812/
A820



For example: parallel remote control with integrated varispeed controller

We reserve the right to make alterations as technical progress may warrant.
Some photos show options offered at additional cost.

Noise reduction and headroom extension manufactured under license from Dolby Laboratories Licensing Corporation. HX Professional originated by Bang and Olufsen. "Dolby" and the double-D sybole are trademarks of Dolby Laboratories Licensing Corporation.

Printed in Switzerland
10.26.0454 (Ed. 0491)
Copyright by STUDER REVOX AG,
CH-8105 Regensdorf-Zurich

STUDER

PROFESSIONAL AUDIO EQUIPMENT
Worldwide: Studer International, Switzerland, CH-8105 Regensdorf-Zurich,
Althardstr. 10, Phone +411870 75 11, Fax +411840 47 37, Telex 825 887 sti ch