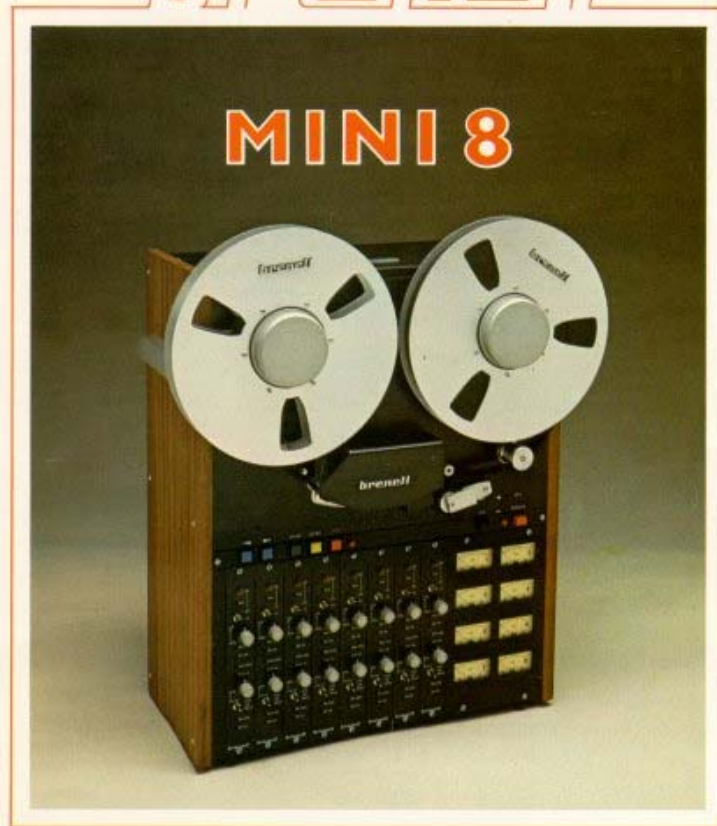


*breneil*



THE GREATEST  
LITTLE EIGHT-TRACK  
IN THE WORLD

# MINI 8

## 1" PROFESSIONAL TAPE RECORDER

Brenell as a company need no introduction to recording and broadcasting – their machines have, and still do, record audio information in virtually every country in the world – often in the most gruelling climatic conditions.

The new 'logic' Mini 8 is the result of two years intensive research and development and combines traditional precision engineering with the most up-to-date electronic circuitry available.

The Mini 8 is capable of providing the professional standards that broadcast studios have come to expect and its one inch tape format outperforms in every respect the 'semi professional' half inch tape medium.

A combination of wide dynamic range and high operational headroom make noise reduction units virtually unnecessary – a major factor for studios operating on a tight budget.

Cost is a major consideration in that the Mini 8 represents a truly professional machine at a price within the reach of anyone seriously considering an 8 track recording facility.

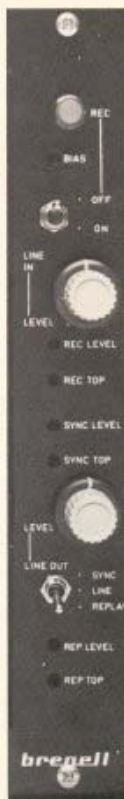
### PERFORMANCE FEATURES

- Compact and portable for small or mobile studios
- Foolproof IC logic transport control including accident-preventing record interlock and full motion sensing.
- Independent record, sync, and playback equalization for optimum performance in every mode
- Silent drop in/drop out record function
- 20dB operating headroom
- Excellent signal to noise ratio
- Separate replay head for 'down stream' monitoring
- Remote control unit with electronic tape counter and zero return
- Powerful, precision balanced spooling motors
- Innovative anti-vibration NAB spool retainers
- Simplified tape path and easy access for editing
- Fully modular electronics for rapid servicing
- Front panel alignment of all essential functions
- Fully variable input and output levels
- Multivoltage power supply to match local supply conditions
- Provision for external varispeed capstan drive
- Replay hum shield
- Automatic sync-line monitor switching

## CHANNEL MODULE

Modular Electronics have long been considered essential for professional recording – the ability to keep the machine in use while servicing one particular channel may save hours of valuable studio time. The Mini 8 features separate record, sync and replay circuits which optimise overdubbing and track-bouncing performance.

*Ramp biasing and erase ensure silent Drop-In* while a flashing record/standby indicator guarantees that the module is in the required mode. *Front panel alignment pre-sets* enable the Mini 8 to be optimised for any tape, including the latest very high output type, without module removal.



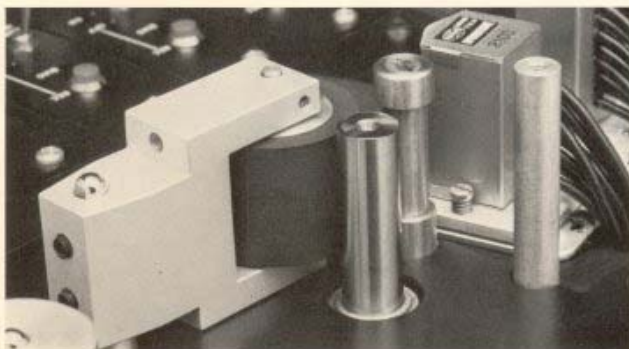
*brenell*

## MINI 8



## HEAD BLOCK ASSEMBLY

Three high precision 8 track heads, painstakingly aligned and tested, form the nucleus of the Mini 8. Brenell's tradition of precision engineering ensures that every machine delivers its specified crosstalk and frequency response. Unique alignment mechanism enables independent adjustment of azimuth, zenith and skew.



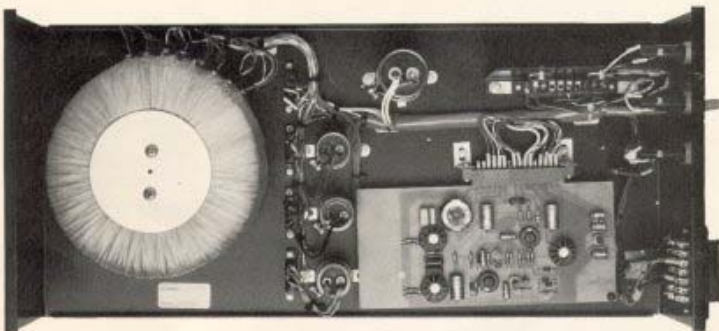
## CAPSTAN ASSEMBLY

Any recording text book will stress the vital importance of low wow and flutter performance and the salient factor is capstan drive. The Mini 8 capstan is machined by our own engineers. Our pinch wheels are carefully selected with double centered bearings and neoprene rims to ensure life long performance.



## LOGIC CONTROL

A major feature of the Mini 8 is its foolproof, integrated circuit, logic transport control. Full motion sensing, dynamic braking, and electronic interlock all combine to guarantee you will never end up with a pile of valuable tape on your control room floor. Mechanical parking brakes automatically stop the tape in the event of a complete power failure.



## POWER SUPPLY

A multitapped toroidal transformer gives worldwide voltage capability and also virtually eliminates hum field problems. A single printed circuit board carries short circuit proof voltage regulation and a master bias/erase oscillator.

## SPOOL RETAINERS

Automatic self centering spool retainers reduce vibration to insignificant levels. Each retainer is hand machined to our exacting tolerances.



A powerful, high speed synchronous motor is indirectly coupled to a heavy brass fly-wheel which provides the constant angular momentum so essential to accurate tape movement.

All printed circuit cards and tape heads are interfaced by high quality gold plated edge connectors which minimises service time and enables replacement parts to be fitted by machine owners.

A single plug-in printed circuit card carries all electronic logic circuitry. Sophisticated motion sensing ensures that the machine cannot be accidentally misused.

A bridging input and very low output impedance ensure that the Mini 8 is compatible with all modern mixing and monitoring devices. The output programme may be switched between line input, tape output, and sync output. Multipin connectors are provided for the optional remote control, tape counter, and power supply. Audio connection is by standard 0.25 inch (6.25mm) jack plugs.

Hand built and subjected to three separate test stages the printed circuit card carries all audio processing circuitry. An extender card is available for 'in situ' module test and alignment. All components are of preferred value and available throughout the World.



## SPECIFICATIONS

Tape Width	One inch (25.4mm)
Tracks	Eight
Reel Size	NAB 26.25cm (10½")
Tape Speed	19 and 38 cm/s ; 7" and 15 ips
Fast Wind	For 730m. (2400 ft.) of tape approximately 100 seconds
Line Input (for OVU)	Adjustable from -10dBm to +20dBm 10K ohm (unbalanced)
Line Output	Adjustable up to +20dBm into 600 ohm (unbalanced)
Record Level	OVU at 320nWb/m
Sel-Sync Output	Up to +20dBm into 600 ohm
Wow and Flutter	.05% (din)
Signal to Noise Ratio	-60dB unweighted reference OVU
Overall Frequency Response	± 2dB 30Hz to 20kHz (better than)
Frequency Response Sync.	± 2.5dB 20Hz to 20kHz
Crosstalk	-60dB at 1kHz (adjacent tracks)
Power Requirements	220-250 volts 50Hz, export versions 110 volts, 60Hz
Weight	32 kgs. (71 lbs)
Dimensions	55cm x 42.5cm x 21.25cm (22" x 17" x 8½")
Remote Control	Plug in type unit for all deck and electronic functions. Available with Digital Counter
Vary-Speed	Available to order.

All measurements made using Scotch 206 tape.

# brenell

Brenell Engineering believe in a continuous programme of research and development. Therefore we must reserve the right to alter specifications or operational format without notice.

The

## MINI 8

is made in England by

ALLEN AND HEATH - BRENELL LIMITED

PEMBROKE HOUSE

CAMPSBOURNE ROAD

HORNSEY

LONDON N.8

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Appointed Agent: