

# SERIES 77



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# EFFICIENCY IN SIMPLICITY

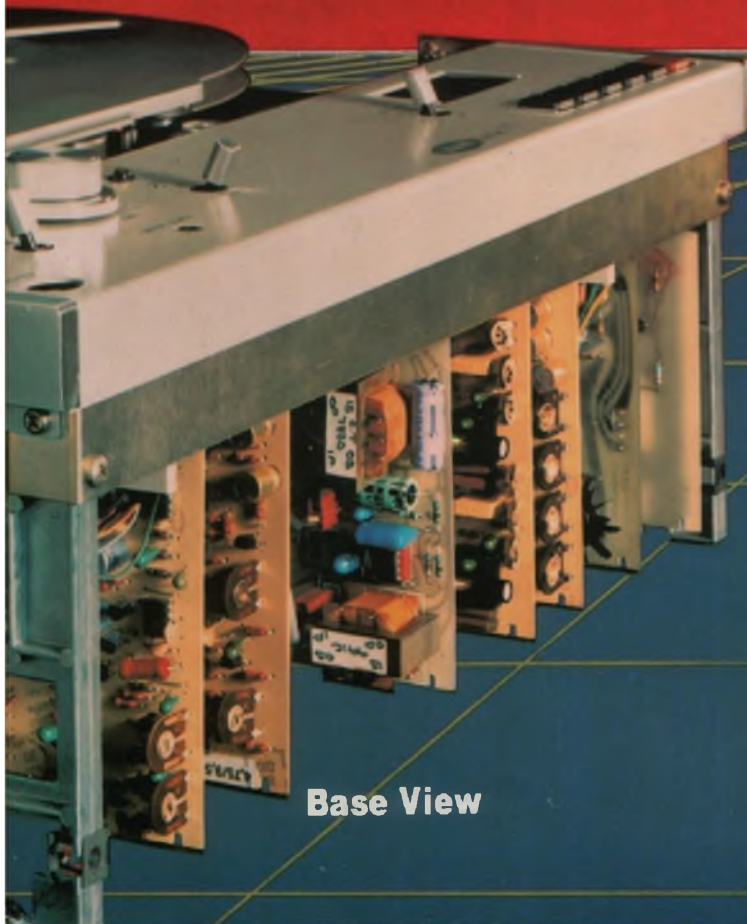
The Series 77 is the latest in a long line of magnetic tape recorders bearing the FERROGRAPH name. This new range of machines combines the well proven design of Revox transport and electronics and the simplicity of use of the Ferrograph. The Series 77 has been designed to ensure long-term stability and reliability under the most severe operational conditions, while meeting the highest quality standards for recording and reproduction at a reasonable cost.

## Transport

A heavy aluminium die-cast chassis, together with die-cast chassis braces, form a rigid, stable reference plane for all motor axes, tension arms and for the removeable die-cast head assembly block. Brushless AC motors with direct-drive, servo-controlled capstan and electrically-controlled spooling motors ensure tension and wind with either large or small diameter reel hubs. All tape motion is logic-controlled and an infra red tape sensor monitors tape continuity.

## Electronics

Professional modular construction with plug-in p.c. boards allows easy access to all audio adjustments. Maintenance is made easy and all p.c. boards are included in the maintenance spares kit. Internal adjustment for bias, equalisation and level calibration controls are all mounted on a single plane and accessible without removing the case. The balanced line input and output, remote start/stop and tape drive remote sockets are located on one single recessed panel on the rear of the machine. A headphone jack is provided on the front panel as well as the controls for speed, power, level, record and monitoring. An internal loudspeaker controlled from the front panel is also provided.



Base View

## Ferrograph Accessories

If the best results are to be obtained from the Series 77, it is of the utmost importance to ensure that none of the metal parts with which the tape comes into contact become magnetised. Even very slight magnetisation of a head may cause irreparable damage to a valued recording.

The Ferrograph D2 Defluxer provides a simple means of totally removing all magnetisation.

To simplify the calibration setting of the Series 77 a range of individually recorded Ferrograph Test Tapes is available in full width format which covers:

- Azimuth Setting
- Response Tones
- CCIR/DIN/NAB/IEC Eq.
- 0 VU Level
- Repeat Frequencies
- Different Speeds

Many other accessories are available including Remote Control unit, Rack Mount brackets, NAB Adaptors, Foot Switch, Signal Operated Switch Unit, Headphones, Microphone, Tapes and Dust Cover.



## Applications

The Series 77 comes in a variety of specifications to meet the needs of broadcast studios, small recording studios, telephone logging, theatre, schools, industry and commerce. In fact, whenever reliable high quality recording is needed the Series 77 will provide the answer.

Design features common to all Series 77 recorders:

- Easy-access heads for simple lacing, editing and cleaning
- Two separate speeds with variable speed control
- 10.5 inch reel capacity with switch for smaller reels
- Full remote control and remote start/stop feature
- 4-digit tape counter with optional real time counter
- Metal case or optional 19 inch rack mounting
- Internal power amplifier and loudspeaker
- Uncluttered simple control panel with preset levels

## Options Available

4 speed ranges

High speed	15/7 $\frac{1}{2}$ ips
Standard speed	7 $\frac{1}{2}$ /3 $\frac{3}{4}$ ips
Low speed	3 $\frac{3}{4}$ /1 $\frac{7}{8}$ ips
Super low speed	1 $\frac{7}{8}$ /1 $\frac{1}{16}$ ips

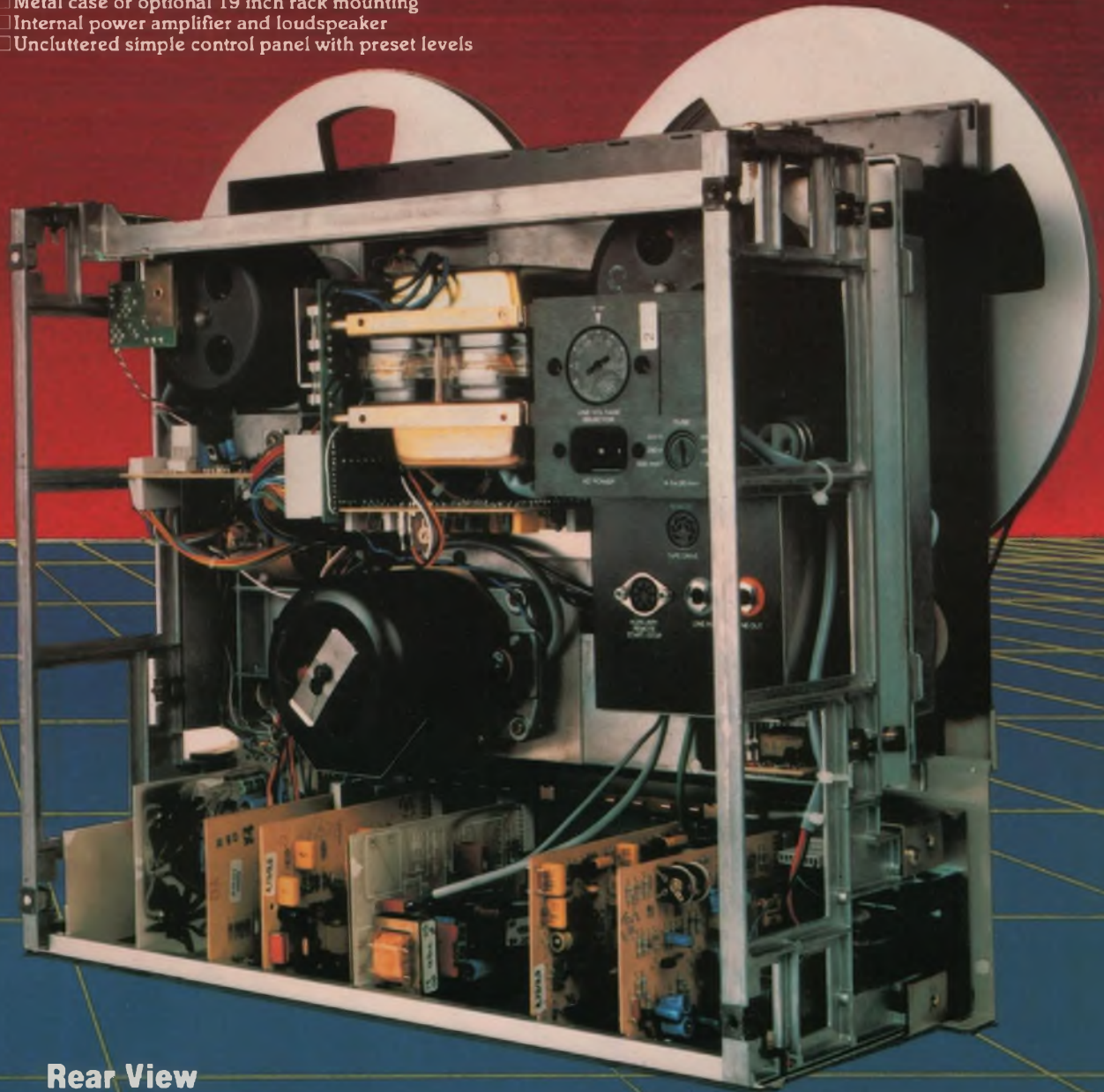
Mono or Stereo

Microphone input

Real time counter LED display

XLR connectors

Endless loop cassette



## Rear View

Professional construction and easy access to all major components makes repair and maintenance quick and easy.

## TECHNICAL SPECIFICATION

### TAPE TRANSPORT

<b>Track format</b>	: Half track mono or Half track stereo
<b>Tape speeds</b>	: 15 and 7 1/2 ips 7 1/2 and 3 3/4 ips 3 3/4 and 1 7/8 ips 1 7/8 and 1 1/2 ips
<b>Wow and Flutter</b> (as per DIN 45507)	: at 15 ips less than 0.06% at 7 1/2 ips less than 0.08% at 3 3/4 ips less than 0.10% at 1 7/8 ips less than 0.20% at 1 1/2 ips less than 0.30%
<b>Tape slip</b>	: max. 0.20%
<b>Reel size</b>	: up to 10.5 inch diameter (min. hub diameter 2.36 inches) tape tension switchable (for small hub sizes)
<b>Winding time</b>	: approx 135 secs. for 3600ft. of tape
<b>Transport mechanism</b>	: 3 motor tape drive, 2 AC spooling motors; 1 AC capstan motor, electronically regulated
<b>Transport control</b>	: Integrated control logic with tape motion sensor Contactless electronic switching of all motors Remote start/stop facility. Full remote control of all functions and electronic timer operation.

### AUDIO SECTION

<b>Equalization</b>	: 15 ips: 50µsec/3180µsec 7 1/2 ips: 50µsec/3180µsec 3 3/4 ips: 90µsec/3180µsec 1 7/8 ips: 120µsec/3180µsec 1 1/2 ips: 200µsec/3180µsec
<b>Frequency response</b>	: at 15 ips 30Hz-22kHz +2/-3dB at 7 1/2 ips 30Hz-20kHz +2/-2dB at 3 3/4 ips 30Hz-16kHz +2/-3dB at 1 7/8 ips 60Hz-8kHz +2/-3dB at 1 1/2 ips 60Hz-4kHz +2/-3dB
<b>Peak recording level</b>	: at 15/7 1/2 ips 640nWb/m corresponds to 4dB above 0 VU at 7 1/2/3 3/4 ips 320nWb/m corresponds to 4dB above 0 VU at 3 3/4/1 7/8 ips 160nWb/m corresponds to 4dB above 0 VU at 1 7/8/1 1/2 ips 80nWb/m corresponds to 4dB above 0 VU
<b>Level metering</b>	: VU meter as per ASA standard with LED peak level indicator
<b>Signal to Noise</b> (reference 2% distortion unweighted including hum)	: at 15 ips better than 60dB at 7 1/2 ips better than 60dB at 3 3/4 ips better than 60dB at 1 7/8 ips better than 58dB at 1 1/2 ips better than 56dB
<b>Erase depth</b>	: better than 70dB
<b>Crosstalk</b>	: Stereo — better than 45dB Mono — better than 60dB
<b>Line input</b>	: for peak level recording of 32 nWb/m 200mV-5V at 10kΩ isolated. Recommended source not greater than 600Ω.
<b>Line output</b>	: from peak level recording of 320 nWb/m 1V into 600Ω isolated.
<b>Headphone output</b>	: suitable for headphones 1000Ω
<b>Connectors</b>	: Line — 3 contact gauge B jack (optional — XLR male or female) Phones — gauge A jack

### GENERAL DETAILS

<b>Loudspeaker</b>	: Internal 30Ω loudspeaker driven from internal amplifier. Variable level control and mute switch.
<b>Metering</b>	: The VU meter always displays the record level signals. Output metering optional.
<b>Case</b>	: sturdy metal case with carrying handles. Provision for fitting optional rack mount brackets.
<b>Power</b>	: 100, 120, 140, 200, 220, 240 volt 50 or 60Hz, Max. 80W. Selected by external voltage selector.
<b>Main fuse</b>	: 100-140: 1A slow blow. 200-240: 0.5A slow blow
<b>Weight</b>	: approx. 371 lbs (17kg)
<b>Dimensions</b> (W × H × D)	: 17.8 × 16.3 × 8.14 inches 452 × 414 × 207mm Clearance for 10.5 inch spools Max. width 21.2 inches (538 mm) Max. height 18.25 inches (464 mm)
<b>Accessories included</b>	: 7 inch empty spool tape head maintenance kit instruction manual input/output plugs mains lead

All figures quoted are minimum performance values normally exceeded by all units. This specification is subject to improvement without notice



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### PROFESSIONAL USER PRICE LIST

FEBRUARY 1988

#### AVM-FERROGRAPH SERIES 77 TAPE RECORDER

10½ Reel Capacity. Balanced Line Termination. Built-in Monitor Amp and Speaker. Vertical or Horizontal Operation. Metal Case (Rack Mount Optional). Flat Deck. "B" Gauge Jack Connectors.

		<u>Mono ½ Track</u>	<u>Mono Full Track</u>	<u>Stereo ½ Track</u>
High Speed	15"/7½"	£1554.00	£1665.00	£1567.00
Standard Speed	7½"/3½"	£1547.00	£1657.00	£1559.00
Low Speed	3½"/1½"	£1549.00	£1659.00	£1561.00
Super Low Speed	1½"/15/16"	£1575.00	£1685.00	£1588.00

PACKING £25.00 PER MACHINE

#### OPTIONAL EXTRA

Microprocessor Controlled Real Time Counter to replace mechanical counter.

£200.00

#### ACCESSORIES

Remote Control	£104.00
Rack Mount Brackets	£ 21.00
N.A.B. Adapters (per pair)	£ 21.50
Defluxer D2	£ 28.00
Maintenance Manual	£ 20.00
Spares Kits	P.O.A.

PRICE : Strictly Net Ex-Works

CARRIAGE : Extra at cost

VAT : Extra at 15%

TERMS : Account Customer - Net Monthly Account  
No Account Customer - Cash with Order

