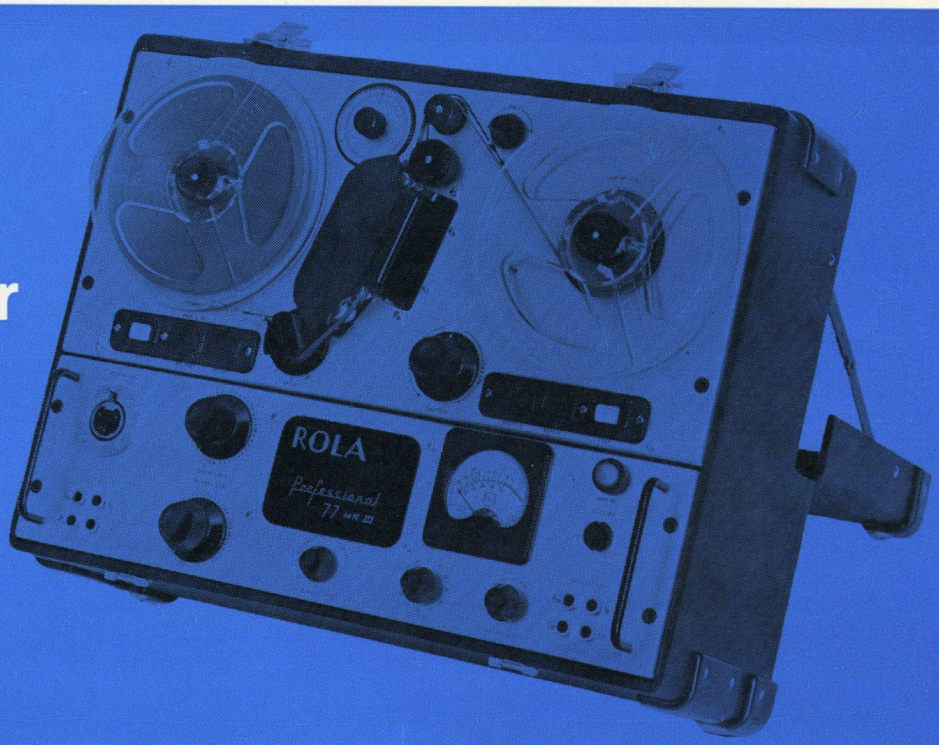
Plessey Components Australia

77 Mk III Tape Recorder

Rola Division
The Boulevard Richmond Victoria

The 77MkIII professional tape recorder



This superbly engineered magnetic tape recorder is basically a portable unit yet it provides all the facilities and flexibility of operation normally found only in studio console recorders.

Cueing and editing facilities are outstanding. During spooling the tape is automatically lifted off the heads. This control can be manually overridden to allow the tape to be monitored as required. Fast "word-drop-in" editing and silent "Record" operation are ensured by the inclusion of a light-dependent resistor in the Record Amplifier and a fully balanced Erase/Bias oscillator. For immediate recording only the Record button need be pressed.

Facilities

simultaneous replay monitoring

direct comparison of original and recorded signals at any speaker volume by means of an A-B control

VU meter and line amplifier switching to either "Record" or "Play" channels

independent level control on "Record" and "Play" amplifiers

switching from "Play" to "Record" without any pause in tape motion and without any switching transients being heard or recorded

meter switching to read DC voltage, AC mains voltage, bias voltage and valve currents

choice of either low noise carbon potentiometer gain controls or stepped attenuators with gain steps of 1.5db between 45db below full gain to infinity

starting time almost instantaneous — full, stable, tape speed is attained in less than 0.2 second. In stopping, the tape moves less than one inch at 15 inches per second. exact cueing is simple with the Rola MkIII Series

Operation

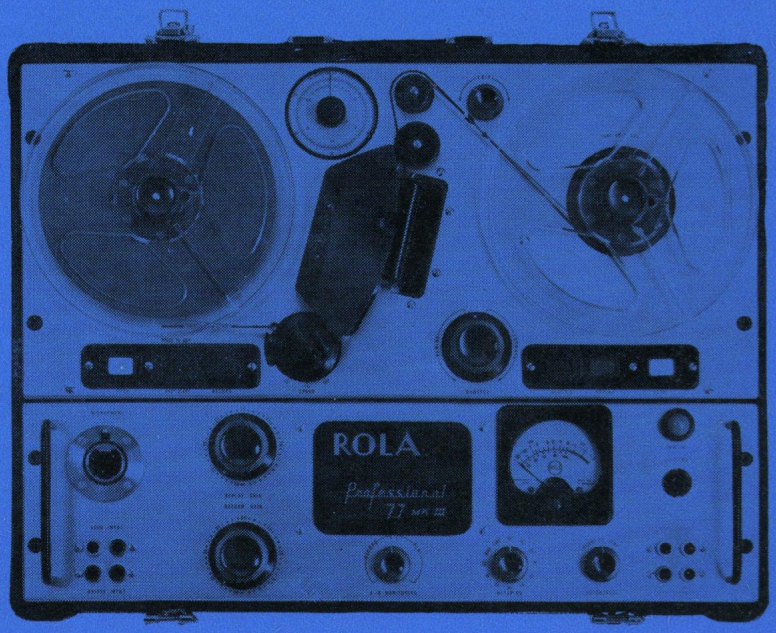
press button, electro-mechanical interlocked separate Edit/Fast Start Stop Play Record and Shuttle buttons fail/safe overrun switch and play/safe switch capstan motor speed and equalization for tape speeds controlled by a common switch

operating indication pilot light illuminates press button corresponding to function selected

tape speeds 3¾/7½ i.p.s. or 7½/15 i.p.s. or special tape speeds can be provided on application

spool size Cine type 7" spools (BS1568:1960) can be used The lid will close on the portable case with these spools in place With the Auxiliary Spooling Mechanism NAB type 10½" spools can be used

The standard recorder in Australian broadcasting– portable rack mounted studio consolette



Design features

rigid construction
press-button operation
three motor tape transport
unique triple head assembly
full or half track heads
venier azimuth adjustment
long wearing laminated heads
automatic tape lifter
complete solenoid operation
variable speed shuttling
tape over-run switch
twist-lock spool caps
precautionary interlock switching
full remote control operation
play-safe switch (ensures absolute safety on playback)
fail-safe tape over-run switch
full edit facilities
extreme serviceability
wrap-round tape threading

Overall dimensions

transportable case
height 16″
width 20″
depth 9½″
weight 56 lbs
standard 19″ rack mounting
14″ of vertical rack space
weight 47 lbs

Technical specifications

tape drive
three motors: capstan driven directly by a synchronous dual-speed motor with integral fly-wheel take-up and re-wind by separate high-torque induction motors

starting and stopping time
less than 0.2 second

timing indication
tape timing indicator driven directly from the tape indicates the time in minutes and is easily reset to zero

timing accuracy
—0 +0.2% of nominal speed

spooling
continuously variable at maximum speed less than 1 minute required to spool 1200 ft of tape in either direction

wow and flutter
less than .2% at 3¾ i.p.s. 0.15% at 7½ i.p.s. and 0.12% at 15 i.p.s. measured on a GB Kalee Flutter Meter

heads
separate "erase" "record" and "play" heads available in full track half track or stereo for simplified head interchange the triple head assembly is designed so that either the complete assembly or individual heads may be readily removed

azimuth adjustment
individual positive vernier screw on each head mounting

overall distortion
less than 2% at 400 Hz including tape distortion at peak recording level*

overall frequency response
at 3¾ i.p.s. 50 — 8000 Hz ± 2db;
40 — 10000 Hz ± 4db
at 7½ i.p.s. 40 — 12000 Hz ± 2db;
35 — 15000 Hz ± 4db
at 15 i.p.s. 30 — 15000 Hz ± 2db;
30 — 18000 Hz ± 4db

recorder characteristics
the record and play characteristics are in accordance with IEC or NAB specifications as required

recording bias
90 KHz with variable control for tape variations

equalization
controls are provided for adjusting the frequency response of both "record" and "replay" channels independently on both speeds of operation to compensate for varying tape characteristics

IEC reference
not less than 58db (in the band 30 Hz — 15 kHz) below peak recording level* (full track)

NAB reference
not less than 60db (in the band 30 Hz — 15 kHz) below peak recording level* (full track)

inputs
balanced 600 ohms and balanced "bridge-in" (—20 to +18 dbm)
microphone input balanced 150 ohms (50-150 ohm microphone) — sensitivity not less than —80 dbV

outputs
balanced 600 ohms nominally +8 db
maximum output +21 db (program line)
unbalanced 15 ohm (monitoring system)

gain
in excess of 95db (from microphone input to zero level — +8dbm at 600 ohms)

level metering
standard VU meter switches to read:
(a) record level (b) line output
(c) 600 ohm line input

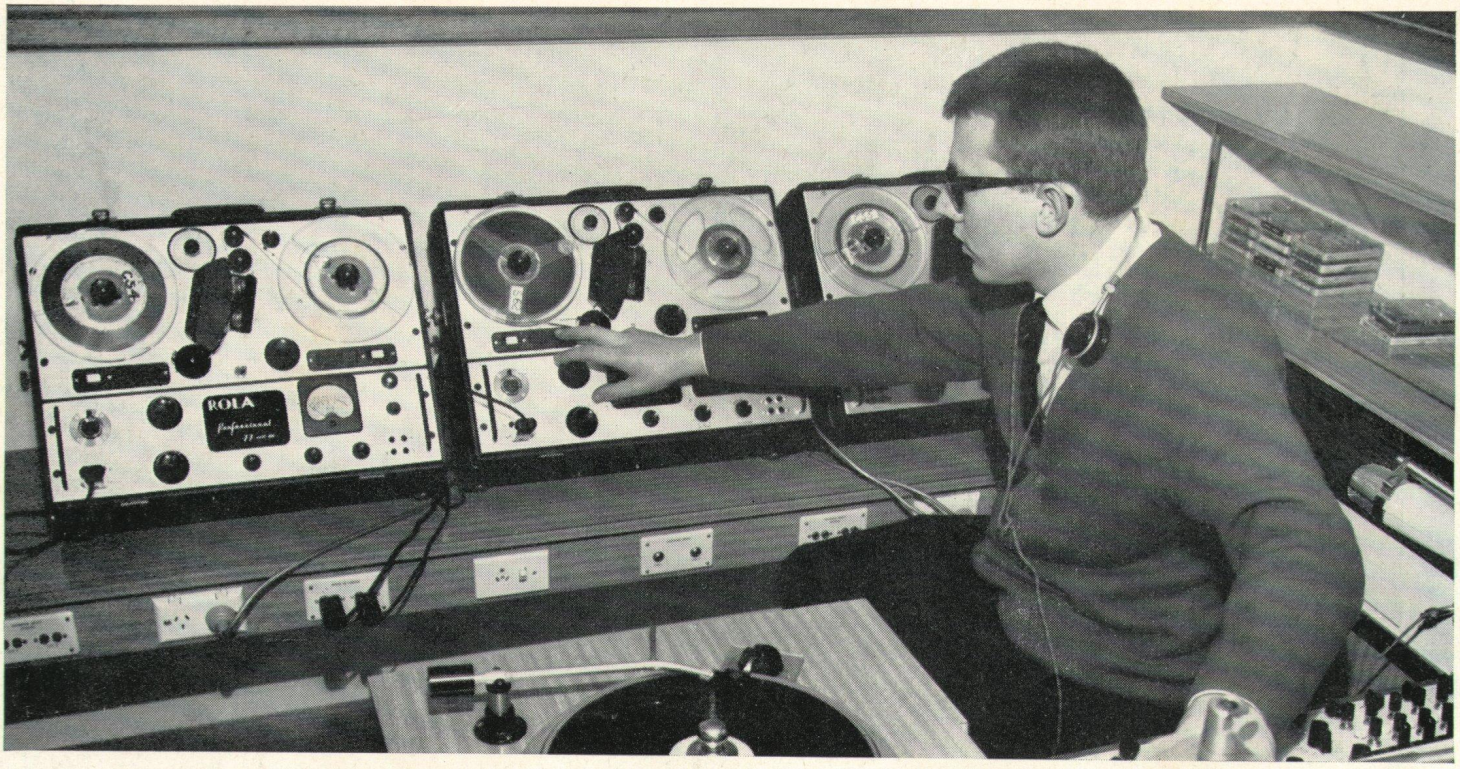
circuit metering
a metering switch allows the VU meter to be used to indicate valve currents bias AC mains and DC supply voltages

monitoring
a separate built-in monitor amplifier and internal speaker are provided the monitor amplifier can be connected to either the "replay" or "record" channels by means of an A-B monitor control the output of the monitor amplifier is available at front panel jacks for use with an external speaker if required

remote control
press button control of all functions

safety switch
play-safe switch makes it impossible to accidentally erase tapes when key is removed from lock

*peak recording level (160 mM R.M.S. full track) equals 8db above normal record level (all measurements using Scotch Tape Type 202)



At 3UZ versatile Rola MkIII tape recorders are used to handle the station's extensive sporting coverage.

77 Mk III Studio Console

The Rola 77 MkIII Recorder is also available as an attractive and highly functional studio console. Design features include:

Inclined amplifier front panel and transport deck for convenient operation and ease of editing

The console cabinet consists of two separate sections. The recorder housing is finished in attractive, durable olive green vinyl and the base unit is veneered in natural teak. Heavy duty castors allow mobility in the studio

If desired the recorder housing can be supplied separately for desk top mounting

Precision instrumentation fan for regulated forced draught ventilation of the recorder without objectional audio noise or radiated magnetic field

Convenient operation from a seated position

Spacious drawer for storage of tapes, editing equipment and accessories

Two general power outlets for auxiliary equipment located on the back of the unit

The complete cabinet can be supplied separately for simple conversion of standard portable or rack mounted 77 MkIII Recorders to a studio console

Dimensions: height 44″ x width 17¼″ x depth 16½″. Desk top unit only: height 15¾″ x width 17¼″ x depth 16½″

PLESSEY
Components

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