

### INTRODUCTION

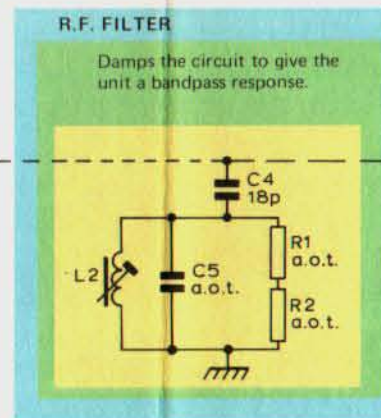
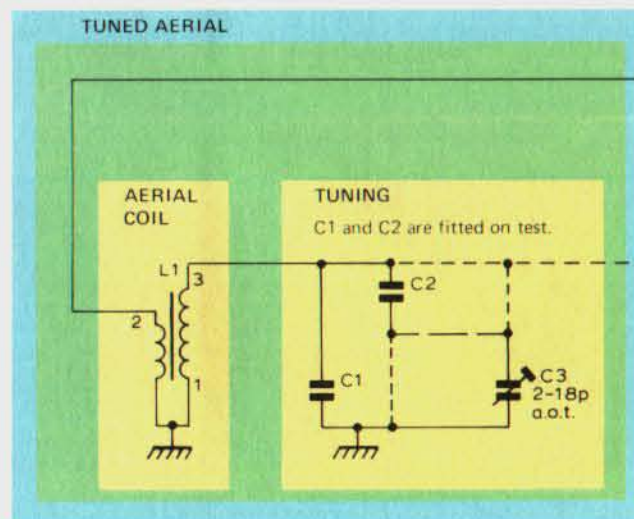
The UN1/163 and the UN1/164 are pre-tuned directional aerial units for use with the RC3/10 AM broadcast receiver. The two aerial units are similar in construction, but the UN1/164 has a larger aperture which gives better signal discrimination.

Each unit contains a bundle of six ferrite rods, together with preset tuned circuits and a preamplifier which presents a 50 ohm output impedance to a coaxial output connector. The same connector is used to supply power from the receiver to the preamplifier via the coaxial output lead.

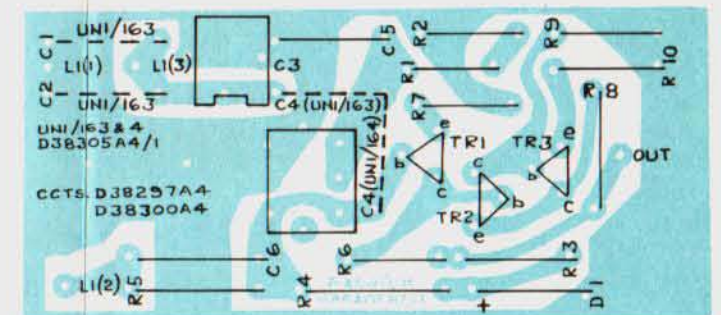
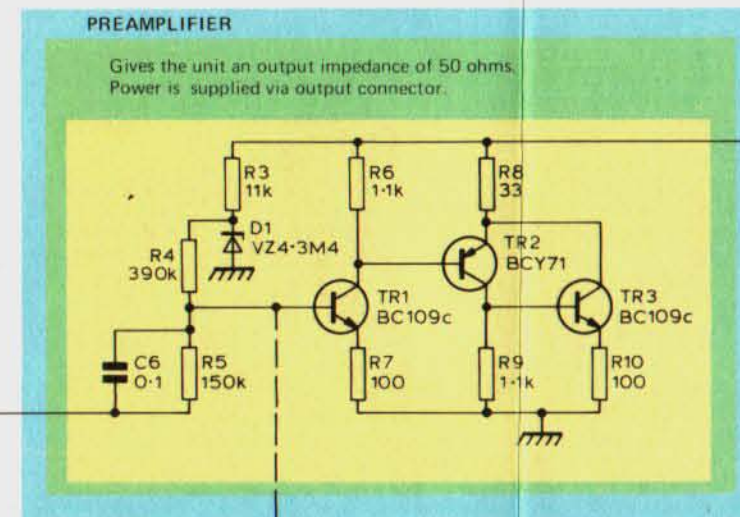
The units are built into lengths of plastic pipe 60 mm in diameter, with a TNC coaxial connector at one end. When installed outdoors the units should be painted with black bitumastic paint to protect the plastic from exposure to ultra violet light.

### SPECIFICATION

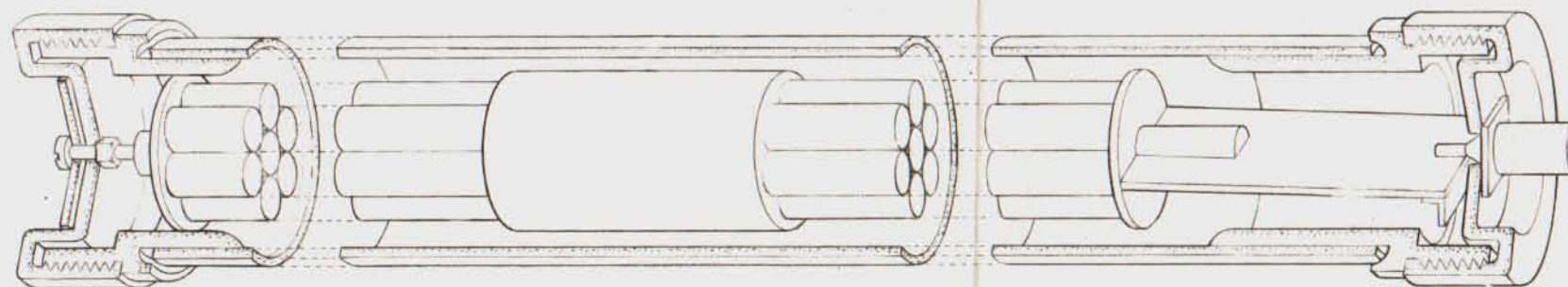
Length UN1/163	300 mm
UN1/164	700 mm
Diameter	60 mm
Coaxial Connector	TNC
Power Supply	10 V $\pm$ 2V at 10 mA
Frequencies	155 to 281 kHz 529 to 1602 kHz
Bandwidth ( $\pm$ 0.5 dB)	$\pm$ 5 kHz
Conversion Efficiency (50 ohm term.)	0.6 to 2.0 Volts/V per metre
Output Impedance	50 ohms
Maximum Output	200 mV rms
Temperature Range	-20 <sup>o</sup> to +50 <sup>o</sup> C



Connections shown - - - are for UN1/163 only  
Connections shown — are for UN1/164 only



Printed wiring board (component side)



**DO NOT DISMANTLE IN HORIZONTAL POSITION.** This may break the printed circuit board.

To dismantle, hold the unit vertically with the coaxial connector at the top. Unscrew the end cap and slide off the base downwards.

TR	Type	Base
1, 3	BC109c	b o c
2	BCY71	e o c

view on leads