

LOW NOISE U.H.F. PRE-AMPLIFIER ASSEMBLY AM14/513

The AM14/513 is a masthead mounting u.h.f. pre-amplifier assembly and with its associated power supply unit PS1/18, forms the Low Noise U.H.F. Pre-amplifier Equipment EP1/517. It is intended for use with television rebroadcast receivers (see RC5/501) and can be preset to any channel in Bands IV and V.

The AM14/513 comprises a comb-line filter FL2/533B or FL2/534B, a u.h.f. amplifier AM14/514 and a 12-volt rectifier circuit, the components of which are mounted on a small circuit board.

The filter, amplifier and power circuit board are mounted on the lid of a die cast metal box, measuring approximately 11 in. x 7 in. x 2 1/4 in., which also includes a silica gel dessicator and two heater resistors.

The unit is powered by 15 volts a.c. supplied via the aerial feeder.

A circuit diagram is given in Fig. 1.

<i>Gain</i>	22dB ±4dB
<i>Amplitude/frequency Characteristic Peak-peak Variation over an 8MHz Channel</i>	Not greater than 0.5dB
<i>Input VSWR</i> relative to 50 ohms over an 8MHz channel	Not greater than 1.3
<i>Max Input</i>	5mV r.m.s.
<i>Noise Figure</i> Channel 21 Channel 68	Not greater than 6 dB Not greater than 9 dB
<i>Power Requirements</i> (fed via output feeder)	350 mA at 15 V 50 Hz
<i>Connectors</i>	Type N
<i>Weight</i>	6 lb.

General Specification

Frequency Coverage Any channel in Bands IV or V

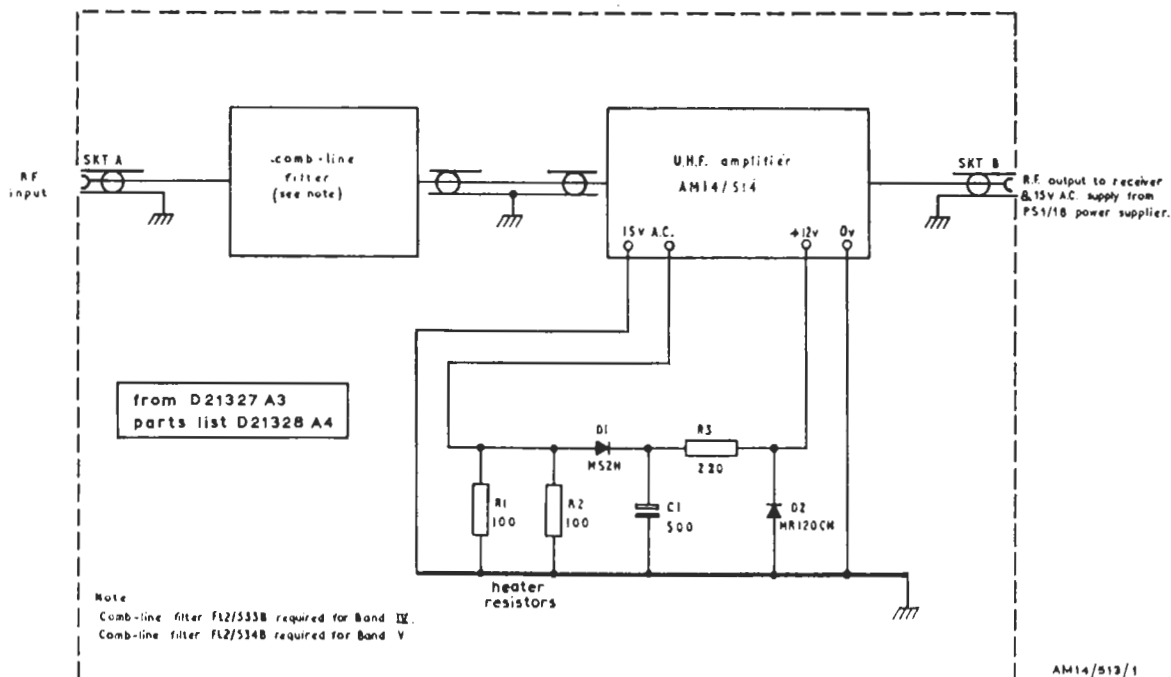


Fig. 1 Circuit of the AM14/513