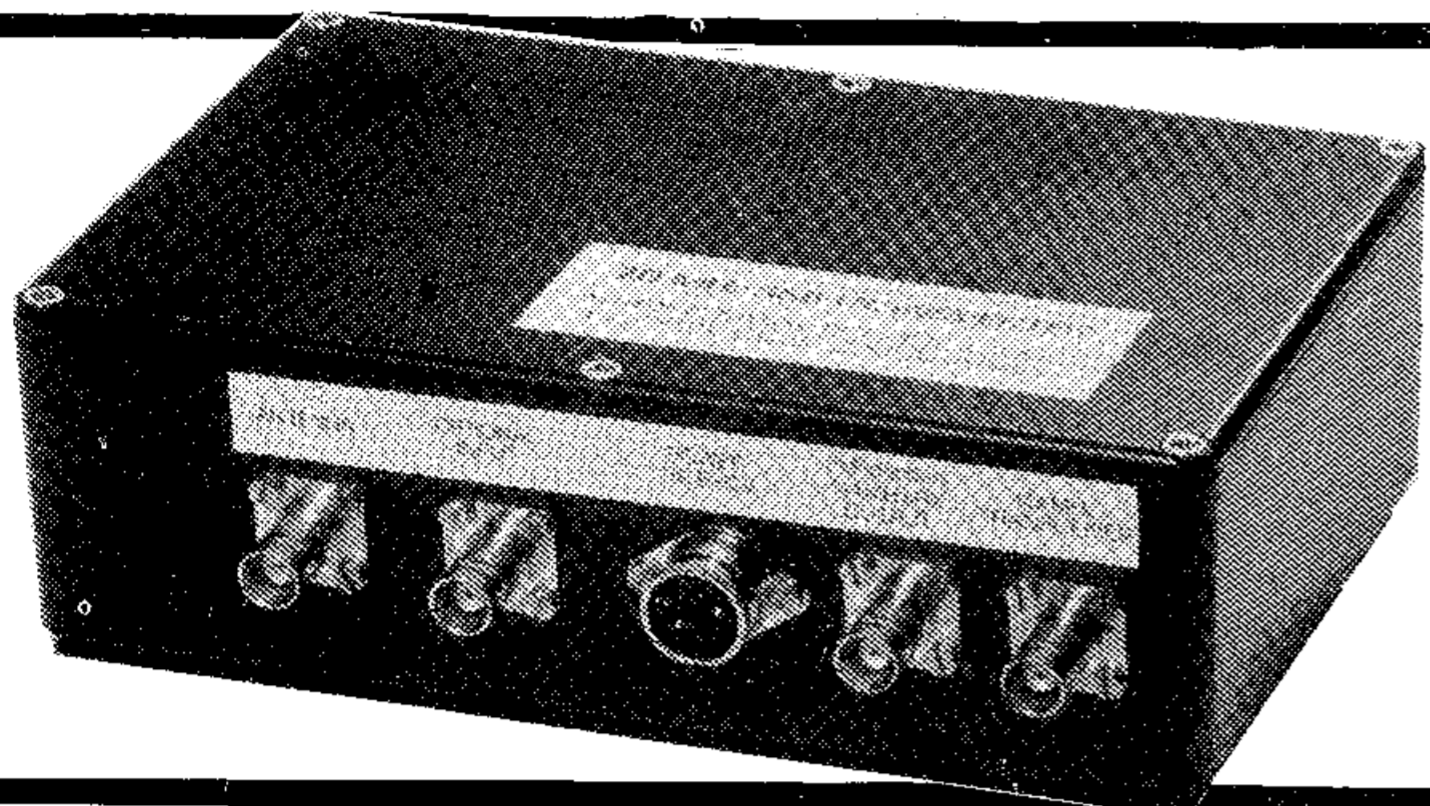


MICROWAVE MODULES LTD

## 70 MHz LINEAR TRANSVERTER SERIES TYPE: MMT70/28 & MMT70/144



### FEATURES

- ★ AVAILABLE FOR USE WITH 10 METRE OR 2 METRE TRANSCEIVERS
- ★ RUGGED, HIGHLY DURABLE PA DEVICE RATED AT 60 WATTS DISSIPATION
- ★ LOW-NOISE RECEIVE CONVERTER—2.0 dB NOISE FIGURE
- ★ RF VOX PROVIDES AUTOMATIC CHANGEOVER

### SPECIFICATION

	MMT70/28	MMT70/144
FREQUENCY COVERAGE	70.025 - 70.7 MHz	
INPUT FREQUENCY RANGE	28.025 - 28.7 MHz	144.025 - 144.7 MHz
INPUT MODES	SSB, FM, AM, CW	
INPUT REQUIREMENTS	5 - 500 mW (variable)	10 Watts (with supplied attenuator)
OUTPUT POWER	10 Watts Continuous Rating	
CONVERSION PRINCIPLE	Single	Double
RECEIVE CONVERTER GAIN	30 dB	15 dB (After Attenuation)
RECEIVE CONVERTER NOISE FIGURE	2.0 dB Maximum	
LOCAL OSCILLATOR FREQUENCY	42 MHz	116 MHz First Conversion— 42 MHz Second
FREQUENCY ERROR AT 70 MHz	Not Greater than 1 KHz	
RF CONNECTORS	50 Ohm BNC Sockets	
INPUT/OUTPUT IMPEDANCE	50 Ohm	
POWER CONNECTOR	5 Pin DIN Socket	
POWER REQUIREMENTS	12.5 Volts at 2.1 Amps	
SIZE	187 x 120 x 53 mm (7 <sup>3</sup> / <sub>8</sub> x 4 <sup>3</sup> / <sub>4</sub> x 2 <sup>1</sup> / <sub>16</sub> inches)	
WEIGHT	900 grams (2 lb)	

### DESCRIPTION

This range of solid state 4 metre transverters will facilitate operation on the 70 MHz amateur band.

Two versions are available at the same cost:

MMT70/28 — For use with 28 MHz Transceivers

MMT70/144 — For use with 144 MHz Transceivers

When used in conjunction with such equipment, both the MMT70/28 and the MMT70/144 will provide all-mode operation on the 4 metre band.

Both models incorporate RF VOX, which minimises the interconnections to the drive source, and automatically switches the transverter into the transmit mode when input drive is applied.

The MMT70/28 is a single conversion up-transverter using a highly stable 42 MHz oscillator, whilst the MMT70/144 down-converts the 144 MHz signal to 28 MHz before the second conversion upto 70 MHz.

Mixing is achieved in both units by a pair of dual gate MOSFETS in a balanced configuration, followed by a low distortion linear transmit amplifier chain.

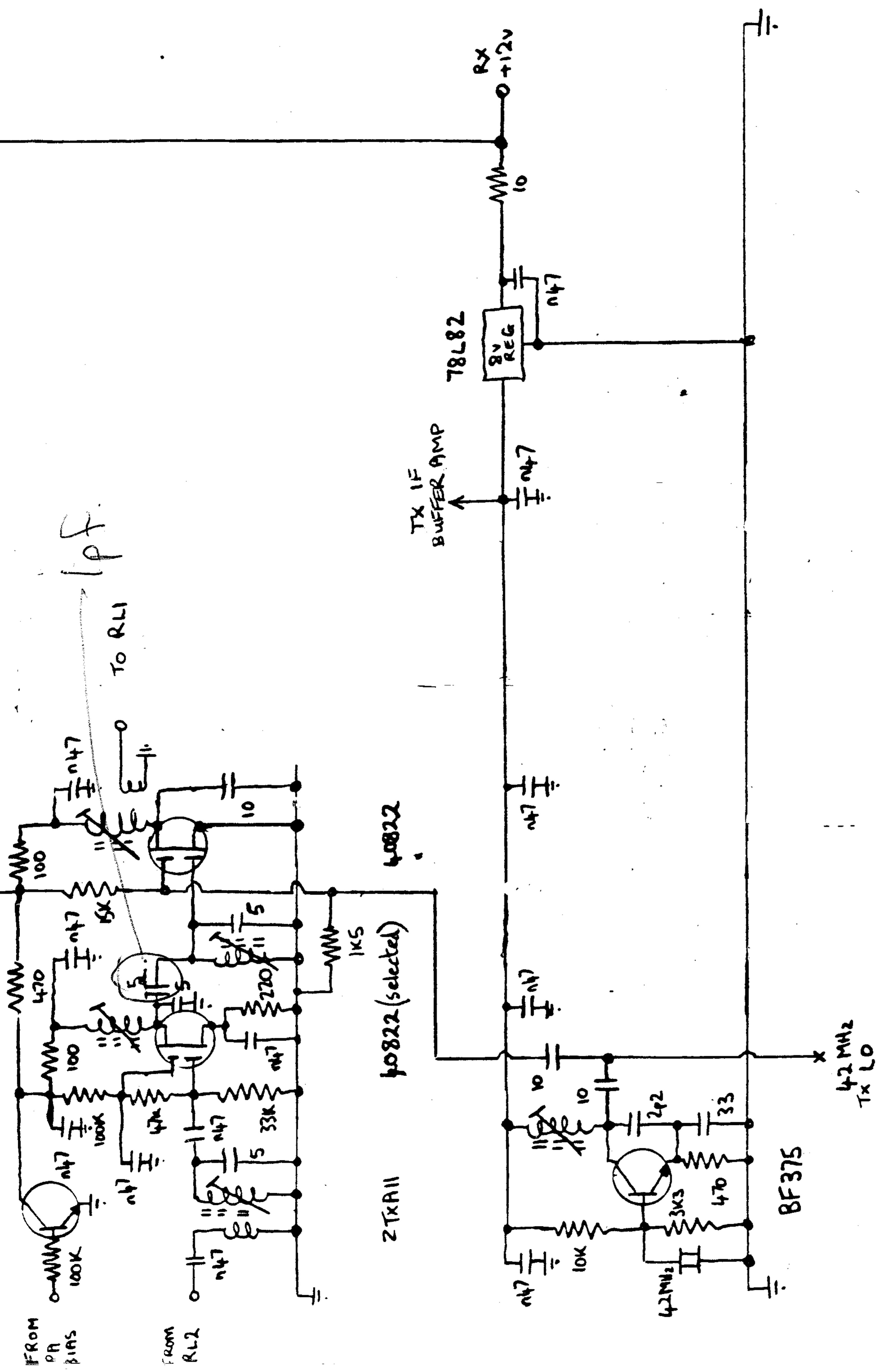
The high power linear amplifier stage is housed in a separate internal compartment together with the aerial changeover relay and a low pass aerial filter which ensures minimal harmonic radiation, together with freedom from out of band spuri on receive.

On the receive side, a sensitive low-noise dual gate MOSFET preamplifier precedes the receive mixers.

The inclusion of these features makes the unit ideal for all modes of communication, particularly where a high degree of stability, sensitivity and linearity are of prime consideration.

The unit is housed in a highly durable black diecast case and all circuitry is constructed on high quality glass-fibre printed circuit board.

MICROWAVE MODULES  
BROOKFIELD DRIVE, AINTREE, LIVERPOOL L9 7AN, ENGLAND  
Telephone: 051-523 4011 Telex 628608 MICRO G



REV 9/81

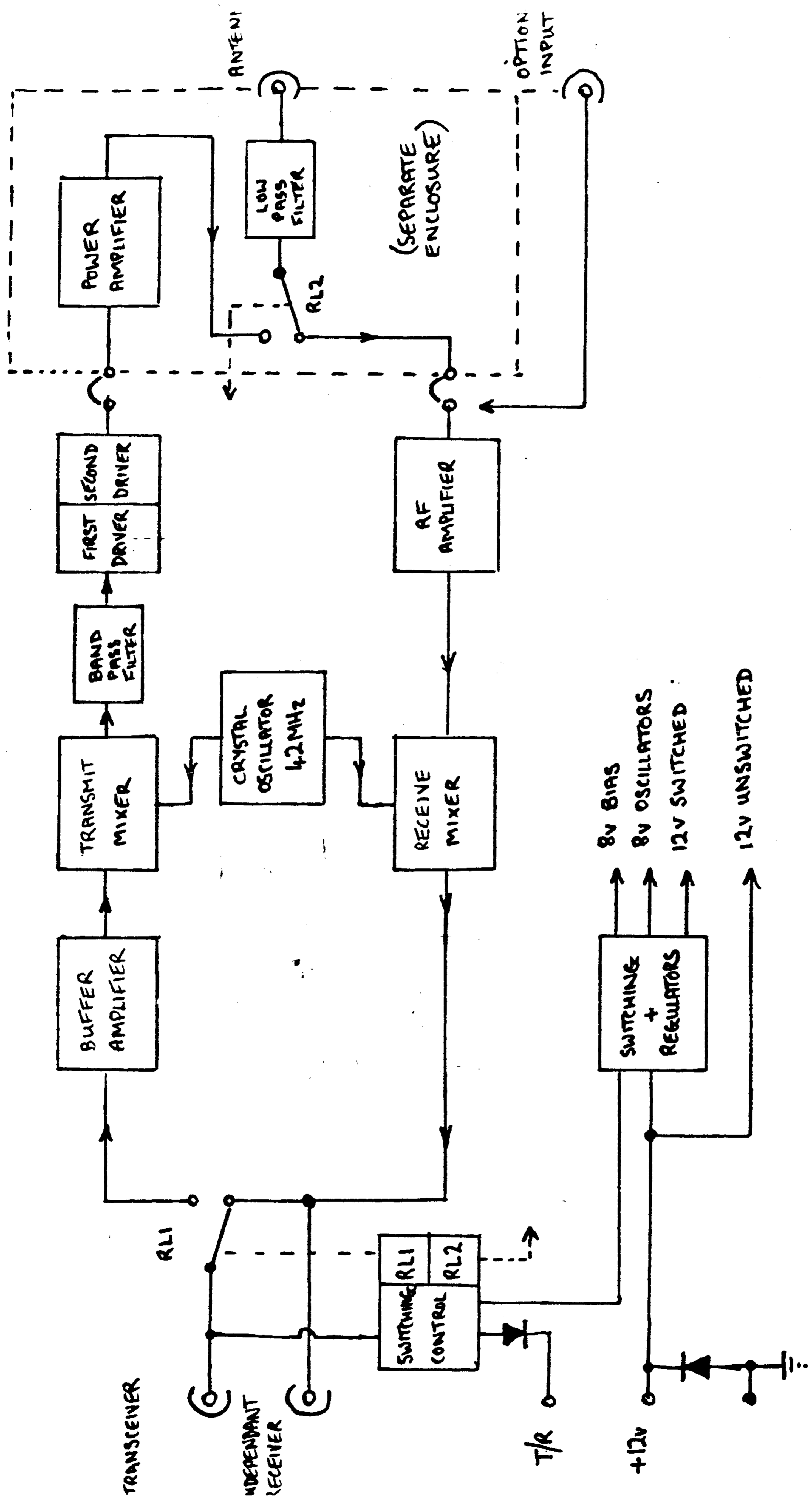
MMT 400/2/3

MMT 70/28 — RX & OSCILLATOR





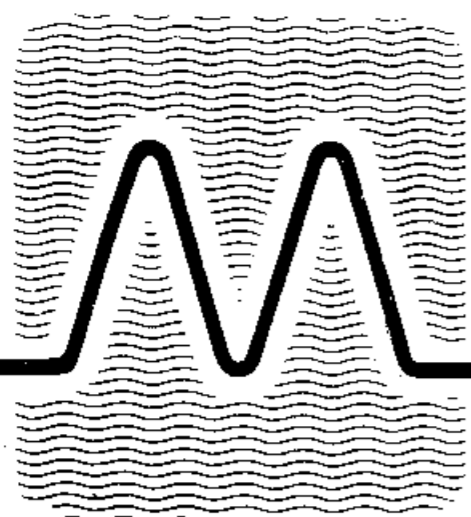
MMT 70/28



RCW 9/81

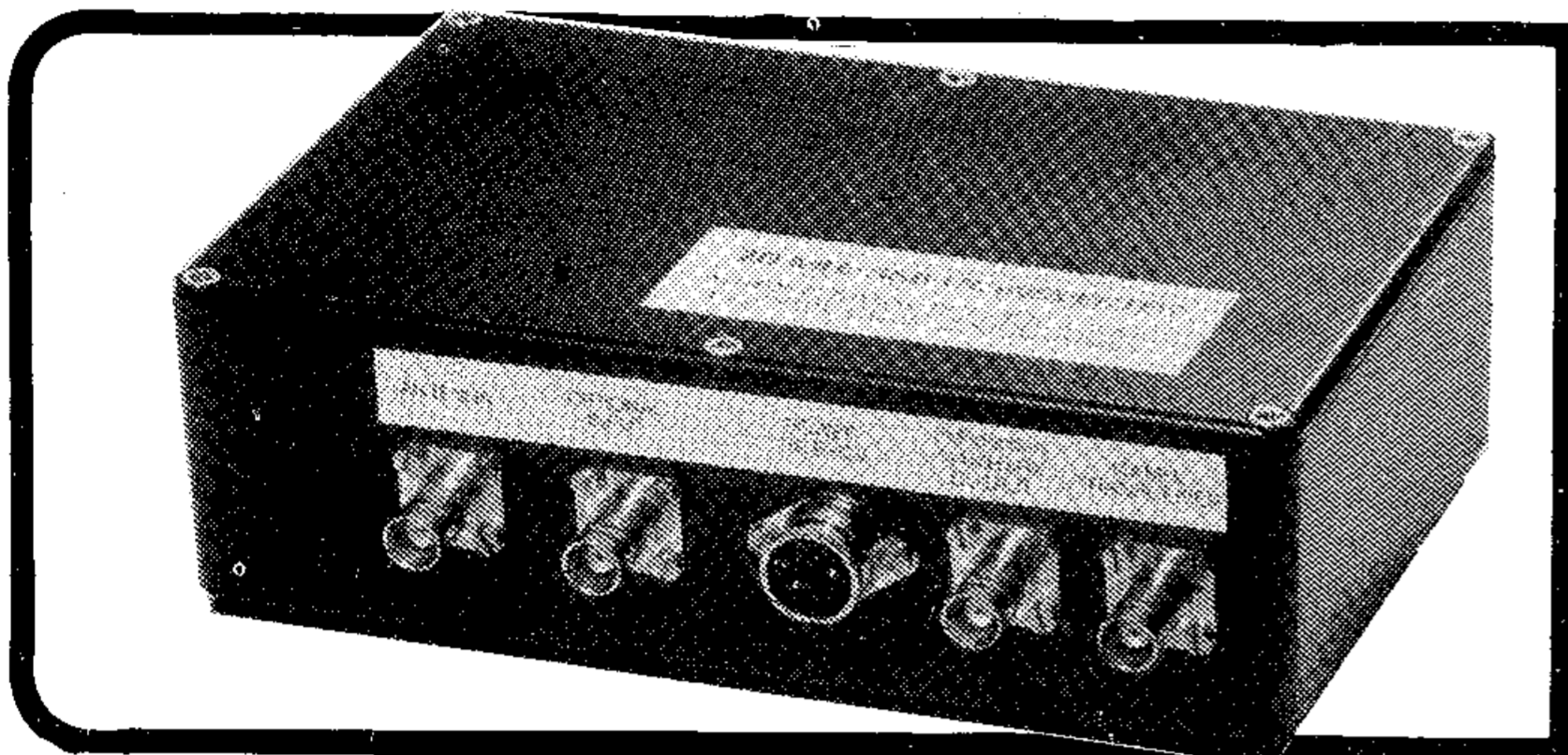






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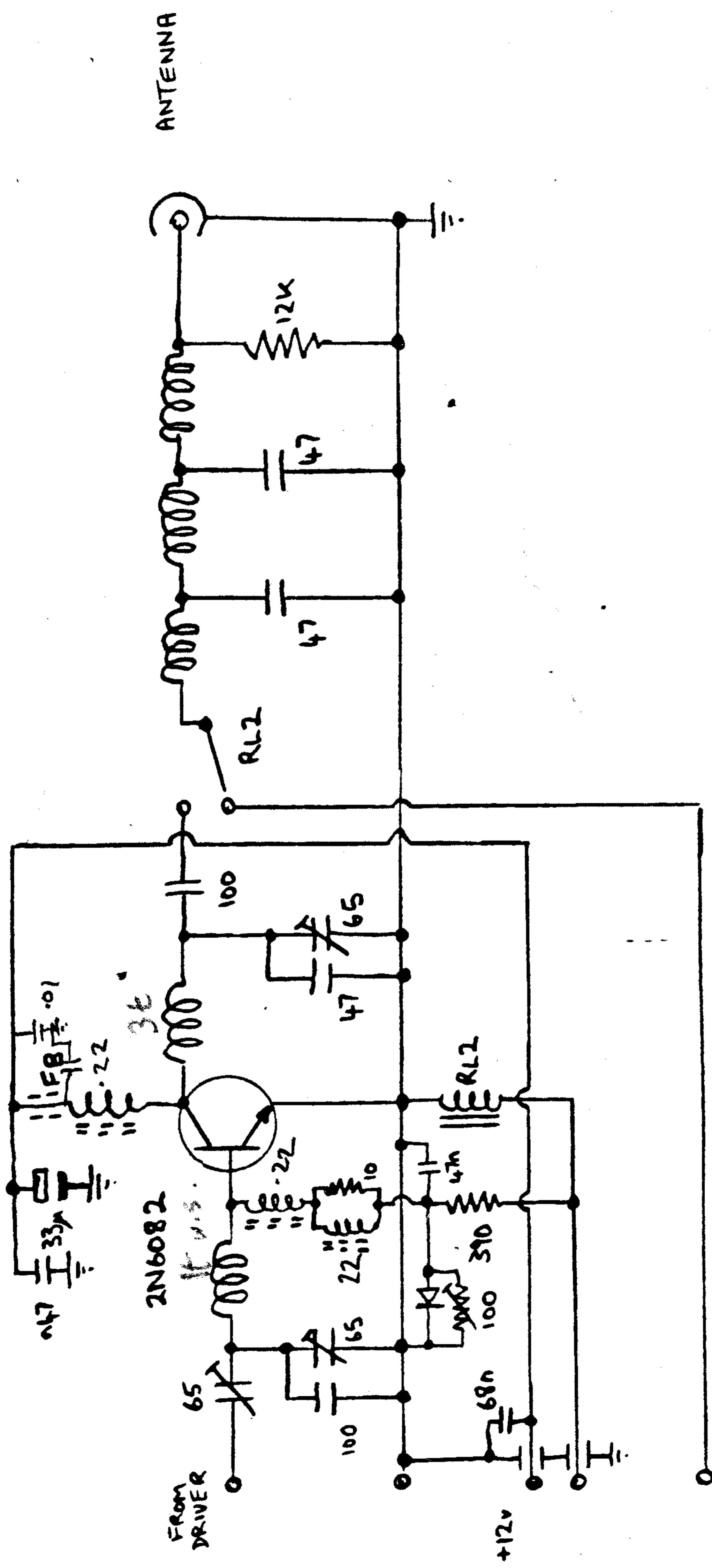
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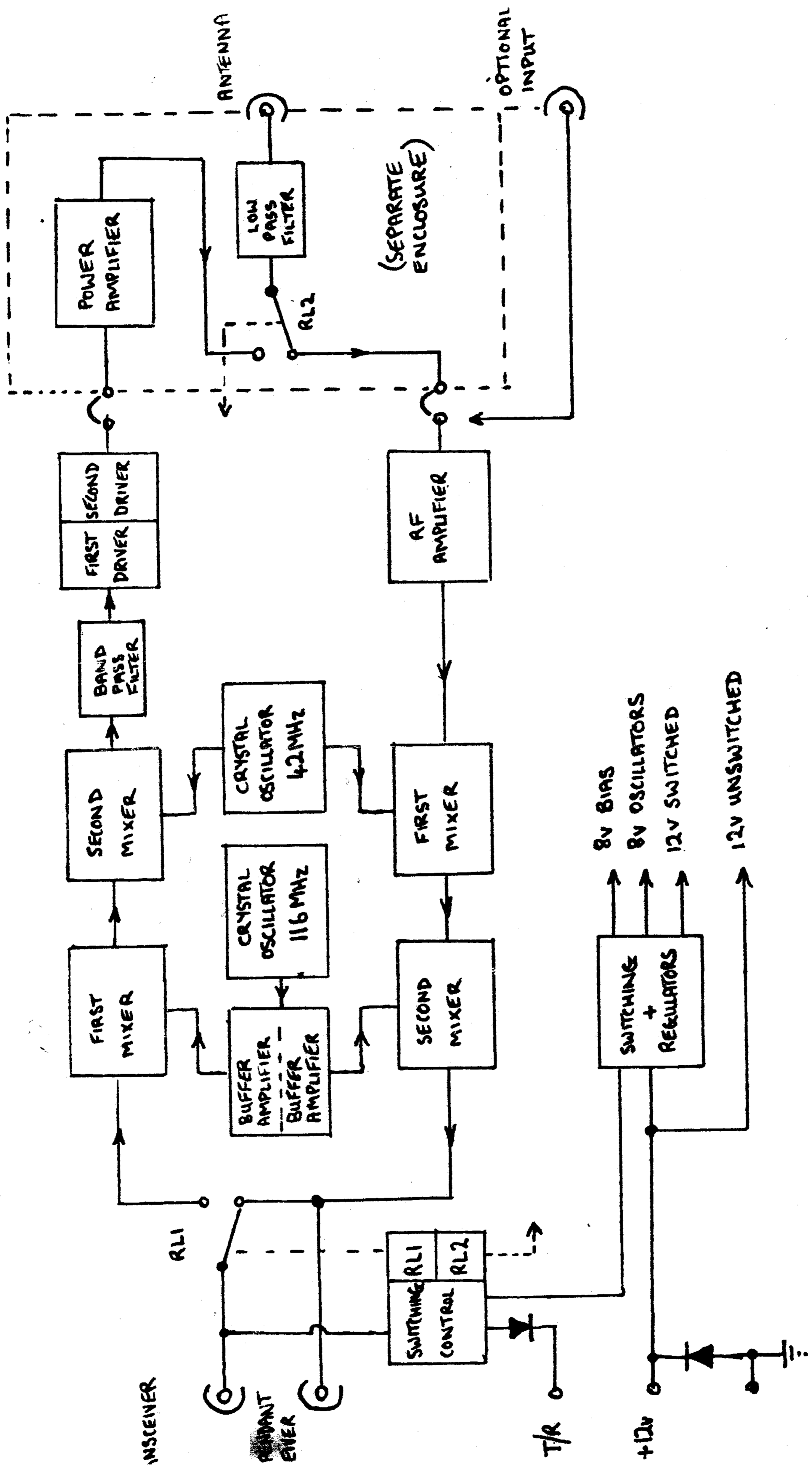


MMT 70/ P.A. SECTION

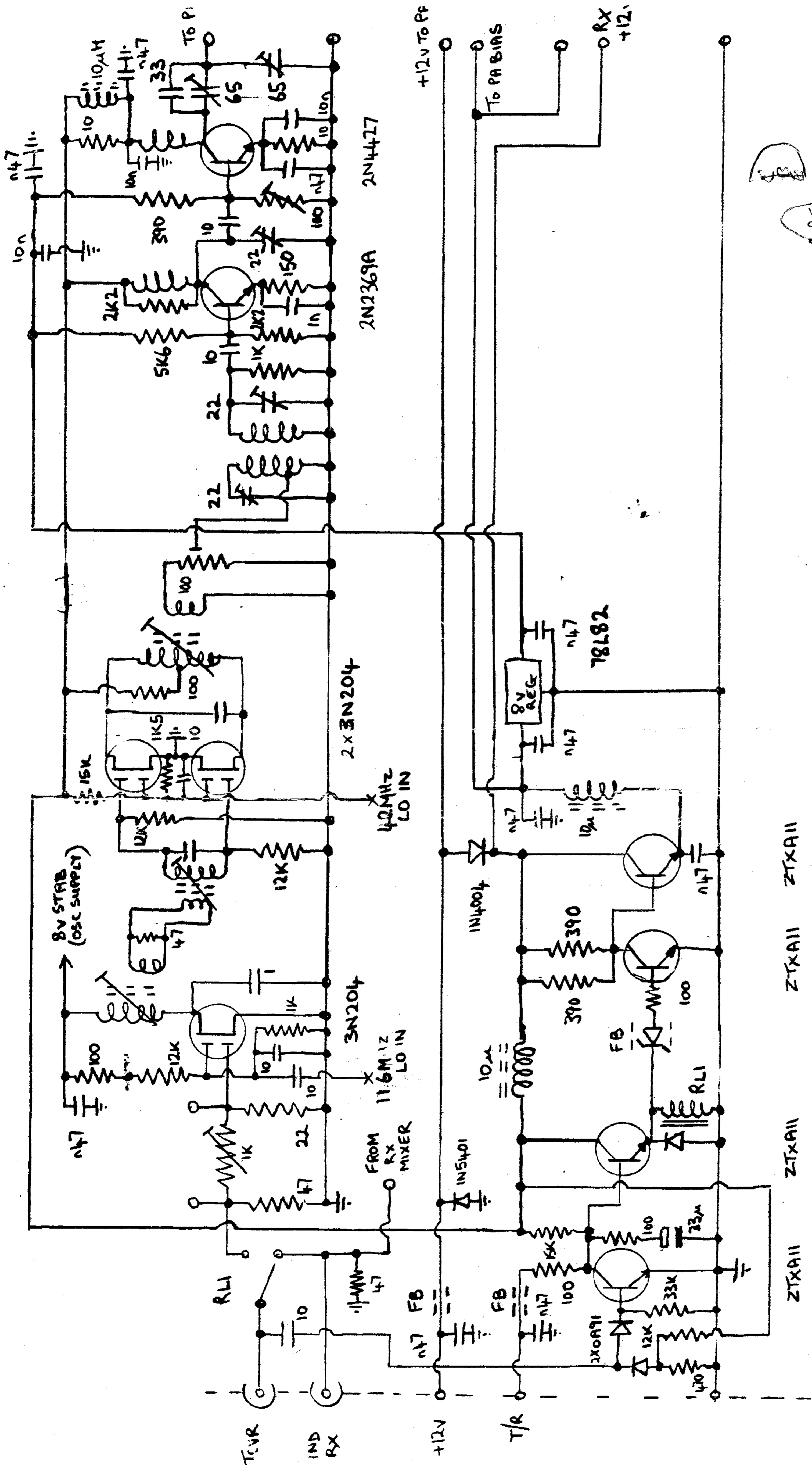


(RCW) 9/81

MMT 70/144



Rev 9/81



MMT 70/144 - SWITCHING & TRANSMIT MIX/DRIVE

RCW  
9/81