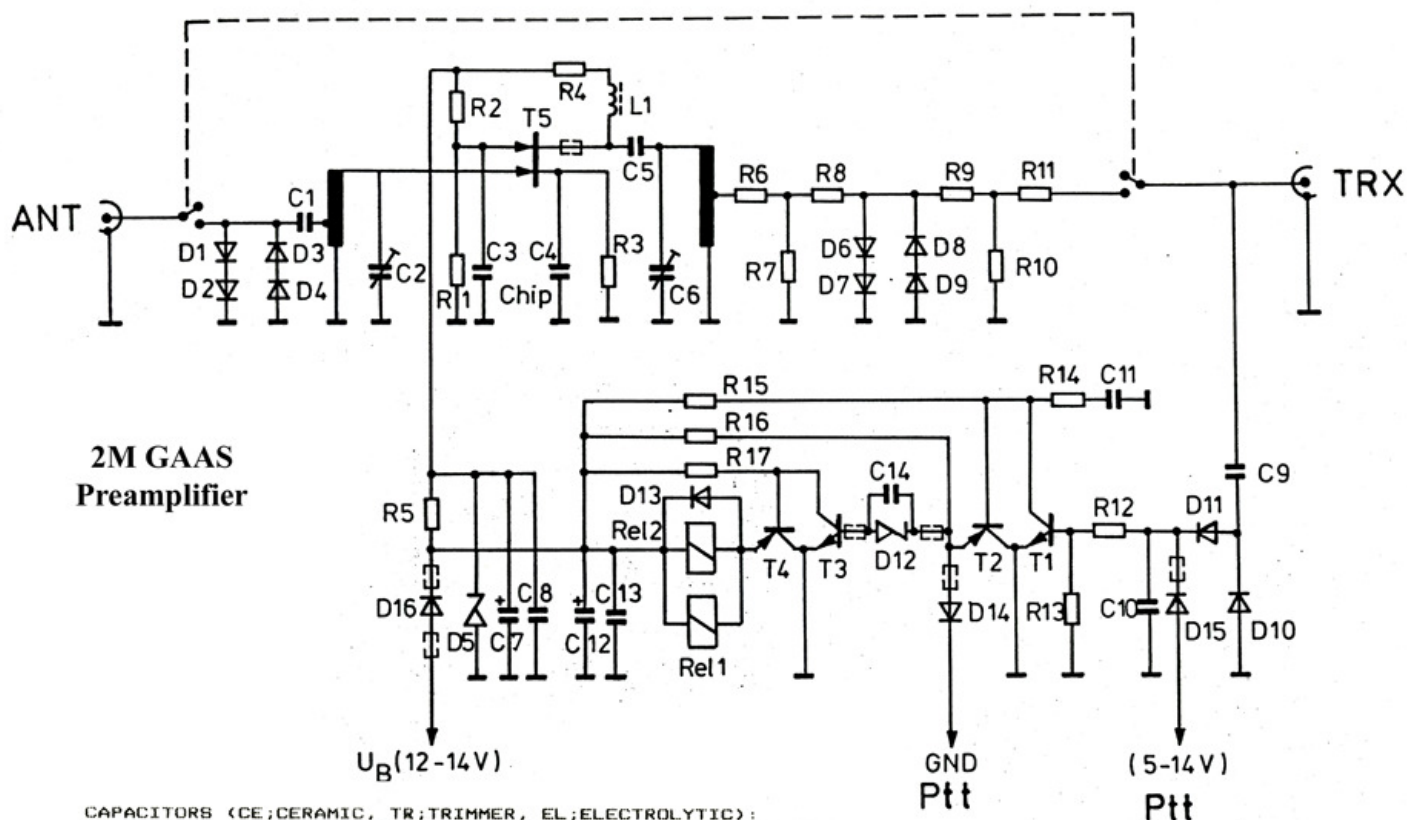


### Technical Specifications

	2 m Pre-amplifier	70 cm Pre-amplifier
N GaAs xxx MAS		
Frequency Range	144 - 146 MHz	430 - 440 MHz
Noise Figure	F < 0.5 dB typ. 0.35 dB	-
N GaAs xxx MA		
Frequency Range	144 - 146 MHz	430 - 440 MHz
Noise Figure	F < 0.8 dB typ. 0.6 dB	F < 1.1 dB typ. 0.9 dB
US-Version		
Frequency Range	144 - 148 MHz	430 - 450 MHz
Noise Figure	F < 0.7 dB typ. 0.5 dB	F < 1.1 dB typ. 0.8 dB
Gain	17 - 20 dB	16 - 19 dB
Max. Switchable Power (PEP) VOX Operation	150 W	150 W
Max. Transfer Power	750 W	350 W
Intercept Point IP 3 (related to input)	-3 dBm	-3 dBm
Stability Factor K *	> 5 absolute stable	> 2
Insertion Loss IL	< 0.15 dB	< 0.25 dB
Current Consumption (at U <sub>b</sub> = 13.8 V)	100 mA	180 mA
Connector	Type N	Type N
Dimensions (mm)	80 x 125 x 57	80 x 125 x 57
Diecast Box	waterproof according to IP 65	
Clamps for mast mount	up to 63 mm	up to 63 mm
$* K = \frac{1 +  \Delta S ^2 -  S_{11} ^2 -  S_{22} ^2}{2  S_{12} \times S_{21} }$		
<p>U<sub>b</sub> = supply voltage 12 - 14 V GND = supply minus PTT = T/R switching</p>		



**2M GAAS  
Pre-amplifier**

CAPACITORS (CE; CERAMIC, TR; TRIMMER, EL; ELECTROLYTIC):  
 C1; 1NF CE, C2; TR, C3; 1NF CHIP, C4; 1NF CHIP, C5; 100P CE, C6; TR,  
 C7; 47U/16V EL, C8; 0,1U CE, C9; 2,7P CE, C10; 10N CE, C11; 10U/16V  
 TANTAL, C12; 47U/16V EL, C13; 0,1U CE

TRANSISTORS  
 T1, T3; BC337, T2, T4; BC327, T5; N-CHANNEL GAAS-SCHOTTKY-GATE-  
 TETRODE (FOR EXAMPLE TEXAS S3030)

SCHOTTKY DIODES  
 D1-D4 + D6-D11 ; BAT41

ZENER DIODES  
 D5; ZPD15, D12; ZPDBV2

DIODES  
 D13; 1N4148, D14-D16; 1N4004

METAL-FILM-RESISTORS RG207  
 R1; 6K $\Omega$ , R2; 10K $\Omega$ , R3; 180 $\Omega$ , R4; 100 $\Omega$ , R5; 180 $\Omega$ , R6; 10 $\Omega$ , R7; 120 $\Omega$ ,  
 R8; 10 $\Omega$ , R12; 1K $\Omega$ , R13; 100K $\Omega$ , R14; 100 $\Omega$ , R15; 150K $\Omega$ , R16; 1K $\Omega$ , R17; 4K7

HOT-MOULDED-RESISTORS  
 R9; 10 $\Omega$ , R10; 120 $\Omega$ , R11; 10 $\Omega$

FERRITE BEADS  
 VALVO 43 12 020 3106

RELAYS  
 REL1 + REL2 ; SPECIAL LANDWEHR ELECTRONIC