

## HIGH SEAS AND OVERSEAS RADIO

### LINCOMPEX MARK II

#### PARTS LIST

#### TRANSMIT AND RECEIVE UNITS

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		1. GENERAL	
		1.01 This section contains a list of parts which are used in the Lincompex Mark II transmit and receive units.	
		1.02 The listing shows the part in relation to the module and submodule in which the part is contained.	
		2. ORDERING INFORMATION	
		2.01 When ordering replacement parts, specify all information pertaining to the part, or parts, as referenced in this section.	
		3. PARTS LIST	
		3.01 The information in this list contains the module or submodule, the part designation, a brief identifying description, the manufacturer, and an identifying reference number. In instances where the same unit is used in both transmit and receive units, the listing is made only once. References are made to indicate units in multiple locations.	

## COMPRESSOR AND OSCILLATOR MODULE

## TRANSMIT UNIT

DESIG	COMPONENT	REQUIREMENT	MANUFACTURER	REF NO.
<b>Miscellaneous</b>				
PCB1	Comp Vlsr — Assy B			EDB910747 — Assy B
PCB2	65-dB Ampl			EDB910741
PCB3	Compr Vlsr — Assy B			EDB910747 — Assy B
PCB4	65-dB Ampl			EDB910741
PCB5	Transmit Limiter			EDB910759
PCB6	Oscillator			EDB910777 (Serial 001-100)
PCB6	Oscillator			EDB910958 (Serial 101 Up)
PCB7	Log Ampl			EDB910771
PCB8	Rectifier — Assy A			EDB910753 — Assy A
PCB9	25-dB Ampl			EDB910734
PCB10	65-dB Ampl			EDB910741
PCB11	Compr Vlsr — Assy A			EDB910747 — Assy A
PCB12	Splitter			EDB910765
T1	Transformer			EDB998192
T2	Transformer			EDB997970
AT1	Attenuator	32 dB, 600 $\Omega$	Welwyn 54/102 (bal)	290003
PLA	24-way Plug		McMurdo Red Range RP24	422003
R1	Resistor*	100 $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5850
R2	Resistor	100 $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5850
R3	Resistor	100 $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5850
R4	Resistor	120 $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5852
R5	Resistor	33k $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5910
Select ON	Resistor	36k $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5911
Test	Resistor	39k $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5912
(Serial	Resistor	43k $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5913
001-100)	Resistor	47k $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5914
	Resistor	51k $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5915
	Resistor	56k $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5916
	Resistor	62k $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5917

\* Unless otherwise stated, all resistors are Multiple Rated Oxide to DEF 5115-1 Style RFG5-E.

COMPRESSOR AND OSCILLATOR MODULE

TRANSMIT UNIT

DESIG	COMPONENT	REQUIREMENT	MANUFACTURER	REF NO.
	Resistor	68kΩ ±1, 1/2W	Electrosil TR5	5905-99-013-5918
	Resistor	75kΩ ±1, 1/2W	Electrosil TR5	5905-99-013-5919
	Resistor	82kΩ ±1, 1/2W	Electrosil TR5	5905-99-013-5920
	Resistor	91kΩ ±1, 1/2W	Electrosil TR5	5905-99-013-5921
	Resistor	100kΩ ±1, 1/2W	Electrosil TR5	5905-99-013-5922
	Resistor	110kΩ ±1, 1/2W	Electrosil TR5	5905-99-013-5923
	Resistor	120kΩ ±1, 1/2W	Electrosil TR5	5905-99-013-5924
TP1 } TP2 } TP3 } TP4 } TP5 } TP6 } TP7 } TP8 } TP9 } TP10 }	Test Socket		Elcom DRG 59704	424001
<b>Splitter</b>				
R1	Resistor*	620Ω ±5, 1/2W	Electrosil TR5	5905-99-013-6111
R2	Resistor	10kΩ ±5, 1/2W	Electrosil TR5	5905-99-013-6140
R3	Resistor	2.2kΩ ±5, 1/2W	Electrosil TR5	5905-99-013-6124
R4	Resistor	1.1kΩ ±5, 1/2W	Electrosil TR5	5905-99-013-6117
R5	Resistor	56kΩ ±5, 1/2W	Electrosil TR5	5905-99-013-6158
R6	Resistor	620Ω ±5, 1/2W	Electrosil TR5	5905-99-013-6111
R7	Resistor	240Ω ±5, 1/2W	Electrosil TR5	5905-00-013-6101
R8	Resistor	100Ω ±5, 1/2W	Electrosil TR5	5905-99-013-6092
R9	Resistor	560Ω ±5, 1/2W	Electrosil TR5	5905-99-013-6110
R10	Resistor	560Ω ±5, 1/2W	Electrosil TR5	5905-99-013-6110
R11	Resistor	100Ω ±5, 1/2W	Electrosil TR5	5905-99-013-6092
R12	Resistor	560Ω ±5, 1/2W	Electrosil TR5	5905-99-013-6110
R13	Resistor	560Ω ±5, 1/2W	Electrosil TR5	5905-99-013-6110
R14	Resistor	82Ω ±5, 1/2W	Electrosil TR5	5905-99-013-6090
C1	Capacitor, Solid Tantalum	47μF, ±20, 20V	STC 472-LWA-402-GA	5910-99-013-0500

\* Unless otherwise stated, all resistors are Multiple Rated Oxide to DEF 5115-1 Style RFG5-E.

## COMPRESSOR AND OSCILLATOR MODULE

## TRANSMIT UNIT

DESIG	COMPONENT	REQUIREMENT	MANUFACTURER	REF NO.
C2	Capacitor, Metallized Paper	0.0002 $\mu$ F $\pm$ 20, 750Vdc	Hunts BM2KV Type W97	5910-99-012-0127
C3	Capacitor, Solid Tantalum	56 $\mu$ F $\pm$ 10, 6V	STC 472-LWA-401-CBA	163083
C4	Capacitor, Solid Tantalum	56 $\mu$ F $\pm$ 20, 35V	STC 472-LWA-403-KG	163074
C5	Capacitor, Solid Tantalum	22 $\mu$ F $\pm$ 20, 15V	STC 472-LWA-401-FA	5910-99-013-0493
C6	Capacitor, Solid Tantalum	56 $\mu$ F $\pm$ 20, 35V	STC 472-LWA-403-KG	163074
C7	Capacitor, Solid Tantalum	22 $\mu$ F $\pm$ 20, 15V	STC 472-LWA-401-FA	5910-99-013-0493
VT1	Transistor		Mullard BC107	335028
VT2	Transistor		Mullard BC107	335028
VT3	Transistor		Mullard BC107	335028
T1	Transformer	1:1		5950-99-580-5609
<b>Compr Vlsr</b>				
R1	Resistor*	1.6k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6121
R2	Resistor	470 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6108
R3	Resistor	470 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6108
R4	Resistor	1k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6116
R5	Resistor (Assy B)	2.7k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6126
R6	Resistor	470 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6108
C1	Capacitor, Solid Tantalum	15 $\mu$ F $\pm$ 10, 35V	STC 472-LWA-402-KB	5910-99-013-0419
C2	Capacitor, Solid Tantalum	47 $\mu$ F $\pm$ 20, 35V	STC 472-LWA-403-KA	5910-99-013-0515
VT1	Dual Transistor		Texas 3N79	336014
RV1	Trimpot	10 $\Omega$ $\pm$ 10, 1/4W	Painton Bourns Type 200P/1/100	213021
RV2	Trimpot (Assy B)	1k $\Omega$ $\pm$ 10, 1/4W	Painton Bourns Type 200P/1/102	213027
MR1	Silicon Diode (Assy B)	1/4W	Texas 1N914	CV 7367
T1	Transformer			T1916, EDB998169
T2	Transformer			T1917, EDB998172

\* Unless otherwise stated, all resistors are Multiple Rated Oxide to DEF 5115-1 Style RFG5-E.

COMPRESSOR AND OSCILLATOR MODULE

TRANSMIT UNIT

DESIG	COMPONENT	REQUIREMENT	MANUFACTURER	REF NO.
<b>65-dB Ampl</b>				
R1	Resistor*	3.9kΩ ±5, 1/2W	Electrosil TR5	5905-99-013-6130
R2	Resistor	220kΩ ±5, 1/2W	Electrosil TR5	5905-99-013-6172
R3	Resistor	5.6kΩ ±5, 1/2W	Electrosil TR5	5905-99-013-6134
R4	Resistor	47Ω ±5, 1/2W	Electrosil TR5	5905-99-013-6084
R5	Resistor	820Ω ±5, 1/2W	Electrosil TR5	5905-99-013-6114
R6	Resistor	4.7kΩ ±5, 1/2W	Electrosil TR5	5905-99-013-6132
R7	Resistor	15kΩ ±5, 1/2W	Electrosil TR5	5905-99-013-6144
R8	Resistor	5.6kΩ ±5, 1/2W	Electrosil TR5	5905-99-013-6134
R9	Resistor	47Ω ±5, 1/2W	Electrosil TR5	5905-99-013-6084
R10	Resistor	1.5kΩ ±5, 1/2W	Electrosil TR5	5905-99-013-6120
R11	Resistor	1kΩ ±5, 1/2W	Electrosil TR5	5905-99-013-6116
R12	Resistor	3.3kΩ ±5, 1/2W	Electrosil TR5	5905-99-013-6128
R13	Resistor	2.2kΩ ±5, 1/2W	Electrosil TR5	5905-99-013-6124
R14	Resistor	620Ω ±5, 1/2W	Electrosil TR5	5905-99-013-6111
R15	Resistor	27Ω ±5, 1/2W	Electrosil TR5	5905-99-013-6078
R16	Resistor	470Ω ±5, 1/2W	Electrosil TR5	5905-99-013-6108
R17	Resistor	1kΩ ±5, 1/2W	Electrosil TR5	5905-99-013-6116
C1	Capacitor, Solid Tantalum	10μF ±20, 20V	STC 472-LWA-401-GA	5910-99-013-0497
C2	Capacitor, Solid Tantalum	47μF ±20, 6V	STC 472-LWA-401-GA	5910-99-013-0485
C3	Capacitor, Solid Tantalum	68μF ±20, 15V	STC 472-LWA-402-FA	5910-99-013-0494
C4	Capacitor, Mica Dielectric	1500pF ±5, 350V	Lemco Inter Service, Style CMMIG	5910-99-012-4704
C5	Capacitor, Solid Tantalum	22μF ±20, 15V	STC 472-LWA-401-FA	5910-99-013-0493
C6	Capacitor, Solid Tantalum	10μF ±20, 20V	STC 472-LWA-401-GA	5910-99-013-0497
C7	Capacitor, Solid Tantalum	150μF ±20, 6V	STC 472-LWA-402-CB	5910-99-013-0486
C8	Capacitor, Solid Tantalum	10μF ±20, 20V	STC 472-LWA-401-GA	5910-99-013-0497
C9	Capacitor, Solid Tantalum	10μF ±20, 20V	STC 472-LWA-401-GA	5910-99-013-0497
C10	Capacitor, Solid Tantalum	150μF ±20, 6V	STC 472-LWA-402-CB	5910-99-013-0486
C11	Capacitor, Solid Tantalum	68μF ±20, 15V	STC 472-LWA-402-FA	5910-99-013-0494
VT1	Transistor		Mullard BC109	335026
VT2	Transistor		Mullard BC109	335026
VT3	Transistor		Mullard BC109	335026

\* Unless otherwise stated, all resistors are Multiple Rated Oxide to DEF 5115-1 Style RFG5-E.

## COMPRESSOR AND OSCILLATOR MODULE

## TRANSMIT UNIT

DESIG	COMPONENT	REQUIREMENT	MANUFACTURER	REF NO.
<b>25-dB Ampl</b>				
R1	Resistor*	1.2k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6118
R2	Resistor	330 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6104
R3	Resistor	47 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6084
R4	Resistor	2.7k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6126
R5	Resistor	2.7k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6126
R6	Resistor	220 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6100
R7	Resistor	27 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6078
R8	Resistor	390 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6106
R9	Resistor	1k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6116
R10	Resistor	3.3k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6128
R11	Resistor	1k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6116
R12	Resistor	1.8k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6128
R13	Resistor	47 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6084
R14	Resistor	120 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6094
R15	Resistor	270 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6102
R16	Resistor	180 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6098
C1	Capacitor, Solid Tantalum	2.2 $\mu$ F $\pm$ 20, 20V	STC 472-LWA-400-GA	5910-99-013-0496
C2	Capacitor, Solid Tantalum	22 $\mu$ F $\pm$ 20, 15V	STC 472-LWA-401-FA	5910-99-013-0493
C3	Capacitor, Solid Tantalum	47 $\mu$ F $\pm$ 20, 6V	STC 472-LWA-401-CA	5910-99-013-0485
C4	Capacitor, Solid Tantalum	10 $\mu$ F $\pm$ 20, 20V	STC 472-LWA-401-GA	5910-99-013-0497
C5	Capacitor, Polyester Film	.01 $\mu$ F $\pm$ 10, 250V	Mullard C281AB/A10K	5910-99-953-5599
C6	Capacitor, Solid Tantalum	150 $\mu$ F $\pm$ 20, 6V	STC 472-LWA-402-CB	5910-99-013-0486
C7	Capacitor, Solid Tantalum	0.47 $\mu$ F $\pm$ 20, 20V	STC 472-LWA-400-KCA	5910-99-013-0409
C8	Capacitor, Solid Tantalum	47 $\mu$ F $\pm$ 20, 35V	STC 472-LWA-403-KA	5910-99-013-0515
VT1	Transistor		Mullard BC107	335028
VT2	Transistor		Mullard BC107	335028
RV1	Trimpot	1k $\Omega$ $\pm$ 10, 1/4W	Painton Bourns Type 200/P/102	213027
<b>Rectifier</b>				
R1	Resistor*	180 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6098
R2	Resistor	110 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6093

\* Unless otherwise stated, all resistors are Multiple Rated Oxide to DEF 5115-1 Style RFG5-E.

COMPRESSOR AND OSCILLATOR MODULE

TRANSMIT UNIT

DESIG	COMPONENT	REQUIREMENT	MANUFACTURER	REF NO.
R3	Resistor	220Ω ±5, 1/2W	Electrosil TR5	5905-99-013-6100
R4	Resistor	820Ω ±5, 1/2W	Electrosil TR5	5905-99-013-6114
R5	Resistor	1kΩ ±5, 1/2W	Electrosil TR5	5905-99-013-6116
R6	Resistor (Assy A)	1kΩ ±5, 1/2W	Electrosil TR5	5905-99-013-6116
R7	Resistor (Assy A)	1kΩ ±5, 1/2W	Electrosil TR5	5905-99-013-6116
R8	Resistor (Assy A)	1.2kΩ ±5, 1/2W	Electrosil TR5	5905-99-013-6118
R9	Resistor (Assy B)	220Ω ±5, 1/2W	Electrosil TR5	5905-99-013-6100
MR1	Silicon Diode	1/4W	Texas 1N914	CV7367
MR2	Silicon Diode	1/4W	Texas 1N914	CV7367
MR3	Voltage Regulator Diode	400 mW	Mullard BZY88-C3Y3	CV7138
RV1	Trimpot	500Ω ±10, 1/4W	Painton Bourns Type 200P/1/501	213026
VT1	Transistor		Mullard BC107	335028
VT2	Transistor (Assy A)		Mullard BC107	335028
VT3	Transistor (Assy A)		Mullard BC107	335028
VT4	Transistor (Assy A)		Mullard BC107	335028
TH1	Thermistor	220Ω ±5 @ 20°C	STC KR221C	280007
C1	Capacitor (Assy A)	.047μF ±10, 250V	Mullard C281AB/A47K	5910-99-954-7527
C1	Capacitor (Assy B)	.005μF ±20, 250V	Hunts BM12KV Type W97	5910-99-012-0112
<b>Log Ampl</b>				
R1	Resistor*	220Ω ±5, 1/2W	Electrosil TR5	5905-99-013-6100
R2	Resistor	8.2kΩ ±1, 1/2W	Electrosil TR5	5905-99-013-5896
R3	Resistor	8.2kΩ ±1, 1/2W	Electrosil TR5	5905-99-013-5896
R4	Resistor	5.1kΩ ±1, 1/2W	Electrosil TR5	5905-99-013-5891
R5	Resistor	2.4kΩ ±1, 1/2W	Electrosil TR5	5905-99-013-5883
R6	Resistor	1.6kΩ ±1, 1/2W	Electrosil TR5	5905-99-013-5879
R7	Resistor	820Ω ±1, 1/2W	Electrosil TR5	5905-99-013-5872
R8	Resistor	27Ω ±1, 1/2W	Electrosil TR5	5905-99-013-5860
R10	Resistor	47Ω ±1, 1/2W	Electrosil TR5	5905-99-013-5842

\* Unless otherwise stated, all resistors are Multiple Rated Oxide to DEF 5115-1 Style RFG5-E.

## COMPRESSOR AND OSCILLATOR MODULE

## TRANSMIT UNIT

DESIG	COMPONENT	REQUIREMENT	MANUFACTURER	REF NO.
R11	Resistor	$22\Omega \pm 1, 1/2W$	Electrosil TR5	5905-99-013-5834
R12	Resistor	$22\Omega \pm 1, 1/2W$	Electrosil TR5	5905-99-013-5834
R13	Resistor	$22\Omega \pm 1, 1/2W$	Electrosil TR5	5905-99-013-5834
R14	Resistor	$18\Omega \pm 1, 1/2W$	Electrosil TR5	5905-99-013-5832
R15	Resistor	$18\Omega \pm 1, 1/2W$	Electrosil TR5	5905-99-013-5832
R16	Resistor	$22\Omega \pm 1, 1/2W$	Electrosil TR5	5905-99-013-5834
R17	Resistor	$2k\Omega \pm 5, 1/2W$	Electrosil TR5	5905-99-013-6123
R18	Resistor	$3.3k\Omega \pm 5, 1/2W$	Electrosil TR5	5905-99-013-6128
R19	Resistor	$2.7k\Omega \pm 5, 1/2W$	Electrosil TR5	5905-99-013-6126
R9	Resistor†	$100 \pm 5, 2.5W$	Welwyn W21	5905-99-014-0537
C1	Capacitor, Solid Tantalum	$27\mu F \pm 10, 10V$	STC 472-LWA-401-EEA	5910-99-013-0576
VT1	Transistor		Mullard BC107	335028
VT2	Transistor		Mullard BC107	335028
VT3	Transistor		Mullard BC107	335028
VT4	Transistor		Mullard BC107	335028
RV1	Trimpot	$500\Omega \pm 10, 1/4W$	Painton Bourns Type 200P/1/501	213026
TH1	Thermistor	$200 \pm 5 @ 20^{\circ}C$	STC G22	280006
TH2	Thermistor	$200 \pm 5 @ 20^{\circ}C$	STC G22	280006
MR1	Silicon Diode	1/4W	Texas 1N914	CV7367
MR2	Silicon Diode	1/4W	Texas 1N914	CV7367
MR3	Silicon Diode	1/4W	Texas 1N914	CV7367
MR4	Silicon Diode	1/4W	Texas 1N914	CV7367
MR5	Silicon Diode	1/4W	Texas 1N914	CV7367
MR6	Silicon Diode	1/4W	Texas 1N914	CV7367
MR7	Voltage Regulator Diode	400 mW	Mullard BZY88-C6V2	CV7102
MR8	Voltage Regulator Diode	400 mW	Mullard BZY88-C4V7	CV7099
MR9	Voltage Regulator Diode	400 mW	Mullard BZY88-C4V7	CV7099

† Resistor wire wound to DEF 5115-2 Pattern RFH3-25.

COMPRESSOR AND OSCILLATOR MODULE

TRANSMIT UNIT

DESIG	COMPONENT	REQUIREMENT	MANUFACTURER	REF NO.
<b>FM Oscillator</b>				
R1	Resistor*	3.3k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6128
R2	Resistor	560 $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5868
R3	Resistor	1.5k $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5878
R4	Resistor	1.1k $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5875
R5	Resistor	200 $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5857
R6	Resistor	360 $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5863
R7	Resistor (Serial 001-100)	56k $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5916
R8	Resistor	510 $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5867
R9	Resistor	1.1k $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5875
R13	Resistor	43 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6083
C1	Capacitor, Solid Tantalum	4.7 $\mu$ F $\pm$ 10, 35V	STC 472-LWA-401-KBA	5910-99-013-0414
C2	Capacitor	.047 $\mu$ F $\pm$ 1, 50V	J & M C204F	
C3	Capacitor	.1 $\mu$ F $\pm$ 1, 50V	J & M C33F	
C4	Capacitor	.047 $\mu$ F $\pm$ 1, 50V	J & M C204F	
C5	Capacitor, Solid Tantalum	10 $\mu$ F $\pm$ 20, 20V	STC 472-LWA-401-GA	5910-99-013-0497
C6	Capacitor, Solid Tantalum	47 $\mu$ F $\pm$ 20, 35V	STC 472-LWA-403-KA	5910-99-013-0515
RV1	Trimpot	1k $\Omega$ $\pm$ 10, 1/4W	Painton Bourns Type 200P/1/102	213027
RV2	Trimpot (Serial 101 up)	50k $\Omega$ $\pm$ 10, 1/4W	Painton Bourns Type 200P/1/503	213033
VT1	Transistor		Mullard BC107	335028
VT2	Transistor		Mullard BC107	335028
VT3	Transistor		Mullard BC107	335028
VT4	Transistor		Mullard BC107	335028
VT5	Transistor		Mullard BC107	335028
VT6	Transistor		Mullard BC107	335028
VT7	Transistor		Mullard BC107	335028
<b>Transmit Limiter</b>				
R1	Resistor*	390 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6106

\* Unless otherwise stated, all resistors are Multiple Rated Oxide to DEF 5115-1 Style RFG5-E.

## COMPRESSOR AND OSCILLATOR MODULE

## TRANSMIT UNIT

DESIG	COMPONENT	REQUIREMENT	MANUFACTURER	REF NO.
R2	Resistor	220 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6100
R3	Resistor	2.2k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6124
R4	Resistor	4.7k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6132
R5	Resistor	100 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6092
C1	Capacitor, Solid Tantalum	.15 $\mu$ F $\pm$ 10, 35V	STC 472-LWA-400-KR	163037
C2	Capacitor, Solid Tantalum	3.3 $\mu$ F $\pm$ 20, 35V	STC 472-LWA-401-KC	5910-99-013-0508
C3	Capacitor, Solid Tantalum	10 $\mu$ F $\pm$ 20, 20V	STC 472-LWA-401-GA	5910-99-013-0497
MR1	Silicon Diode	1/4W	Texas 1N914	CV7367
MR2	Silicon Diode	1/4W	Texas 1N914	CV7367
RV1	Trimpot	10k $\Omega$ $\pm$ 10, 1/4W	Painton Bourns Type 200P/1/103	213030
RV2	Trimpot	5k $\Omega$ $\pm$ 10, 1/4W	Painton Bourns Type 200P/1/502	213029

## MODEM MODULE

## TRANSMIT UNIT

DESIG	COMPONENT	REQUIREMENT	MANUFACTURER	REF NO.
TP1 } TP2 } TP3 } TP4 }	Test Point		Elcom DRG 59704	424001
	Modem Assembly		Mullard Type YL2109 or Mullard Type YL2109/01 or Mullard Type YL2109/02	EDB910967 EDB910968 EDA910969
PLA	24-way Plug		McMurdo Red Range RP24	424003
R1	Resistor*	10 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6068

\* Unless otherwise stated, all resistors are Multiple Rated Oxide to DEF 5115-1 Style RFG5-E.

TRANSMIT UNIT

DESIG	COMPONENT	REQUIREMENT	MANUFACTURER	REF NO.
C1	Capacitor, Metallized Paper	.005 $\mu$ F $\pm$ 20, 250V	Hunts BML2KV Type W97	5905-99-012-0112
MR1	Silicon Diode	1/4W	Texas 1N914	CV7367

DELAY MODULE

TRANSMIT UNIT

DESIG	COMPONENT	REQUIREMENT	MANUFACTURER	REF NO.
TP1 } TP2 } TP3 } TP4 } TP5 }	Test Point		Elcom DRG 59704	424001
	Delay Assembly		Mullard YL2108	EDA908796
PLA	24-way Plug		McMurdo Red Range RP24	424003

LOW-PASS FILTER MODULE

TRANSMIT UNIT

DESIG	COMPONENT	REQUIREMENT	MANUFACTURER	REF NO.
R1	Resistor*	68 $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5870
R2 } R3 } R4 }	Resistor	5.1k $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5891
T1	Transformer			EDB998189
T2	Transformer			EDB998195
T3	Transformer			EDB998198
T4	Transformer			EDB998189
AT1	Attenuator	8 dB, 600 $\Omega$	Welwyn Type CA2pi (Unbal)	29008

\* Unless otherwise stated, all resistors are Multiple Rated Oxide to DEF 5115-1 Style RFG5-E.

## LOW-PASS FILTER MODULE

## TRANSMIT UNIT

DESIG	COMPONENT	REQUIREMENT	MANUFACTURER	REF NO.
PLA	24-way Plug		McMurdo Red Range RP24	422003
TP1 TP2 TP3 TP4 TP5 TP6 TP7 TP8 TP9 TP10	Test Socket		Elcom DRG 59704	424001
LPF1 LPF2 PCB1 PCB2		LP Filter Assembly LP Filter Assembly 25-dB Amplifier Assembly		
<b>LP Filter Assy</b>				
C1	Capacitor, Polystyrene	64300pF $\pm 1$ , 63V	SEI Type PF	193403
C2	Capacitor, Polystyrene	21400pF $\pm 1$ , 63V	SEI Type PF	193401
C3	Capacitor, Polystyrene	103000pF $\pm 1$ , 63V	SEI Type PF	193405
C4	Capacitor, Polystyrene	147000pF $\pm 1$ , 63V	SEI Type PF	193406
C5	Capacitor, Polystyrene	60800pF $\pm 1$ , 63V	SEI Type PF	193402
C6	Capacitor, Polystyrene	228000pF $\pm 1$ , 63V	SEI Type PF	193407
C7	Capacitor, Polystyrene	75100pF $\pm 1$ , 63V	SEI Type PF	193404
C8	Capacitor, Polystyrene	103000pF $\pm 1$ , 63V	SEI Type PF	193405
C9	Capacitor, Polystyrene	21400pF $\pm 1$ , 63V	SEI Type PF	193401
L1	Inductor	41 - 73 mH		EDB998201
L2	Inductor	20.16 mH		EDB998204
L3	Inductor	14.00 mH		EDB998207
L4	Inductor	21.71 mH		EDB998210
R1	Resistor*	3.3k $\Omega$ $\pm 5$ , 1/2W	Electrosil TR5	5905-99-013-6128

\* Unless otherwise stated, all resistors are Multiple Rated Oxide to DEF 5115-1 Style RFG5-E.

**POWER SUPPLY MODULE**

**TRANSMIT UNIT**

DESIG	COMPONENT	REQUIREMENT	MANUFACTURER	REF NO.
	Power Supply Unit		STC 70010/DAB/Q107	EDA910821
LP1	Lamp	0.04A 28V		6240-99-995-9118
FS1 } FS2 } FS3 } FS4 }	Fuse	1A		5920-99-900-3648
TP1 } TP2 } TP3 } TP4 }	Test Socket		Sealectro SKT 0804	420001

**DISCRIMINATOR AND EXPANDOR MODULE**

**RECEIVE UNIT**

DESIG	COMPONENT	REQUIREMENT	MANUFACTURER	REF NO.
<b>Miscellaneous</b>				
T1	Transformer			EDB998189
AT1	Attenuator	4 dB, 600Ω	Welwyn, Type CA2pi	290001
PLA	24-Way Plug		McMurdo Red Range RP24	422003
TP1 } TP2 } TP3 } TP4 } TP5 } TP6 } TP7 } TP8 }	Test Socket	Elcom DRG 59704		424001

## DISCRIMINATOR AND EXPANDOR MODULE

## RECEIVE UNIT

DESIG	COMPONENT	REQUIREMENT	MANUFACTURER	REF NO.
BPF1	B.P. Filter Assy			EDB910889
PCB1	Splitter Assy			EDB910765
PCB2	Receive Limiter Assy			EDB910919
PCB3	Tone Alarm Assy			EDB910913
PCB4	Discriminator Assy			EDB910870
PCB5	Antilog Ampl Assy			EDB910877
PCB6	Vlstr Dbl Expr Assy			EDB910883
PCB7	25-dB Ampl Assy			EDB910734
PCB8	25-dB Ampl Assy			EDB910734
R1	Resistor*	620 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6111
R2	Resistor	260 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6102
R3	Resistor	1k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6116
R4	Resistor	100 $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5850
R5	Resistor	5.1k $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5891
C1	Capacitor, Solid Tantalum	22 $\mu$ F $\pm$ 20, 15V	STC 472-LWA-401-FA	5910-99-013-0493
C2	Capacitor, Solid Tantalum	0.1 $\mu$ F $\pm$ 10, 35V	STC 472-LWA-400-KWA	5910-99-013-0406
C3	Capacitor, Solid Tantalum	0.47 $\mu$ F $\pm$ 10, 35V	STC 472-LWA-400-KC	5910-99-013-0409
<b>Splitter</b>	Refer to Compressor and Oscillator Module— Transmit Unit			
<b>Bandpass Filter</b>				
C1	Capacitor, Polystyrene	7740pF $\pm$ 1, 125V	SEI Type PF	193302
C2	Capacitor, Polystyrene	37700pF $\pm$ 1, 1,125V	SEI Type PF	193203
C3	Capacitor, Polystyrene	31000pF $\pm$ 1, 1,125V	SEI Type PF	193204
C4	Capacitor, Polystyrene	41110pF $\pm$ 1, 125V	SEI Type PF	193300
C5	Capacitor, Polystyrene	21000pF $\pm$ 1, 125V	SEI Type PF	193191
C6	Capacitor, Polystyrene	18200pF $\pm$ 1, 125V	SEI Type PF	193190
C7	Capacitor, Polystyrene	4670pF $\pm$ 1, 125V	SEI Type PF	193301
C8	Capacitor, Polystyrene	10000pF $\pm$ 1, 125V	SEI Type PF	193189

\* Unless otherwise stated, all resistors are Multiple Rated Oxide to DEF 5115-1 Style RFG5-E.

## DISCRIMINATOR AND EXPANDOR MODULE

## RECEIVE UNIT

DESIG	COMPONENT	REQUIREMENT	MANUFACTURER	REF NO.
L1	Inductor	387.9 mH		EDB 998213
L2	Inductor	97.34 mH		EDB 998216
L3	Inductor	80.05 mH		EDB 998219
L4	Inductor	733.4 mH		EDB 998222
L5	Inductor	165.73 mH		EDB 998225
L6	Inductor	143.7 mH		EDB 998228
L7	Inductor	645.1 mH		EDB 998231
L8	Inductor	2.53 mH - 301.6 mH		EDB 998234
<b>Receive Limiter</b>				
R1	Resistor*	820 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6114
R2	Resistor	15k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6144
R3	Resistor	2.7k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6126
R4	Resistor	1k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6116
R5	Resistor	150 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6096
R6	Resistor	100 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6092
R7	Resistor	15k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6144
R8	Resistor	4.7k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6132
R9	Resistor	1k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6116
R10	Resistor	56 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6086
R11	Resistor	390 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6106
R12	Resistor	15k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6144
R13	Resistor	4.7k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6132
R14	Resistor	1k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6116
R15	Resistor	56 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6086
R16	Resistor	390 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6106
R17	Resistor	15k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6144
R18	Resistor	4.7k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6132
R19	Resistor	1k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6116
R20	Resistor	56 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6086
R21	Resistor	390 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6106
R22	Resistor	120 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6094
C1	Capacitor, Solid Tantalum	2.2 $\mu$ F $\pm$ 20, 20V	STC 472-LWA-400-GA	5910-99-013-0496
C2	Capacitor, Solid Tantalum	47 $\mu$ F $\pm$ 20, 35V	STC 472-LWA-403-KA	5910-99-013-0515

\* Unless otherwise stated, all resistors are Multiple Rated Oxide to DEF 5115-1 Style RFG5-E.

## DISCRIMINATOR AND EXPANDOR MODULE

## RECEIVE UNIT

DESIG	COMPONENT	REQUIREMENT	MANUFACTURER	REF NO.
C3	Capacitor, Polystyrene	200pF $\pm$ 20, 125V	SEI 200AAM	193409
C4	Capacitor, Solid Tantalum	6.8 $\mu$ F $\pm$ 20, 6V	STC 472-LWA-400-CA	5910-99-013-0484
C5	Capacitor, Solid Tantalum	2.2 $\mu$ F $\pm$ 20, 20V	STC 472-LWA-400-GA	5910-99-013-0496
C6	Capacitor, Solid Tantalum	2.2 $\mu$ F $\pm$ 20, 20V	STC 472-LWA-400-GA	5910-99-013-0496
C7	Capacitor, Polystyrene	200pF, $\pm$ 20, 125V	SEI 200AAM	193409
C8	Capacitor, Solid Tantalum	6.8 $\mu$ F, $\pm$ 20, 6V	STC 472-LWA-400-CA	5910-99-013-0484
C9	Capacitor, Solid Tantalum	2.2 $\mu$ F $\pm$ 20, 20V	STC 472-LWA-400-GA	5910-99-013-0496
C10	Capacitor, Solid Tantalum	2.2 $\mu$ F $\pm$ 20, 20V	STC 472-LWA-400-GA	5910-99-013-0496
C11	Capacitor, Polystyrene	200pF $\pm$ 20, 125V	SEI 200AAM	193409
C12	Capacitor, Solid Tantalum	6.8 $\mu$ F $\pm$ 20, 6V	STC 472-LWA-400-CA	5910-99-013-0484
C13	Capacitor, Solid Tantalum	2.2 $\mu$ F $\pm$ 20, 20V	STC 472-LWA-400-GA	5910-99-013-0496
C14	Capacitor, Solid Tantalum	2.2 $\mu$ F $\pm$ 20, 20V	STC 472-LWA-400-GA	5910-99-013-0496
C15	Capacitor, Polystyrene	200pF $\pm$ 20, 125V	SEI 200AAM	193409
C16	Capacitor, Solid Tantalum	6.8 $\mu$ F $\pm$ 20, 6V	STC 472-LWA-400CA	5910-99-013-0484
C17	Capacitor, Solid Tantalum	2.2 $\mu$ F $\pm$ 20, 20V	STC 472-LWA-400GA	5910-99-013-0496
MR1	Germanium Diode		Mullard	AAY-42-CV-7127
MR2	Germanium Diode		Mullard	AAY-42-CV-7127
MR3	Germanium Diode		Mullard	AAY-42-CV-7127
MR4	Germanium Diode		Mullard	AAY-42-CV-7127
MR5	Germanium Diode		Mullard	AAY-42-CV-7127
MR6	Germanium Diode		Mullard	AAY-42-CV-7127
MR7	Germanium Diode		Mullard	AAY-42-CV-7127
MR8	Germanium Diode		Mullard	AAY-42-CV-7127
VT1	Transistor		Mullard BC107	335028
VT2	Transistor		Mullard BC107	335028
VT3	Transistor		Mullard BC107	335028
VT4	Transistor		Mullard BC107	335028
<b>Tone Alarm</b>				
R1	Resistor*	15k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6144
R2	Resistor	3.3k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6128
R3	Resistor	22k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6148

\* Unless otherwise stated, all resistors are Multiple Rated Oxide to DEF 5115-1 Style RFG5-E.

DISCRIMINATOR AND EXPANDOR MODULE

RECEIVE UNIT

DESIG	COMPONENT	REQUIREMENT	MANUFACTURER	REF NO.				
R4	Resistor	1k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6116				
R5	Resistor	33k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6152				
R6	Resistor	15k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6144				
R7	Resistor	470k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6180				
R8	Resistor	470k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6180				
R9	Resistor	470k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6180				
C1	Capacitor, Solid Tantalum	6.8 $\mu$ F $\pm$ 20, 6V	STC 472-LWA-400-CA	5910-99-013-0484				
C2	Capacitor, Solid Tantalum	1 $\mu$ F $\pm$ 20, 35V	STC 472-LWA-400-KA	5910-99-013-0506				
C3	Capacitor, Solid Tantalum	3.3 $\mu$ F $\pm$ 20, 35V	STC 472-LWA-401-KC	5910-99-013-0508				
VT1 } VT2 } VT3 } VT4 } VT5 }	Transistor		Mullard BC107	335028				
MR1					Silicon Diode	1/4W	Texas 1N914	CV7367
MR2					Voltage Regulator Diode	400 mW	Mullard BZY88/C6V2	CV7102
MR3					Voltage Regulator Diode	400 mW	Mullard B2488/C6V2	CV7102
RLA					Relay	675 $\Omega$ , 26.5V	Clare Elliott Type F RL7631	511006
RV1	Trimpot	50k $\Omega$ $\pm$ 10, 1/4W	Painton Bourns Type 200P/1/503	213033				
RV2	Trimpot	5k $\Omega$ $\pm$ 10, 1/4W	Painton Bourns Type 200P/1/502	213029				
<b>Discr</b>								
R1	Resistor*	15k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6144				
R2	Resistor	4.7k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6132				
R3	Resistor	1k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6116				
R4	Resistor	56 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6086				
R5	Resistor	390 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6106				
R6	Resistor	330 $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5862				
R7	Resistor	2.7k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6126				

\* Unless otherwise stated, all resistors are Multiple Rated Oxide to DEF 5115-1 Style RFG5-E.

## DISCRIMINATOR AND EXPANDOR MODULE

RECEIVE UNIT

SECTION 403-310-800

DESIG	COMPONENT	REQUIREMENT	MANUFACTURER	REF NO.
R8	Resistor	12k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6142
R9	Resistor	15k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6144
R10	Resistor	120 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6094
R11	Resistor	330 $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5862
R12	Resistor — Metlohm	2.7k $\Omega$ $\pm$ 1, 1/8W	Painton PMF 60/50-100TC	EDA 910957
R13	Resistor	680 $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5870
R14	Resistor	3.3k $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5886
R16	Resistor	220 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6100
RV1	Potentiometer	1k $\Omega$ $\pm$ 20, 3/4W	Morganite 80 Cermet	261049
C1	Capacitor, Solid Tantalum	2.2 $\mu$ F, $\pm$ 20, 20V	STC 472-LWA-400-GA	5910-99-013-0496
C2	Capacitor, Solid Tantalum	22 $\mu$ F $\pm$ 20, 35V	STC 472-LWA-402-KA	5910-99-013-0513
C3	Capacitor, Solid Tantalum	6.8 $\mu$ F $\pm$ 20, 6V	STC 472-LWA-400-CA	5910-99-013-0484
C4	Capacitor, Solid Tantalum	2.2 $\mu$ F $\pm$ 20, 20V	STC 472-LWA-400-GA	5910-99-013-0496
C5	Capacitor	47000pF $\pm$ 1, 50V	Johnson & Matthy C204F	137002
C6	Capacitor, Solid Tantalum	47 $\mu$ F $\pm$ 20, 20V	STC 472-LWA-402-GA	5910-99-013-0500
C7	Capacitor, Solid Tantalum	0.47 $\mu$ F $\pm$ 10, 35V	STC 472-LWA-400-KCA	5910-99-013-0409
C8	Capacitor, Solid Tantalum	4.7 $\mu$ F $\pm$ 20, 10V	STC 472-LWA-400-EA	5910-99-013-0488
VT1 } VT2 } VT3 } VT4 } VT5 }	Transistor		Mullard BC107	335028
	Transistor		Texas 2N2223A	336015
MR1	Silicon Diode	1/4W	Texas 1N914	CV7367
MR2	Voltage Reference Diode	400 mW, 5.1V	Mullard BZY78	
MR3	Voltage Reference Diode	400 mW, 5.1V	Mullard BZY78	
MR4	Voltage Reference Diode	400 mW, 5.1V	Mullard BZY78	
MR5	Silicon Diode	1/4W	Texas 1N914	CV7367
MR6	Voltage Regulator Diode	400 mW	Mullard BZY88 C4V7	CV7099
MR7	Voltage Regulator Diode	400 mW	Mullard BZY88 C4V7	CV7099
MR8	Voltage Regulator Diode	400 mW	Mullard BZY88 C6V8	CV7103

DISCRIMINATOR AND EXPANDOR MODULE

RECEIVE UNIT

DESIG	COMPONENT	REQUIREMENT	MANUFACTURER	REF NO.
<b>Antilogarithmic Amplifier</b>				
R1	Resistor*	2.2k $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5882
R2	Resistor	2.7k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6126
R3	Resistor	10k $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5898
R4	Resistor	150 $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5854
R5	Resistor	560 $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5868
R6	Resistor	10k $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5898
R7	Resistor	150 $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5854
R8	Resistor	2.2k $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5882
R9	Resistor	2.2k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6124
R10	Resistor	4.7k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6132
R11	Resistor	750 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6113
R12	Resistor	3.3k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6128
R13	Resistor	510 $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5867
R14	Resistor	2.2k $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5882
R15	Resistor	4.7k $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5890
R16	Resistor	12k $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5900
R17	Resistor	16k $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5903
R18	Resistor	22k $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5906
R19	Resistor	390 $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5864
R20	Resistor	22 $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5834
R21	Resistor	180 $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5856
R22	Resistor	100 $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5850
R23	Resistor	100 $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5850
R24	Resistor	100 $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5850
R25	Resistor	100 $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5850
R26	Resistor	240 $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5859
R27	Resistor	27 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-5836
RV1	Trimpot	500 $\Omega$ $\pm$ 10, 1/4W	Painton Bourns Type 200P/1/501	213026
C1	Capacitor, Solid Tantalum	0.1 $\mu$ F $\pm$ 10, 35V	STC 472-LWA-401-KWAA	5910-99-013-0406
C2	Capacitor, Solid Tantalum	0.1 $\mu$ F $\pm$ 10, 35V	STC 472-LWA-401-KWAA	5910-99-013-0406
C3	Capacitor, Solid Tantalum	0.68 $\mu$ F $\pm$ 10, 35V	STC 472-LWA-400-KBA	5910-99-013-0410
C4	Capacitor, Solid Tantalum	10 $\mu$ F $\pm$ 10, 20V	STC 472-LWA-401-GAA	5910-99-013-0395

\* Unless otherwise stated, all resistors are Multiple Rated Oxide to DEF 5115-1 Style RFG5-E.

## DISCRIMINATOR AND EXPANDOR MODULE

RECEIVE UNIT

SECTION 403-310-800

DESIG	COMPONENT	REQUIREMENT	MANUFACTURER	REF NO.
C5	Capacitor, Solid Tantalum	22 $\mu$ F $\pm$ 20, 15V	STC 472-LWA-401-FA	5910-99-013-0493
VT1	Transistor		Texas 2N2223A	33615
VT2	Transistor		Mullard BC 107	335028
VT3	Transistor		Mullard BC 107	335028
VT4	Transistor		Mullard BC 107	335028
VT5	Transistor		Mullard BC 107	335028
VT6	Transistor		Mullard BC 107	335028
MR1	Regulator Diode	400 mW	Mullard BZY88 C3V3	CV7138
MR3	Silicon Diode	1/4W	Texas 1N914	CV7367
MR4	Silicon Diode	1/4W	Texas 1N914	CV7367
MR5	Silicon Diode	1/4W	Texas 1N914	CV7367
MR6	Silicon Diode	1/4W	Texas 1N914	CV7367
MR7	Silicon Diode	1/4W	Texas 1N914	CV7367
MR8	Regulator Diode	400 mW	Mullard BZY94 C15	CV7106
<b>Double Expander Variolusser</b>				
R1	Resistor*	560 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6110
R2	Resistor	56 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6086
R3	Resistor	1.1k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6117
R4	Resistor	100 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6092
R5	Resistor	470 $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6108
R6	Resistor	10k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6140
R7	Resistor	6.8k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6136
C1	Capacitor, Solid Tantalum	10 $\mu$ F $\pm$ 10, 20V	STC 472-LWA-401-GAA	5910-99-013-0395
C2	Capacitor, Solid Tantalum	39 $\mu$ F $\pm$ 10, 10V	STC 472-LWA-401-EAA	5910-99-013-0378
C3	Capacitor, Solid Tantalum	220 $\mu$ F $\pm$ 20, 10V	STC 472-LWA-403-EA	5910-99-013-0491
VT1	Transistor		Texas 2N2223A	336015
VT2	Transistor		Texas 2N2223A	336015
VT3	Transistor		Mullard BC107	335028

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**DISCRIMINATOR AND EXPANDOR MODULE**

**RECEIVE UNIT**

DESIG	COMPONENT	REQUIREMENT	MANUFACTURER	REF NO.
MR1	Diode	400 mW	Mullard BZY88 C8V2	CV7105
MR2	Diode	400 mW	Mullard BZY88 C8V2	CV7105
T1	Transformer			EDB998238
T2	Transformer			EDB998238
T3	Transformer			EDB998253
<b>25-dB Ampl</b>	Refer to Compressor and Oscillator Module — Transmit Unit			

**FADING REGULATOR MODULE**

**RECEIVE UNIT**

DESIG	COMPONENT	REQUIREMENT	MANUFACTURER	REF NO.
<b>Miscellaneous</b>				
T1	Transformer			EDB998192
T2	Transformer			EDB998189
PLA	24-Way Plug		McMurdo Red Range RP24	422003
TP1 } TP2 } TP3 } TP4 } TP5 } TP6 } TP7 }	Test Sockets		Elcom DRG 59704	424001
LPF-1 } LPF-2 }	L.P. Filter			EDB910837
PCB1	25-dB Ampl Assy			EDB910734
PCB2	Rectifier (Assy B)			EDB910753 (Assy B)
PCB3	Compr Vlsr (Assy B)			EDB910747 (Assy B)
PCB4	65-dB Ampl Assy			EDB910741
PSB5	25-dB Ampl Assy			EDB910734

FADING REGULATOR MODULE

RECEIVE UNIT

DESIG	COMPONENT	REQUIREMENT	MANUFACTURER	REF NO.
R1	Resistor*	22k $\Omega$ $\pm$ 5, 1/2W	Electrosil TR5	5905-99-013-6148
R2	Resistor	100 $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5850
R3	Resistor	5.1k $\Omega$ $\pm$ 1, 1/2W	Electrosil TR5	5905-99-013-5891
C1	Capacitor	0.022 $\mu$ F $\pm$ 10	Mullard C281AB/A22K	5910-99-954-0074
AT1	Attenuator	8 dB, 600 $\Omega$	Welwyn CA2pi (unbal)	290008
LP Filter	Refer to L.P. Filter Module — Transmit Unit			
Rectifier	Refer to Compressor Module — Transmit Unit			
65-dB Ampl	Refer to Compressor Oscillator Module — Transmit Unit			
<b>MODEM MODULE</b> Refer to MODEM MODULE, TRANSMIT UNIT				<b>RECEIVE UNIT</b>
<b>DELAY MODULE</b> Refer to DELAY MODULE, TRANSMIT UNIT				<b>RECEIVE UNIT</b>
<b>POWER SUPPLY MODULE</b> Refer to POWER SUPPLY MODULE, TRANSMIT UNIT				<b>RECEIVE UNIT</b>

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