

BZ5MXD10U

Application for FCC Certification 10W Digital Television Translator

Parts List and Tune-up Procedure:

The following is the procedure for changing the channel of the MXD10U translator. Since the amplifier is broadband, channel change involves retuning of the output filter and recalibration of the output meter.

The amplifier meter was calibrated to read 100% (top scale) at full power and at the channel specified when the transmitter was tested at the factory. If the amplifier is to operate at a channel other than that of the factory test channel, the metering is going to require re-calibration. The power meter setting is a channel dependent calibration.

1. Connect the transmitter output to a 50 ohm dummy load or the antenna. The transmitter uses a 50 Ω type N connector for its output. An inline wattmeter with a selection of detector elements should be used for measurements.
2. Connect the 115VAC mains input. This AC circuit should be rated for 15 amperes, and should be supplied through a slow-tripping breaker or time delay fuse. Generally, a breaker that is rated for across-the-line motor starting will be found to be satisfactory. Also, connect the power cable that connects the power supply to the amplifier. This is the nine-wire cable supplied with the amplifier.
3. Switch 'ON' the power supply circuit breaker. Depress the power supply 'ON' push button switch. The two LEDs marked INTRLK and TEMP should be lighted, and the amplifier should be operating and the cooling fans on both the power supply and the amplifier should be running.
4. The amplifier is equipped with AGC and VSWR protections which have been factory set. To set the correct level out of the channel processor or exciter, switch OFF the amplifier AGC (switch down) then adjust the Transcoder level control so that the output of the amplifier is 110%. Switch ON the AGC and front panel meter should read 100%. If not, adjust the front panel pot labeled AGC LEVEL for 100% indication.

The output filter must be retuned as per the frequency response sweeps attached (note: two different tunings depending on the type of filter used):

BZ5MXD10U

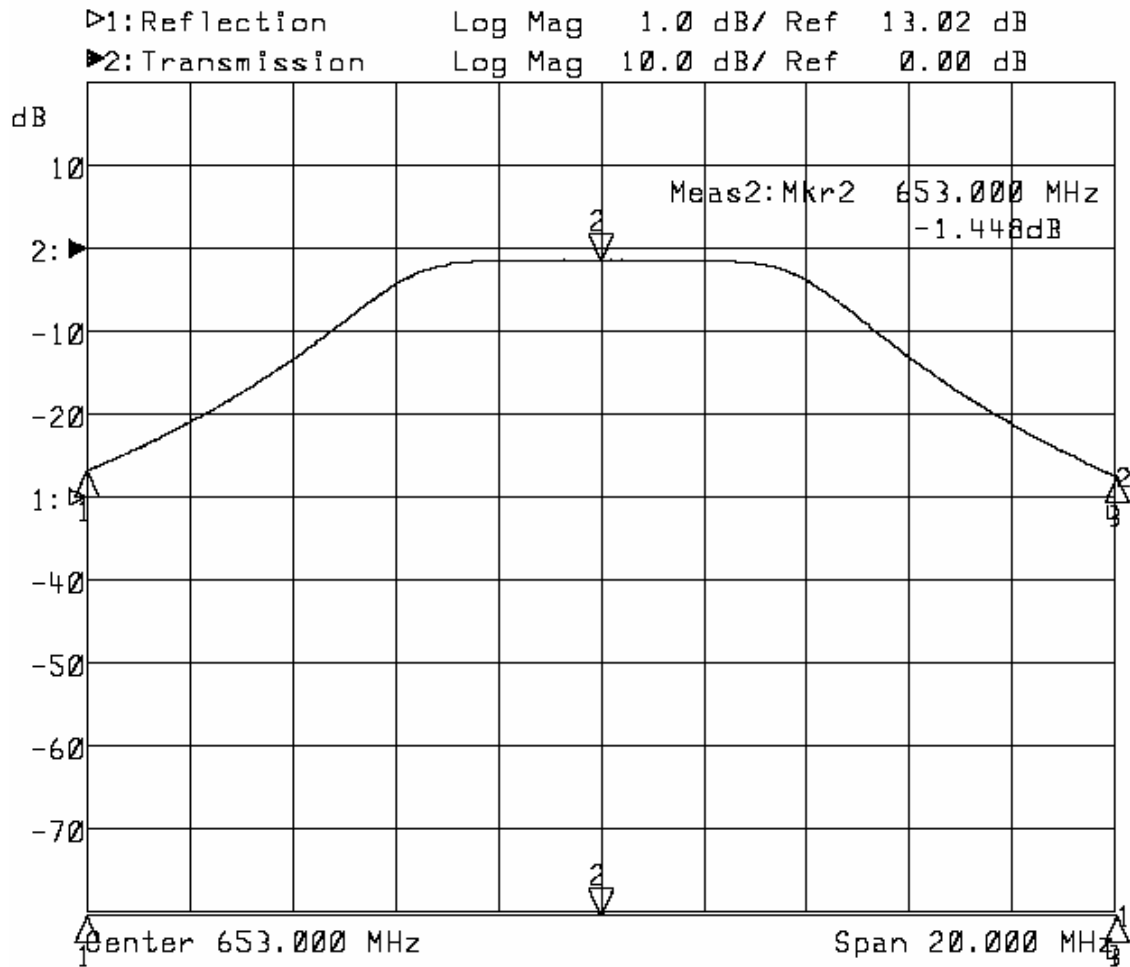
Application for FCC Certification

10W Digital Television Translator

Parts List and Tune-up Procedure

Simple Mask Filter:

Bandpass Response

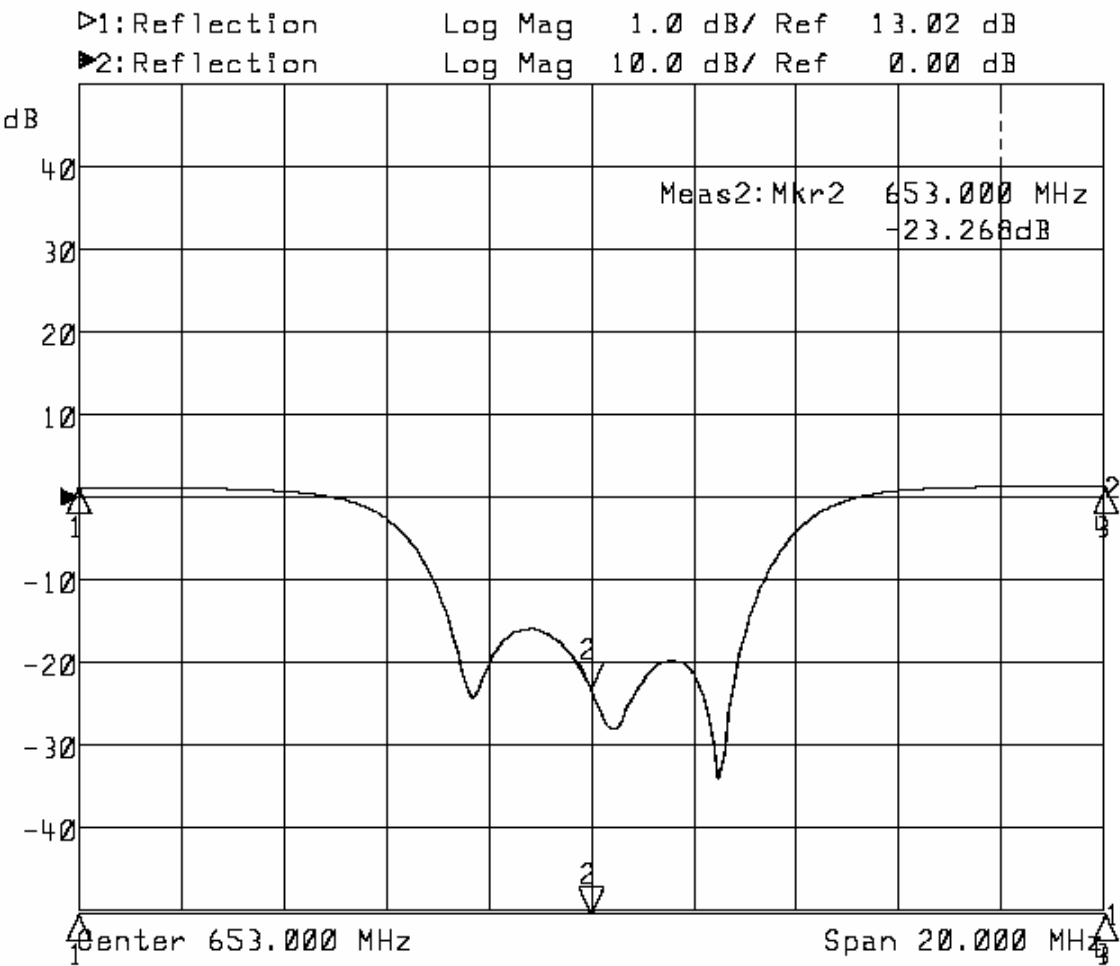


BZ5MXD10U
Application for FCC Certification
10W Digital Television Translator

Parts List and Tune-up Procedure

Simple Mask Filter:

Return loss



BZ5MXD10U

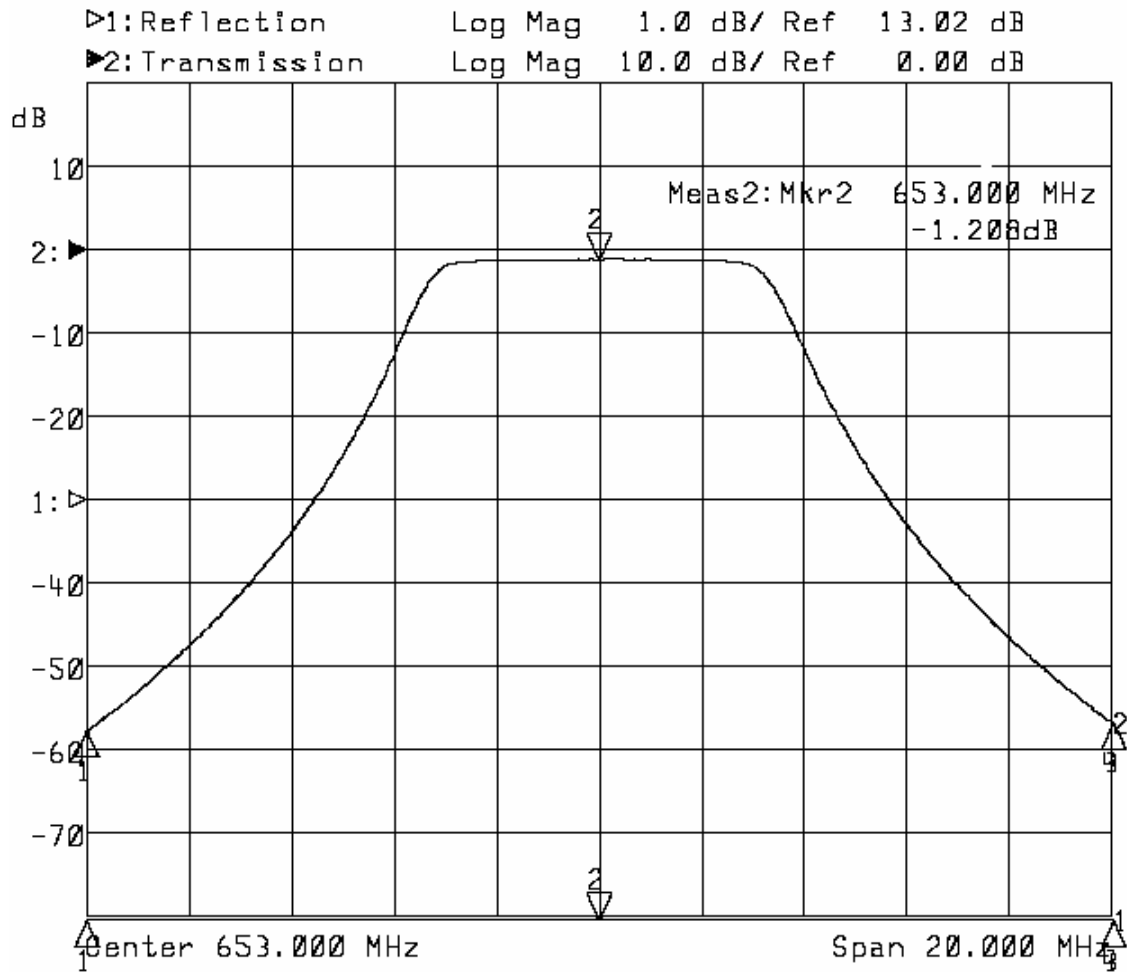
Application for FCC Certification

10W Digital Television Translator

Parts List and Tune-up Procedure

Stringent Mask Filter:

In band Response

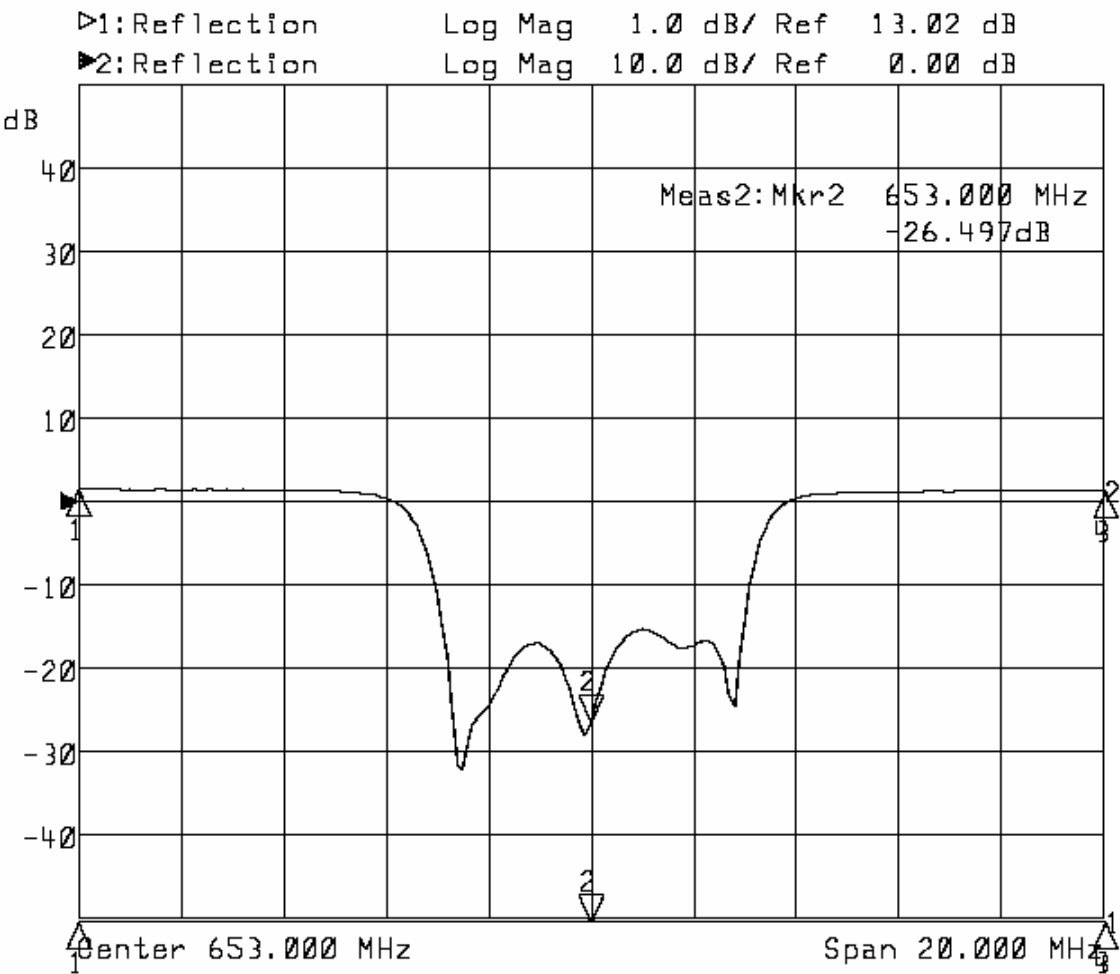


BZ5MXD10U
Application for FCC Certification
10W Digital Television Translator

Parts List and Tune-up Procedure

Stringent Mask Filter:

Return loss



Level					Line	Tp	Component	Description	ID	Qty	UM	Total	Rev
1					1	9	40D2238	ASSEMBLY DRAWING R-3		0	EA	0	
1					10	5	40D2234P1	FRONT PANEL R-3		1	EA	1	
1					11	5	40D2235P1	CHASSIS R-2		1	EA	1	
1					13	5	40D2236P1	REAR PANEL R-3		1	EA	1	
1					15	5	40D2237P1	TOP COVER R-1		1	EA	1	
1					17	1	40D2239G1	HEATSINK ASSY R-5		1	EA	1	
	2				1	9	40D2239P1	ASSEMBLY DRAWING R-2		0	EA	0	
	2				10	5	40D2233P1	HEATSINK ADD EXTRUSION R-4		1	EA	1	
	2				12	1	21B1473G1	FRONT END (FOR DTV DRIVER) R-8		1	EA	1	
	3				1	9	21B1473A1	ASSEMBLY DRAWING R-5.1		0	EA	0	
	3				9	9	11A1354	SCHEMATIC R-2.1		0	EA	0	1
	3				10	4	21B1473P1	PCB FRONT END DRIVER R-3		1	EA	1	
	3				11	5	21B1366P1	SHIELD FRAME COVER R-2		1	EA	1	1
	3				12	5	21B1516P1	SHIELD FRAME R-2		1	EA	1	1
	3				13	5	21B1481P1	MOUNTING PLATE R-2		1	EA	1	1
	3				14	5	21B1480P1	SPACER PLATE R-3		1	EA	1	1
	3				15	5	1206C220J1GAC	CAP, 22.0 PF 50V CHIP	C1	1	EA	1	
	3				16	5	1206C220J1GAC	CAP, 22.0 PF 50V CHIP	C2	1	EA	1	
	3				17	5	1206CG101J9B	CAP 100p CERAMIC CHIP	C3	1	EA	1	
	3				18	5	12062R102K9B	CAP 1n 50V PHILIPS	C4	1	EA	1	
	3				19	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C5	1	EA	1	
	3				20	5	12062R104K9B	CAP 100nF 10% 50V	C6	1	EA	1	
	3				21	5	12062R104K9B	CAP 100nF 10% 50V	C7	1	EA	1	
	3				22	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C8	1	EA	1	
	3				23	5	12062R102K9B	CAP 1n 50V PHILIPS	C9	1	EA	1	
	3				24	5	1206CG101J9B	CAP 100p CERAMIC CHIP	C10	1	EA	1	
	3				25	5	1206CG101J9B	CAP 100p CERAMIC CHIP	C11	1	EA	1	
	3				26	5	12062R102K9B	CAP 1n 50V PHILIPS	C12	1	EA	1	
	3				27	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C13	1	EA	1	
	3				28	5	12062R104K9B	CAP 100nF 10% 50V	C14	1	EA	1	
	3				29	5	12062R104K9B	CAP 100nF 10% 50V	C15	1	EA	1	
	3				30	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C16	1	EA	1	
	3				31	5	12062R104K9B	CAP 100nF 10% 50V	C17	1	EA	1	
	3				32	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C18	1	EA	1	
	3				33	5	12062R104K9B	CAP 100nF 10% 50V	C19	1	EA	1	
	3				34	5	1206CG101J9B	CAP 100p CERAMIC CHIP	C20	1	EA	1	
	3				35	5	1206CG101J9B	CAP 100p CERAMIC CHIP	C21	1	EA	1	
	3				36	5	12062R102K9B	CAP 1n 50V PHILIPS	C22	1	EA	1	
	3				37	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C23	1	EA	1	
	3				38	5	12062R104K9B	CAP 100nF 10% 50V	C24	1	EA	1	
	3				39	5	PCT10/35DK	CAP 10uf 35V 10% TANT	C25	1	EA	1	
	3				40	5	NACZ151M35V8X10.8	CAP 150U 35V 20%	C26	1	EA	1	
	3				41	5	PCT47/10DM	CAP 47uF 10V 20% TANT	C27	1	EA	1	6
	3				45	5	9C12063A3901JL	RESISTOR 3K9 1/4W 5% CHIP	R1	1	EA	1	
	3				46	5	9C12063A3901JL	RESISTOR 3K9 1/4W 5% CHIP	R2	1	EA	1	
	3				47	5	9C12063A1000JL	RESISTOR 100 OHMS 1/4W 5%	R3	1	EA	1	
	3				48	5	9C12063A1001JL	RESISTOR 1K 1/4W 5% CHIP	R4	1	EA	1	
	3				49	5	9C12063A2001JL	RESISTOR 2K 1/4W 5% CHIP	R5	1	EA	1	
	3				50	5	RFP-10-100TVC	RES 100 OHM 20WRF LOAD 5%	R6	1	EA	1	
	3				51	5	9C12063A51R0JL	RESISTOR 51R 1/4W 5% CHIP	R7	1	EA	1	
	3				52	5	9C12063A51R0JL	RESISTOR 51R 1/4W 5% CHIP	R8	1	EA	1	

	3			53	5	9C12063A5101JL	RESISTOR 5K1 1/4W 5% CHIP	R9	1	EA	1	
	3			54	5	9C12063A5101JL	RESISTOR 5K1 1/4W 5% CHIP	R10	1	EA	1	5
	3			55	5	9C12063A2702JL	RESISTOR: 27K CHIP	R11	1	EA	1	
	3			56	5	9C12063A5101JL	RESISTOR 5K1 1/4W 5% CHIP	R12	1	EA	1	
	3			58	5	9C12063A5101JL	RESISTOR 5K1 1/4W 5% CHIP	R14	1	EA	1	
	3			59	5	3224J1-103E	RESISTOR 10K POT	RV1	1	EA	1	
	3			60	5	3224J1-102E	RESISTOR 1K POT	RV2	1	EA	1	
	3			61	5	9C12063A10R0JL	RESISTOR 10R 1/4W 5% CHIP	R10	1	EA	1	5
	3			63	5	1F1304-3	S/M COUPLER	HY1	1	EA	1	
	3			64	5	1F1304-3	S/M COUPLER	HY2	1	EA	1	
	3			67	5	PI-810	PIN DIODE AT. KDI PI-810-2		1	EA	1	
	3			69	5	MMBT2222ALT1	TRANSISTOR, MOTOROLA "1P"	Q1	1	EA	1	
	3			72	5	MHL-8118	IC MOTOROLA SPR 05-004 MHW9182	U1	1	EA	1	4
	3			73	5	LM358D	IC DUAL OP AMP SOIC 8 MOT	U2	1	EA	1	
	3			74	5	MC78M12CDT	IC SEE 78M12CDT	U3	1	EA	1	
	3			75	5	MC78L05ACD	IC REGULATOR 100mA SOIC-8	U4	1	EA	1	
	3			79	5	BB811	DIODE VARACTOR	CR1	1	EA	1	
	3			80	5	BB811	DIODE VARACTOR	CR2	1	EA	1	
	3			81	5	HSMS-2850	DIODE HEWLETT PACKARD	CR3	1	EA	1	2
	3			83	5	1280A-1	TURRET PIN	TP1	1	EA	1	5
	3			84	5	1280A-1	TURRET PIN	TP2	1	EA	1	5
	3			85	5	1280A-1	TURRET PIN	TP3	1	EA	1	5
	3			87	5	24MCX501-10/111	STRT BKHEAD CONNCTR 50^ SHUNER		2	EA	2	1
	3			88	5	2499003X5S0152M	CAP FEEDTHRU 1500u		3	EA	3	1
	3			89	9	21B2313	LABEL - TOP COVER		0	EA	0	8
2				14	1	21B1324G4	IPA ASSY UHF 1KW PA MOD R11		1	EA	1	
	3			9	9	21B1334S	SCHEMATIC R-1		0	EA	0	
	3			10	1	21B1334G1	IPA PCB ASSY R-4		1	EA	1	
		4		1	9	21B1334A1	ASSEMBLY DRAWING R0.1		0	EA	0	
		4		10	4	21B1334P1	PCB IPA R-0		1	EA	1	
			5	1	5	250-GX-030011	0.0300" +/- 0.002" 36 X 48		13	IN	13	
		4		11	9	21B1334S	SCHEMATIC R-1		0	EA	0	
		4		13	5	1280A-1	TURRET PIN		1	EA	1	
		4		15	5	MC1723CD	VOLTAGE REGULATOR	U1	1	EA	1	
		4		17	5	1F1304-3	S/M COUPLER	HY1	1	EA	1	
		4		18	5	1F1304-3	S/M COUPLER	HY2	1	EA	1	
		4		22	5	MMBT2907ALT1	TRANSISTOR PNP MOTOROLA 2FE	Q3	1	EA	1	
		4		23	5	12062R102K9B	CAP 1n 50V PHILIPS	C1	1	EA	1	
		4		24	5	12062R104K9B	CAP 100nF 10% 50V	C2	1	EA	1	
		4		25	5	NACZ151M35V8X10.8	CAP 150U 35V 20%	C3	1	EA	1	
		4		26	5	100B-110-JP500X	CAP 11p 500V CHIP	C100	1	EA	1	
		4		27	5	2320-1	CAP TRIM 1-5pf JOHANSON	C101	1	EA	1	
		4		28	5	12062R104K9B	CAP 100nF 10% 50V	C102	1	EA	1	
		4		29	5	2320-1	CAP TRIM 1-5pf JOHANSON	C103	1	EA	1	
		4		30	5	100B-6R8-JP500X	CAP 6p8 500V CHIP	C104	1	EA	1	
		4		31	5	12062R102K9B	CAP 1n 50V PHILIPS	C105	1	EA	1	
		4		32	5	12062R104K9B	CAP 100nF 10% 50V	C106	1	EA	1	
		4		33	5	PCT10/35DK	CAP 10uf 35V 10% TANT	C107	1	EA	1	
		4		35	5	100B-110-JP500X	CAP 11p 500V CHIP	C110	1	EA	1	
		4		36	5	2320-1	CAP TRIM 1-5pf JOHANSON	C111	1	EA	1	
		4		37	5	12062R104K9B	CAP 100nF 10% 50V	C112	1	EA	1	
		4		38	5	2320-1	CAP TRIM 1-5pf JOHANSON	C113	1	EA	1	

		4		39	5	100B-6R8-JP500X	CAP 6p8 500V CHIP	C114	1	EA	1	
		4		40	5	12062R102K9B	CAP 1n 50V PHILIPS	C115	1	EA	1	
		4		41	5	12062R104K9B	CAP 100nF 10% 50V	C116	1	EA	1	
		4		42	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C117	1	EA	1	
		4		44	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C4	1	EA	1	
		4		45	5	9C12063A2202JL	RESISTOR 22K 1/4W 5% CHIP	R1	1	EA	1	
		4		46	5	9C12063A5601JL	RESISTOR 5K6 1/4W 5% CHIP	R2	1	EA	1	
		4		47	5	9C12063A3300JL	RESISTOR 330R 1/4W 5% CHIP	R3	1	EA	1	
		4		48	5	9C12063A1002JL	RESISTOR 10K 1/4W 5% CHIP	R4	1	EA	1	
		4		49	5	9C12063A2201JL	RESISTOR 2K2 1/4W 5% CHIP	R5	1	EA	1	
		4		50	5	9C12063A1002JL	RESISTOR 10K 1/4W 5% CHIP	R6	1	EA	1	
		4		51	5	WSC-1-1R-1%	RES 1 OHM 1W 1% DALE	R7	1	EA	1	
		4		52	5	WSC-1-1R-1%	RES 1 OHM 1W 1% DALE	R8	1	EA	1	
		4		53	5	9C12063A1001JL	RESISTOR 1K 1/4W 5% CHIP	R100	1	EA	1	
		4		54	5	CRCW2512510J	RES 51 OHM 1W DALE	R101	1	EA	1	
		4		55	5	CRCW2512510J	RES 51 OHM 1W DALE	R102	1	EA	1	
		4		57	5	9C12063A1001JL	RESISTOR 1K 1/4W 5% CHIP	R110	1	EA	1	
		4		59	5	9C12063A0000J	RES 0 OHM JUMPER	R9	1	EA	1	
		4		60	5	ST-4B103	RES 10K POT	RV3	1	EA	1	
		4		61	5	ST-4B102	RES 1KW POT 1/4W 5% CHIP	RV100	1	EA	1	
		4		62	5	ST-4B102	RES 1KW POT 1/4W 5% CHIP	RV110	1	EA	1	
		4		63	5	WSC-1-1R-1%	RES 1 OHM 1W 1% DALE	R10	1	EA	1	
		4		64	5	MMBD7000LT1	DIODE DUAL GENERAL PURPOSE	CR100	1	EA	1	
		4		65	5	MMBD7000LT1	DIODE DUAL GENERAL PURPOSE	CR110	1	EA	1	
		4		66	5	MUR120	DIODE, ULTRAFAST REC. MOTOROLA	CR1	1	EA	1	
	3			11	5	21B1365P1	SHIELD FRAME, WOLF MANU R-2		1	EA	1	1
	3			12	5	21B1366P1	SHIELD FRAME COVER R-2		1	EA	1	1
	3			14	5	2499003X5S0152M	CAP FEEDTHRU 1500u		1	EA	1	
	3			18	5	11A1219P1	GASKET BERQUIST SIL-PAD R-0		2	EA	2	
	3			19	5	11A1183P1	MTG PLATE R-3		1	EA	1	
	3			20	5	11A1184P1	PRESSURE BAR R-0		2	EA	2	
	3			21	5	MRF-181S	RF POWER FET 4W SEE XRF181S	Q1	1	EA	1	
	3			22	5	MRF-181S	RF POWER FET 4W SEE XRF181S	Q2	1	EA	1	
	3			23	1	11A1511G1	COAX CABLE R-3		1	EA	1	
		4		1	9	11A1511	CABLE ASSY R-3		0	EA	0	
		4		10	5	RG178B/U	50 OHM COAXIAL CABLE		0	IN	0	
		4		11	5	5831-5002-10	STRAIGHT CNCTR OMNI SPECTRA		1	EA	1	
	3			24	1	11A1511G2	COAX CABLE R-3		1	EA	1	
		4		2	9	11A1511	CABLE ASSY R-3		0	EA	0	
		4		12	5	2037-5008-00	CONNECTOR RT ANGLE SMA RG188		1	EA	1	
		4		13	5	RG316/U	COAX CABLE - BELDEN		0	FT	0	
	3			33	9	21B2311	STICK ON LABEL		0	EA	0	10
2				15	5	572-4858-01-16	WINCHESTER POST		1	EA	1	
2				16	1	21B2230G1	AMP RF UHF SMA CONN'R R-2		1	EA	1	5
	3			1	9	21B1389S	SCHEMATIC 0.1		0	EA	0	
	3			2	9	21B2230A1	Assembly Drawing R-2		0	EA	0	
	3			3	5	21B1411P1	SPACER PLATE R-1		0	EA	0	
	3			4	5	21B2230P1	PCB AMP RF R-2		1	EA	1	
	3			7	5	12062R104K9B	CAP 100nF 10% 50V	C1	1	EA	1	
	3			8	5	12062R102K9B	CAP 1n 50V PHILIPS	C2	1	EA	1	
	3			9	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C3	1	EA	1	
	3			10	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C4	1	EA	1	

	3			11	5	12062R104K9B	CAP 100nF 10% 50V	C5	1	EA	1	
	3			12	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C6	1	EA	1	
	3			13	5	NACZ151M35V8x10.8	CAP 150U 35V 20%	C7	1	EA	1	
	3			14	5	100B-8R2-JP500X	CAP 8p2 500V CHIP	C101	1	EA	1	
	3			15	5	2320-2	CAP BLUE JOHANSON TRIM 5.18pf	C102	1	EA	1	
	3			16	5	100B-180-JP500X	CAP 18p 500V CHIP	C103	1	EA	1	
	3			17	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C104	1	EA	1	
	3			18	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C105	1	EA	1	
	3			19	5	12062R104K9B	CAP 100nF 10% 50V	C106	1	EA	1	
	3			20	5	2320-2	CAP BLUE JOHANSON TRIM 5.18pf	C107	1	EA	1	
	3			21	5	100B-8R2-JP500X	CAP 8p2 500V CHIP	C111	1	EA	1	
	3			22	5	2320-2	CAP BLUE JOHANSON TRIM 5.18pf	C112	1	EA	1	
	3			23	5	100B-180-JP500X	CAP 18p 500V CHIP	C113	1	EA	1	
	3			24	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C114	1	EA	1	
	3			25	5	12062R103K9B	CAP 10nF CERAMIC CHIP	C115	1	EA	1	
	3			26	5	12062R104K9B	CAP 100nF 10% 50V	C116	1	EA	1	
	3			27	5	2320-2	CAP BLUE JOHANSON TRIM 5.18pf	C117	1	EA	1	
	3			28	5	MMBD7000LT1	DIODE DUAL GENERAL PURPOSE	CR100	1	EA	1	
	3			29	5	MMBD7000LT1	DIODE DUAL GENERAL PURPOSE	CR110	1	EA	1	
	3			30	5	1F1304-3	S/M COUPLER	HY1	1	EA	1	1
	3			31	5	1F1304-3	S/M COUPLER	HY2	1	EA	1	1
	3			32	5	142-0701-235	CONNECTOR	J1	1	EA	1	
	3			33	5	142-0701-235	CONNECTOR	J2	1	EA	1	
	3			34	5	MRF 184	TRANSISTOR MOTOROLA	Q1	1	EA	1	
	3			35	5	MRF 184	TRANSISTOR MOTOROLA	Q2	1	EA	1	
	3			36	5	9C12063A2200JL	RESISTOR 220R 1/4W 5% CHIP	R1	1	EA	1	
	3			37	5	9C12063A1000JL	RESISTOR 100 OHMS 1/4W 5%	R2	1	EA	1	
	3			38	5	9C12063A3301JL	RESISTOR: 3K3 1/4W 5%	R101	1	EA	1	
	3			39	5	9C12063A0000JL	RES JUMPER	R102	1	EA	1	
	3			40	5	9C12063A3301JL	RESISTOR: 3K3 1/4W 5%	R110	1	EA	1	
	3			41	5	9C12063A0000JL	RES JUMPER	R112	1	EA	1	
	3			42	5	RFP-10-50TV	RES 10W 5% 50	R201	1	EA	1	
	3			43	5	RFP-10-50TV	RES 10W 5% 50	R202	1	EA	1	
	3			44	5	ST-4B102	RES 1KW POT 1/4W 5% CHIP	RV1	1	EA	1	
	3			45	5	ST-4B102	RES 1KW POT 1/4W 5% CHIP	RV100	1	EA	1	
	3			46	5	ST-4B102	RES 1KW POT 1/4W 5% CHIP	RV110	1	EA	1	
	3			47	5	1280A	TURRET PIN	TP1	1	EA	1	
	3			48	5	LM317T	IC VOLT REG	U1	1	EA	1	
	3			49	5	4672	MICA INSULATOR-KEYSTONE		1	EA	1	
	3			50	5	FMPI125W50220	Insulator for Screw		1	EA	1	
2				17	5	21B1411P1	SPACER PLATE R-1		1	EA	1	
2				18	5	20B1500P1	TYPE 3156 THERMOSTAT R-7		1	EA	1	
2				20	1	10A2121G1	UHF BI-DIR CPLR ASSY (MX20) R1		1	EA	1	
	3			1	9	10A2121A1	ASSEMBLY DRAWING R-1		0	EA	0	
	3			10	5	2056-0000-00	CONNECTOR		5	EA	5	
	3			11	4	10A2120P1	PCB DIR CPLR R-0		1	EA	1	
		4		1	5	250-GX0600-5511	0.060" +/- 0.002" 1oz 36X48		5	IN	5	
	3			12	4	10A2122P1	SHIELD CASE R-1		1	EA	1	
	3			13	5	9C12063A1000JL	RESISTOR 100 OHMS 1/4W 5%	R1,R2	2	EA	2	
	3			14	5	10A357P1	SHIELD CASE COVER R-5		1	EA	1	
	3			15	5	10A2108P1	BOTTOM COVER R-0		1	EA	1	
	3			17	5	9C12063A0000JL	RES JUMPER	R3-R5	3	EA	3	

	3			22	5	QITPCS	1/4" TIN PLATED COPPER STRIP		0	EA	0	
	3			23	5	21B2315	STICK ON LABEL		1	EA	1	1
2				21	1	20B1235G9	METERING ASSY FOR MX20U R-17		1	EA	1	
	3			10	5	20B1233P1	PCB R-4		1	EA	1	
	3			11	9	20B1234	PATTERN R-3		0	EA	0	
	3			12	9	20B1236	SILKSCREEN R-3		0	EA	0	
	3			15	5	CE100F24-11	END CONNECTORS		1	EA	1	10
	3			16	5	B1570-B-1/4-05	SPACER TIN PLATED		4	EA	4	
	3			17	5	EC100F-11	Cover End IDC 0.1" 11pin Pandu		1	EA	1	10
	3			18	5	MLSS100-11	LOCKING HEADER	J3	1	EA	1	
	3			19	5	1280B	TURRET		2	EA	2	
	3			20	5	2062-0000-00	RECEPTACLE SEE 50-651-0000-31	J1	1	EA	1	
	3			21	5	2062-0000-00	RECEPTACLE SEE 50-651-0000-31	J2	1	EA	1	
	3			22	5	508-AG11D	IC SOCKET 8 PIN		3	EA	3	
	3			23	5	630-09472	CAP 4700p 100V CERAMIC	C1	1	EA	1	
	3			24	5	630-09472	CAP 4700p 100V CERAMIC	C2	1	EA	1	
	3			25	5	681-10689	CAP 68p 100V CERAMIC	C3	1	EA	1	
	3			26	5	681-10689	CAP 68p 100V CERAMIC	C4	1	EA	1	
	3			27	5	681-10689	CAP 68p 100V CERAMIC	C5	1	EA	1	
	3			28	5	681-10689	CAP 68p 100V CERAMIC	C6	1	EA	1	
	3			29	5	344-15474	CAP u4763V FILM SEE 372-21474	C7	1	EA	1	
	3			30	5	344-21104	CAP u1 100V FILM 344-25104	C8	1	EA	1	
	3			31	5	TAP2.2M16	CAP 2u2 16V TANT	C9	1	EA	1	
	3			32	5	630-09472	CAP 4700p 100V CERAMIC	C10	1	EA	1	
	3			34	5	550-3640-450200	INDUCTOR 10uH SEE 1537-36	L1	1	EA	1	
	3			35	5	550-3640-450200	INDUCTOR 10uH SEE 1537-36	L2	1	EA	1	
	3			37	5	HP5082-2800	DIODE SEE IN5711	CR1	1	EA	1	
	3			38	5	HP5082-2800	DIODE SEE IN5711	CR2	1	EA	1	
	3			39	5	HP5082-2800	DIODE SEE IN5711	CR3	1	EA	1	
	3			40	5	HP5082-2800	DIODE SEE IN5711	CR4	1	EA	1	
	3			41	5	1N4148	DIODE SWITCHING	CR5	1	EA	1	
	3			42	5	LM358N	IC OP AMP	U1	1	EA	1	
	3			43	5	LM358N	IC OP AMP	U2	1	EA	1	
	3			44	5	LM358N	IC OP AMP	U3	1	EA	1	
	3			45	5	MPS8598	TRANSISTOR PNP GEN PURP	Q1	1	EA	1	
	3			46	5	MPS8598	TRANSISTOR PNP GEN PURP	Q2	1	EA	1	
	3			52	5	3R152P911J	RES 1/4W 5% 910	R1	1	EA	1	
	3			53	5	3R152P510J	RES 1/4W 5% 51	R2	1	EA	1	
	3			54	5	3R152P911J	RES 1/4W 5% 910	R3	1	EA	1	
	3			55	5	3R152P510J	RES 1/4W 5% 51	R4	1	EA	1	
	3			56	5	3R152P472J	RES 1/4W 5% 4K7	R5	1	EA	1	
	3			57	5	3R152P472J	RES 1/4W 5% 4K7	R6	1	EA	1	
	3			58	5	3R152P472J	RES 1/4W 5% 4K7	R7	1	EA	1	
	3			59	5	3R152P472J	RES 1/4W 5% 4K7	R8	1	EA	1	
	3			60	5	3R152P102J	RES 1/4W 5% 1K	R9	1	EA	1	
	3			61	5	3R152P102J	RES 1/4W 5% 1K	R10	1	EA	1	
	3			62	5	3R152P275J	RES 1/4W 5% 2M7	R11	1	EA	1	
	3			63	5	3R152P275J	RES 1/4W 5% 2M7	R12	1	EA	1	
	3			68	5	3R152P122J	RES 1/4W 5% 1K2	R17	1	EA	1	
	3			69	5	3329H-1-102	POT 1K	R18	1	EA	1	
	3			70	5	3R152P122J	RES 1/4W 5% 1K2	R19	1	EA	1	
	3			71	5	3329H-1-102	POT 1K	R20	1	EA	1	

	3			72	5	3R152P104J	RES 1/4W 5% 100K	R21	1	EA	1	
	3			74	5	3R152P104J	RES 1/4W 5% 100K	R23	1	EA	1	
	3			78	5	3R152P513J	RES 1/4W 5% 51K	R27	1	EA	1	
	3			79	5	3R152P513J	RES 1/4W 5% 51K	R28	1	EA	1	
	3			80	5	3R152P102J	RES 1/4W 5% 1K	R29	1	EA	1	
	3			81	5	3329H-1-104	POT 100K	R30	1	EA	1	
	3			82	5	3R152P513J	RES 1/4W 5% 51K	R31	1	EA	1	14
	3			83	5	3329H-1-104	POT 100K	R32	1	EA	1	
	3			84	5	3R152P513J	RES 1/4W 5% 51K	R33	1	EA	1	14
	3			85	5	3R152P472J	RES 1/4W 5% 4K7	R34	1	EA	1	
	3			86	5	3R152P472J	RES 1/4W 5% 4K7	R35	1	EA	1	
	3			87	5	3329H-1-103	POT 10K	R36	1	EA	1	
	3			88	5	3R152P101J	RES 1/4W 5% 100	R37	1	EA	1	
	3			89	5	3R152P393J	RES 1/4W 5% 39K	R38	1	EA	1	
	3			91	5	3R152P393J	RES 1/4W 5% 39K	R40	1	EA	1	
	3			92	5	3R152P103J	RES 1/4W 5% 10K	R41	1	EA	1	
	3			93	5	3329H-1-103	POT 10K	R42	1	EA	1	
	3			94	5	3R152P101J	RES 1/4W 5% 100	R43	1	EA	1	
	3			95	5	3R152P393J	RES 1/4W 5% 39K	R44	1	EA	1	
	3			96	5	3R152P100J	RES 1/4W 5% 10	R45	1	EA	1	
	3			99	5	3R152P242J	RES 1/4W 5% 2K4	R39	1	EA	1	
	3			101	5	630-09472	CAP 4700p 100V CERAMIC	C11	1	EA	1	
	3			102	5	630-09472	CAP 4700p 100V CERAMIC	C12	1	EA	1	
	3			103	5	630-09472	CAP 4700p 100V CERAMIC	C13	1	EA	1	
	3			109	5	1N4148	DIODE SWITCHING	CR6	1	EA	1	
	3			110	9	20B2547	SCHEMATIC		0	EA	0	
1				18	5	30C2020P1	HEATSINK SUPPORT R-1		1	EA	1	
1				19	5	10A2076P1	KEEP PLATE (PWR SUPPLY) R-1		2	EA	2	
1				20	5	HE28-6-A	POWER SUPPLY		1	EA	1	
1				21	5	HA15-0.9-A	CONTROL P/SUPPLY 12V, 0.9A		1	EA	1	
1				22	5	10A2075P1	KEEPER PLATE R-1		1	EA	1	
1				23	5	8404	SPACER H.H. SMITH		4	EA	4	1
1				24	1	30C1829G4	CONTROL BOARD ASSY R-9		1	EA	1	
2				4	9	30C1829A4	ASSY DWG, MX30V		0	EA	0	7
2				9	5	30C1829P1	PCB CONTROL R-1		1	EA	1	
2				10	9	30C1829 SH3-4	PC PATTERN R-1.2		0	EA	0	
2				11	9	30C1829 SH6	SOLDER MASK R-1.2		0	EA	0	
2				12	9	30C1829 SH5	SILKSCREEN R-1.2		0	EA	0	
2				16	9	20B2531	SCHEMATIC R-1		0	EA	0	
2				22	5	516-AG11D	IC SOCKET 16 PIN		1	EA	1	
2				25	5	ILQ1	IC OPTO ISOLATOR	U3	1	EA	1	
2				28	5	DS1E-SL2-DC12V	RELAY	K1	1	EA	1	
2				29	5	RXE090	PROTECTOR RAYCHEM	F1	1	EA	1	
2				31	5	1N4148	DIODE SWITCHING	CR1	1	EA	1	
2				32	5	1N4148	DIODE SWITCHING	CR2	1	EA	1	
2				43	5	561-2201-080	LED DIALIGHT GREEN	DS4	1	EA	1	
2				44	5	561-2201-080	LED DIALIGHT GREEN	DS5	1	EA	1	
2				58	5	3R152P152J	RES 1/4W 5% 1K5	R6	1	EA	1	
2				61	5	3296W-1-502	POT 5K	R9	1	EA	1	8
2				62	5	3R152P152J	RES 1/4W 5% 1K5	R10	1	EA	1	
2				69	5	3R152P152J	RES 1/4W 5% 1K5	R17	1	EA	1	
2				74	5	4606X-101-102	RES NET 1K 2%	RN1	1	EA	1	

End of parts list
