

BZ5MXD1V

Application for FCC Certification

1 Watt Digital Television Translator

Parts List and Tune-up Procedure/Active Devices:

The following is the procedure for changing the channel of the MXD1V 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 will require re-calibration. Refer to the transmitter service manual for the specific calibration procedures. 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 suitable for digital signals 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..
3. Switch 'ON' the amplifier.
4. The amplifier is equipped with VSWR protection which has been factory set. To set the correct level out of the channel processor or exciter, adjust the Transcoder level control so that the output of the amplifier is 100%.

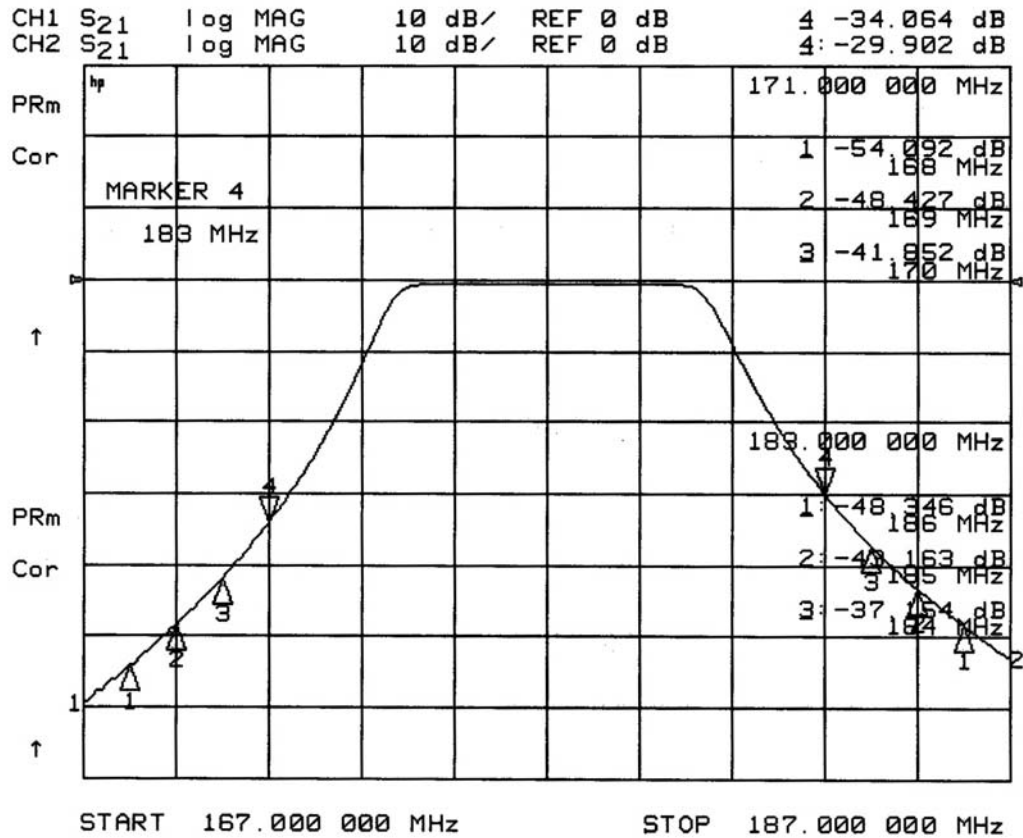
If it is required to meet output emissions as defined by the the stringent mask, the output filter must be retuned as per the frequency response sweeps attached:

BZ5MXD1V
Application for FCC Certification
1 Watt Digital Television Translator

Parts List and Tune-up Procedure

Mask Filter:

Bandpass Response

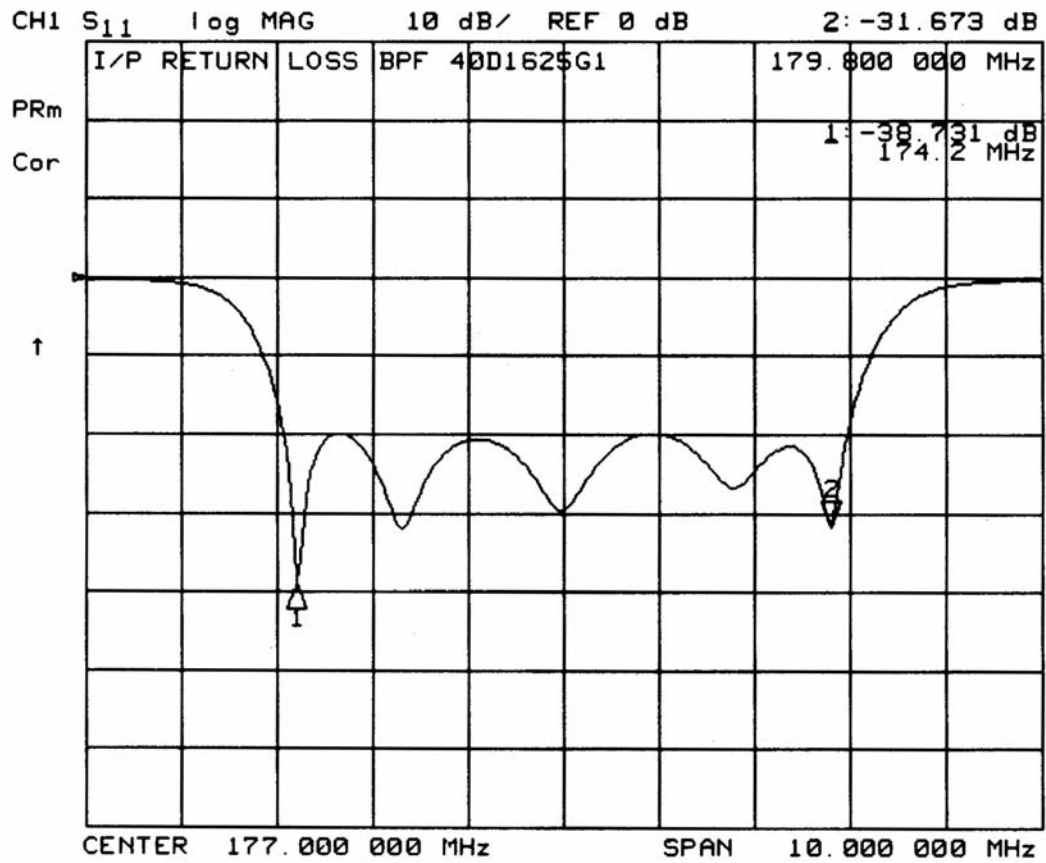


BZ5MXD1V
 Application for FCC Certification
 1 Watt Digital Television Translator

Parts List and Tune-up Procedure

Mask Filter:

Return loss



BZ5MXD1V
Application for FCC Certification
1 Watt Digital Television Translator

Active Devices List:

ID	Component	Description	Qty	UM	Total
	40D2180A2	ASSEMBLY	0	EA	0
	10A1453G8	AMP MX1V 18dB 24V	1	EA	1
U2	MHW6185	HYBRID	1	EA	1
	20B1235G5	METERING BOARD FOR MX1V R-17	1	EA	1
CR1	HP5082-2800	DIODE SEE IN5711	1	EA	1
CR3	HP5082-2800	DIODE SEE IN5711	1	EA	1
U1	LM358N	IC OP AMP	1	EA	1
Q1	MPS8598	TRANSISTOR PNP GEN PURP	1	EA	1
VR1	MC78L12CP	IC VOLT REG	1	EA	1