



Model 100WSXTU Model 100WSXTV



**SOLID STATE,
UHF OR VHF
TELEVISION**

TRANSMITTER/TRANSLATOR



100 WATT

DRIVER/AMPLIFIER

e. l. marsden wireless, inc.

15731 Nike Dr. • Terrell, TX 75160 • Tel: 972-524-6412 • Fax: 972 563-0859

Tech: 972-563-2861

www.elmwi.com

Description of the Equipment

The Model 100WSXT Series is available in both UHF and VHF versions. This is a 100 Watt Television Transmitter/Translator designed for NTSC, PAL or SECAM Formats.

The audio and video signals are fed to the exciter assembly, which consists of two stages. A modulator/ upconverter which creates on-channel visual and aural carriers at 0 dBm. In the UHF version this signal is then amplified by a 25 Watt LDMOS driver (IPA) and fed to an 150 Watt LDMOS power amplifier (PA) to provide the 100 Watt transmitter output power. The VHF version utilizes MOS transistors in the IPA and PA stages. The output filter assembly and directional coupler are mounted inside the transmitter cabinet.

When used as a translator, either a demodulator is added to provide visual and aural to the modulator or when appropriate, the modulator is replaced with a channel conversion unit.

This television transmitter has many control and protection features seldom found in comparably priced equipment:

- The PA amplifier has a circulator isolated output for enhanced reliability and performance.
- Active components are located on printed circuit boards for fast, easy field service.
- All of the metering and control circuitry is built with precision components.
- Light emitting diodes (LEDs) give a quick, visual indication of the condition of the transmitter.
- A front panel meter gives accurate readings of important voltages, currents, and powers associated with the driver and PA.
- Robust power components insure that the transmitter can survive adverse conditions.
- All of the major components, such as power supplies, circulators, and fans, are easily field replaceable and are readily available from either the original manufacturer or from e. l. marsden wireless, inc.

Technical Specifications

Power Capability	100 W Visual (peak sync) with 10 W Aural (average)
Frequency Range	Any TV channel within the following bands including standard offsets UHF 470-806 Mhz, VHF-HI 174-216 Mhz, VHF-LO 54-88 MHz
Carrier Stability	± 1 kHz standard and offset channels
Intercarrier Stability	± 500 Hz
Harmonics Products	-60 dB or better referred to sync peak
Non-Harmonic Spurious Products	As per appropriate FCC or CCIR Standard
C Line Voltage	120/ 240 VAC, single phase, 60 Hz/50 Hz (Specify 50 Hz or 60 Hz when ordering)
Driver	25 W LDMOS Amplifier (UHF), 50 W MOS (VHF)
Output Stage	150 W LDMOS Amplifier (UHF), 200 W MOS (VHF)
Dimensions (W x H x D):	22" x 20" x 20"
Weight	~70 lb.

For more information, call 972-524-6412.

Ask for Brendan or Gale.