

**BZ5T2500U**  
**Application for FCC Certification**  
**Modulator Input 2500Watt UHF Translator**

Operational Description

This application requests authorization for a video/audio input driven 2500 Watt translator, BZ5T2500U. The translator is driven directly by a color demodulator.

The intended use of the T2500U is to rebroadcast a television relay station or other legal source of video and audio.

The T2500U is a solid state translator designed to operate a 2500 Watt sync peak visual RF power and 250 Watt average aural single carried RF power.

The T2500U is self contained in a single cabinet with internal cooling fans. The simplicity of design, the employment of modular subassemblies and the use of standard components also enhance serviceability.

The specific unit tested for this application was on channel 50.

The modulator section of this translator will accept video from the television relay station, frequency spacing, deviation and other characteristics including distortion are therefore determined for the most part by the originating television station. It is anticipated that the translator will be driven directly by the modulator output of an FM microwave repeater. No provision is made for tampering with or adjustment of the composite video or audio signal except for the depth of video and audio modulation.

The T2500U meets all requirements for unattended operation. A description of the automatic shutdown and control circuitry can be found in the user's manual.

Station identification requirements will be supplied by the originating station.

Wiring, shielding and construction are in accordance with accepted principles of good engineering practice. The translator's construction is such that all hazardous components are enclosed or protected against accidental contact by operating personnel.