

BZ5TTS250MVX

Application for FCC Certification

Demodulator Input

250 Watt VHF Translator

OPERATIONAL DESCRIPTION

This application requests authorization for video/audio input to our 250 Watt VHF Translator, BZ5TTS250MVX. The Translator will be driven directly by a color demodulator.

The intended use of the TTS250MVX is to rebroadcast a television relay station or other legal source of video and audio.

The TTS250MVX is a solid-state Translator designed to operate at 250W peak sync visual RF power and 25W average aural single carrier RF power.

The TTS250MVX is a self contained single cabinet with an internal cooling fan. The simplicity of design, the employment of modular subassemblies, and the use of standard components also enhance serviceability.

The unit tested specifically for this application was operated on Channel 13. This channel was chosen to provide protection to and from existing radio services, and to facilitate the measurement of spurious products conducted and radiated from the 250 Watt VHF Translator.

The input signals used in this equipment application tests were generated by a color bar generator driving a General Instruments Demodulator and General Instruments Modulator which are typically the units used. However, due to varying customer requirements, other heterodyne processors are available upon request. The published specifications on any modulator used in this equipment will meet or exceed FCC specifications.

The General Instruments Demodulator of this translator will accept video and audio from the television relay station. The Demodulator splits the video and audio signals and provides the General Instruments Modulator with video and audio or a composite signal. The Modulator then generates both video and audio or composite signal to the customer's required frequency. Frequency spacing, deviation, and other characteristics including distortion are therefore determined solely by the originating television station. It is anticipated that the translator will be driven directly by the demodulator output of an FM microwave repeater. No provision is made for tampering with or adjusting the composite video or audio signal except for depth of video modulation. Therefore, all aspects of the input video signal are determined solely by the originating television station.

The TTS250MVX meets all the requirements for unattended operation. A description of the automatic 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.