

Synthesized VHF Surveillance  
Voice Transmitter

Pager Transmitter

***CST801VI***

CST801VI – User Guide, 1.0.3 Copyright & Information

**Copyright & Information**

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**Condition of Use**

The user undertakes that,

- They are a bona fide law enforcement agency with technical capabilities.
- The CST801VI is being used to fulfill official requirements.
- The CST801VI will be used with discretion.
- Precautions will be undertaken to keep details restricted to members of their organization requiring such information.

The user acknowledges that,

- The CST801VI is for use by law enforcement agencies.
- The CST801VI may not comply with government type approval.
- The users will be responsible for satisfying themselves that the 801 may be legally operated in the district where the user intends to deploy it.

**Disclaimer**

Care has been taken in assuring the quality of the CST801VI but the developers, TTI and any associated company, distributor or reseller do not accept responsibility for errors. In no event shall the aforementioned parties be liable for any loss of profit or any other commercial damage including, but not limited to, special, incidental, consequential or other damages arising from the provision of the CST801VI or associated software or peripherals to the user.

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**CERTIFICATION STANDARDS**

**FCC Notice**

This device complies with Part 90 of the FCC Rules.

FCCID: IP9801VI

This device meets FCC requirements as a controlled/occupational environmental device closer than 2.5 cm.

Operations is subject to the following two conditions:

1. this device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation

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### **INTRODUCTION**

Tactical Technologies Inc. (Model number CST801VI), is a 1 channel, .25 watt VHF FM synthesized voice transmitter for law enforcement use. The operating frequency is only a 4 Mhz section from 150 – 174 Mhz due to the narrow band antenna. The unit utilizes an internal antenna and a single internal microphone for transmitter operations. The CST801VI can be equipped with an optional scrambler for added transmitter security.

Figure 1, The CST801VI Transmitter



### ***Operating Frequencies***

The frequencies available on the CST801VI are spaced in 12.5 kHz steps beginning with 150.0000 MHz and ending with 174.0000 MHz.

Simply put, “12.5 kHz steps” means your frequency must be in any of the following configurations:

xxx . x000  
xxx . x125  
xxx . x250  
xxx . x375  
xxx . x500  
xxx . x625  
xxx . x750  
xxx . x875

This gives the CST801VI the ability to transmit on any one of 280 available frequencies. Any other frequency selection will result in an error message.

### **Citation Receivers**

Any of Tactical Technologies Inc. Citation Receiver/Recorder kits (Series 20 and higher) are able to program frequency, power, and scrambling settings into the CST801VI. A special Citation Interface Cable, is supplied with the CST801VI for such an application.

See your TTI representative for more information. If you already own a Citation 20 or higher receiver, programming instructions are found in the Citation Operators Manual.

***Range of the CST802VI Transmitter***

It is impossible to state absolutes about how far an RF transmitter like the CST801VI will transmit. Many variables affect the range of a device including buildings, trees, weather, construction materials, installation, etc.

All things being perfect (meaning transmissions are outdoors over flat terrain with no obstructions), a .25 watt CST801VI should be able to easily transmit over a ¼ mile. You should expect less distance than that however, in a real world operation.

One of the most important variables, and one that the operator can actually control, is the placement of the receiver and the receiving antenna. A good rule to follow is the higher the antenna placement, the better chance you have of quality reception. This alone will increase your operating range. Just having the CST801VI in an ideal location is not enough.