TTDMOD

Two Tone Detector Module

Install & User Manual

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Tech. Publication No. 9000-0000-107 Rev 01

Warning

If incorrectly used, this equipment can cause severe injury. Those who use and maintain the equipment should be trained in its proper use, warned of its dangers, and should read the manuals before attempting to set up, operate, adjust or service the equipment. Keep this manual for future reference.

Important Safety Information

Installation & Service Precautions

• Electrocution, severe personal injury and damage to equipment can occur during installation or servicing this equipment. All electrical work should be performed by, or under the supervision of an experienced electrician and in accordance with all applicable electrical, fire, building and safety codes.

•You must test the system and equipment to insure it is operating correctly after the installation, as well as after any work has been performed.

System Operation

•Training is necessary to ensure those responsible can correctly use the system. Periodic tests can serve to accomplish the training for the operators, in addition to verifying system readiness.

•You must carefully read and completely understand all the information about the system including its abilities and its limitations. Since no control system is infallible, you must have contingency plans for control, in the event the primary systems do not perform as expected, for any reason.

TTDMOD Hardware

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1) Life support devices or systems are devices or systems which, (a) are intended for surgical implants into the body, or (b) support or sustain life, or whose failure to perform, when properly used in accordance with instructions, can reasonably be expected to result in a significant injury to the user.

2) Critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

Two Tone Decoder Module

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Product Overview

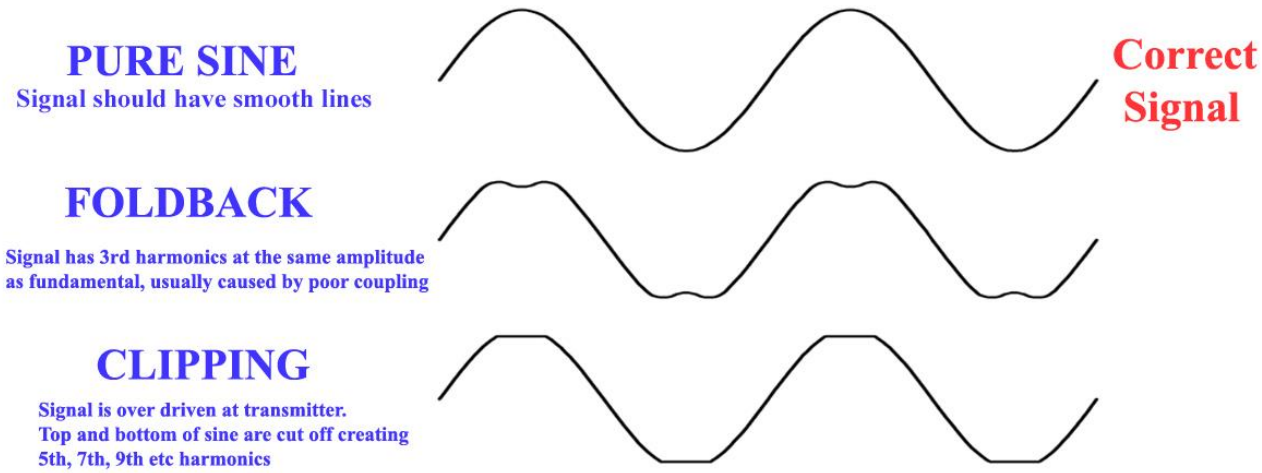
Basics

The TTDMOD PCB detects Sinusoid signals and provides the frequency of the sinusoid to the RXC-3000 processor. When installed, the RXC-3000 detects the TTDMOD and activates the portion of its program that is dedicated to single and two-tone detection.

If the TTDMOD is not installed, the RXC-3000 will display on its LCD screen that the option is not installed.

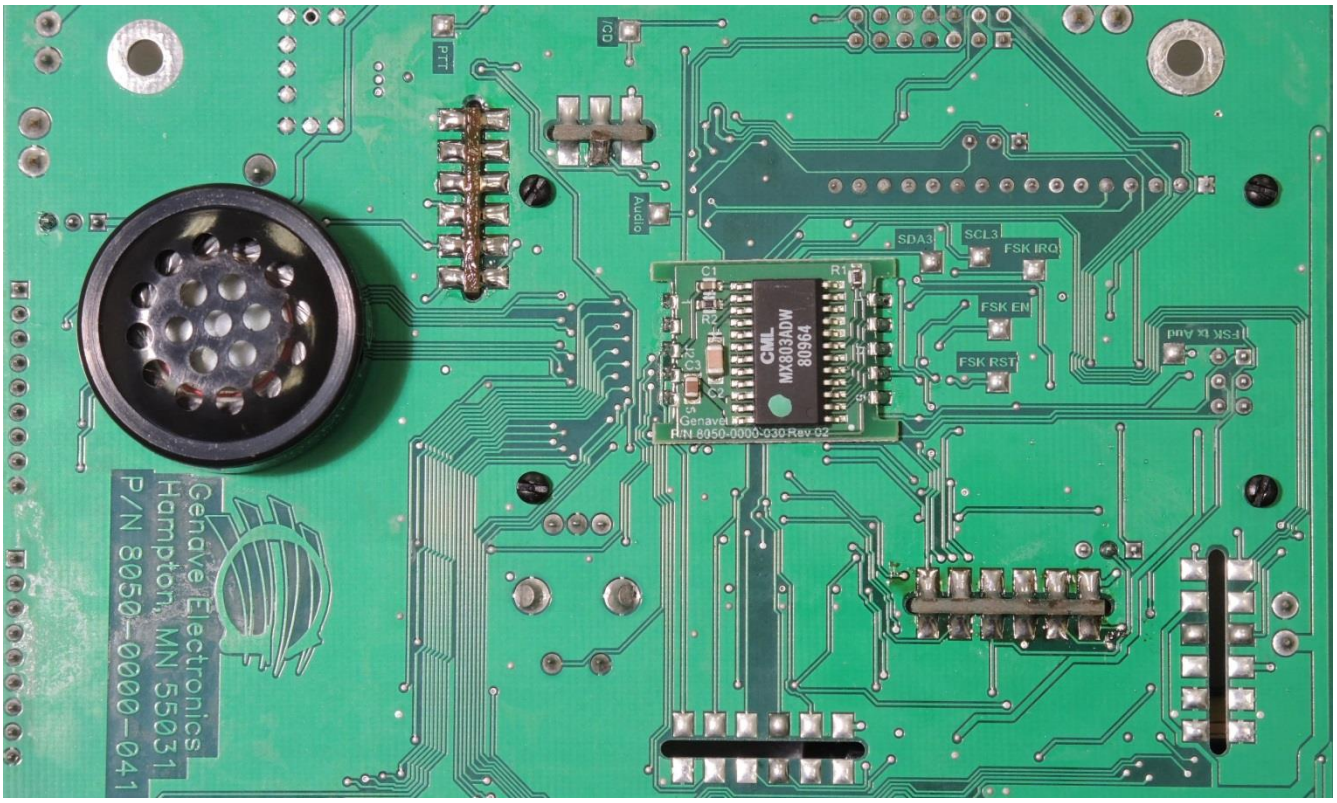
If the signal to be decoded has white noise, voice or other tones present, the TTDMOD first removes all signals except for repeating sinusoids and then will present the information for the LARGEST sinusoid only. All other sinusoids are ignored.

If the signal is highly distorted and full of harmonics, the TTDMOD may have a more difficult time detecting the frequency. As long as the main signal is larger than the harmonics or phasing, the TTDMOD will find the frequency.



Installing the module

The TTDMOD is installed by soldering it onto the back of the RXC motherboard. As shown below, the board is attached by soldering the 10 castellated pads to the surface mount pads on the RXC.



Testing the module

Once the TTDMOD is installed, go through the menus and enter the Live TTS Decoding Menu.

Send the RXC a 1000 Hz signal and if the TTDMOD is installed correctly 1000Hz will be displayed on the LCD screen.