

# Electronic Tool Tip #15 – Handheld Frequency Counter

This time around, I am making a departure from my usual type of Tool Tip. Usually, I talk about tools and repair aids. This time, I am going to talk about a handy piece of test equipment that makes verification of radio programming much simpler.

Often, when programming a radio, especially when programming a type with which the user is unfamiliar, it can be difficult to know whether or not the radio has been programmed properly. This is especially confusing when the radio in question cannot seem to be able to communicate successfully with a local repeater.

Very often, when such programming goes awry, it is because the programmed information is incorrect either as to the repeater frequency offset, the CTCSS tone, or both. When this happens, it can sometimes be difficult to actually see the error, for a number of reasons.

Many hams will set up their radios to display the repeater call sign rather than the frequency on-screen in the radio display. Of course, if the unit were set to display frequency, then the repeater offset is easily seen in the display. However, even in that situation, the CTCSS tone would still not be shown.

The Latnex FC-2800M handheld frequency counter solves this problem. This nice little unit will display the transmitted carrier frequency as well as any subaudible codes – both CTCSS and DCS – that are transmitted with the carrier. The FC-2800M covers all frequencies from 2MHz to 2800MHz in two selectable ranges, the first being 2MHz to 200MHz and the second covering 27MHz to 2.8GHz (2800MHz).

The unit is powered by an internal rechargeable 3.7V Li-ion battery, and is controlled in all aspects of its operation through the use of four front-panel pushbutton switches. Battery charging is accomplished via a USB port and cable to a 5V USB source. Of course, the unit incorporates a CTCSS/DCS decoder as well as a DMR frequency counter.

The front panel display shows incoming signal information including the existing noise floor and the incoming signal's relative strength above that noise floor, and a typical signal strength bar graph. Also displayed on the front panel are the two most recent (historical) frequency measurements.

This frequency counter is available online from Amazon, at a price of \$69.00 (USD) plus shipping if you are not an Amazon Prime member. Of course, the government has to get its share, so tax will also be applied. Point your browser to <https://www.amazon.com/gp/product/B09F9XY63J> if you want to investigate this item for yourself.

