HAM RADIO 101

Programming Radio's and Hand's On

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Get to Know your Radio

One of the best ways to be helpful during an emergency situation, is to be familiar with your radio. Understand how to navigate through menu's, add or edit frequencies quickly, or just being able to switch between modes easily.(FM, AM, HF, Digital)

Our Goal in EmComm is to establish Communication Channels, and be able to pass messages efficiently.

Read The Manual?

Why is the manual the most overlooked inclusion of a radio, or other product? Is it that we don't seem to have the time to read it? Or perhaps we fear it isn't going to be understandable. Maybe it is just thick and intimidating.

These are often true, but they can be very helpful to learn the features of a radio.

Don't have a radio? I'd suggest taking time to browse manuals online or even to sit down with someone else and have them show you their radio, tell you a bit about it, and maybe why they chose it.

Pick one that is easy to use for you, not just because somebody said it's GREAT!

Requirements for adding Frequencies

- 1. Know how to accomplish with your radio.
- 2. The correct information to store
- 3. What information do I need to program a frequency? Where can I find this information?

Frequency

Offset

Tones

+ or - or
Simplex
How Much?

PL Tone(Repeater
Tone), CTCSS
Tones?

Where Can I find Frequency Information ???

- 1. ARRL Repeater Directory Book
- 2. Manually Scanning Slow, and will only hear if frequency is active
- 3. Monitor 144.390(aprs channel) Excellent way to find local repeaters, especially if travelling.
- 4. Talk to someone you know
- 5. Online

Analog

http://utahvhfs.org/rptr.html

http://www.artscipub.com/repeaters/

http://www.rfinder.net/blog/

http://www.repeaterbook.com/

D-Star

http://www.dstarinfo.com/standard-repeater-list.aspx

http://www.dstarusers.org/repeaters.php

General Frequencies - Scanner & Non Ham

http://www.cityfreq.com/

http://www.radioreference.com/

http://www.1bearcat.com

http://www.interceptradio.com/

Other Tips about memories

The Tx Power Level will be saved with each memory channel, so you can specify one to be used by default.

Operating mode is also remembered, FM is common voice mode, but your radio may have other modes, such as AM, FM, WFM, SSB, USB, and sometimes DATA

The Easy Way

While important to know how to add frequencies when needed, if you're up against filling hundreds of frequencies manually, you'll be spending a lot of time doing so, and hopefully the radio doesn't get reset and lose them all.

The better solution here is to use a computer programming software to manage, and save them to your radio, hundreds of channels can be uploaded in minutes.

Programming Software Options

OEM - Can be costly and sometimes limited, each will have their own specific database or outline to use, sometimes expensive.

RT Systems - Aftermarket Software & Cable

One stop provider of software, cable, and live customer support. Common database that is shared across any of their supported radios. ~\$50 per radio-cable setup

CHIRP - An open source aftermarket software that is free and is based on a common database file, that can be shared among many different radios. Use generic programming cables found on amazon or ebay. ~\$20-35 per cable

Support is more online forum style, or find a friend that knows.

Any Questions?

Hands On
 We can try uploading some local frequencies to your
 radio, if we have the right cables & software for your
 radio...