

Indiana Oath Keepers Recommended Communications Equipment

Before you purchase anything contact the Comms Coordinator for advice unless you are an experienced radio operator.

CommsCoord@IndianaOathKeepers.org

CPT Team - Individual Comm – CPT Team AO Comms

- **Baofeng DM-1701 DMR Handheld, Highly Recommended**
– Works best when used with a Hotspot. Will work through repeaters and in simplex both digital and analog modes. This radio will work analog without a DMR ID but the DMR channels require a DMR-ID which is easy to apply for and free if you have a Ham Technician License.

DM-1701DMR Radio \$99.00, Hotspot about \$135.00

<https://www.radioddity.com/collections/consumer-radios/products/baofeng-dm-1701>

There is a special review of the DM-1701 written by the comms coordinator.



- **Baofeng RD-5R DMR Handheld**, – works best when used with a Hotspot. Will work through repeaters and in simplex both digital and analog modes. This radio will work analog without a DMR ID but the DMR channels require a DMR-ID which is easy to apply for and free if you have a Ham Technician License. **The RD-5R has trouble with accessories like Speaker Mics and Tactical Headsets.**

RD-5R Radio \$69.00

<https://www.radioddity.com/collections/consumer-radios/products/radioddity-x-baofeng-rd-5r-dmr-ham-amateur-two-way-radio>

Read the DMR Primer to learn more about DMR.

The **Anytone 878 plus** is an excellent radio but cost more.



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- **Baofeng BF-888S UHF Handheld** – 16 Channel FRS – 1 to 4 Watts, 1-4 miles. \$15.00 on Amazon. Pictured – When ordering this radio read the description and look for **scrambler** option in the description. Some of this model do not have this option. Only order the ones with the scrambler option. This is essential for local CPT operations.

- o **Antenna, Nagoya NA-717**, \$16.00



- **Dual Band Handhelds** – VHF/UHF
 - o **Baofeng BF-F8HP**, **8 Watt**, UHF/VHF, \$63.00, pictured, **Recommended**
 - o **Antenna, Nagoya**, NA-771, \$17.00
 - o **A mobile antenna** on your vehicle with an antenna adapter will help these handhelds work exceptionally on your vehicle when mobile.



Local Mobile Comm

- **CB Radios** – 5-10 mile
- **Recommend the TYT TH-9800, Quad Band, Ham** – Vehicle Mounted Quad Band with **cross band repeat**, will extend teams comm 20-50 miles on **Repeaters**. This radio will do CB (AM) and FRS and GMRS as well as four



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Ham bands. \$223.00. can be ordered on Amazon. Pictured. See power supply below.

- **Antenna for Th-9800, Comet or Diamond Quad Band**, \$126.00. Needs a heavy duty antenna mount. This antenna can be used on your vehicle or on your home if set up properly.
- **The Antenna is the most important part of a radio.**

State, Regional, National Comm

Receiver (No Ham License required)

- **SDR Play, RSP1** – For use with a PC or Laptop, \$149.00. The SDR play is a powerful **Receiver** that is capable of receiving almost any communications, whether ham or otherwise. It receives (depending on antenna) as well as most HF ham radio transceivers.



Information - <http://www.sdrplay.com/>

To Purchase - <https://www.hamradio.com/detail.cfm?pid=H0-015965>

- **HF Radio**
 - o **Yaesu Ft-450D**, 100 Watts, all mode, \$699.00, pictured, Recommended
 - o **ICOM 7300**, 100 Watts all mode, \$1200.00. Better radio, far more complicated to setup and operate.
- **Antenna** – 80m, 40m, 20m minimum



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- o **A simple homemade 80m dipole** works very well, **with an external tuner**.
- o **Offcenter Fed Dipole (OCF)**, 80m All Band, **No tuner**, 137 feet end to end. You will need to purchase a 4:1 Current Balun and the wire needed to build this antenna. Comm Corrdinator has one of these.
- o **An Inverted L for small locations**. The inverted L only requires 30 foot of horizontal space and about 33 foot of elevation. Most yards will accommodate this 80m antenna. It also requires tuner.
- o **A Folded Dipole** works well in small locations too.
- **Power Supply, Iota DLS-45**, \$148.95. Can be used with or without a battery. If you use this with a battery get one of the IQ modules to control the charge. You can purchase a DLX series as well, I prefer the DLS series (my preference). These supplies will act as full featured battery charge controller as well as a power supply. You may not think you need a battery but eventually you will want one or two batteries. Batteries (deep cycle, like for a trolling motor) act as a filter for your ham station (main advantage) as well as Emergency Power. <https://www.solar-electric.com/iota-dls-45-12-volt-45-amp-regulated-battery-charger.html>
- **HF Amp** – An HF Amplifier can make all the difference in getting through when bands are bad. We are currently in a portion of the sun spot cycle where the bands are often bad and will be for the next couple of years. Therefore, an HF Amp can mean the difference in being heard or not being heard. RM Italy makes some great inexpensive amps. I own and use an RM Italy HLA 300 Plus. <http://www.rmitaly.us/> . RM Italy makes a number of different amps at reasonable prices be sure to get one that covers the whole HF Band, or at least most of it. These amps are made in Italy and tech Support is very difficult in the USA. However, they are priced within reason. You may want to get an amp that has fans on it. With an Amp like this you will have to purchase an external Tuner as well.



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Call the Comms Coordinator and I will help you when you consider an amp.

- **Digital Modes** When thinking about Emergency SHTF communications passing messages and information will be very important. Digital modes are the best way to pass traffic or messages. Digital Modes work with HF and VHF/UHF radios when connected to a computer. Once your station is setup the cost of adding Digital Modes is small. Some radios have the signal link type interface built in.
 - o **Receive, A computer and FLDigi**, free download
 - o **Transmit , Signal Link USB**, \$99.00