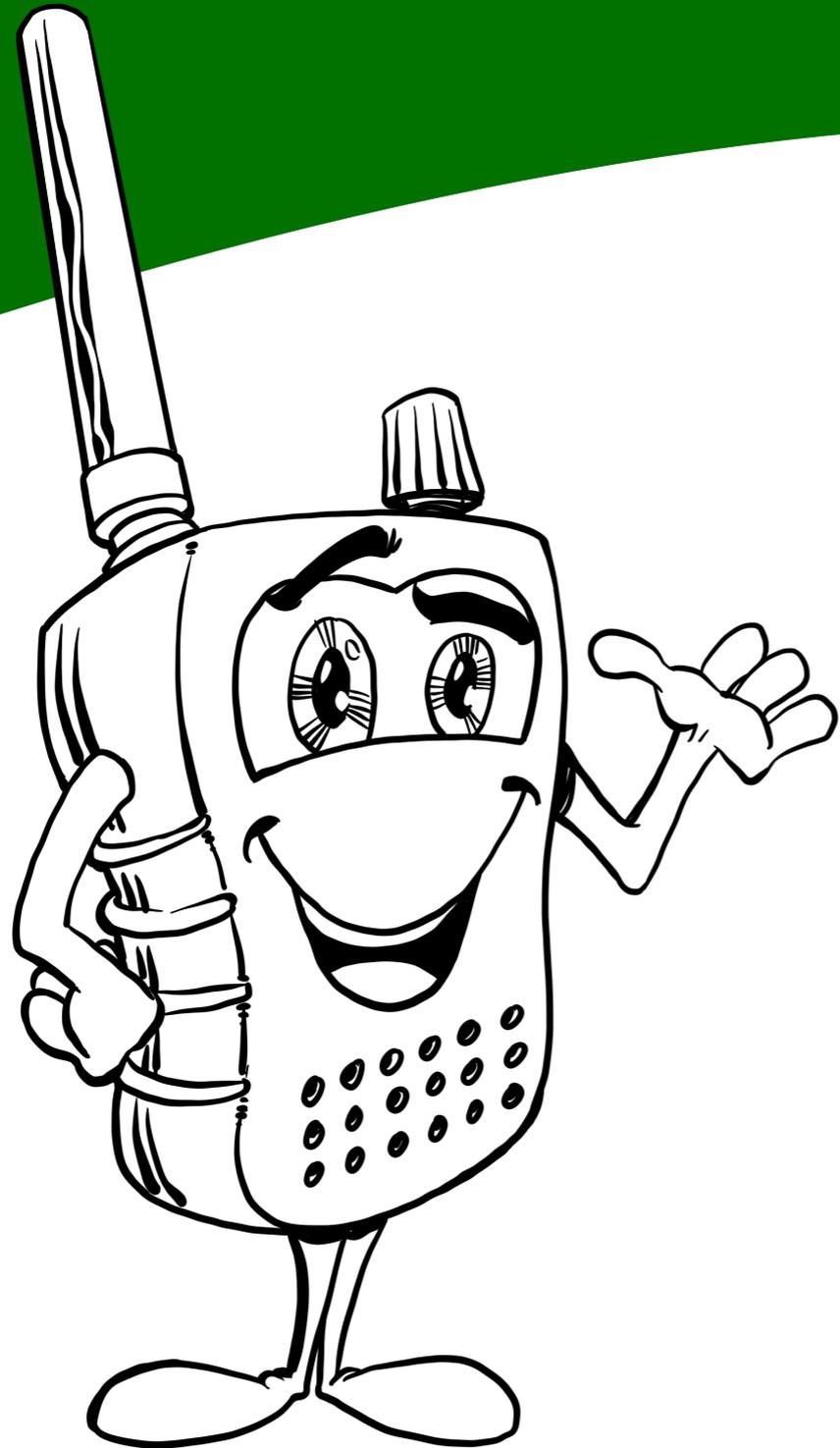


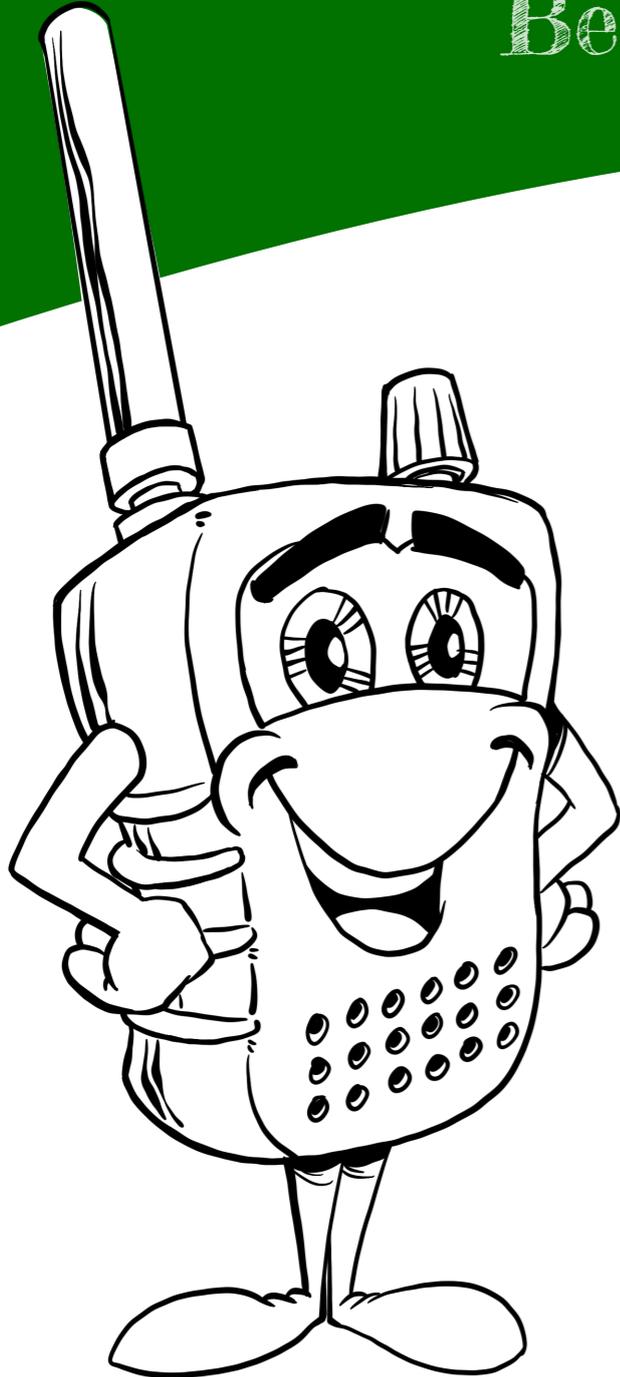
# Scanner School's



## 5 Things You Need to Know Before Buying Your First Scanner

# Scanner School's

5 Things You Need to Know  
Before Buying Your First Scanner



#1

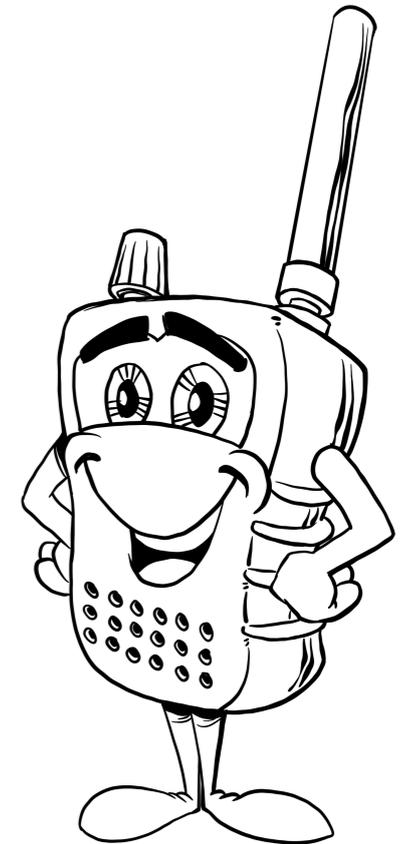
**WHAT TYPE OF SCANNER CAN  
YOU AFFORD ON YOUR BUDGET?**

# #1

# What type of scanner can you afford on your budget?

## How much can you afford on a new scanner?

- An inexpensive entry level scanner could cost less than \$100 USD
  - The cheapest scanners will **not** have recommended options such as:
    - PL or DPL Decoding
    - Alpha Tags
    - LTR, EDACS, or Motorola Trunk Tracking
    - Will **not** do digital, such as P25, DMR, ProVoice



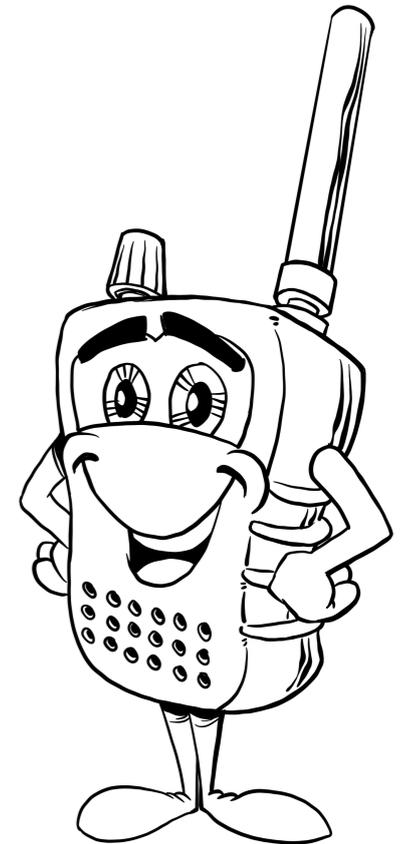
#1

# What type of scanner can you afford on your budget?

**But for just a few dollars extra....**

- Our #1 Entry level scanner pick is just under \$100 and supports:
  - Alpha Tags
  - PL / DPL
  - 500 Memory Channels

Check out our recommendations on page 25!



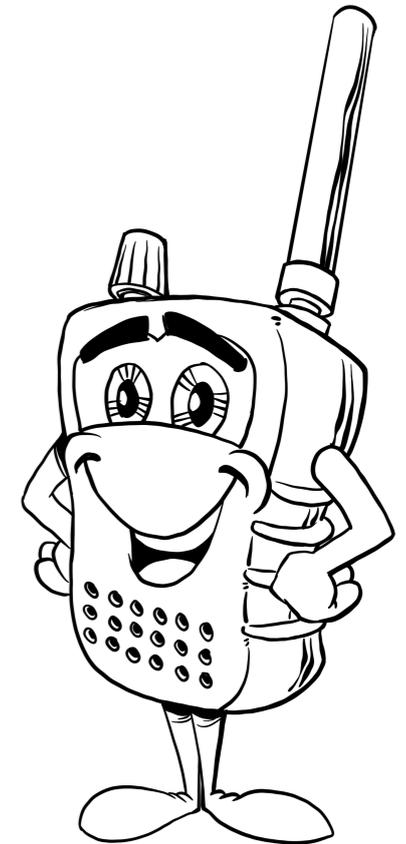
# #1

# What type of scanner can you afford on your budget?

## Upgrading to Analog Trunking

- Analog Trunking Scanners cost around \$150 USD
  - **At this price point the following features are usually standard:**
    - PL and DPL Decoding
    - Alpha Tagging
    - LTR, EDACS, and Motorola Trunking, with Reband Support
  - Not supported at this price point
    - **Digital Modulation such as:**
      - P25 - Conventional and Trunking
      - DMR (MotoTRBO)
      - ProVoice

Check out our recommendations on page 26!



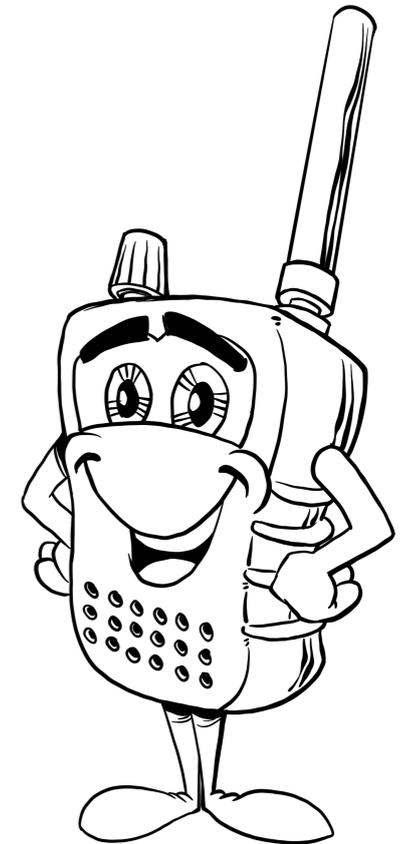
# #1

# What type of scanner can you afford on your budget?

## Upgrading to Digital Trunking

- Digital Trunking Scanners cost around \$350 USD
  - **At this price point the following features are usually standard:**
    - PL and DPL Decoding
    - Alpha Tagging
    - LTR, EDACS, and Motorola Trunking, with Reband Support
    - Digital Modes
      - P25 Conventional and Trunking
- You could further upgrade your scanner to include
  - DMR - MotoTRBO
  - ProVoice - Digital Talk Groups on EDACS Trunk Systems

Check out our recommendations on page 27!

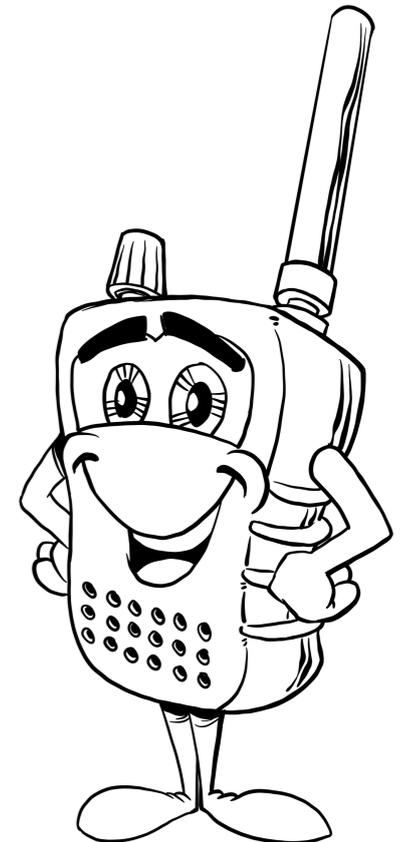


# #1

# What type of scanner can you afford on your budget?

## Top of the line Uniden Scanners

- Scanners are upwards of \$450 USD
  - **Uniden Home Patrol Series**
    - Have the Radio Reference Database Built in
    - Allow you to enter your zip code and systems
      - Not as “turn-key” as most want
      - Allow for user defined banks - which help
- You could further upgrade your scanner to include
  - DMR - MotoTRBO
  - ProVoice - Digital Talk Groups on EDACS Trunk Systems

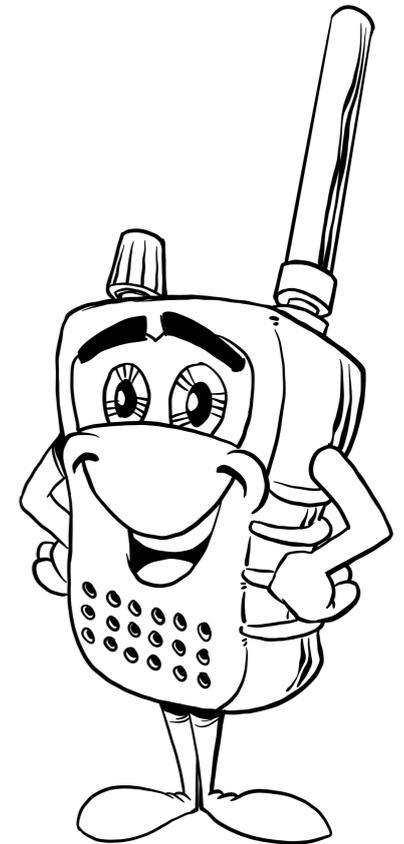


# #1

# What type of scanner can you afford on your budget?

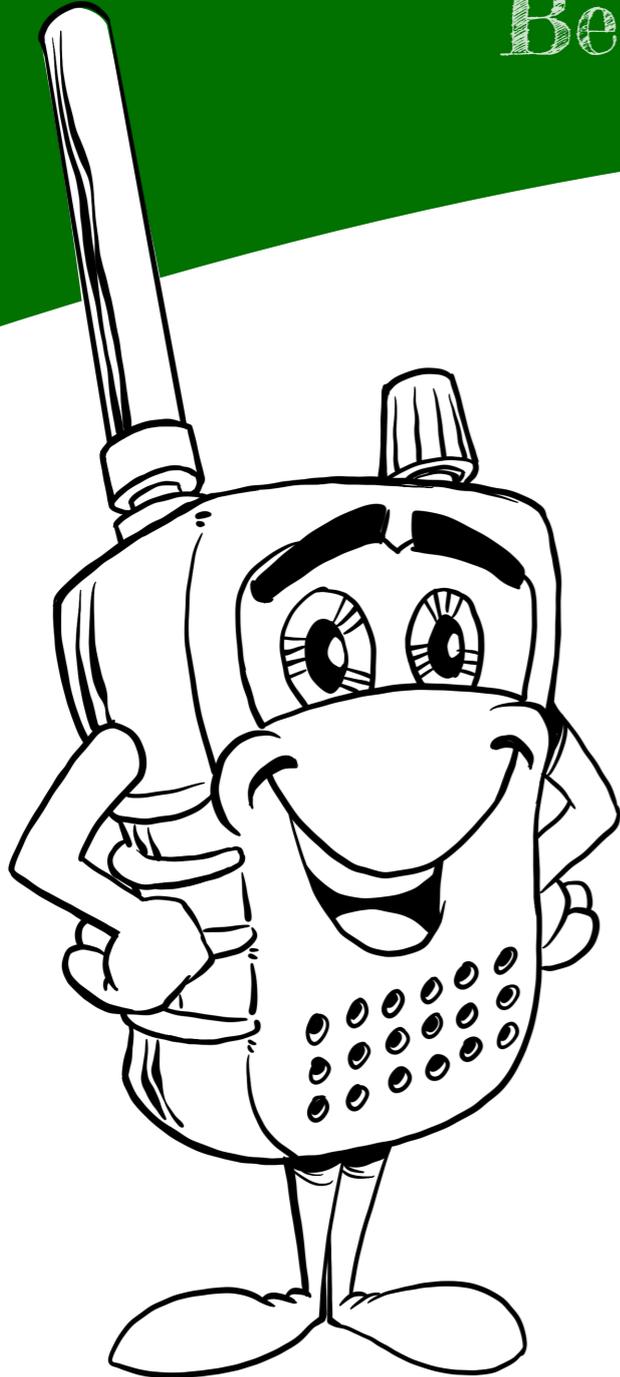
## Top of the line Whistler Scanners

- Scanners are upwards of \$450 USD
  - **Whistler Group “TRX” Series Scanners**
    - Have the Radio Reference Database Built in
    - Software is clunky
    - No 3rd party software support
- Also includes at this price point -
  - DMR - aka MotoTRBO
  - ProVoice - Digital Talk Groups on EDACS Trunk Systems
  - NXDN



# Scanner School's

5 Things You Need to Know  
Before Buying Your First Scanner



**YOU NEED TO CHOOSE:  
HANDHELD OR DESKTOP**

# #2

## You Need to Choose: Handheld or Desktop

### Why this matters

Sometimes you could end up paying slightly more for a desktop version of a scanner, and sometimes you won't.

#### **For example:**

The Uniden BCD436HP is approximately \$100 less than the BCD536HP  
However - the more expensive BCD536HP allows you connect the scanner to an existing WiFi connection or setup its own access point (AP)

#2

# You Need to Choose: Handheld or Desktop

## **Batteries**

Handheld scanner can operate using batteries.

You might find out that you get better results on portable operation if you swap out the batteries.

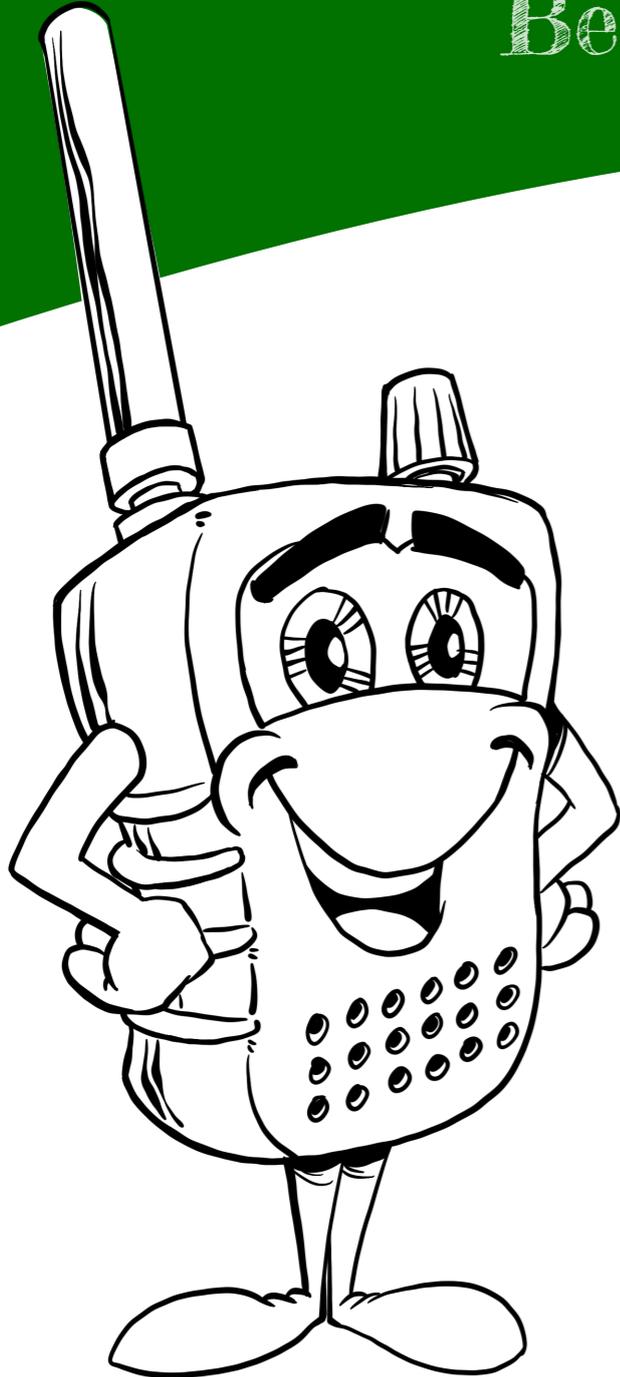
In today's newer scanners that use a USB connection to charge the batteries, the batteries will only charge if the scanner is not powered on.

Additionally, you might need to purchase a USB to AC Power adapter separately from your scanner purchase.

Since the scanner won't operate and charge, you will want to invest in an external battery charger to make sure you have charged batteries if this is important to you.

# Scanner School's

5 Things You Need to Know  
Before Buying Your First Scanner



#3

**FIND OUT WHAT FREQUENCIES  
AND SYSTEMS ARE USED IN YOUR  
LOCAL AREA**

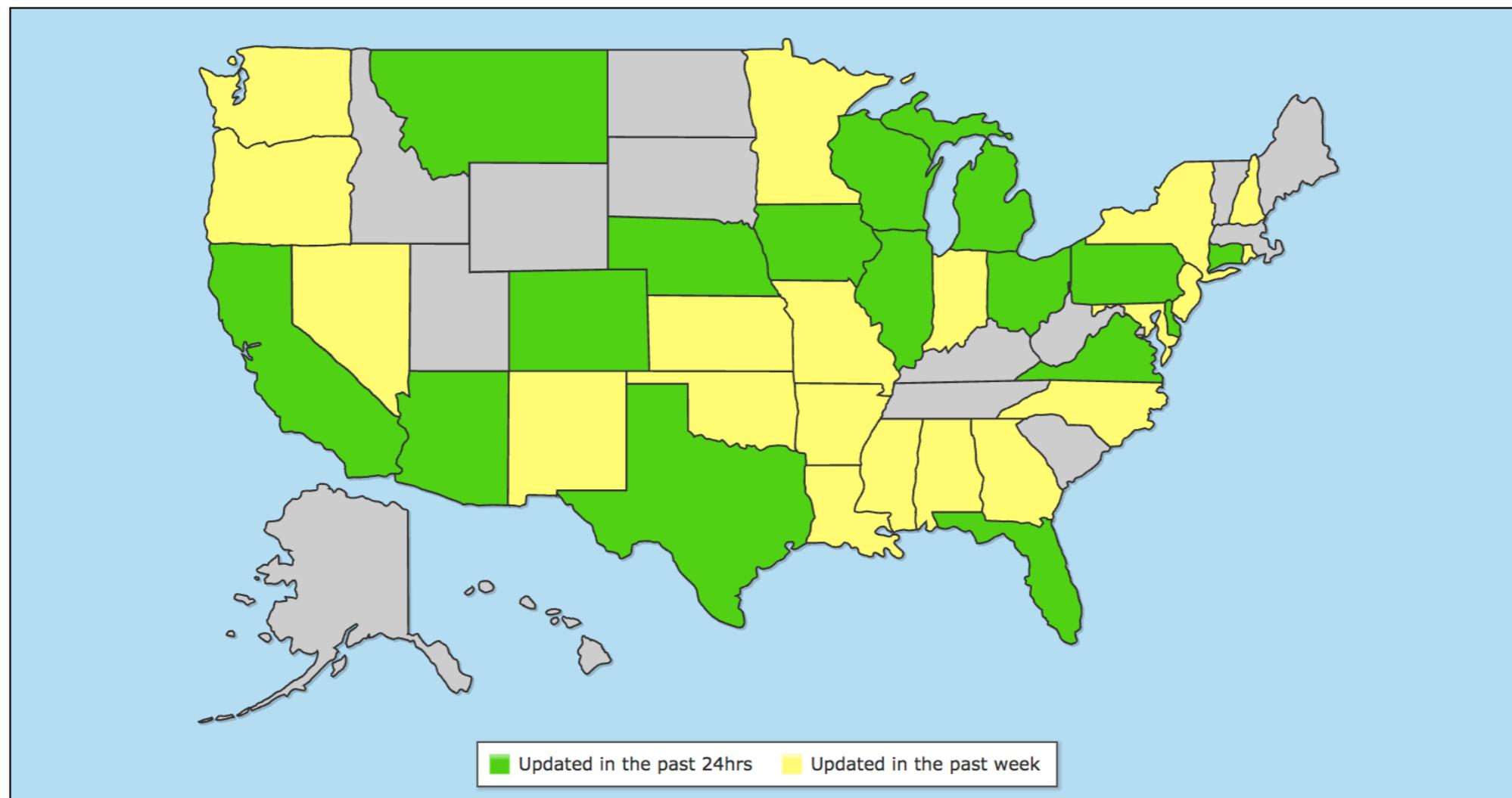
#3

Find out what frequencies and systems are used in your local area

**Check the Radio Reference Database**  
**<http://www.radioreference.com/apps/db>**

The Radio Reference Database (United States)

Choose Country: United States



#3

Find out what frequencies and systems are used in your local area

## What is Radio Reference ?

- Radio Reference is probably the worlds largest scanner forum website with one of the largest scanner radio communities.
- The Database at Radio Reference includes all known frequencies, repeaters, trunk radio systems, and talk groups across the United States and many other countries.
- The Radio Reference Forums is a great source for local knowledge with posts and answers by local scanner radio users

# #3

## Find out what frequencies and systems are used in your local area

### What do you look for in the Radio Reference Database?

- Navigate to your Country, State, and County to find your information for your local area
- Be sure to check the database for the following information:
  - **Are conventional frequencies used in the area?**
    - Are they Analog (AM / FM)
    - Are they Digital? (P25, NXDN, DMR?)
    - Are any frequencies Encrypted?
      - shown with an 'e' for part time encryption
      - Shown with an 'E' for full time encryption
  - **Are any trunk systems used in your area?**
    - If they are Motorola Type II, do they have Digital Talk Groups?
    - If they are any of the talk groups Encrypted?

# #3

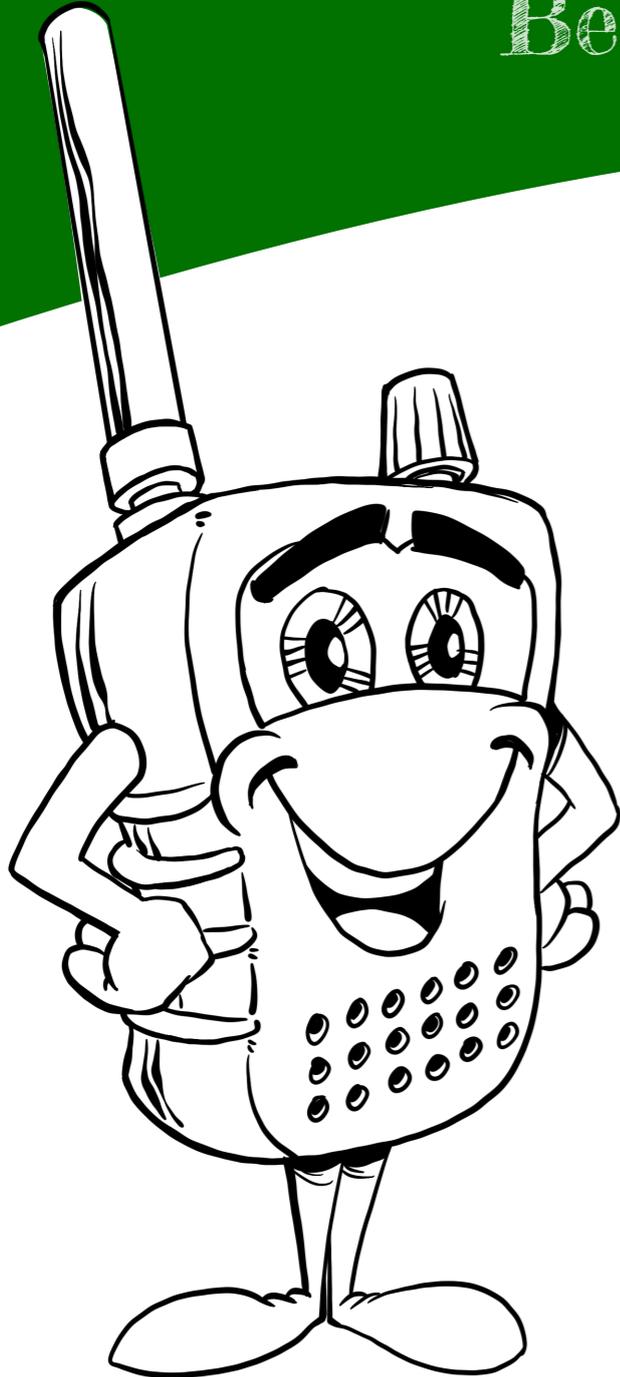
## Find out what frequencies and systems are used in your local area

### How do you use the information from Radio Reference?

- If you area just uses analog conventional systems, any scanner on the market will be a viable solution for you
- If you are interested in monitoring a Motorola, LTR, or EDACS trunk system, you will need an scanner that is at least a “Trunk Tracker III” series
- If you want to monitor a P25 frequency or Talk Group, it will require a scanner that is at least a “Trunk Tracker IV” series.
- If you want to monitor a “Phase 2” P25 Trunk system and talk groups show a “T” next to them, you will need a scanner that is at least a “Trunk Tracker V”
- ProVoice or DMR will require an additional paid upgrade to some digital scanners and may be included with others
- At this time, NXDN is only supported via Whistler Scanners or using computer hardware and software
- If you want to listen to anything with an “E”, it will be impossible. There is no way to monitor any encrypted frequencies or talk groups

# Scanner School's

5 Things You Need to Know  
Before Buying Your First Scanner



#4

**HOW FAR AWAY DO YOU WANT  
TO MONITOR?**

# #4

## How far away do you want to monitor?

**Think about how far you are from what it is you want to listen to.**

Several factors may dictate how far your scanner can receive, such as:

- Are you listening to a repeater or a simplex transmission?
- How much power is the transmitting station using?
- Listening from a basement will limit your reception
- Likewise, listening from higher elevations can improve your reception

Your antenna, coax, and even weather can play a role in how well you receive a particular station.

Typically, you can expect a VHF or UHF frequency to have a maximum range somewhere in the neighborhood of 50mi (80km), but the range can also be as little as a few hundred feet or meters.

# #4

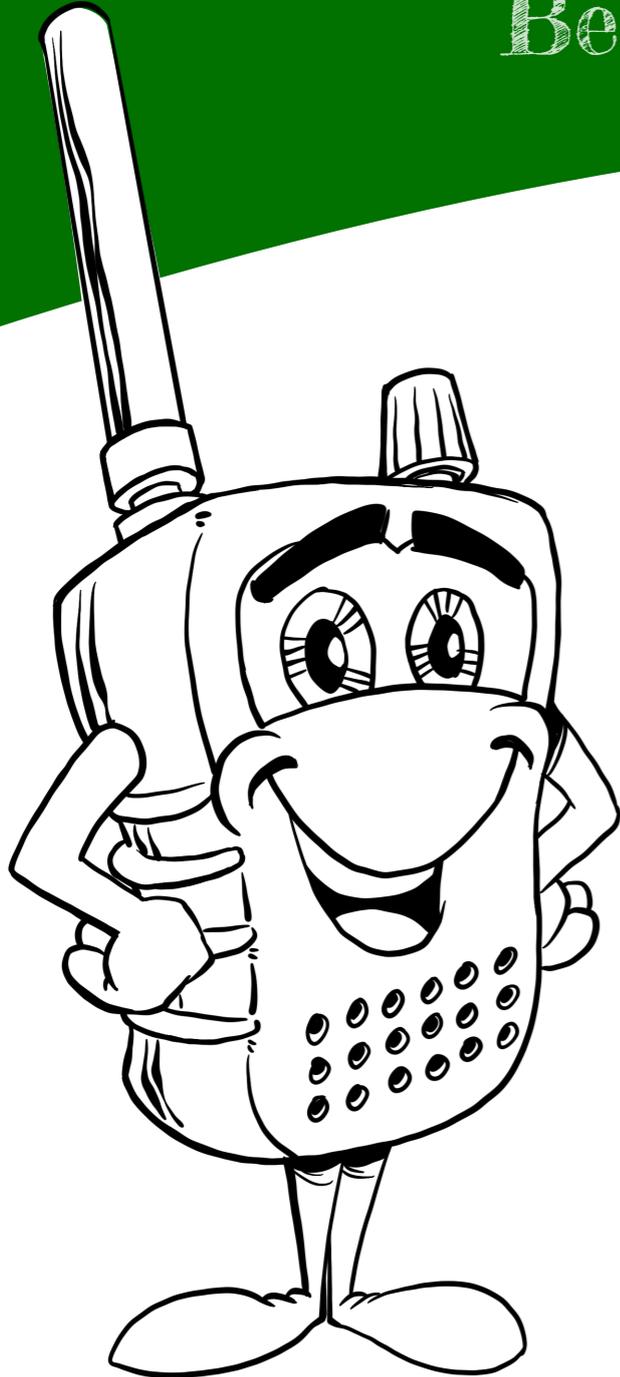
## How far away do you want to monitor?

### How can you improve your reception?

- Most of the time, you can improve your reception by installing an outdoor scanner antenna
- If you are restricted from putting out an outside antenna due to landlord or Home Owner's Association - try putting an antenna in an attic space or in a closet on your highest floor
- Coax is the equivalent of tires on your vehicle. You want to right tires for the right type of driving you will be doing. Quality cable like LMR400 costs a bit more, but it has very minimal loss over a large range of frequencies

# Scanner School's

5 Things You Need to Know  
Before Buying Your First Scanner



#5

**UNDERSTAND YOUR LOCAL  
SCANNING LAWS**

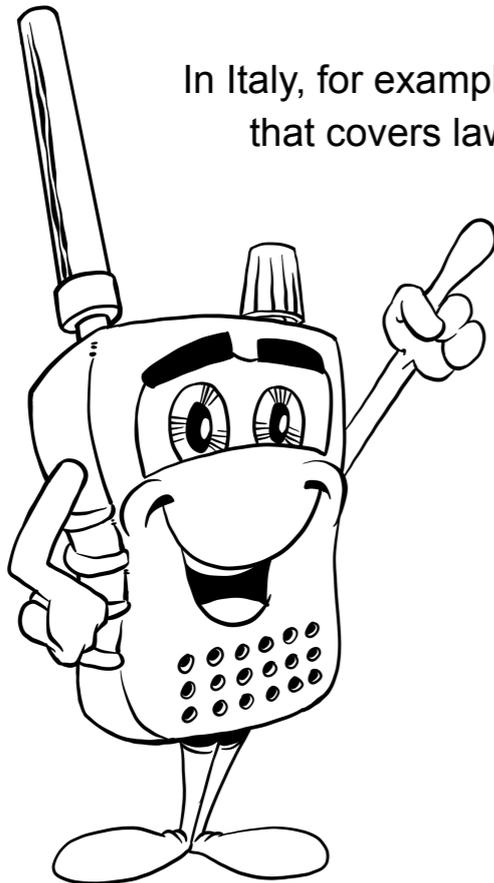
# #5

## Understand your local scanning laws

### Make sure you scan legally

**Scanning laws can vary from county to country and from state to state**

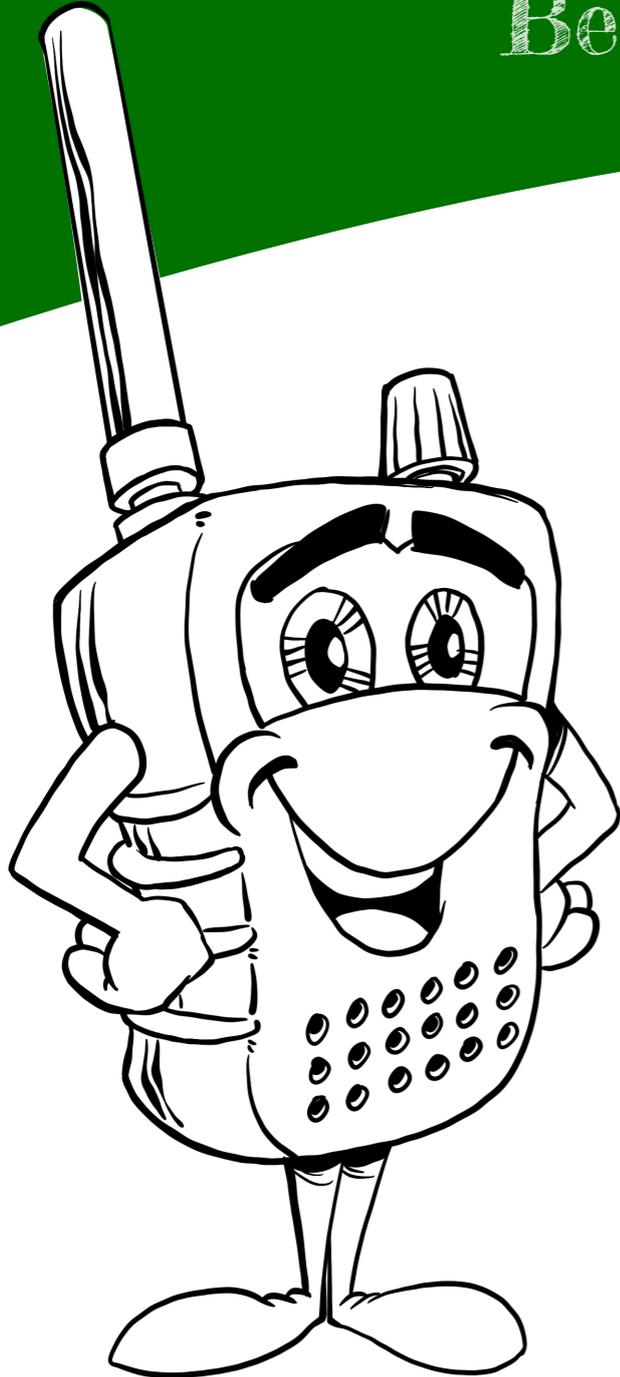
In Italy, for example, it is illegal to own a scanner that can intercept law enforcement frequencies. Owning a radio that covers law enforcement carries a 1 - 5 year jail sentence, according to the Art 617 bis Civil Code.



**Check Wikipedia for a list of laws in your country**  
**[https://en.wikipedia.org/wiki/Scanner\\_\(radio\)](https://en.wikipedia.org/wiki/Scanner_(radio))**

# Scanner School's

5 Things You Need to Know  
Before Buying Your First Scanner



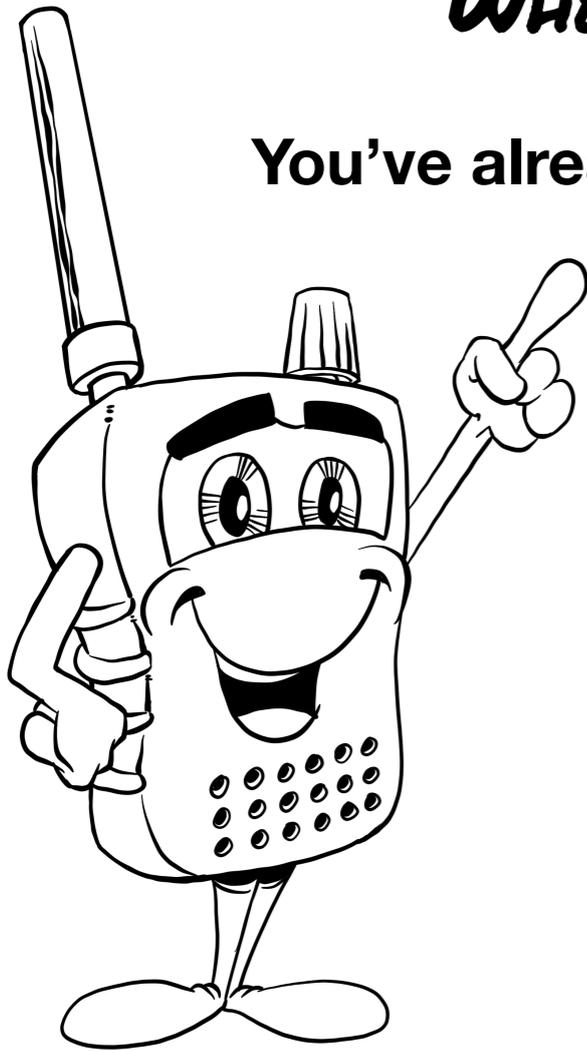
Bonus

# B

## Bonus Information

### **WHERE CAN YOU FIND MORE INFORMATION?**

**You've already discovered a great resource in Scanner School!**



**Check out our website at**

**[www.scannerschool.com](http://www.scannerschool.com)**

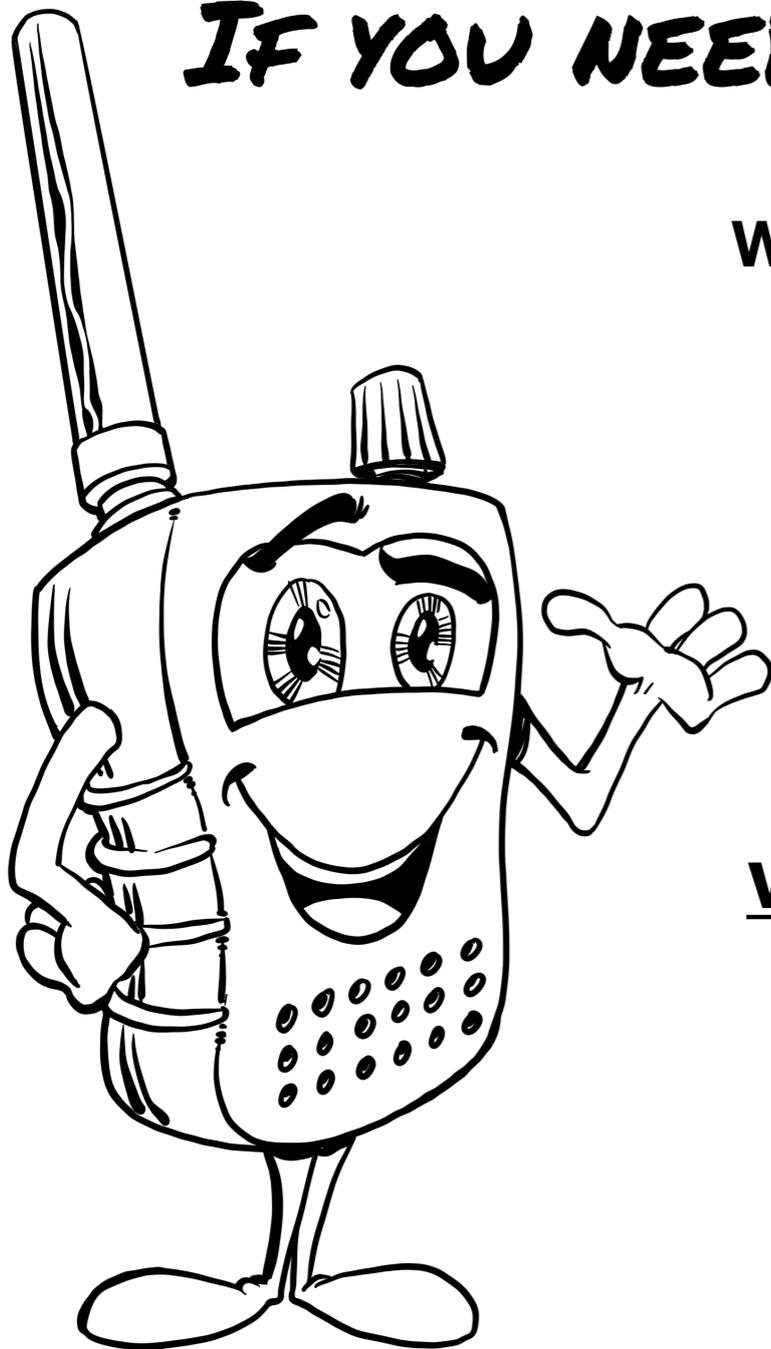
**for more scanner radio related information,  
tutorials, podcasts, and videos.**

B

## Bonus Information

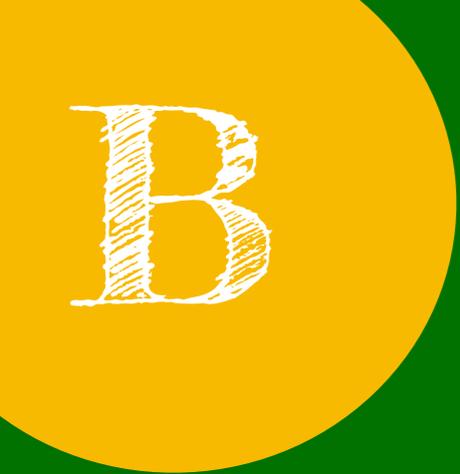
**IF YOU NEED MORE PERSONALIZED HELP**

We are here to give you a hand!



**You can reach out and book a  
consulting session at**

**[www.scannerschool.com/consulting](http://www.scannerschool.com/consulting)**



B

# Bonus Information

## **ENTRY LEVEL SCANNER REVIEWS**

**Looking for a scanner to get you into the hobby?**

**We reviewed several scanners on our  
podcast!**

**Read the reviews or listen to the podcast  
[www.scannerschool.com/session6](http://www.scannerschool.com/session6)**

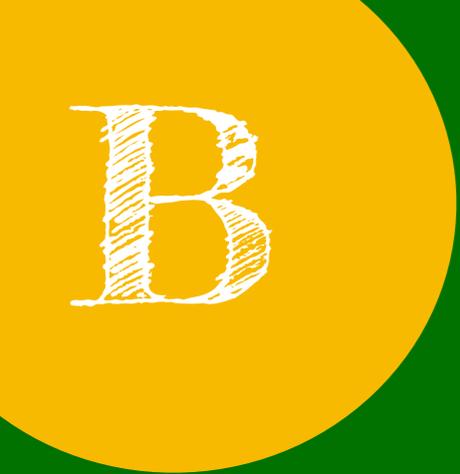
# B

## Bonus Information

### **ANALOG TRUNKING SCANNER REVIEWS**

If you need a scanner that supports LTR, EDACS, or Motorola Trunking

Read the reviews or listen to the podcast  
[www.scannerschool.com/session12](http://www.scannerschool.com/session12)



B

# Bonus Information

## **DIGITAL TRUNKING SCANNER REVIEWS**

If you need a scanner that supports P25

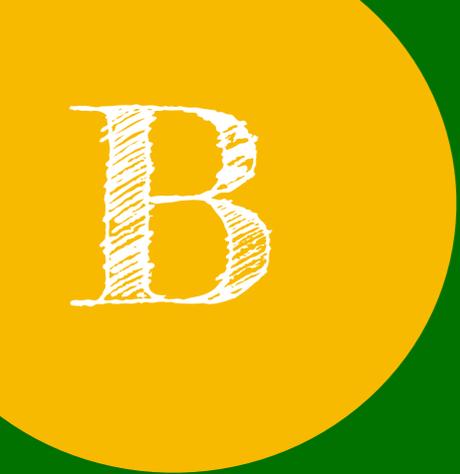
**Read the reviews or listen to the podcast  
Session TBD**

**Subscribe to our podcast at:**

**[www.scannerschool.com/itunes](http://www.scannerschool.com/itunes)**

**[www.scannerschool.com/stitcher](http://www.scannerschool.com/stitcher)**

**[www.scannerschool.com/googleplay](http://www.scannerschool.com/googleplay)**



B

# Bonus Information

## **JOIN OUR COMMUNITY**

**If you are looking to connect with other  
Scanner School Students  
Please join our Facebook Group**

**[www.scannerschool.com/facebookgroup](http://www.scannerschool.com/facebookgroup)**