

**MicroHAMS Digital Conference 2009**

# **Remote Station Operation - v2.0**

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# What and Why?

- What is “Remote Station Operation?”
- Why would you want to operate remotely?
- Changes from last year?

# What are key elements?

- Computer and Internet Connection
- Rig control and interface to computer
- Antenna(s)
- Remote station elements (computer or phone)

# Computer Elements

- Computer
  - Moderate to fast PC (PIII or better)
  - Windows XP or Vista
  - Soundcard and Two RS-232 ports
- Software Required
  - Rig Control
  - Audio Link
- Internet Connection
  - Broadband connection (256k upstream)
  - Static IP (or use No-IP DDNS)

# The Rig

- What type of rig?
  - Any modern rig that supports computer control
  - More bands in single box, more options
- What are rig control options?
- Soundcard connection
  - Same requirements needed for PSK31

# Antenna Consideration

- What ever you have is enough to start!
- Multi-band verticals are good option
- Multiple antenna ports?
- Advance options
  - Rotator control
  - Antenna switching control

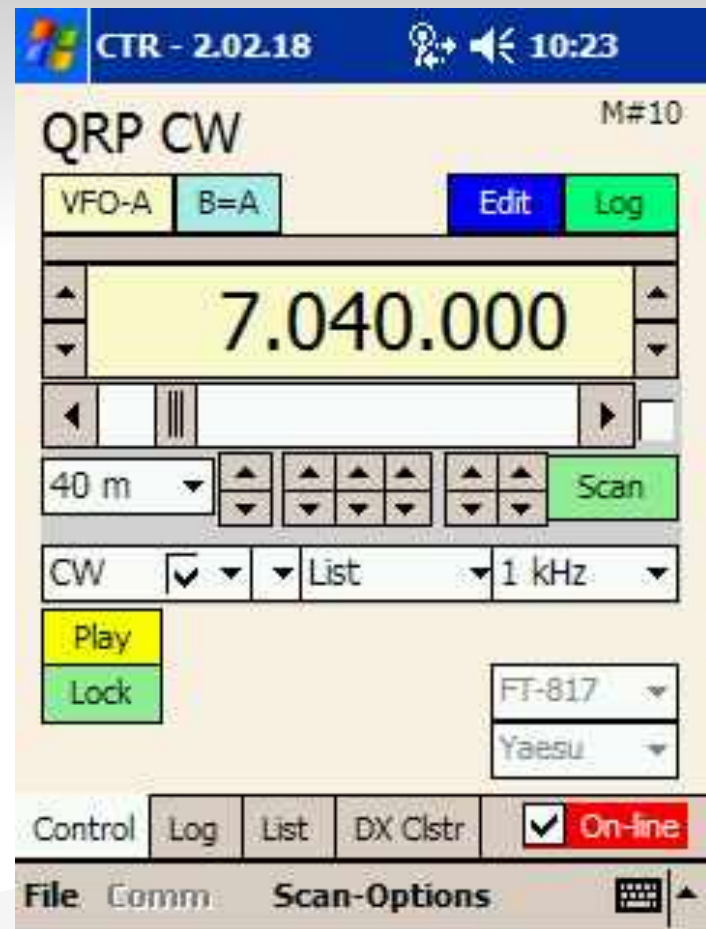
# Hardware for Remote Station

- Mobile Phone
  - Windows Mobile Required (today)
- Headset / Audio Needs
  - Very useful, makes things easier
- Internet Connection?
  - Cell Phone with internet connection

# Software - Part 1

- CTR (Control The Rig)

“It brings control of your radio into the palm of your hand, any where, any time. Direct serial, Bluetooth®, TCP/IP, and Wi-Fi connections are supported. The program provides frequency lists, a ADIF compatible logbook, DX Cluster support, and callsign lookups.”





# Software - Part 2

## Microsoft Portrait

“Microsoft Portrait is very low bit rate video conferencing software supporting MSN Messenger and Internet Locator Service (ILS) on PCs, Pocket PCs and Handheld PCs. It runs on local area networks, dialup networks and even wireless networks with bandwidths as low as 9.6 kilobits/second”



**DEMO**

# References

- CTR (Control The Rig)
  - <http://ctr-remote.home.comcast.net/~ctr-remote/index.htm>
- Microsoft Portrait
  - <http://research.microsoft.com/en-us/projects/portrait/default.aspx>

