Remotehams Remote Control Overview

RICHMOND AMATEUR RADIO CLUB
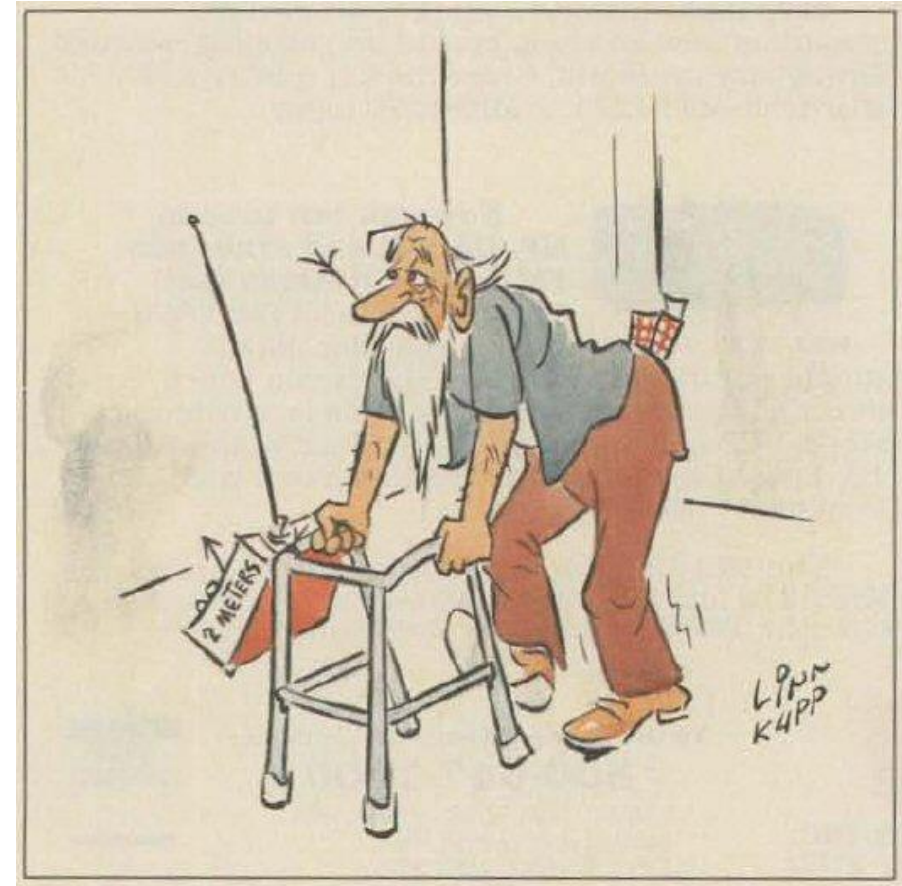
SEPTEMBER 2015

Why operate Remote?

Some of us are getting OLDER!

Remote Ops can be used from Apartments, Assisted Living Facilities, Condos, and Family Member's home who might not like a 70' tower!

RemoteHams.com

Why operate Remote?

It's fun to operate mobile – even if you DON'T own a mobile "Shack on Wheels"

You can purchase 1 really nice rig and antenna system and work it from wherever you are!

No compromise mobile antenna systems

People - Beta Testing Results

- Pro
  - May I please join your Radio club. I live in a building were I can't put up any antennas. I don't currently have any HF equipment at this time. I sold it when I had to move because my wife had a stroke 8 years ago. I think it is really nice that people like you do this it really helps a guy like me enjoy HF again. it has been years since I have been on HF until I found this software on the internet. Thank, You. Kurt Witt K9URT 73
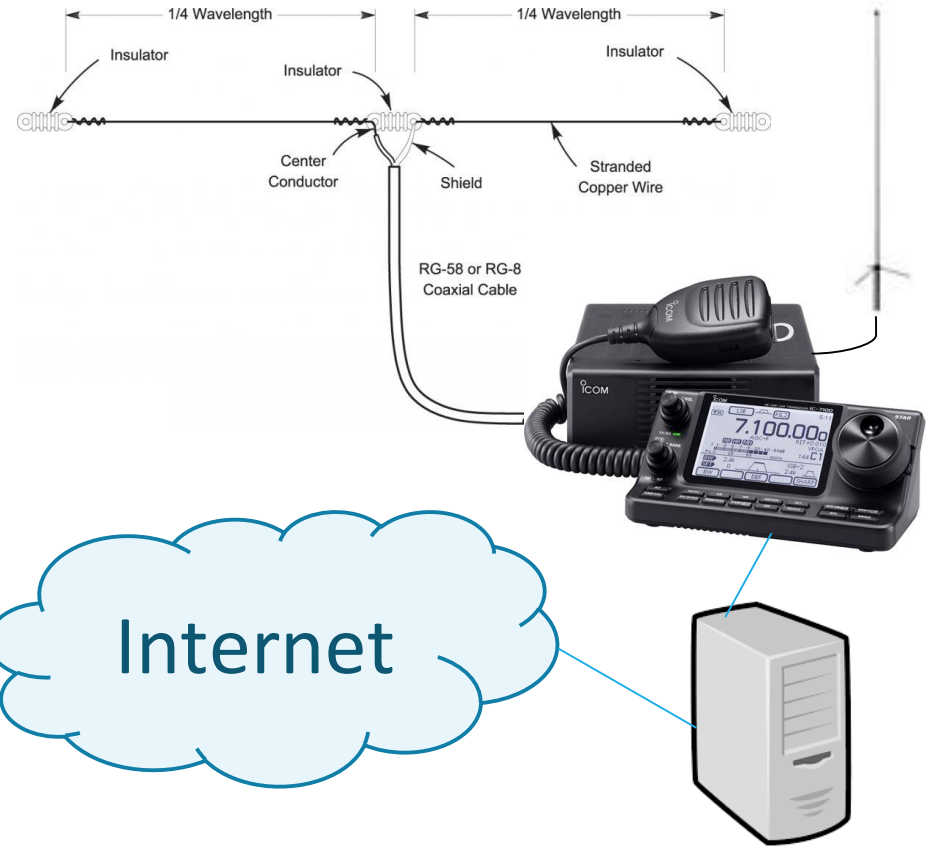
- Con
  - *(Complaint)* Some guy n3vng was hijacking tour radio feom me 7/7/15 @ 1:25 pm . Miamiatc

  - *(Response) Michael, The testing radio is being used by Amateur Radio operators at this time. The ARRL has lots of useful information on how to become a licensed Amateur Radio operator. Once you receive your callsign, I'd be happy to add you to the club register - Jim Bates K8OI*

  - *(Complaint)* uh huh I thought so. I will not use your radio anymore. your message is 5 by 5 with me.....put a radio up and dont enforce the rules of the site and show favoritism to friends that want to gang up on me because i simply asked for those to ask to tune when i am using. buhbye I have never had problems with a radio owner as I do you. Others let me tune and I am not ham certified. Miamiatc

What are we trying to do?

Internet

Demo gear & environment?

Remote Controlled Rig

RemoteHams Android Client

Remote Clients

Useful 3rd Party Software
- VNC Server (free)
- Bitvise SSH Server (free)
- Putty (free)

Remote Parts List
- Antenna System
  - 40m Dipole
  - 2m/70cm Vertical
- Rig – IC-7100
- Laptop
- USB interface
  - RIG Control
  - Mic In/Line Out
- Serial CW Keyer Interface
- UPnP Router

RemoteHams RCForb Server
(running Windows 8)

RemoteHams RCForb Client

Network Speed

ISP Advertised Data Rates	Kbytes/Second	
	Download	Upload
Analog 56kbps Modem	7	**4**
DSL – 768kbps/128kbps	96	16
Comcast – 3Mbps/768kbps	384	96
FIOS – 15Mbps/5Mbps	1,920	640
FIOS – 25Mbps/25Mbps	3,200	3,200
FIOS – 80Mbps/80Mbps	10,240	10,240

A single RemoteHams network connection uses **4 Kbytes/Second** – that's roughly equal to a 56k Modem Upload Speed!

Network Data Usage

Here's the Calculation:

4 KBytes/Second
x 60 Seconds
x 60 Minutes
= 14,400 Kbytes/Hour
OR 14 Mbytes/Hour

1,024 Mbytes = 1 Gigabyte of Data

1 Gigabyte of Data
= 73 Hours of Usage

All this mind numbing, number crunching means just one thing:

You can TALK for a LONG time using only a LITTLE bit of DATA!

Client Option: Quick, Easy & Free

Use a Laptop
with the Built-In
Microphone and
Speakers

Client Option: Quick, Easy & < $10

RemoteHams
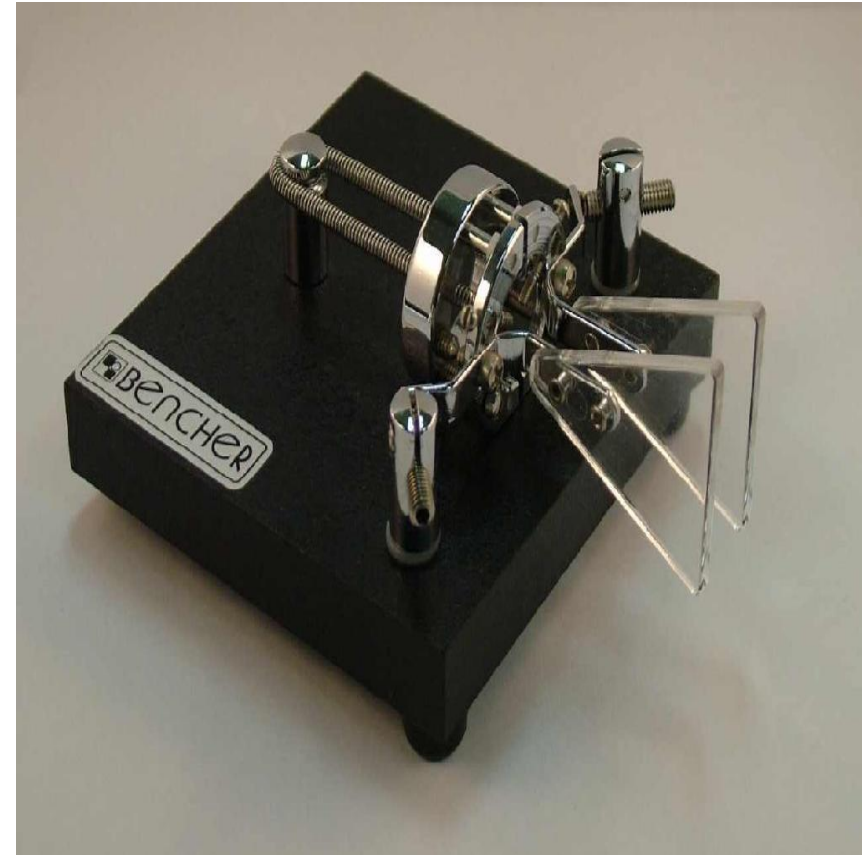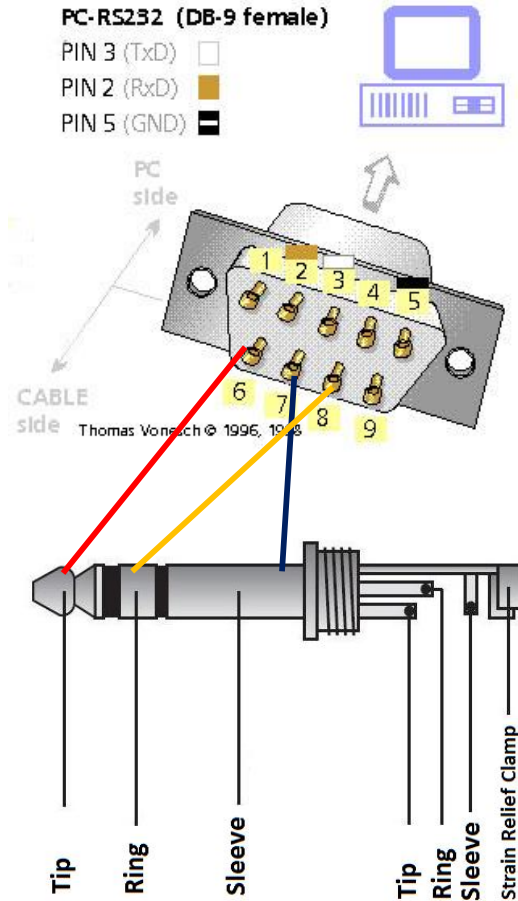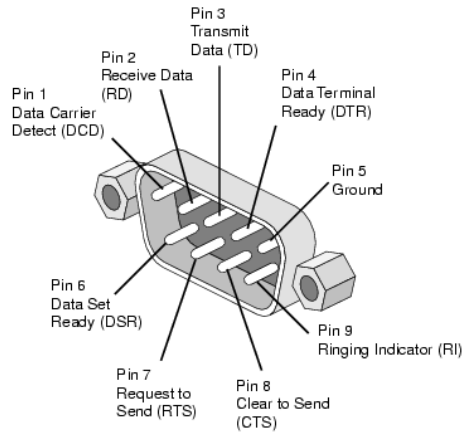
Android

Client

$9.99

Client Option: Headsets

Logitech USB

Heil Headset

Client Option: CW Paddle Interface

KeySpan USA-19HS USB/Serial Adapter

Client Option: O.R.B. – The EA$Y Way!
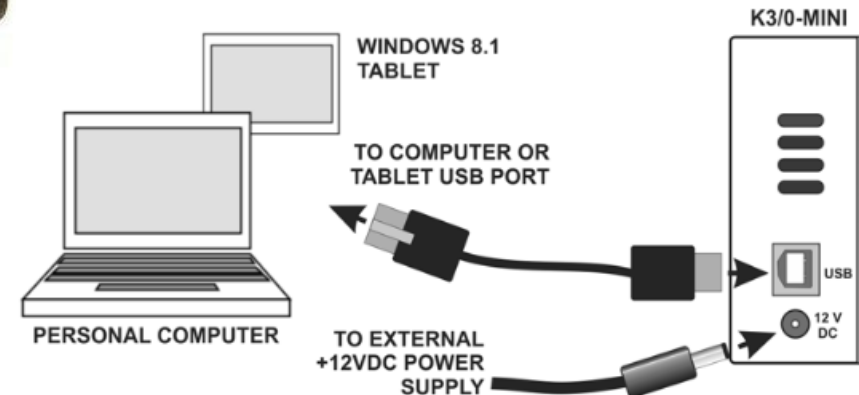
O.R.B. Connections
- Headphone Output -> 3.5mm (1/8 in) Stereo
- Mic Input -> 8 Pin Round (Elecraft/Kenwood Pin configuration)
- 2nd Mic Input -> 3.5mm (1/8 in) Stereo (Ring NC)
- Paddle Input -> 3.5mm (1/8 in) Stereo
- PTT/KEY Input -> 3.5mm (1/8 in) Stereo (Ring NC), in parallel with KEY

If Your Wallet is TOO FULL of $$$

Elecraft K3/0 Mini

- Tight Integration With RCForb Client
- Cross Compatible Between All Brands of Radios

Links & Contact Information

http://rarclub.net/

http://www.remotehams.com

http://www.remotehams.com/orb-control-device.html

http://www.elecraft.com/K3-Remote/k3_remote.htm

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Demo
&
Questions