Remote Vehicle Radio Operation

Quick Deployment for EMCOMM

Craig J Coley, WB5KUO

Vehicle Installation Required Components

- Remote Vehicle Starter
- IC-7100 All Mode Transceiver 80m-10m, 2m, 70cm
- Autocoupler for multi band operation
- 36AH LiFePO4 Battery with Bluetooth Monitor and Wireless Relay
- AC Supply and Power Pole panel
- 64 Bit Windows 10 Computer
- WiFi Access Point for remote access
- GPS Receiver for Winlink
- Bluetooth headset for driving



Vehicle Installation- Spare Tire Compartment



Vehicle Installation Battery Subsystem

- 36aH LiFePO4 battery
- Locally fused at 30A
- Bluetooth Voltage Monitor
- Wireless 40A Relay with Keyfob
- Installed in Padded Battery Shipping Box



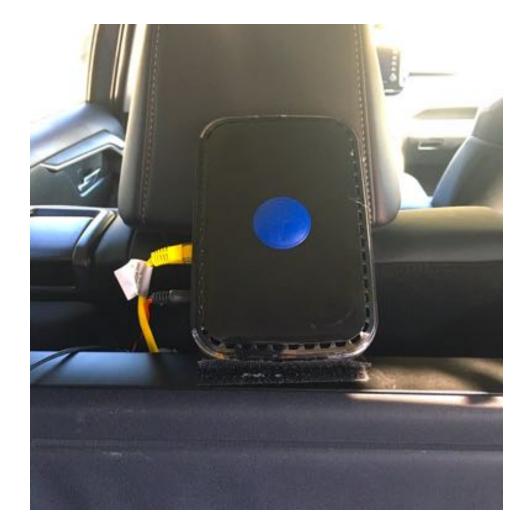
Vehicle Installation Windows Computer

- Minix Z83-4 12 VDC Intel Atom running Windows 10 Pro 64 Bit
- Standard user setup with no password for auto-boot
- GPS Receiver for Winlink
- Installed Software: ICOM RS-BA1 Remote Utility WSJT-X/JTAlert FLRig/FLDigi Winlink Express N3FJP ACL
- Bluetooth headset interface



Vehicle Installation WiFi Access Point

- NetGear 12 VDC Access Point
- Ethernet connection to PC
- Allows Remote Control via LAN
- Velcro Mounted at 45 Degrees for equal HOR/VER polarization



Remote Control Required Components

- 64 Bit Windows Computer
- USB WiFi Transceiver
- RS-BA1 Software for Voice
- RealVNC Software for Digital
- 20AH Lithium Battery (7 Hours)
- Keyboard/Monitor
- USB Speaker/Microphone
- RC-28 USB Remote Dial



Remote Control Voice Operation

- ICOM RS-BA1 Software
- Interfaces with RC-28 control
- Allows full rig control
- Best solution for voice



Remote Control Digital Modes

- Remote Desktop with RealVNC
- FLDIGI, WSJT-X, Winlink Express
- Audio Compression in RS-BA1 software distorts the audio too much for digital modes Allows digital software to directly control the transceiver

| 6.1.2 (MOSKAG-MADDIN) - 1110, 110001 | | | | - C > |
|--|---------------|-----------------------|-----------------|----------|
| Ele Sunta Menury Beyer Job RMAN | O SLOOPS O DV | TTONS OFFER | ALX DTR ALX RTS | |
| <u>14</u> | 070 | .000 | A PNR 25 | -1- |
| E Regivered.1.14 / IC-7128 - WESKUD | | | | - 0 X |
| Be do Boats Canadiana Jana Politang Ball | | | 104 (MS / S | 9 / 1.8/ |
| 14070.000 | | | AugOdry Notes | |
| | 3 | R L | | |
| | | | | |
| 1-071.94 N | | | | |
| | | | | |
| ······································ | | Paris of Pa | | ***** |
| w (| NON 4 | 1105 • • • 001 | | |
| P Type here to search | P C 1 | 🖻 0 🎵 | • 🖪 🛠 = i | a 🖬 🚆 |
| P Type here to search | 0 1 | • • d • | 📅 🖬 🕋 🌒 | 5 = 10 |

Questions?