

Work in Progress More information

Deployment Process:

Connect power source(s). AC, battery or both.
Connect required antenna(s)
Connect ground wire
Connect microphone(s) for voice ops
Power up radios

GET ON THE AIR

For digital/packet mode

Connect TNC cable to PC
Connect TNC mic and audio cables
Power up Kantronics TNC
Start AirMail or PacLink application

** For other digital modes**

Connect Donner interface audio & serial
cables to PC
Start FLdigi/EasyPal applications

For D-Star digital mode

Connect D-Star data cable to PC
Start D-RATS or other apps

Antennas to be used:

2 meter J-pole roll-up
Dual band (2 meter/440) aluminum J-pole
Dual band (2 meter/440) mobile mag-mount
VHF-Lo band (42-50 MHz) mag-mount

As with all Amateur Radio Projects, this one is still in progress. Feel free to contact me with feedback, suggestions, comments or praise.

Idea for this project was built on the efforts of many other Hams. Thanks to all who experimented before me.

For more information -

Links: <http://richhand.blogspot.com/>
<http://www.qrz.com/db/K7RFH>

Email: k7rfh@arrl.net

Call sign: K7RFH

Organizations:

*King & Kitsap County American Red Cross
Kent EM Communications Support Team
Mike & Key Amateur Radio Club
BEARS—Boeing Employees Amateur Radio Society*



Red Cross & EMCOMM Digital/Packet Portable Radio System

When all else fails,
Amateur Radio



Built by K7RFH, Rich

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Red Cross & EMCOMM Packet Portable Radio System

Purpose of Project:

To provide a portable/mobile Red Cross , FM voice/ digital radio system that goes anywhere, sets up quickly and stores easily in a compact space.

Package details-

Total weight: 30 pounds

Power: AC or battery (charge handhelds, run power inverter or power an external radio)

Super Powergate 40S provides auto failover and battery charging when AC is available.

Alinco DM-330MV power supply provides internal power. **Genesis NP7-12 SRLA 7.0Ah battery** provides power to all components.

Vertex FTL 1011/99 used for Red Cross comm
Icom ID-880H operates either voice or digital modes on the 2m/70cm/D-Star.

Kantronics Packet Communicator 3 Plus TNC and **Donner Digital Interface** used for digital operations with an attached netbook.

Samsung N-150 netbook running Windows 7 provides platform for AirMail/PacLink, FLdigi, EasyPal, D-RATS and other amateur radio applications.

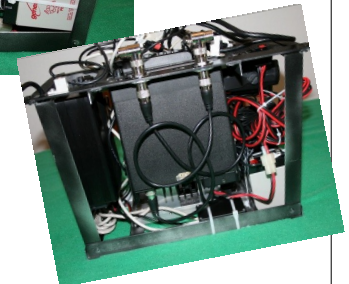
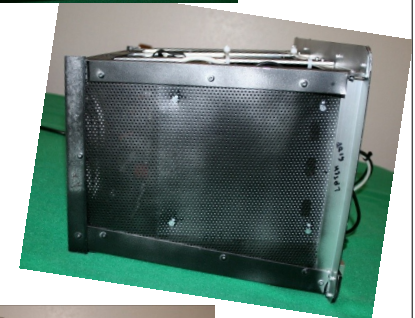
Design Features:

Unique modular open frame design provides easy access to equipment for maintenance, modification and inspection. **Aluminum framing** significantly reduces weight. An audio jack extender allows connecting the ID-880H to either the KPC-3+ TNC or the MFJ-281 Clear Tone speaker.



Other features:

- Separate VHF/UHF & Low Band antenna inputs
- Separate microphones for each radio
- External grounding block
- Cigarette lighter DC power output
- Power terminals for bare wire connections
- Powerpole DC power output
- Powerpole battery power input
- Power Supply charges both internal & external batteries



Communications Academy 2011
Portable Radio System Entry

Pictures demonstrate easy system separation from case; layout of components and relatively simply, clean design elements.