



The Barrett 2063 HF-VHF Cross Gate provides seamless transfer of information from a Barrett VHF network onto a Barrett HF network without operator interaction.

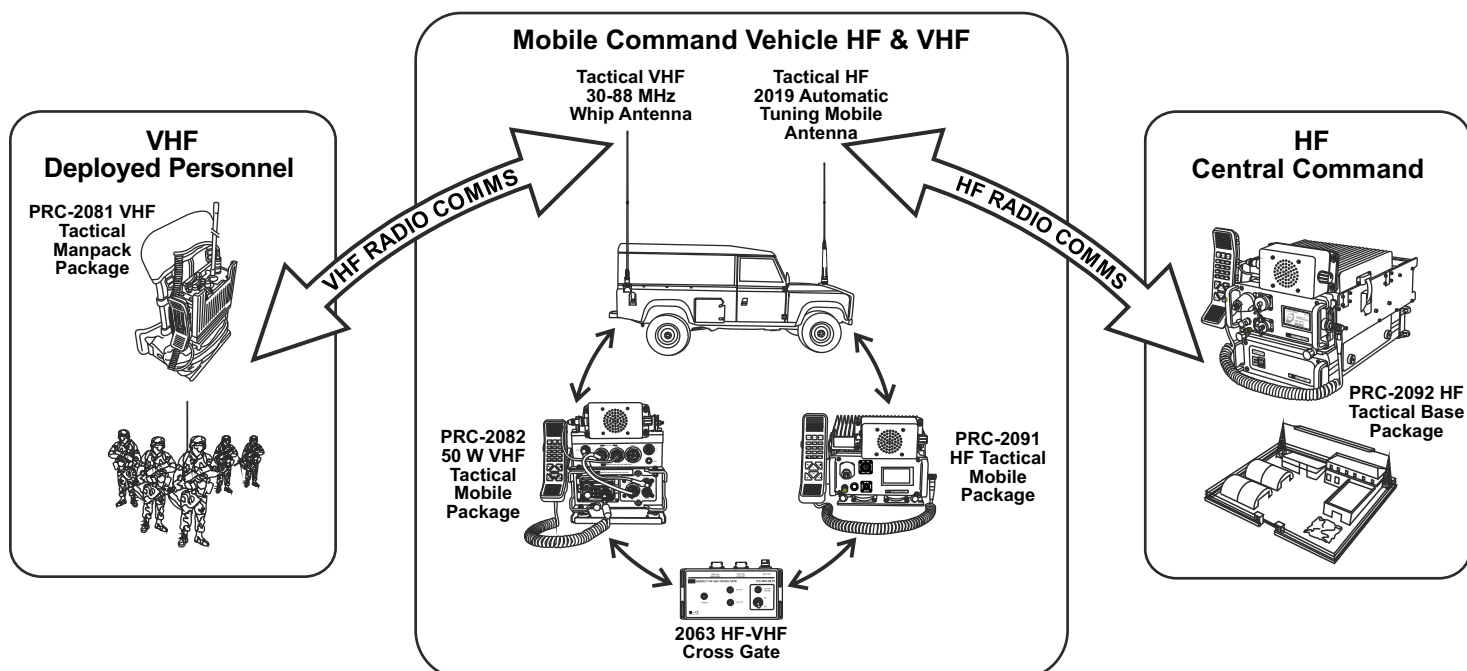
The fully automated switching reduces the time it takes to rebroadcast mission critical information. It also significantly reduces the likelihood of communication errors and allows Commanders in strategic locations to talk to their deployed assets directly.

A typical field scenario would involve a mobile command vehicle receiving information from deployed troops over a VHF communications system. If this information needs to be passed to a higher headquarters, it would be transmitted using the HF radio link. Any response back from the higher command to the deployed troops would then go through the same procedure in reverse.

As shown in the diagram below, a Cross Gate located in the mobile command vehicle would enable direct communications between the deployed troops and the higher command on an as required basis.

The Barrett 2063 Cross Gate operates by establishing a transmit/receive path between HF and VHF networks connected at the Cross Gate station in the mobile command vehicle. When the Cross Gate is "Linked", the Cross Gate relays all voice transmissions between the two networks.

- Interoperability between Barrett HF and Barrett VHF communication systems
- Allows deployed troops to communicate directly with far distant command and control centres
- Reduces delays in communicating time critical information





General specifications

| | |
|----------------------|---|
| Indicators | "VHF PTT", "HF PTT", "Power on", "HF <-> VHF Linked" |
| Controls | "HF <-> VHF Link Switch" |
| Input Voltage | +13.8VDC from HF radio |
| Input Current | < 100mA @13.8V input |

VHF Signal Connections

| | |
|--------------------------------|---|
| VHF Balanced Audio (RX) | RX Balanced audio in, 600 Ohm input impedance, 0dBm recommended, DC offset 0 to 12V |
| VHF Balanced Audio (TX) | Tx audio out, 0dBm nominal into 600 Ohm load, DC offset 0 to 12V |
| VHF PTT Signal In | Ring (+12VDC), Tip 0VDC |
| VHF Mute Signal Out | Tip (+12VDC), Ring 0VDC |
| VHF Ground | 0V radio ground |

HF Signal Connections

| | |
|------------------------------|---|
| HF Ground | 0V VHF radio Ground +13.8V +13.8V from VHF radio |
| HF Balanced Audio In | RX Balanced audio in, 600 Ohm input impedance, 0dBm recommended |
| HF Balanced Audio Out | Tx audio out, 0dBm nominal into 600 Ohm load |
| HF PTT Out | Active low radio external PTT keying |
| HF mute in | Active low radio mute state input |

Environmental

| | |
|----------------------------------|--|
| Operating temperature | -20C to +55C |
| Storage temperature | -40 to +85C |
| Humidity | up to 95% @ 55C |
| Shock | MIL-STD 810G |
| Vibration | MIL-STD 810G |
| Weight (including cables) | 1050g |
| Weight (without cables) | 650g |
| Dimensions in mm | 203 L x 116 W x 70 H (inc switches and connectors) |

Specifications are typical. Equipment descriptions and specifications are subject to change without notice or obligation.