2063 HF-VHF Cross Gate

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.

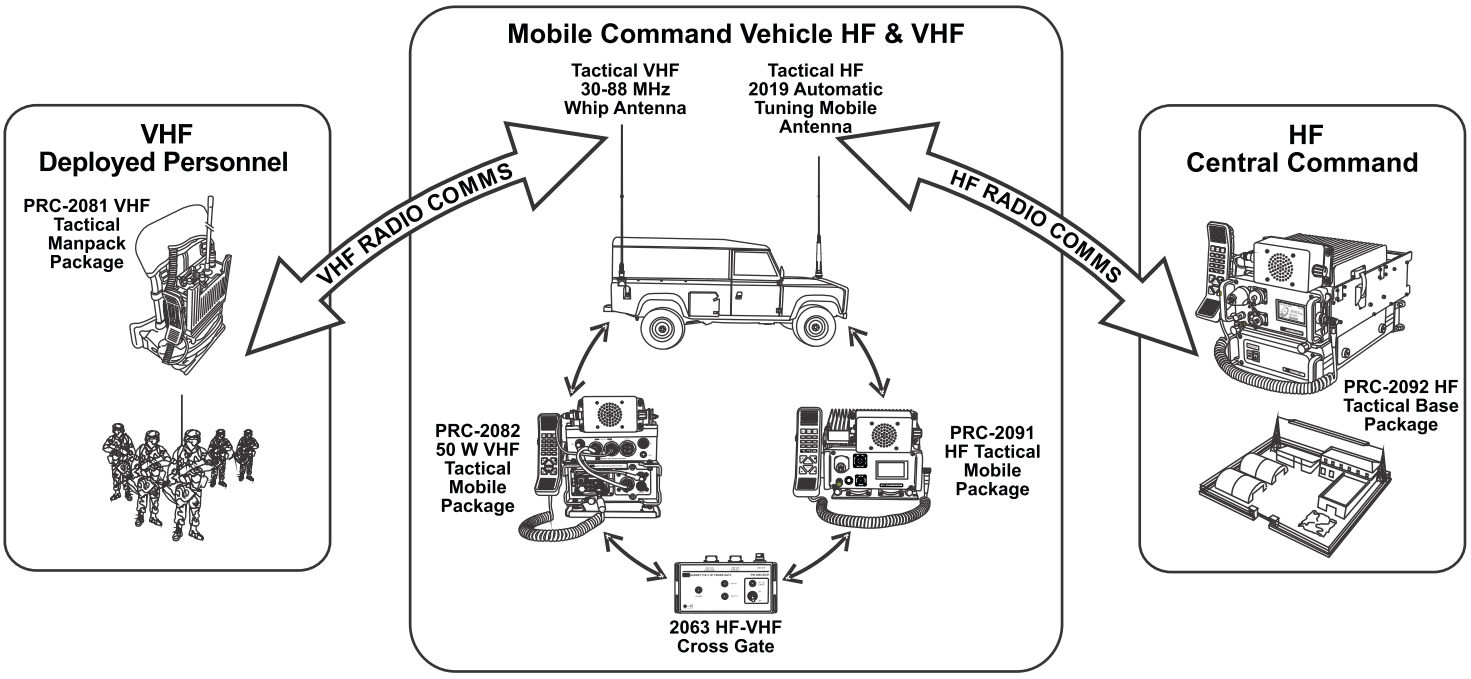
The fully automated switching reduces the time it takes to rebroadcast mission critical information. It also significantly reduces the likelihood of communication errors and allows Commanders in strategic locations to talk to their deployed assets directly.

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**



BARRETT

2063 HF-VHF Cross Gate

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 (RX)	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.

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