The Barrett 2062 HF Crossgate is a practical and effective solution for extending the line of sight reach of conventional VHF/UHF networks by linking them to a HF network using a Barrett HF transceiver. The 2062 is designed to give field operations with VHF/UHF handheld radios access to the HF network when away from their vehicles. The 2062 is also capable of HF channel selection, which allows the VHF user to select the best HF channel to transmit from.

The Barrett 2062 is small in size and weight making it easy to fit in vehicles and has the intuitive user commands Barrett products are known for. The flexible interface to OEM VHF/UHF transceivers, makes connection between existing HF and VHF/UHF networks a simple and cost effective solution.

The 2062 Crossgate links the HF and VHF/UHF networks by either a specific Selcall sent from a station on the HF network or by a specific DTMF sequence sent by a station on the VHF/UHF network. When the networks are linked, received audio from the HF network is broadcast on the VHF/UHF network and vice versa. The link is closed by transmitting a specific Selcall from the HF network or a specific DTMF sequence on the VHF/UHF network.

General specifications

- **Indicators**: Power on- Connected- HF PTT VHF/UHF - PTT", Speaker level clip indicator
- **Controls**: "VHF/UHF speaker level gain"
- **Input power**: +11 to +15 V DC (12 V DC nominal)
- **Input current**: 176 mA @ +12.6 V input
- **Sealing**: IP41
- **Weight**: 0.18 kg

**VHF/UHF Signal connections**

- **Balanced audio in**: Rx balanced audio in, 600 ohm input impedance, 0 dBm recommended
- **VHF/UHF speaker level audio in**: Radio speaker level single ended audio input, 10 k ohm input impedance, gain adjustable on the crossgate
- **VHF/UHF mute in**: Active low, radio mute state input, optically isolated
- **VHF/UHF audio out**: Tx balanced audio out, 0 dBm nominal into 600 ohm load
- **VHF/UHF mic level audio out**: Tx single ended audio out, mic input level
- **VHF/UHF PTT out**: Active low, radio external PTT keying
- **VHF/UHF ground**: 0 V radio ground, internally RF isolated

**HF Signal connections**

- **HF ground**: 0 VHF radio ground, +13.8 V power from HF radio
- **RS-232 I/O**: RS-232 control signals between HF radio and crossgate
- **HF balanced audio in**: Rx balanced audio in, 600 ohm input impedance, 0 dBm recommended
- **HF balanced audio out**: Tx audio out, 0 dBm 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**: -20°C to +55°C
- **Storage temperature**: -40°C to +85°C
- **Humidity**: Up to 95% @ 55°C
- **Shock**: MIL-STD 810G
- **Vibration**: MIL-STD 810G

**Typical 2062 HF-VHF/UHF crossgate network example**