BARRETT COMMUNICATIONS
ADVANCED HF SSB EQUIPMENT

2062 HF-VHF/UHF Crossgate

Barrett's 2062 HF Crossgate is a practical, effective and affordable solution for extending the line of sight reach of a conventional VHF/UHF networks by linking them to an HF network using Barrett's HF transceivers. The 2062 can also be used to give field operators with VHF/UHF handheld radios access to the HF network when away from their vehicles.

With the 2062's small size, intuitive user commands and flexible interface to OEM VHF/UHF transceivers makes connection between existing HF and VHF/UHF networks simple and with a minimal investment.

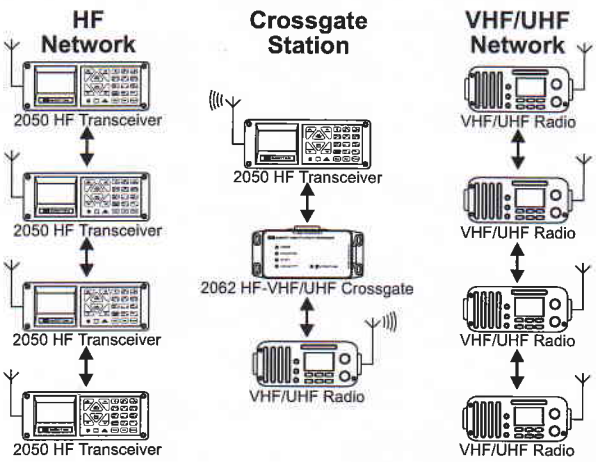
The 2062 cross patch links the HF and VHF/UHF networks by either a specific selcall sent from the and HF station on the HF network or by a specific DTMF sequence sent by a station on the VHF/UHF network. When the networks are linked, received audio from the HF network is broadcast on the VHF/UHF network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

Features

Simple to operate

Small physical size – easy to fit in vehicles.

Flexible interface for OEM VHF/UHF transceivers



Specifications

VHF Signal Connections	Description
Balanced audio in	VHF Rx balanced audio in, 600 Ω input impedance, 0dBm recommended.
VHF speaker level audio in	VHF radio speaker level single ended audio input, 10 kΩ input impedance, gain adjustable on the Crossgate.
VHF mute in	Active low, VHF radio mute state input, optically isolated.
VHF Audio Out	VHF Tx VHF balanced audio out, 0dBm nominal into 600 Ω load.
VHF Mic. Level Audio Out	VHF Tx single ended audio out, mic. Input level.
VHF PTT out	Active low, VHF radio external PTT keying.
VHF ground	0 Volt VHF radio ground, internally RF isolated.

HF Signal Connections	Description
HF ground	0 Volt HF radio ground.
+13.8 V	+13.8 V Power from HF radio.
RS-232 I/O	RS-232 control signals between HF radio and Crossgate.
Balanced audio in	HF Rx balanced audio in, 600 Ω input impedance, 0dBm recommended.
Balanced audio out	HF Tx audio out, 0dBm nominal, into 600 Ω load.
HF PTT out	Active low HF radio external PTT keying.
HF mute in	Active low HF radio mute state input.

Control Function	DTMF Code	Notes
Initiate patch/transmit Selcall	*XXXX(XX)##	XXXX(XX) is a 4 digit or 6 digit Selcall ID. VHF/UHF Annunciation: "Selcall XXXX(XX) Sending, Patched in", followed by a connection tone.
Terminate patch	99	VHF/UHF Annunciation: A hangup tone followed by "DTMF Hangup, Patched out".
Select HF channel	XX	XX is the HF network channel number, in the range of: 01 to 50 VHF/UHF Annunciation: "Channel XX Selected".

General	
Indicators	"Power on", "Connected", "HF PTT", "VHF/UHF PTT", Speaker level clip indicator.
Controls	"VHF/UHF speaker level gain"
Input power	+11 to +15VDC (12VDC Nominal)
Input current	176mA @ +12.6V input
Size	150mm x 66mm x 41mm (including mounting tabs)
Sealing	IP41
Weight	0.18kg

Environmental	
Operating temperature	-20°C to +55°C
Storage temperature	-40°C to +85°C
Humidity	Up to 95% @ 55°C
Shock	MIL-STD-810D, method 516.3 procedure VI
Vibration	MIL-STD-810D, method 514.3 Category

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