# GATEWAY 3031 CROSSPATCH





## **KEY FEATURES**

- Easy to use
- Easy to install
- Compact and lightweight for mobile use
- Uses industry standards
- Rugged and reliable

Codan's 3031 HF Crosspatch is a practical, effective and affordable solution for extending the reach of a conventional VHF / UHF network beyond the horizon using Codan's HF transceivers.

The 3031 also enables organisations to extend existing Codan HF networks with VHF / UHF hand-held radios that are carried by field operators when away from base or their vehicle.

With the 3031's unique, flexible design and straightforward user commands, organisations can extend existing HF or VHF / UHF networks into remote areas with minimal investment in new infrastructure.

#### EASY TO USE

The 3031 Crosspatch uses a straightforward set of over-the-air DTMF tones or Press-To-Talk (PTT) clicks from a VHF / UHF radio to initiate calls from a Codan HF Transceiver. These calls can be used to gain assistance in an emergency or as part of normal daily communications, such as checking back to base. Alternatively, calls can be made from a Codan HF Transceiver to field operators using VHF / UHF radios. With the extensive capabilities of Codan's HF Transceivers, a wide range of applications are available.

#### **EASY TO INSTALL**

Codan HF Transceivers automatically enable the Crosspatch functionality when a 3031 is detected. Only a single cable is required to connect the 3031 to the VHF / UHF radio. Installation and alignment does not require special tools.

### **DESIGNED FOR MOBILE USE**

Its compact and lightweight design makes the 3031 ideal for vehicle installations where space is limited and ruggedness is essential. It includes technology to overcome the difficulties typically experienced with traditional HF Crosspatch equipment.

#### **INDUSTRY STANDARDS**

The 3031 Crosspatch has been designed to complement any existing VHF / UHF radio network. By using industry standard DTMF signalling and a flexible VHF / UHF hardware interface, the 3031 has been designed to have the widest compatibility possible with existing VHF / UHF infrastructure.

A subset of functionality has been provided to VHF / UHF radios without DTMF capability through the use of a sequence of PTT key clicks.

### **RUGGED AND RELIABLE**

The 3031 Crosspatch is a rugged, reliable, compact unit that has been designed to survive in extreme conditions, and comes with a full three year warranty.

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#### **HOW IT WORKS**

The 3031 Crosspatch interfaces between a Codan HF Transceiver and a third-party VHF / UHF FM radio.

When the 3031 is activated, audio received by one Transceiver is relayed to the other corresponding Transceiver, effectively joining the two radio networks together. When the 3031 is deactivated both Transceivers operate independently and in their normal state.

The 3031 can be enabled either from the Codan HF Transceiver interface or via a series of straightforward commands sent via a VHF / UHF radio. A user-friendly Quick Reference Sticker with user instructions is provided.

Full functionality is available with VHF / UHF radios supporting DTMF signalling. A subset of this functionality is also available for basic or older non-DTMF VHF / UHF radios.

#### WHO CAN USE IT

The 3031 Crosspatch™ is designed for any organisation that needs to extend their current HF or VHF / UHF radio networks beyond their normal area of operation. The 3031 can be integrated into either mobile or fixed installations, enabling the greatest flexibility to match the operational requirements of any organisation.

#### SYSTEM CONFIGURATION

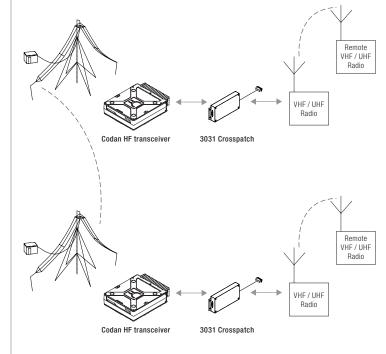
Example of Envoy basic layout for HF to VHF/UHF & VHF/UHF to HF communication. Other transceivers and configurations supported.

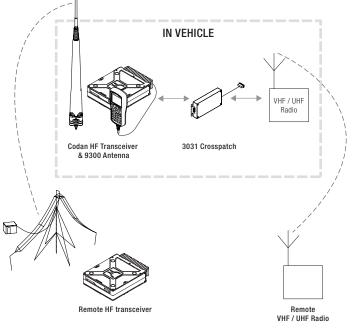


VHF/UHF Tx signal level	10mV p-p to 3 V p-p, nominal
VHF/UHF Rx signal level	10mV p-p to 3 V p-p, nominal 600 $\Omega$ output impedance (selectable) Balanced/unbalanced audio (selectable)
Operating voltage	9 to 16 V DC
Power consumption	Less than 100 mA (13.8 V supply)
Environment	Ambient temperature: -30 + 70°C Reflective humidity: 95% non-condensing
Size	140mm W x 65mm D x 31mm H
Weight	0.2kg (0.5lb)
Sealing	IP41

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

Example of trunked layout for HF link between separate VHF / UHF networks. Other





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#### CODANCOMMS.COM

CANADA +1 250 382 8268 **US** +1 571 919 6432 **UAE** +971 44 53 72 01 SALES@CODANCOMMS.COM AUSTRALIA +61 8 8305 0528 

transceivers and configurations supported.