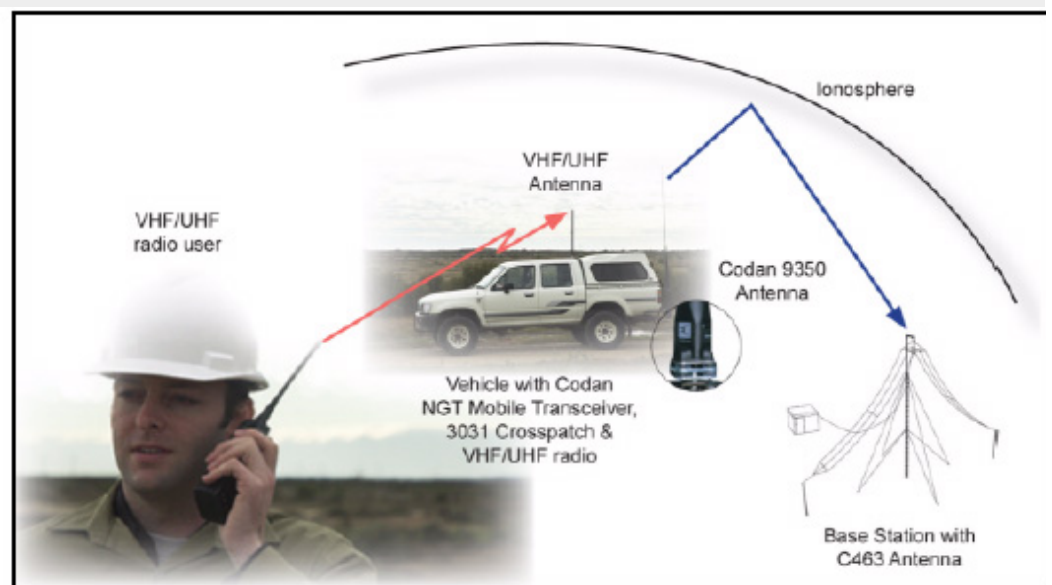


# CODAN HF/VHF Repeater Crosspatch

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### Obsoleted

Codan 3031 HF VHF 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 handheld 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.

### Key features

### 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 installation

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 advanced HFCommander™ 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

As with all Codan equipment, 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.

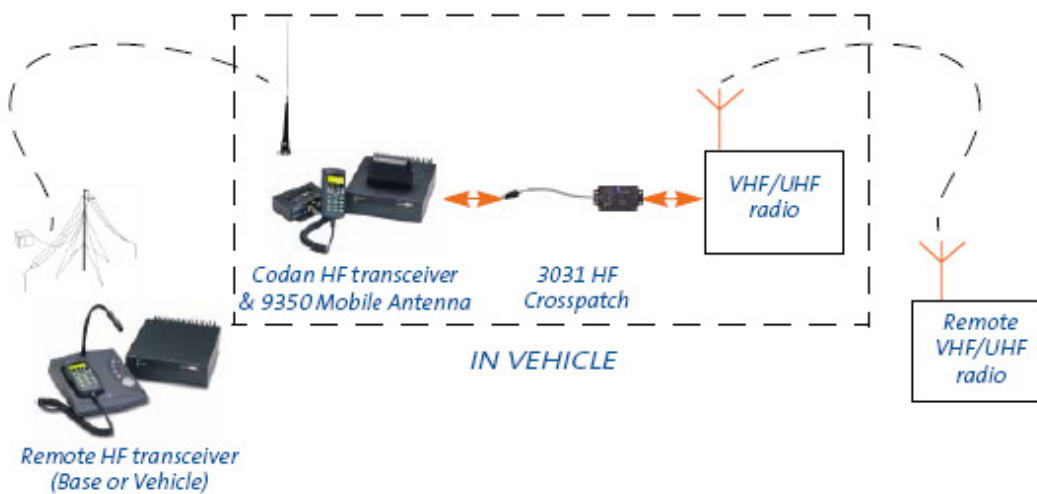
## How it works

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.

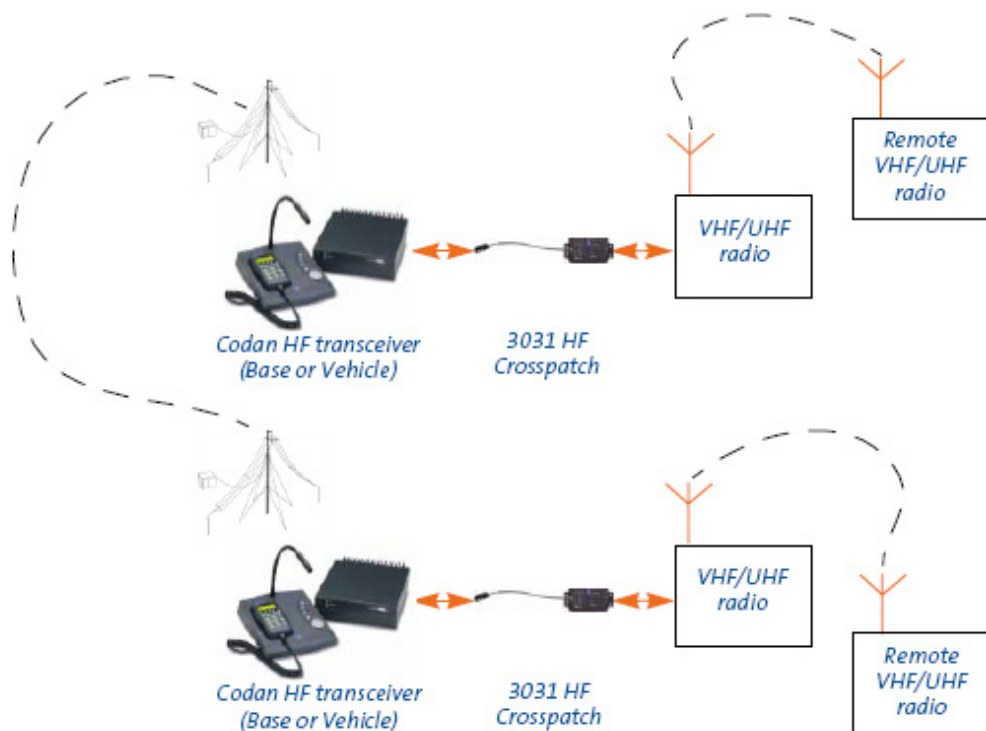
### Basic layout for HF to VHF/UHF and VHF/UHF to HF communication



### 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.

### Trunked layout for HF link between separate VHF/UHF networks



**NOTE:** The HF transceiver must be a Codan NGT/2110 model that has a General Purpose Input/Output (GPIO) port, such as the NGT SRx, SR, ASR and 2110 series Transceivers.

### Technical specifications

	10mV p-p to 3 V p-p, nominal
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VHF/UHF Tx signal level	
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 to +70°C Relative humidity: 95% non-condensing
Size	140 mm W x 65 mm D x 31 mm H
Weight	0.2 kg (0.5 lb)
Sealing	IP41

**Obsoleted**

**HF VHF UHF Repeater - Crosspatch**