



Features include

- Compact lightweight modular design
- Configurations include:-
 - 5 W Hand Portable
 - 25 W Manpack
 - 50 W Mobile
 - 50 W Base Station
 - 50 W Re-broadcast system
- DSP voice and data signal processing
- Selective and group calling
- Compatible with other 30 – 88 MHz communications equipment

Available options include

- Encryption and frequency hopping security
- Messaging and encrypted data transfer

The PRC-2080 low band VHF transceiver is designed for multi-role tactical military and security applications. It is an extremely compact and lightweight unit which is simple to operate in demanding mission critical conditions. The PRC-2080 is part of the family of Barrett transceivers that are field proven in over 150 countries, on every continent and in all environments.





BARRETT

TACTICAL COMMUNICATIONS



Advanced tactical handset for operation and field programming with mil spec bayonet connector



The PRC-2080 Tactical VHF radio system is a military grade portable communication transceiver specifically designed for tactical applications. It is designed to withstand complete immersion, vibration, drop and temperature extremes to MIL-STD 810G.

Communication modes

The PRC-2080 Tactical VHF radio system has multiple levels of encryption and frequency hopping security available. Analogue voice and digital unencrypted data are fitted as standard. The following levels of encryption are available:-

- Analogue Voice - Fixed Frequency (AFF)
- Digital Unencrypted Data - Fixed Frequency
- Digital Encrypted Voice - Fixed Frequency (DEFF)
- Digital Encrypted Voice - Frequency Hopping (DEFH)**
- Digital Encrypted Voice - Free Channel Search (DEFCS)
- Digital Encrypted Data - Fixed Frequency
- Digital Encrypted Data - Frequency Hopping**

** Requires an Australian Department of Defence Export licence.

Simple to use

For basic operation of the PRC-2080, only the front panel controls are required. Field programming, advanced menu options, selective calling and group calling features are accessible via the PRC-2080's supplied advanced handset. The PRC-2080 is an ideal replacement to the PRC-77 and its variants, which are now obsolete and susceptible to interception and jamming.

Rugged design

Users will appreciate the PRC-2080 transceiver's solid construction, simplicity and accessibility. Maintenance is quick and simple with only three internal modules which can be exchanged without any special tools. All inter-module connectors are gold plated and there are no wiring looms or complex back plane assemblies. In designing the PRC-2080, emphasis has been placed on ensuring low cost of ownership over a long service life. The transceivers software defined architecture ensures compatibility with legacy, current and future communication systems.

Modular construction

The PRC-2080's main circuitry is contained in three modules – the radio frequency (RF), digital signal processor (DSP) and power amplifier (PA) modules. A very high level of integration is used to minimise component count and to increase reliability. The embedded software is controlled by the DSP module, which uses a low current, high speed DSP core engine. Speech coding and all frequency hopping and encryption functions are processed by the DSP under the control of a host microprocessor. The RF module contains a high dynamic range front end with DDS (Direct Digital Synthesiser) system which achieves fast frequency switching times whilst maintaining low current consumption. The PRC-2080's RF design takes into account the hostile electromagnetic environment and achieves excellent ECM resistance and co-siting performance. The PRC-2080's RF, DSP and software design make it one of the most cost effective, secure, high performance VHF transceiver's available in the tactical military market today.

PRC-2080 - 5 W VHF Hand Portable package - P/N 2080-00-10

In stand-alone configuration, the PRC-2080 is ideal for squad level communication requirements. Using either the supplied advanced handset or optional tactical headset, the PRC-2080 transceiver can communicate reliably up to 8 km in open space (subject to terrain and topography), using the standard tape whip antenna. An optional multicam canvas backpack or webbing pouch is available. (see back page)

The standard package comprises:-

- PRC-2080 VHF transceiver
- Advanced tactical handset
- Tape whip antenna with gooseneck
- Rechargeable 6.5 Ah Li-Ion battery
- AC battery charger
- Optional multi battery charger available



PRC-2081 - 25 W VHF Manpack package P/N 2081-00-10

The PRC-2081 25 Watt Manpack upgrades the PRC-2080 transceiver with increased power and communication range. The PRC-2081 is a military grade manpack communication set specifically designed for tactical applications and designed to withstand complete immersion, vibration, drop and temperature extremes to MIL-STD 810G.

The standard package comprises:-

- PRC-2080 VHF transceiver
- VHF 25 W manpack dock
- 10 Ah, 16.8 V Li-Ion battery pack
- AC/DC charger
- Collapsible section whip
- Tape whip antenna
- Advanced tactical handset
- Framed backpack



PRC-2082 - 50 W VHF Mobile package P/N 2082-00-10

The PRC-2082 Mobile package provides a convenient docking station for the PRC-2080 transceiver as well as the flexibility for dismounted use when not in the vehicle (additional accessories are required to use the PRC-2080 as a Hand Portable). The 50 W VHF amplifier provides range extension and increased link reliability when connected to the external vehicle whip antenna system. The PRC-2082 can be installed in a range of vehicles including jeeps, patrol boats, APC's, and tanks. The PRC-2082 is ready for connection to combat net radio systems incorporating intercom harnesses. The overall size of the system makes it one of the smallest VHF platforms available making it particularly suited to vehicles where space is limited.

The standard package comprises:-

- PRC-2080 VHF transceiver
- Vehicle docking station
- 50 W VHF amplifier
- Advanced tactical handset
- Military VHF vehicle whip antenna with base
- Rugged external amplified speaker
- Tactical Installation Kit



PRC-2084 - 50 W VHF Base package P/N 2084-00-10

The Barrett PRC-2084 VHF Base Package, provides a convenient docking station with power amplification to 50 W, as well as the flexibility of dismounted communications when removed from the docking station (additional accessories are required to use the PRC-2080 as a Hand Portable).

The VHF Base Package can be installed in a number of temporary base and fixed command configurations and operated from a variety of AC and DC power sources.

The standard package comprises:-

- PRC-2080 VHF transceiver
- Vehicle docking station
- 50 W VHF amplifier
- Advanced tactical handset
- 30 to 88 MHz whip antenna
- AC power supply module
- Rugged external amplified speaker
- Tactical Installation Kit



PRC-2083 - 50 W VHF Re-broadcast System - P/N 2083-00-10

The Barrett PRC-2083 Re-broadcast system is typically used to link two low band VHF networks providing extended range to overcome communication difficulties due to distance or terrain. The two networks can use different security options (frequency hopping and encryption) providing a field deployable interoperability solution.

The re-broadcast system utilizes two PRC-2084 50 Watt systems and incorporates a nine band co-location filter assembly and AC/DC power supply with battery backup facilities all housed in a MIL-SPEC ruggedised transportable case allowing for easy deployment in any field environment.

The standard package comprises:-

- PRC-2080 VHF transceiver x 2
- Vehicle docking station x 2
- 50 W VHF amplifier x 2
- Advanced tactical handset x 2
- AC power supply
- Bandpass filter panel
- Transportation casing
- Rugged external amplified speaker x 2
- Tactical Installation Kit



PRC-2080 General specifications

Frequency range	30 MHz to 88 MHz
Channel resolution	25 kHz
Channels	10
Squelch	150 Hz tone squelch
Display	Backlit LCD graphics display
Programming	PC programming software, Fill Gun, Cloning cable, Tactical handset
BITE	Advanced module diagnostics & error reporting
Output power	5 W / 500 mW / 50 mW (selectable)
Modulation	FM (F3E) Digital

Mechanical & environmental

PRC-2080 - 5 W VHF Hand Portable package – P/N 2080-00-10

Battery	12 V
Antennas	Tape whip with gooseneck 6 section whip with gooseneck
Dimensions in mm	100W x 55D x 250H including battery
Weight	1.4 kg with battery pack
Temperature	Operating -20°C to +60°C
Construction	Aluminium body and polycarbonate battery casing
MIL-STD 810G	Drop, shock, vibration & immersion

PRC-2081 - 25 W VHF Manpack package – P/N 2081-00-10

(General specs as per PRC-2080 unless noted below)	
Battery	16.8 V 10 Ah Li-Ion
Antennas	Tape whip with gooseneck or 6 section collapsible whip
Output power	25 W
Dimensions in mm	315W x 205D x 510H
Weight	7.7 kg with backpack frame and battery pack
Temperature	Operating -20°C to +60°C

PRC-2082 - 50 W VHF Mobile package – P/N 2082-00-10

(General specs as per PRC-2080 unless noted below)	
Supply voltage	10 to 30 V DC
Output power	50 W
Dimensions in mm	300W x 330D x 300H
Weight	12 kg excluding antenna

PRC-2084 – 50 W VHF Base package – P/N 2084-00-10

(General specs as per PRC-2080 unless noted below)	
Power Supply	100 to 240 V AC
Output power	50 W
Dimensions in mm	300W x 550D x 350H
Weight	18 kg excluding antenna

PRC-2083 - 50 W VHF Re-broadcast System – P/N 2083-00-10

(General specs as per PRC-2084 unless noted below)	
Power Supply	100 to 240 V AC
Dimensions in mm	685W x 715D x 550H
Weight	47 kg excluding antennas

Webbing pouch - Multicam (optional)

- Designed to be worn on webbing using the MOLLE system for attachment.
- Made from 1000 denier nylon.
- Also available in Olive Green.

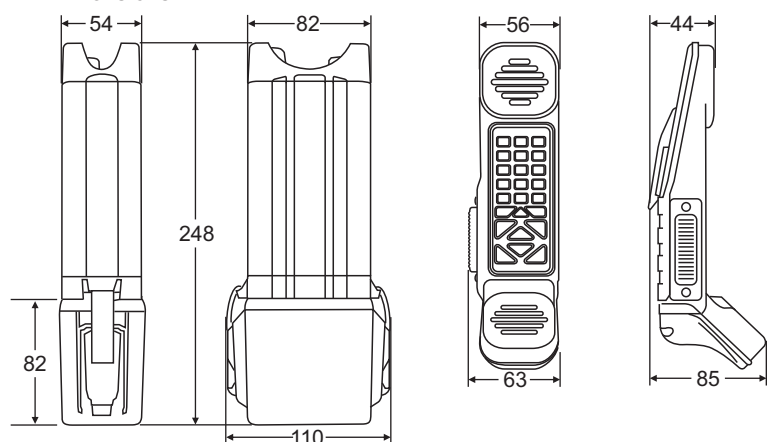


Canvas backpack - Multicam (optional)

- Lightweight backpack design is suited to back mounting of the transceiver using either a short or long antenna.
- Made from 1000 denier nylon.
- Also available in Olive Green.



Dimensions in mm



BCB2080B/01