



- **Advanced fully software-defined architecture**
- **Intuitive and user-friendly touch-screen interface**
- **Wireless operation via iOS, Android & Windows devices**
- **Selcall / Telcall**
- **GPS interface software**
- **SMS - Pagecall**
- **Multiple Self ID's**
- **Wi-Fi Adaptor**
- **2019 Auto tune HF antenna with internal GPS receiver**
- **Address books**

Designed and built in Australia for the world's harshest conditions, Barrett HF equipment thrives in the outback and has the track record to prove it. The Barrett "Outback Traveller Pack" should be considered as standard equipment for anyone travelling in remote areas.

Utilising the "free to air" nature of HF communications, the "Outback Traveller Pack" provides access to essential safety and emergency services with no ongoing call charges.



The Barrett 4050 handset app supports iOS, Android and Windows devices for wireless voice and radio control.

4050 D



4050 D HF SSB transceiver features

(Features and options listed below are standard inclusions with the 2030 HF SDR .Outback Traveller Pack).

HF spectrum coverage

Transceiver will be programmed with frequencies to meet Australian Communications and Media Authority (ACMA) requirements.

100 Watt PEP power output

The transceiver has 100 Watt (PEP) power output in voice mode on all frequencies.

Selective call - Selcall

Selective call - Selcall - provides a simple and efficient method of calling stations within an HF network. The 4050 D allows either 4 or 6 digit Selcalls which can be programmed into the transceiver on a channel by channel basis. Selcall ID's and details can be stored in the internal address book.

Direct dial telephone calls

Telcall allows telephone access utilising direct dial telephone services (such as those provided by 4WD HF Radio Networks) to place or receive telephone calls without the requirement to go through an operator (call charges may apply).

Scanning

Channel scanning combined with Selcall enables calls to get through on the channel most suitable. Eight scan tables are available with up to 30 channels programmable per table.

Emergency Selcall with geographical position

The Barrett 4050 D displays and annunciates emergency selective calls, also showing the position of the station sending the emergency call if it is fitted with a GPS receiver.

Scan resume - no missed calls

If the transceiver has been left unattended it automatically returns to scanning and is ready to receive calls on any channel.

Call history

Detail of all recent calls, including call type, time, date and Selcall ID are held in history buffers for future viewing.

SMS

Allows short text messages to be sent from one 4050 D transceiver to another using the alpha numeric keypad on the front of the transceiver.

Tunable receiver

Tunes all frequencies, in all modes, between 500kHz to 30MHz down to 1Hz steps.

Rugged construction

An extruded aluminium chassis combined with a rugged weather resistant polycarbonate alloy front panel has been designed to withstand harsh and hostile environments. Extensive vibration testing and temperature cycling has proved the Barrett 4050 D will operate in the world's toughest environments.

Compact, easy to install remote control head for vehicles

The 4050 D remote control configuration is ideal for installation into today's compact vehicles.

Noise reduction

The 4050 D utilises a Digital Signal Processing (DSP) noise reduction system.

GPS interface software

The GPS interface software installed in your transceiver used in conjunction with the supplied 2019 antenna internal GPS receiver will enable GPS positioning functionality. The 4050D will display your current position (latitude and longitude). You can transmit your position to another Barrett transceiver, and have the ability to interrogate the position of other similarly equipped Barrett transceivers. You can also log your position into the base station database operated by some HF networks.

The "Outback Traveller Pack" includes

Barrett 4050 D HF SSB transceiver with remote control head, extension speaker, vehicle mounting cradle, mounting hardware, Wi-Fi adaptor and Barrett 2019 automatic tuning mobile antenna with extendable whip.



Barrett 4050 HF SDR remote head configuration

2019 Automatic tuning mobile HF antenna

- **Waterproof rugged enclosure**
- **Extendable whip**
- **Solid state - no moving parts**

The Barrett 2019 is an automatic tuning mobile antenna, designed to interface with Barrett 4000 series transceivers. Providing a frequency coverage of 2 MHz to 30 MHz, the Barrett 2019 features rapid tuning (typically <1.5 S) and low power consumption. High radiation efficiency and accurate tuning are assured by maximising antenna current (not minimising the VSWR) on every tune. The Barrett 2019 antenna incorporates a wideband amplifier that is activated in receive mode to enable channel scanning.

A GPS receiver is fitted within the 2019 antenna casing and interfaces directly through the RF control cable to current production 4050 D transceivers. The active tuning elements of the antenna are housed in black waterproof, highly impact resistant technical plastic moulding. The housing incorporates a heavy duty anti-vibration mount at its base. Even with its rugged construction, the Barrett 2019 weighs only 3.6 kg.

The Barrett 2019 is supplied standard with a tapered, blackened, aluminium whip shaft with extendable, blackened stainless steel whip. The main antenna body has a MIL-STD control cable connector and a UHF RF connector. The 2019 is supplied with a 6 metre composite control and RF cable and connectors to connect it with the transceiver. A 10 metre control RF cable is available as an accessory.

General specifications

Frequency range	2 MHz to 30 MHz (continuous)
VSWR	Better than 2:1 when tuned
Tuning time	Less than 1.5 seconds (typical)
Operating temperature	-30°C to +60°C
Humidity	95% relative, non-condensing
Environmental	IP67
Supply voltage	12.6 V DC (derived from transceiver)
Antenna impedance	50 ohm unbalanced
Mounting	M16 stud with provision for padlock
Weight	Main antenna body weight including heavy duty spring 4.15 kg
Input current	Average 600 mA @ +12.6 V input
Standards	Complies with MIL-STD 810G for drop, dust, temperature, shock and vibration



General Specifications

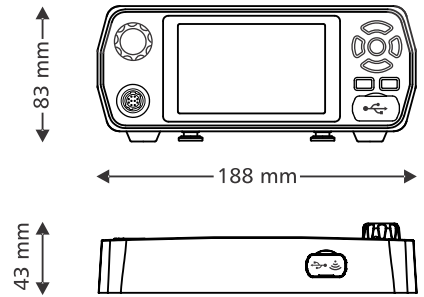
TX Frequency Range	1.6MHz – 30MHz
RX Frequency Range	250KHz – 30MHz
Channel Capacity	200
Address Book	300 contacts
Frequency Stability	±0.5 ppm (±0.3 ppm optional)
Frequency Resolution	1 Hz tunable receiver
Operating Modes	J3E (USB, LSB) - H2B (AM) - J2A (CW) - B2B (AFSK) Software-Defined filter bandwidth
Filter Bandwidths	Fully Software-Defined. From 300Hz to 3000Hz and beyond. Optionally up to 16kHz.
Operating Temperature	-30° to +70°, relative humidity 95%, non condensing
Supply Voltage	13.8V
Selcall System	Based on CCIR 493-4, 4 and 6 digit system
Current Consumption	350mA standby (muted)
Sensitivity	-121dBm (0.20 µV) for 10dB SINAD
RF Output Power	100W PEP (with 12V supply)
Standards	Designed to meet or exceed: Australia/New Zealand AS/NZS 4770 2000 and AS/NZS 4582:1999

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

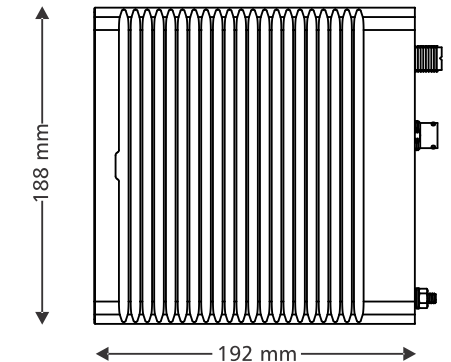
Summary of features and options

- Advanced fully software-defined architecture
- Intuitive and user-friendly touch-screen interface
- Wireless operation via iOS, Android & Windows devices
- Advanced calling features
- Detachable Front Panel
- Enhanced DSP noise reduction
- Lightweight and Compact Design
- Wi-Fi Adaptor
- Telcall
- "SMS Pagecall" short text messaging
- 1.6 to 30 MHz continuous
- Intuitive and user-friendly interface
- 3 year warranty (Standard)

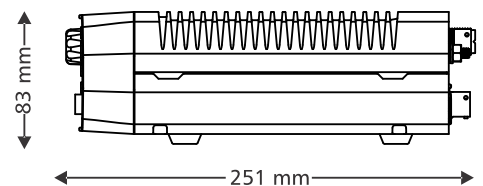
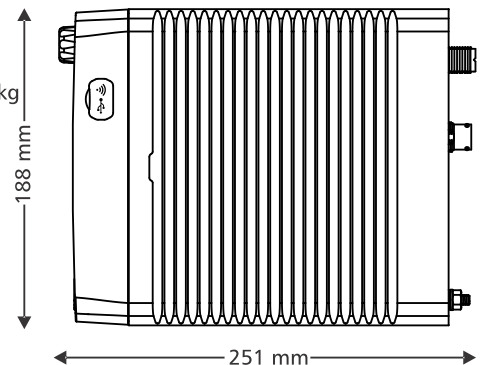
4050 remote control head
(trunk mount configuration)
Weight 0.35 kg



4050 remote control configuration
(trunk mount) main unit
Weight 2.2 kg



4050 local control configuration
Weight 2.55 kg



BCB4050D01/3



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