

2030 HF SSB transceiver



- Rugged commercial grade HF transceiver
- 1.6 MHz to 30 MHz, all mode, 125 W PEP RF power output
- 30 programmable channels and Selcall fitted as standard
- Rapid mobile or base station installation
- Intuitive "ease of use" operation
- Telcall and voice security options

The Barrett 2030 HF transceiver is an addition to Barrett's proven range of HF transceivers for customers that don't require some of the more advanced features offered by the 2050 transceiver.



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Digital Signal Processing (DSP)

A single DSP chip provides modulation and demodulation of all on air signalling used in the ALE, Selective Call and syllabic mute processes and provides noise reduction of received signals.

Simple architecture

The transceiver uses only two microprocessors, the main processor uses a soft loaded core while the second processor is used within the control head to operate the display and keypad.

Selective Call

Fitted with both a CCIR 493-4 based, four and six digit system of which the protocol is available for free distribution and an OEM protocol that is fully compatible with other major HF manufacturers' four and six digit systems that utilise encryption.

BITE - Built-in Test Equipment

Tests receiver performance, Selcall, syllabic mute, VCO operation and serial communications port viability.

Programming serial port

For ease of programming in a vehicle, a notebook computer loaded with the 2000 series programming package can load a transceiver's parameters without the need for cables through the remote head IR port.

Second antenna connector

Allows each channel to select one of two antennas - ideal when long and short distance antennas are used.

Voice security

AES, DES or FFT voice security modules are available as an option for the 2030 transceiver.

Size and weight

The 2030 in a local control configuration measures only $185(w) \times 270(d) \times 70(h)$ and weighs less than 2.6 kg. Housed in a lightweight, extremely strong sealed aluminium chassis, 2030 meets MIL-STD 810G for drop, dust, temperature, shock and vibration.

Direct dial telephone calls

The Telcall option provides direct dialling access with the Barrett HF Telephone Interconnect and most interconnects from other manufacturers.



Barrett 2030 HF transceiver front panel

SMS Pagecall

Allows short text messages to be sent from one 2030 transceiver to another. Barrett 2030 transceivers have alpha-numeric input keys (similar to mobile phones) that allow direct text message input (without the need for an external PC or Palm type input device).



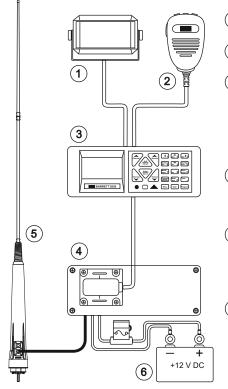
Barrett 2030 HF transceiver rear panel

Configuration flexibility

The 2030 transceiver is packaged as a desktop (local control) transceiver and with the addition of the simple and inexpensive mobile pack the 2030 is quickly reconfigured to a mobile (vehicle mount) transceiver.

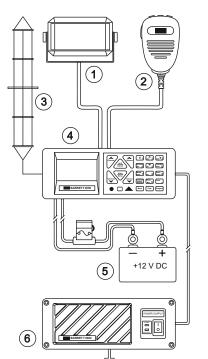
This feature simplifies the logistics of stocking the right transceiver for the right application. The modular design of the 2000 series of products as a whole enables a basic 2030 transceiver to adapt quickly and easily between base station and mobile configurations.

Typical 2030 HF transceiver mobile configuration example



- 1 Loudspeaker
- 2 Hand microphone
- (3) Remote head detached from 2030 HF transceiver RF module
- (4) 2030 HF transceiver RF module P/N BC203000
- 5 Optional 2019 automatic tuning mobile HF antenna P/N BC201900
- 6 12 V DC power source

Typical 2030 HF transceiver base station configuration example



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- (1) Loudspeaker
- (2) Hand microphone
- 912 multi-wire broadband dipole base station antenna P/N BC91200
- (4) 2030 HF transceiver RF module with remote head engaged P/N BC203000
- (5) 12 V DC power source
 - OR
- (6) 2022 Base station mains power supply P/N BC202200

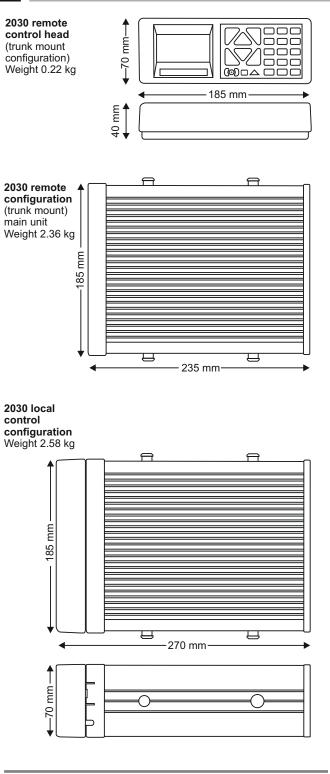




General specifications

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Transmit frequency range	1.6 MHz to 30 MHz (continuous)
Channel capacity	Up to 30 programmable channels
Frequency stability	±0.5 ppm (±0.3 ppm optional)
Receive frequency range	250 kHz to 30 MHz (continuous)*
Frequency resolution	1 Hz tunable receiver
Operating modes	J3E (USB, LSB) - H3E (AM) - J2A (CW) J2B (AFSK) Optional J2B (AFSK) with narrow filter
Operating temperature	-30°C to +70°C humidity 95% relative, non condensing
Supply voltage	2030 -13.8 V DC (negative ground) polarity protected. Over voltage protected
Selcall system	Based on CCIR 493-4, four and six digit systems
Current consumption	470 mA standby (muted, back lighting off) Voice average less than 9 Amps typical Two tone less than 12 Amps typical
Sensitivity	-120 dBm (0.224 uV) for 10 dB SINAD - J3E Mode
RF output power	125 W PEP voice ±1.5 dB or 30 W PEP voice ±1.5 dB or 10 W PEP voice ±1.5 dB
Duty cycle	100% two tone input signal with fan option
Standards	FCC approved – Part 90 Exceeds/complies with Australian/ New Zealand standard AS/NZS 4770:2000 and AS/NZS 4582:1999 EMC and vibration standard IEC 945 Complies with MIL-STD 810G for drop, dust, temperature, shock and vibration NTIA Approved

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*reduced sensitivity 250 kHz to 500 kHz

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

Summary of features and options

- Software Defined Core
- Advanced calling features
- Detachable Front Panel
- Enhanced DSP noise reduction
- Secure Digital Voice, Data Encryption and scrambling options
- Lightweight and Compact Design
- BITE Built-in Test Equipment
- Second antenna connector
- Direct dial telephone calls via the Barrett 2060 Automatic
- Telephone Interconnect
- "SMS Pagecall" short text messaging
- 1.6 to 30 MHz continuous
- Intuitive and user-friendly interface
- 3 year warranty (Standard)
- Independent of all other communications' networks
- Free to air no call costs



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