

2040 HF Tactical Manpack Transceiver

Specifications

Frequency range	1.6 MHz to 30 MHz Tx, 500 kHz to 30MHz Rx
Channel capacity	Up to 500 programmable channels (simplex or semi-duplex)
Operating modes	J3E (USB, LSB) - H3E (AM) - J2A (CW) - J2B (AFSK)
Frequency stability	±10 Hz or better than 0.3 PPM over temperature range -30°C to +70°C
Sensitivity	-120dBm (0.224µV) for 10dB SINAD - J3E Mode pre-amp on -115dBm (0.398µV) for 10dB SINAD - J3E Mode pre-amp off
Blocking	-20 kHz and +20 kHz better than 71dB (max. usable sens.)
Rx intermodulation	Better than 89dBµV
RF connections	Whip or long wire using internal automatic antenna tuner or 50 Ohms
RF output power	30 watt PEP ± 1dB, 10watt PEP ± 1dB
Supply voltage	12VDC from internal battery 22-24 VDC from external supply
Average battery life	20Hrs based on a 10% voice duty cycle duty cycle
Environmental	-30°C to +60°C, IP67
Dimensions	2040 manpack including battery cartridge 235mm W x 145mm H x 290mm D
Programming interfaces	Infrared (IrDA) and RS-232
Weight	2040 manpack 5.2Kg. 10Ah Lithium Ion battery cartridge 1.2Kg
Standards	Meets AS/NZS4770:2000, AS/NZS4582:1999, CE, MIL-STD-188-141B, MIL-STD-810F shock, vibration, dust and spray

Options

BCO20400	Frequency Hopping (requires export licence)
BCO20505	ALE MIL-STD-188-141B
BCO20506	Secure Call
BCO20501	4 and six digit Selective call
BCO20502	4 and six digit Selective call and Telcall
BCO20504	GPS Interface
BCO20503	RS-232 Control

Head Office:
Barrett Communications Pty Ltd P O Box 1214, Bibra Lake WA 6965 AUSTRALIA
Toll Free Tel: 1800 999 580 Tel: (618) 9434 1700 Fax: (618) 9418 6757
email: information@barrettcommunications.com.au
internet: www.barrettcommunications.com.au

European Office:
Barrett Europe Limited 19 Lenten Street Alton, Hampshire GU34 1HG
UNITED KINGDOM Tel: (44) 1420 542254 Fax: (44) 1420 543373
email: information@barretteurope.co.uk
internet: www.barrettcommunications.com.au



MADE IN AUSTRALIA

BCB204001/7



AS/NZS
ISO 9001:2000
APPROVED
BY BVQI



BARRETT COMMUNICATIONS 2000 SERIES



2040 HF Tactical Manpack Transceiver



Harsh conditions require tough, uncompromising equipment. Dependable, secure communications are essential to the survival of your mission and your staff.

Key features

Frequency Hopping

ALE to MIL-STD-188-141B

GPS equipped

MIL-STD-810F compliant

Digital and Analogue security

DSP based

Less than 210mm square

Weights only 6.4Kg including a 10 Ah battery cartridge

The Barrett 2040 is the result of 30 years experience in the provision and support of HF communications globally. Employing Barrett's well known intuitive operator interface, teamed with current communications technology and rugged packaging, the 2040 provides an exceptionally specified, lightweight, HF manpack.

Barrett's unique 2000 series architecture allows each transceiver to be configured from a simple open channel voice radio to a fully optioned frequency hopping, digitally encrypted system transceiver with MIL-STD Automatic Link Establishment (ALE).



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ISO 9001:2000
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BARRETT COMMUNICATIONS 2000 SERIES



2040 HF Tactical Manpack Transceiver

The 2040 manpack is equipped with a fully automatic antenna tuner allowing the deployment of a full range of tactical and static antennas. An inbuilt battery management system supports its light weight Lithium Ion battery cartridges. All connections to the IP67 rated manpack are made using MIL-STD connectors. Configuring the 2040 is simple using either the Windows based programming system through the auxiliary socket or wirelessly using the IrDA port. Emergency field programming can be performed, by password entry, using the front panel keypad.

The 2040's range of carry systems include British Army approved back packs which allow full webbing to be utilised and are available in UN blue as well as the traditional drab olive to ensure neutrality is observed when deployed in the humanitarian and peacekeeping roles.

All 2000 series transceivers including the 2040 manpack have common operating features and functions and major internal modules, reducing training, inventory, maintenance and system ownership costs to a minimum.

Antenna mounting stud for use with whip antenna or untuned long wire antenna

16 Pin auxiliary connector for connection to email, fax & data systems or field data terminals (FDT's)

Connector for CW key or ESU when using frequency hopping or GPS receiver for tracking applications

Power input connector for charging and operating transceiver

Handset connector for MIL-STD handset, waterproof speaker mic or OEM encrypted handsets

Connector protection caps fitted to all connectors

Comfortable carry handles for gloved hands



Features

Frequency hopping

The unique, easy to use frequency hopping system requires no central synchronisation station, has no entry or late entry time and requires no handshaking. Hopping at 5 channels per second, using a 10 digit hopping encryption key, and with a user selectable hopping bandwidth to suit the antenna type in use, the system provides excellent protection against EW attacks.

Secure call

Secure call is an innovative, narrow band voice encrypter that is very simple to use, has no handshaking or sync delays, and provides operators secure point to point, or point to multipoint communications.

Rugged and lightweight design

Using the latest polycarbonate plastic alloys combined with lightweight strong aluminium alloy extrusions, the 2040 weighs only 6.4Kg including its 10Ah, quick change, Lithium Ion battery cartridge. The 2040's small physical size makes it comfortable to operate and wear when deployed in either of its back pack options.

Outstanding voice quality

The standard DSP noise reduction system reduces external channel noise, the effects of interference, and enhances audio signals to provide easier listening. The level of noise reduction can be easily selected to suit prevailing conditions.

Extended operation time

The very low current consumption of the 2040 manpack enables it to operate for over 20 hours on one battery cartridge. Spare quick change battery cartridges are small, lightweight and easily fit in the carry system side pockets. Dry cell emergency packs are available to extend mission time, negating the need to carry charging equipment.

Selective calling systems

The 2040 manpack provides international standard 4 and 6 digit selective call facilities that include Telcall, SMS, GPS position and remote transceiver operational status monitoring, point to point secure call and remote transceiver disable capabilities.

GPS tracking, command and control

Fitted with the optional GPS module, the 2040 manpack is able to be automatically tracked with the Barrett 977 base tracking system. Individual operators can be located, maintained within certain areas or corridors, be alerted if straying into no-go areas and have facilities to alarm controllers if they are in danger. Tracking signals are digital and encrypted for security.

SMS messaging system

64 character SMS messages, encrypted for security, are directly entered via the 2040 front panel keys and can be sent to individual or multiple stations.

Data capability FDT's

Using the 2040's flexible auxiliary connector, Barrett 2020 email and data systems and many OEM FDT's (Field Data Terminals) are supported.

Digital crypto handsets

The 2040's audio connectors provide interfaces for various external OEM voice crypto devices. Barrett recommends the Telsy TCH01C HC250U crypto handset for 256 bit high level encryption and ease of use. In addition to the standard options available in the 2040 manpack many other forms of internal analogue and digital encryption systems are available to suit user requirements.

Automatic antenna tuner

Whips and un-tuned wire antennas are simply deployed using the inbuilt, fully automatic antenna tuner. For overnight or temporary fixed operations various lightweight broadband and tuneable tactical antennas are available.

Accessories

Advanced framed back pack for manpack -

Available in drab olive or blue. British army approved and allows full webbing to be used.



Universal AC/DC power adaptor - for charging and operating the manpack transceiver when either mains power between 100-254VAC or DC power between 11-18VDC is available.

Includes:-

- AC power cords to suit most world power outlets
- DC power lead that has clips and adaptors to plug into either a vehicle cigarette outlet, vehicle power outlet or 12v battery.



Battery cartridge -

14.8V 10Ah Lithium Ion - colour dark grey



2040 Manpack battery cartridge loading



915 tactical, rapid deployment, tuned, end fed, dipole antenna - 40 Watt PEP max.

Includes:-

- Lanyards and spool.
- 5 metres of RG-58AU coaxial cable, water proof BNC connector coaxial.
- Carry bag.



Collapsible 3m whip - with gooseneck - colour black



GPS receiver - combined receiver/antenna

Includes:-

- 3 metre cable and connector to suit 2040 manpack adapter connector.



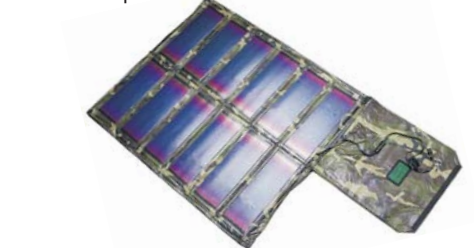
Headphones - black light weight tactical - for manpack transceiver with MIL-STD 16 pin connector.



Solar power supply pack - for charging and operating the manpack transceiver

Includes:-

- Compact lightweight tactical foldout solar panel 24VDC @ 1.7 Amps peak
- Folds to 18cm x 5cm x 5cm package, camouflage colour with lead and plug to suit manpack.



CW key - light weight tactical - with leg strap for manpack transceiver with MIL-STD 6 pin connector.



MIL-STD handset - light weight tactical - for manpack transceiver with MIL-STD 6 pin connector.



Waterproof speaker / microphone - for manpack transceiver with MIL-STD 5 pin connector.

