BARRETT COMMUNICATIONS

Commercial Catalogue

2090 HF Manpack transceiver

	Part Number	Packaging Type	Net Weight	
2090 HF Manpack transceiver	BC209000	C1	4.85 kg	

Standard features:-
- 500 channels with frequency range 1.6 to 30 MHz
- Power output 10-30 W PEP, power input 22 VDC nominal
- Software defined core & DSP
- Digital Selective Calling & Telcall - 4 & 6 digit
- GPS & RS232 interface
- Meets MIL-STD 810G for shock, temperature, vibration, dust and immersible to 1 m for 1 hr

BC209000   2090-01-09   BCM20900

Optional Features*:-
- ECCM Options (COMSEC/TRANSEC)
- MIL STD 188-141B ALE (JITC certified)
- Internal fit high speed modem

* For additional options and accessories, please see relevant section detail.

Note:- See brochure for more detailed information.

Includes:-

2090 HF Manpack transceiver	BC209000			
Advanced handset	2090-01-09			
Barrett 2090 operation and installation manual	BCM20900			

Commercial Catalogue

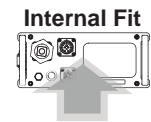|	Part Number	Packaging Type	Net Weight	
Automatic link establishment (ALE) controller	BCO20505	N/A	N/A	

MIL STD 188-141B ALE (JITC certified)

Note:- When using ALE at least one ALE fill program is required by the system administrator to set up the ALE network - this fill program is included in the 2000 Series programming kit P/N BCA20001.

Internal Fit

	Part Number	Packaging Type	Net Weight	
Secure call	BCO20506	N/A	N/A	

A point to point or point to multipoint Secure call system initiated by the entry of a scramble key and Secure call selcall.
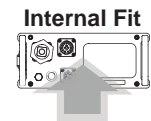
Note:- Selcall option must be fitted.

Internal Fit

	Part Number	Packaging Type	Net Weight	
Frequency hopping	BCO20507	N/A	N/A	

5 or 25 hops per second - no central synchronisation station, no net entry delay or late entry delay. ESU/GPS to be purchased separately.

Note:- This option requires an Australian Government Export Licence.

Internal Fit

![Barrett Communications logo]

	Part Number	Packaging Type	Net Weight	
Voice encryption AES 256	BCO20509	N/A	N/A	

Enables the 2090 to operate in FFT based voice scramble mode.

Note:- Software and cables are not included.
        Please see key injection kit BCA20255.

Internal Fit

	Part Number	Packaging Type	Net Weight	
Voice encryption DES 56	BCO20510	N/A	N/A	

Enables the 2090 to operate in FFT based voice scramble mode.

Note:- Software and cables are not included.
        Please see key injection kit BCA20255.

Internal Fit

	Part Number	Packaging Type	Net Weight	
Secure digital voice Low rate auto vocoder 600/1200/2400 with AES256 encryption	BCO20520	N/A	N/A	

Note:- This option requires key management and keyfill software P/N 2090-04-32
Note:- This option requires an Australian Government Export Licence.
Note:- Factory fit only

Internal Fit

BARRETT COMMUNICATIONS

Commercial Catalogue

	Part Number	Packaging Type	Net Weight	
Secure digital voice auto vocoder 700/1200/2400 with DES 56 encryption	BCO20521	N/A	N/A	

Note:- This option requires key management and keyfill software P/N 2090-04-32

Internal Fit

	Part Number	Packaging Type	Net Weight	
Key management and keyfill software (AES 256 and DES 56)	2090-04-32	N/A	N/A	

For secure digital voice Low rate auto vocoder 600/1200/2400 with AES 256 encryption and secure digital voice auto vocoder 700/1200/2400 with DES 56 encryption.
Includes:-
- Scrambler key injection software P/N BCUSB40255
- Serial cable to suit 2090 with DB9 adaptors P/N SA-29109
- USB to serial adaptor P/N BCA92318

	Part Number	Packaging Type	Net Weight	
Voice scrambler FFT	BCO20511	N/A	N/A	

Enables the 2090 to operate in FFT based voice scramble mode.

Note:- Software and cables are not included.
Please see key injection kit BCA20255.

Other encryption scrambling devices
Other encryption and scrambling devices are available for special applications, please ask our sales department about your specific requirements.

Internal Fit

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Commercial Catalogue

	Part Number	Packaging Type	Net Weight	
Key injection kit for DES 56/ AES 256/ FFT	2090-01-34	C4	0.20 kg	

Includes:-
- Scrambler Key Injection Software P/N BCUSB20255
- Serial cable P/N SA-29109
- USB to serial adaptor P/N BCA92318

	Part Number	Packaging Type	Net Weight	
Clover 2000 external modem with USB interface & internet & fax gateway software	BC202900	C4	0.65 kg	

Clover 2000 external modem powered by USB interface from connected ruggedised laptop (not included) running the communications suite software.

Includes:-
- Cable to suit 2090 Manpack
- Cable modem to USB
- Cable modem earth strap P/N SA-29321
- Instruction manual
- Barrett 2020 HF email and fax gateway software P/N USB-209002

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	Part Number	Packaging Type	Net Weight	
Battery pack 10 Ah	2090-03-05	C7	1.25 kg	

16.8 V 10 Ah Lithium Ion - colour black.

Waterproof speaker / microphone	2090-01-25	C4	0.20 kg	

With 15 pin connector.

Advanced handset	2090-01-09	C4	0.40 kg	

Advanced handset with waterproof speaker, microphone, Press-To-Talk (PTT) button and backlit control keypad for use with advanced software features such as selcall, groupcall, key entry and front panel programming. Colour black.

Headphones - lightweight	2090-01-08	C6	0.30 kg	

Folding headphones with 5 pin connector - colour black.

Accessories

![BARRETT COMMUNICATIONS]

Commercial Catalogue

	Part Number	Packaging Type	Net Weight	
Lightweight tactical headset (under helmet)	2090-01-38	C4	0.28 kg	

Lightweight tactical headset, suited to under helmet mounting, with amphenol 15 pins connector, speaker, microphone and clip on Press-To-Talk (PTT) button.
Colour black.

CW key - lightweight	2090-01-07	C4	0.40 kg	

Brass CW key with leg strap and 6 pin connector.

Collapsible 3 metres whip	2090-02-07	C6	0.40 kg	

With gooseneck - colour black.

Tape whip - 1.5 metres	2090-02-05	C6	0.25 kg	

For manpack operation in receive mode
(for transmission from 5 to 30 MHz but at limited efficiency).

Accessories

		Part Number	Packaging Type	Net Weight	

BARRETT COMMUNICATIONS

Commercial Catalogue

Emergency long wire antenna	2090-02-06	C4	0.40 kg	

With adaptor to suit whip stud on 2090 manpack transceivers.

Counterpoise earth kit - single-wire	2090-02-09	C4	0.20 kg	

Recommended to increase the efficiency of the 2090 Operating with whip antennas
below 3 MHz.

Includes:-
- Winding hub, wire earth radial and peg
- Carry bag - colour black

Counterpoise earth kit - multi-wire	2090-02-08	C4	0.25 kg	

Recommended to increase the efficiency of the 2090 Operating with whip antennas
below 3 MHz when in dry soil or desert areas where normal earth connections are difficult
to achieve.

Includes:-
- Winding hub, wire earth radials and weights
- Carry bag - colour black

Rapid deployment broadband dipole antenna - 125 W	2090-02-03	C6	1.85 kg	

Operates from 2 to 30 MHz without adjustment - 125 W PEP max.
Can be deployed as full length broadband dipole or in compact form. Manufactured with Kevlar radiators and
UV resistant Dacron cords.

Includes:-
- Radiators and loads wound on reusable spools
- Lanyards wound on reusable spools with throw and securing weights
- 10 metres of RG-58AU coaxial cable, with waterproof BNC and UHF coaxial connectors
- Carry bag - colour black

![BARRETT COMMUNICATIONS]

Commercial Catalogue

	Part Number	Packaging Type	Net Weight	
Rapid deployment wire dipole antenna - 125 W	2090-02-01	C6	2.10 kg	

Operates from 2 to 30 MHz - 125 W PEP max.
Frequency markers attached to Kevlar radiators.

Includes:-
- Lanyards wound on reusable spools with throw and securing weights
- 10 metres of RG-58AU coaxial cable, with waterproof BNC and UHF coaxial connectors
- Carry bag - colour black

Portable mast	2090-02-04	C2	5.20 kg	

Suitable for rapid deployment broadband dipole antenna - 125 W and rapid deployment wire dipole antenna - 125 W.

Includes:-
- 7 pieces mast
- Guys on winders, earth pegs, guy pegs and hammer
- Carry bag - colour black

Backpack for manpack - colour black	BCA209009	C2	2.30 kg	

The full pack provides for the 2090 and various accessories including wire antennas and spare battery packs.
A pouch is provided to hold the 2090's removable display and handset.
The side packs can be detached from pack to make the pack more compact.

Note:- Solar panel bag not included. See Rapid deploy solar panel P/N BCA209010

Accessories

Commercial Catalogue

	Part Number	Packaging Type	Net Weight	
Day Pack - colour black	2090-01-37	C2	1.0 kg	

The Day Pack provides a compact carry bag solution for the 2090. With storage for essential items like antenna's, solar panel, GPS as well as a seperate pouch for a water bladder and small rugged tablet. There are external MOLLE fixing points if user specific pouches want to be added.

	Part Number	Packaging Type	Net Weight	
Clover 2000 internal modem with internet and fax gateway software	2090-04-02	C4	0.35 kg	

Operates with the supplied Barrett 2020 HF Data system software providing full email facilities and connection to the Internet email and international fax system.

Includes:-
- Internal fit modem PCB P/N BCA204029
- Serial cable with 15 pin MIL-STD connectors and DB-9 adaptors P/N SA-29109
- Barrett 2020 HF Email and fax gateway software P/N USB-209002

USB-209002   SA-29109   BCA204029

Internal Fit

	Part Number	Packaging Type	Net Weight	
Universal AC/DC power adaptor	2090-03-01	C7	1.80 kg	

For charging and operating the manpack transceiver or manpack battery when either mains power between 100-254 VAC or DC power between 11-18 VDC 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 12 V battery
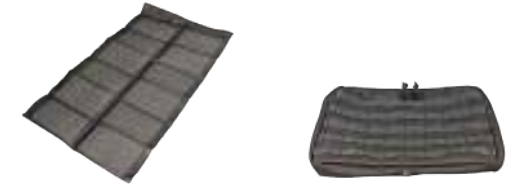
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Commercial Catalogue

	Part Number	Packaging Type	Net Weight	

Rapid deployment solar panel - colour black

	BCA209010	C6	1.30 kg	

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

Includes:-
- Compact lightweight tactical foldout solar panel 24 VDC @ 1.2 Amps normal
- Folds to 37cm x 22cm x 4cm package with lead and plug to suit manpack or external
  battery management unit
- Solar panel bag - colour black P/N BCA209015

Rapid deployment hand crank generator

	2090-03-04	N/A	8.25 kg	

For charging and operating the manpack transceiver.

Includes:-
- Compact hand crank generator with fold out operator's seat 24 VDC @ 3 Amps peak with
  lead and plug to suit manpack or external battery management unit
- Carry bag - colour black
- Hand crank generator manual P/N BCM40522

GPS receiver / antenna module (ESU)

	2090-01-24	C4	0.15 kg	

Combined receiver / antenna to suit 2090. Enable the GPS receiver antenna to be placed up to 4 metres from the 2090. Used when the 2090 is deployed at a temporary base station or in a vehicle docking station allowing the ESU / GPS to be mounted or placed outside the enclosure or vehicle.

Accessories

| | Commercial Catalogue | Part Number | Packaging Type | Net Weight | |

Programming kit

| | | 2090-01-30 | C4 | 0.20 kg | |

PC Programming kit - to suit 2090 Manpack.

Includes:-
- Software (operating manual included on the USB) P/N USB-209001
- Serial cable to suit 2090 with DB25 and DB9 adaptors P/N SA-29109
- USB to serial adaptor P/N BCA92318

Display / handset extender interface

| | | BCA209013 | C4 | 0.15 kg | |

Enables the display and handset to be extended up to 30 metres from the transceiver.
The 1.5 metres standard display / handset extender cable is used when the display is carried on front web-bing and the 15 metres extender cable is used for remote operation.

Display / handset extender cable 1.5 metres

| | | 2090-01-12 | C4 | 0.10 kg | |

Cable that connects the web worn display and handset when removed from the PRC-2090 in
a manpack configuration.

Display / handset extender cable 15 metres

| | | 2090-01-13 | C4 | 0.85 kg | |

Enables the display and handset to be extended 15 metres from the PRC-2090, used when PRC-2090 is
deployed in temporary operations centre when it is desirable to have the PRC-2090 located outside the
operations centre near its antennas. Up to two cables can be daisy chained to achieve 30 metres separation
between the PRC-2090 and the operator with the display and handset.