



Q-MAC HF-90 MANPACK

PACKAGE DESCRIPTION

The Q-MAC HF-90 Manpack is a portable, instant-deployment HF SSB radio communication system, incorporating the Q-MAC HF-90 Transceiver - now available with optional frequency hopping. *A detailed description of this product, together with technical specifications, is provided on a separate brochure.*

This package is designed for applications where the operator requires medium to long range communications, whilst on foot. It is ideal where mobility is of paramount importance, given that it is compact, lightweight (total weight is approximately 7kg) and comfortable to carry for long periods. The HF-90 Manpack is totally independent of terrain and can be used whilst carried on the operators back, or when staked into the ground. The Q-MAC HF-90 Manpack can be easily converted to a Base Station Package, Vehicle Package or Portable Package with the addition of appropriate accessories.

The Q-MAC HF-90 Manpack is being used worldwide in a variety of applications including; international aid projects, military/paramilitary applications, search and rescue, mineral exploration, forestry management, conservation and wildlife projects.

PACKAGE INCLUDES

- Q-MAC HF-90 Transceiver - Supplied complete with speaker microphone.
- Q-MAC TM-90 Tuner - Simple to use single-control tuner, incorporating LED tuning indicators. Operates by way of a continuously variable inductor with no moving contacts. Tuner does not require any DC power to operate, only RF power which is generated from the HF-90 Transceiver. Supplied complete with coaxial connection to HF-90 Transceiver and ground/earth connection.
- Q-MAC Collapsible Whip Antenna - High efficiency, six section whip antenna totalling three metres in length. Provides reliable operation from 3.6 to 10MHz. Made from high-grade aluminum alloy tubing with internal braided tension chord. Black in colour. *Please refer to information on the reverse of this brochure concerning "Antenna Deployment".*
- Q-MAC Long Wire Antenna Kit - Includes 7m wire antenna, 5m counterpoise, long wire antenna adaptor (fits to TM-90 Tuner) and throw rope. Allows very efficient operation between 2.5 to 10MHz. *Please refer to information on the reverse of this brochure concerning "Antenna Deployment".*
- Q-MAC Rechargeable Battery - Maintenance-free, sealed lead acid gel battery 7Ah. Supplied complete with DC power cable, incorporating connector for charging devices, and battery condition monitor. *Please refer to information on the reverse of this brochure concerning "Battery Use".*
- Q-MAC Canvas Backpack - (545h x 275w x 160d) Custom designed backpack made from water resistant canvas, with fully padded and reinforced compartments to house the HF-90 and its accessories. Supplied with 2 stainless steel support stakes for operating from the ground. Alternatively, the package may be supplied in a military-grade modular backpack on rugged external frame (510h x 400w x 300d) - as an optional upgrade. Both backpack models are available in olive drab, blue or alternative colour (upon request).
- Q-MAC Instruction Literature.



This photograph shows the HF-90 Manpack in the standard canvas backpack (blue) and in the optional military-grade backpack on frame (olive drab), together with a variety of standard and optional accessories.



ANTENNA DEPLOYMENT

The Q-MAC Collapsible Whip Antenna supplied with the HF-90 Manpack is spring-loaded for instant deployment. The operator erects the antenna by snapping together all six sections. When not in use, the antenna is folded up and stored within the Q-MAC Canvas Backpack.

The Q-MAC Long Wire Antenna Kit supplied with the HF-90 Manpack is designed to be set up once the operator is stationary. It is typically deployed by throwing over a tree at the one end and fixing to the TM-90 Tuner at the other end. It may be used at full length (7m) to achieve tune for lower frequencies or it can be folded back in half (3.5m) to achieve tune for higher frequencies. The counterpoise provided must be fitted to the TM-90 Tuner and then extended along the ground to provide adequate earthing.

BATTERY USE

The Q-MAC Rechargeable Battery provided with this Package has a 7Ah capacity. This battery will provide, on average, around 10 hours of operation to the Q-MAC HF-90 Transceiver (based on a standard duty cycle of 10% transmit and 90% receive/standby).

ADDITIONAL OPTIONS & ACCESSORIES

The following options and accessories may be purchased separately, for use with the HF-90 Manpack:

- Q-MAC Advanced Option – Provides Selcall facilities (Codan compatible) and field programming ability. Supplied with appropriate DTMF mic/handset.
- Q-MAC Frequency Hopping Option – Provides complete protection against intercept and jamming (military grade). *A detailed description of the Q-MAC HF-90 Frequency Hopping Option, together with technical specifications, is provided on a separate brochure.*
- Q-MAC Framed Backpack Upgrade – Replaces standard backpack with modular military-grade model (supplied on frame.)
- Q-MAC Collapsible Whip Antenna (2-section) – 1m whip with 4 to 12.9 MHz coverage, supplied with flexible gooseneck. Suited to short-range communications.
- Q-MAC Tape Whip Antenna – 1m whip with 4 to 12.9 MHz coverage, supplied with flexible gooseneck. Suited to short-range communications in jungle/forestry terrain.
- Q-MAC Portable Broadband Antenna – End-fed broadband (requires single mounting point) with 2 to 30 MHz coverage. Supplied on shuttle for easy deployment and storage. Maximum efficiency.
- Q-MAC AC Mains Charger – 2A limited current, 120/240V AC input, 12V DC nominal.
- Q-MAC DC Step-Up Battery Charger – 1A current, steps up 12V DC input voltage to 14+ Volt for rapid charging via a vehicle cigarette lighter socket.
- Q-MAC Fold-Up Solar Panel Charger – 10.8 Watt rated power. Comprises five panels that fold into a compact canvas pouch.
- Q-MAC Hand Crank Generator – 30 Watt output at 16 Volt regulated (70RPM) c/w charge indicator. Meets Mil Std 810D. May be supplied with optional monopod. Does not fit within backpack.
- Q-MAC CW Option & Telegraph Key – Supplied with suitable headphones if required.



Specifications are subject to change without notice.

Represented by:

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