



# Q-MAC Electronics

## QM9018 HF-90 Kit Base Station

### Tactical Communications



Tactical HF Radio

50Watts PEP

Optional Frequency Hopping



### Package Description

The Q-MAC HF-90 Base Station Package is an HF SSB radio communication kit designed for fixed base station use. This package incorporates the Q-MAC HF-90 Transceiver (a detailed description of this product, together with technical specifications, is provided on a separate brochure).

This package as a whole is characterized by its extremely compact size, ease of use and its adaptability. It incorporates a mains power supply unit with battery backup, for use with different AC mains systems (regardless of voltage level or consistency of supply). The antenna included accommodates all frequencies between 2 to 30MHz and offers different mounting configurations. The Q-MAC HF-90 Base Station Package can be easily converted to a Manpack, Portable or Vehicle Package with the addition of appropriate accessories.



The Q-MAC HF-90 Kit Base Station Package is being used worldwide in a variety of applications including; international aid projects, military/paramilitary applications, search & rescue, mineral exploration, forestry management, conservation and wildlife projects, construction, transportation and tourism services.

### Features

- Small Size
- High Sensitivity
- Excellent 3rd Order Intercept
- Compact Automatic Antenna Tuner
- Selective Calling
- Simple to Use
- Simple to Maintain
- Rugged Construction
- Field Proven in over 85 Countries

### Standard Package Contents

- Q-MAC HF-90 Transceiver - Supplied complete with fist microphone and DC power cable.
- Q-MAC Mounting Cradle - Offers a variety of mounting options.
- Q-MAC External Mount Speaker - A large efficient speaker incorporating audio mute facility for fixed channel operation.
- Q-MAC AC Mains Power Supply Unit (PSU) – Desk-top unit operating from 115/230 Volt AC at 15 Amp continuous. Offers voltage/current protection and short circuit protection. Supplied with customer's choice of AC mains plug.
- Q-MAC Battery Changeover Switch – Monitors the 13.8 Volt DC output from the PSU. Automatically switches to battery in the event of mains power failure and back again once the power is restored. Incorporates battery charging facility.
- Q-MAC Rechargeable Battery – Maintenance-free sealed lead acid gel battery 7Ah.
- Q-MAC Fixed Broadband Dipole Antenna – High efficiency 3-wire centre-fed broadband dipole offering 2 to 30 MHz frequency coverage and 130 Watt (voice and data) power rating. Constructed from multi-strand stainless steel wire with fibreglass spreaders. Supplied complete with 30m RG-58 coaxial cable and connectors. *Please refer to information on the reverse of this brochure concerning "Antenna Installation".*



HF-90 Construction



LIGHT WEIGHT • HIGH POWER • FREQUENCY HOPPING • SELECTIVE CALLING • LOW POWER CONSUMPTION



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### Antenna Installation

The Q-MAC Fixed Broadband Dipole Antenna supplied with this package can be mounted in the following configurations:

- Horizontally between two supports – This is the preferred installation. Note that elevation of the antenna results in longer range communication.
- As an inverted V with one high central support and two lower end supports – This configuration is ideal where there is limited space available for installation. Note that this configuration results in a more omni-directional radiation pattern and is ideal for short range communication.

### Mechanical Characteristics:

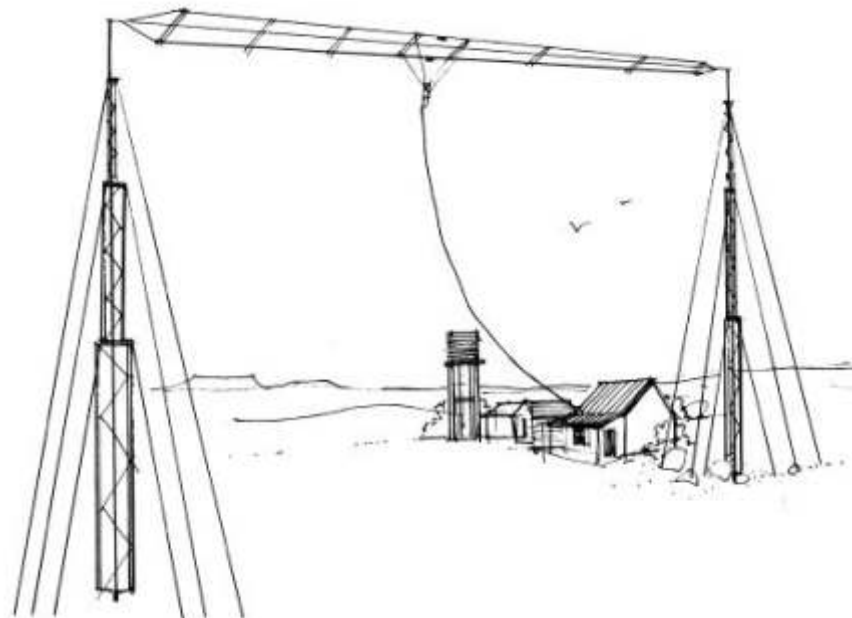
- Shipping weight: 4.5kg
- Mast height: 10m minimum
- Mast spacing: 30m (horizontal configuration) 18m (inverted V configuration)
- Antenna length: 27m
- Radiating elements: Stainless steel (multi-strand)
- Wind rating: 210km/hr\*

\* In accordance with AS1170.2 – 1989 loading code – wind loads.

### Additional Options

The following options may be purchased separately, for use with the HF-90 Kit Base Station Package;

- Q-MAC Advanced Option - Provides Selcall facilities (Compatible with Codan<sup>(TM)</sup> and Barrett Communications<sup>(TM)</sup> transceivers - CCIR 493-4) and field programming ability. Supplied with the appropriate DTMF mic/handset.
- Q-MAC Frequency Hopping Option - Provides complete protection against interception and jamming (military -grade). A detailed description of the Q-MAC Frequency Hopping Option, together with technical specifications is provided on a separate brochure.



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Specifications are subject to change without notice.  
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