TACTICAL RADIOS


■ HF Transceivers
■ VHF Transceivers

- Frequency Hopping
- Digital Encryption
- Antenna Systems
- Data Transmission

TACTICAL RADIOS


## Q-MAC ELECTRONICS

Q-MAC Electronics was established in 1994 to design, manufacture and market a range of quality tactical communication products. The company operates from a sound financial base and is committed to steady continuous growth through a focus on its key competencies - innovative design, excellent value for money and strong after sales support.

Q-MAC specialises in and is committed to providing tactical communication equipment that is low cost, secure and simple to use. Q-MAC's core products are high performance radio transceivers, the HF-90 and the VHF-90M, and the ML-91 NVIS Roof Rack Antenna System.

## GLOBAL NETWORK

Q-MAC Electronics distributes and services its products via a large international network of dealers and agents. The company recognises the vital role which its dealers and agents serve and therefore places strong emphasis on a co-operative working relationship based on mutual trust and support. It is through the success of this approach that Q-MAC has enjoyed consistent export sales of its products to over 100 countries worldwide on every continent.

## TACTICAL RADIOS

The HF-90 compact transceiver is the world's smallest high power HF SSB transceiver. It is available in commercial or military specification and achieves ranges of up to 3000 km without the use of satellites or mobile telephone towers.

Q-MAC's VHF-90M is a low band VHF transceiver providing short to medium range communications. At only 1 kg with its battery, the VHF-90M is the most compact, cost effective and versatile high performance VHF transceiver available in the tactical market today.

Both the HF-90 and VHF-90M are designed for multi-role use, suiting manportable, mobile and base station applications. Q-MAC also offers digital encryption and frequency hopping options for communication free of interception and jamming. A full range of antennas and other accessories is available in addition to rapid service and support.

The ML-91 NVIS Roof Rack Antenna is an innovative vehicle loop antenna which is, without doubt, the best type of antenna for vehicular NVIS (Near Vertical Incidence Skywave) operations. The ML-91 is effective in overcoming the skip zone common in HF whip based antenna systems. With the correct selection of frequency, it provides virtually continuous coverage from 0 to 1000 km or more.

TACTICAL RADIOS


## Q-MAC EXPERTISE

Q-MAC's management team operates from a purpose built factory and office facility located within the Herdsman Industrial Park in Perth, Western Australia.

The personnel which make up the management team are responsible for all design and management aspects of the company, whilst Q-MAC's manufacturing requirements are satisfied by a combination of in-house capability and a dedicated group of Australian based production contractors. These contractors are selected on the basis of their quality control efficiencies and price competitiveness, so that Q-MAC is able to offer its customers excellent product reliability and value for money.

The experience of the management team and directors is impressive and spans several decades. The management team and directors also hold qualifications and professional affiliations in their respective fields of expertise.

With an in-house range of qualified and experienced personnel, as well as a comprehensive global network of consulting professionals, Q-MAC offers training, systems planning and design, site commissioning and after sales support to all customers.

## KEY PROFESSIONAL COMPETENCIES

- Radio Frequency Design
- Cryptography
- Embedded Software
- Electronic Circuits
- Mechanical Design to Military Standards
- Project Management
- Technical Training


## DESIGN PHILOSOPHY

- Lead through production innovation
- Develop products with a long operational life
- Develop products with a multi-role capability
- Maintain stock on the shelf
- Continually invest in R\&D
- Maintain a strong customer focus


## KEY MARKETS

- Military
- Paramilitary
- Aid \& Relief
- Peace Keeping
- Conservation
- Police
- Mining
- Intelligence
- Border Patrol
- Emergency Services
- Search \& Rescue
- Telecommunications
- Infrastructure Construction



## HF-90

The HF-90 is a rugged all-purpose HF SSB transceiver, designed for long-range manpack, portable, vehicle and fixed base station applications. It is available in commercial and military specification and is an extremely compact and light weight unit, featuring only essential controls to ensure ease of operation. The HF90 has been designed for use in demanding tactical field conditions. Not only is it simple to operate, but it is also priced competitively to suit both commercial and military requirements. Furthermore, it is value-engineered to ensure low cost of ownership over the long term.

The HF-90 transceiver has a quality, high specification design. It provides full frequency coverage from $2-30 \mathrm{MHz}$ and has capacity for up to 255 programmed channels. The unit can operate at a selected power level of up to 50 W , whilst achieving low battery consumption. The addition of accessories such as power amplifiers, antenna tuners and data options extends the capabilities of the HF-90 across a broad range of users.

The HF-90 is also extremely reliable due to the advanced SMD manufacturing process used and the overall design efficiency. The specifications of the HF-90 will enable reliable communications up to distances of 3000 km . In addition, the transceiver incorporates superior signal handling capability which ensures excellent reception even in the most crowded radio environments.

Q-MAC's HF-90 is the most compact, versatile, high performance HF SSB transceiver available on the market today.



## VHF-90M

The VHF-90M Military transceiver is a state of the art communication device specifically designed for tactical military voice and data applications in short to medium ranges. It is an extremely compact and light weight unit, featuring only essential controls to ensure ease of operation.

The radio is available with four modes of communication:

- Analog Fixed Frequency (Legacy PRC-77 Compatible) (AFF)
- Secure Digital Fixed Frequency (DEFF)
- Secure Digital Frequency Hopping (DEFH)
- Free Channel Search (FCS)

Q-MAC's VHF-90M addresses two roles. When used with a short antenna, it is an ideal inter/intra squad/platoon level communicator which is light weight and simple to operate. When combined with an integrated Docking Station and Amplifier, it becomes capable of use at company/battalion/ brigade level where longer ranges are required.

In both roles, the ECCM capability of the VHF-90M ensures low probability of intercept. The dual role capability simplifies equipment logistics and renders the VHF-90M a capable replacement of the PRC-77 and equivalents.

This revolutionary new transceiver incorporates the very latest in RF and DSP design technology. Q-MAC's VHF-90M is the most cost effective, versatile, high performance VHF transceiver available in the tactical military market today.


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Q-MAC Electronics Pty Ltd 142 Hasler Rd
tel: $\quad+61892422900$
Osborne Park WA 6017
Perth, Western Australia PO Box 1334, OPBC, WA 6916 AUSTRALIA
fax: $\quad+61892423900$
email: info@qmac.com
> web: www.qmac.com

