

# MTM800 Enhanced

TETRA Mobile Radio




## Seamless mobile access to voice and data – when and where it's needed

Motorola's MTM800 Enhanced TETRA control head sets the standard for new levels of durability, performance and usability. Developed for organisations where rugged and versatile mobile radios are essential, it builds on the key components of Motorola's field-proven and trusted TETRA platform, placing information at the fingertips of users so that they can make truly informed decisions. Resilience, true interoperability and mission critical data are at the core of Motorola's vision for Seamless Mobility and the enhanced MTM800 Enhanced control head widens the scope with its world-class display, full data capability and in-built intelligence. Discerning professionals demand high quality voice communications with fast access to mobile applications. The MTM800 Enhanced delivers on both, with SDS, packet data and WAP\* options, plus USB for fast connectivity.



MTM800  
Enhanced





## Ergonomically engineered for future mission critical needs

- Ease-of-operation in the most demanding situations – unsurpassed audio quality, intuitive keypad and high-definition, colour display combined with a sleek yet durable design
- Dust and water resistant to IP 54. Rain, salt, fog, and dust protection tested to MIL 810 C/D/E/F for the standard control head
- Motorcycle control head rated IP67 for dust and water resistance
- Comprehensive model options available – for use in the office, in a vehicle - car, boat, motorcycle

## Intelligence at your fingertips

- User training and familiarisation easier by design. Features the same cellular-style menu, icons and colour display that have established Motorola's MTH800 handheld and MTP850 portable
- Multiple language capability – support for European, Arabic and Cyrillic characters (plus many others)
- Access and query information on the move – integrated WAP\* browser and Multi Slot Packet Data provide unique, high-bandwidth connectivity for real-time access to mobile office applications and user databases
- Tailor to specific requirements. Faster programming and connectivity via USB, ETSI compatible Peripheral interface (PEI) and programmable I/O ports\* ensures tighter integration with third-party applications

## Mission-critical communications with total security

- Full suite of TETRA security functions – air interface, SIM card\* and end-to-end encryption
- Receive assistance when and where it is needed – hitting the emergency button not only alerts colleagues to critical situations but sends and updates dispatch on the user's location
- Switch to covert mode at the press of a button
- Integrated GPS receiver delivers location-based services. Knowing where your resources are enables you to allocate tasks based on up to date information
- Transform workflows and improve performance with the highest levels of network security, resilience and value available. Motorola's TETRA solutions leverage more than 75 years of excellence in the most critical and demanding environments.
- Stay at the forefront of TETRA development with a future-proof platform that meets the promise of the broadband world tomorrow.
- Build on the widest portfolio base in the industry. Motorola's in-house technologies, solutions and best-in-class business relationships deliver the complete TETRA solution.
- Compatibility and interoperability assured. As an early pioneer of TETRA, Motorola has been a driving force in standards' developments and product innovation.

# Flexible options that meet mission-critical needs – whatever the requirement

## 'Dash' mounted – the MTM800 Enhanced for compact installation

A self-contained radio transceiver unit with enhanced control head. It is fully compliant with the DIN-A standard for installation on car dashboards and with its sleek yet durable design, is easy to deploy. The high-quality display ensures optimum viewing for both driver and passenger.



Tactile keypad, intuitive user interface and optional WAP\* browser make it easy to access information – such as databases, job lists and schedules – on the move. The clarity of the VGA display, with 640x480 pixel resolution, is ideal for viewing maps, images and photographs

## MTM800 Enhanced – 'Desktop'

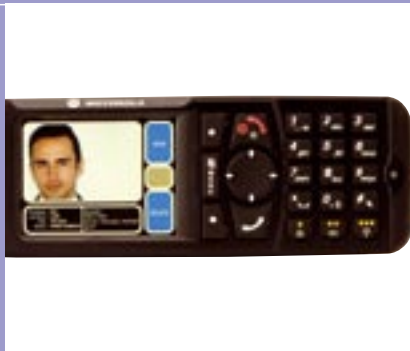
A fully-integrated TETRA solution for office environments, with base tray incorporating loudspeaker and a range of desktop accessories available, including telephone handset and desk microphone.



Fitted in a purpose-built cradle and featuring desktop microphone and speaker, a host of user-specific accessories make the MTM800 Enhanced suitable across a variety of office applications – emergency response control rooms, event management or fleet command and control for example.

## MTM800 Enhanced – 'Remote' Model

Locate the control head remotely using a mounting cable of up to 10 metres. Allows a more flexible vehicle installation (i.e. under the seat or in the glove compartment of covert operation vehicles), while the rear accessory connector on the control head provides I/O (Input / Outputs\*) for easy integration with 3rd party applications. A second microphone may also be connected to accommodate additional users.



Fully integrated into the vehicle via programmable I/O ports\*, the MTM800 Enhanced will signal alerts to you via the Mobile control head if doors are opened or lights are left on – whatever the sensor, you choose!

## MTM800 Enhanced – 'Motorcycle' model

Has all the robust features of the enhanced MTM800 Enhanced user interface, while the control head is tested to IP67 for dust and water resistance, making it ideal for any user requiring an environmentally-hardened, waterproof control head.



Operating the radio from external devices, such as the control box next to the handgrip, allows users to change talkgroup and alter volume without difficulty.

## MTM800 – 'Expansion Head'

Designed for a wide range of installation, the MTM800 Enhanced Expansion Head model may be used with or without a control head. Offering full data capabilities (PEI) including SDS and packet data (single slot and multi-slot as an option), a 3rd party interface allows full control of the radio (the SB9600 API), while the physical interface is provided via serial link.



Establish a virtual control head for operations that can be interfaced directly with applications running on a PC. Ideal for customised train or covert installation



## Smarter Accessories

Motorola's vast experience in delivering mobile radios to professional users is reflected in the quality and range of accessories available.

A variety of microphones, loudspeakers, antennas, data / programming cables and hands-free installation kits are available for vehicle and desktop mounting. These are now complemented by specialised and rugged accessories for the MTM800 Enhanced control head – including ultra compact or heavy-duty microphones with programmable buttons or keypads, and motorcycle / specialist vehicle accessories with remote push-to-talk and waterproof microphones.

Designed for purpose

## SPECIFICATIONS

### General

|                     |   |            |
|---------------------|---|------------|
| Dimensions HxWxD mm | Dash and Desk models (radio + control head) | 60x185x175 |
|                     | Standard control head                       | 60x185x31  |
|                     | Radio only                                  | 49x170x155 |
|                     | Remote control head                         | 60x185x39  |
|                     | Motorcycle control head                     | 60x185x39  |

### User Interface

|  |   |
|--|---|
| 2.8" back-lit colour display             | VGA – 640x480 pixels Transflective TFT , 65,000 colours   |
| Back-lit Alpha-numeric keypad            | Roman, arabic, cyrillic, chinese, Korean, bopomofo characters available   |
| 4 way navigation key, menu and soft keys | 3 programmable function keys  |
| Emergency                                | Emergency button with backlight   |
| Dual function rotary                     | Talkgroup and volume change. Can be locked by press and hold  |
| Languages                                | English, French, German, Spanish, Dutch, Swedish, Russian, Greek, Arabic, Chinese (traditional & simplified) and Korean |
| Shortcuts to menus                       | Quick access to menus via editable menu shortcuts   |
| Shortcuts to features                    | One-touch feature on the 10 numeric keypad  |

### Environmental Specifications

|                           |  |
|---------------------------|--|
| Operating temperature     | -30 to +60 °C  |
| Storage temperature       | -40 to +85 °C  |
| Humidity                  | ETS 300 019-1-5 class 5.1 and 5.2 EIA/TIA 603 (95%)            |
| Dust and Water            | Dash / Desk / Remote: IP54 (cat.2)<br>Motorcycle: IP67 (cat.2) |
| Shock, drop and vibration | ETS 300 019-1-5 class 5M2 and 5M3 MIL 810 C/D/E/F              |

### RF Specifications

|                                   |   |
|-----------------------------------|---|
| Frequency Bands MHz               | 350-390/380-430/410-470/806-870                     |
| RF Channel Bandwidth              | 25kHz   |
| Transmit / receive Separation kHz | 10 (380-430) 45(806-870) 10 (350-390) 10 (410-470)  |
| Switching Bandwidth (TMO) MHz     | 50 (380-430) 19 (806-825) 40 (350-390) 60 (410-470) |
| Switching Bandwidth (DMO) MHz     | 50 (380-430) 19 (806-825) 40 (350-390) 60 (410-470) |
| Transmitter RF Power Watt         | Class 3 (380-430) (806-825) (350-390) (410-470)     |
| RF Power Level Accuracy           | +/- db 2  |
| Receiver Class                    | A & B   |
| Receiver Static Sensitivity dBm   | -112 minimum -114 typical                           |
| Receiver Dynamic Sensitivity dBm  | -103 minimum -105 typical                           |

### GPS Specifications

|                         |   |
|-------------------------|---|
| Simultaneous Satellites | 12  |
| Mode of operation       | Autonomous or assisted (A-GPS)  |
| GPS antenna             | Lead with FME male connector for standard GPS antennae (5V,25mA supply) |
| Sensitivity             | -152 dbm/-182dbW  |
| Accuracy                | 5 meter (50% probable) 10 meter (95% probable)                          |

\* Planned features or developments, please contact Motorola for information on availability and upgrade requirements

[www.motorola.com/tetra](http://www.motorola.com/tetra)



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