


This document applies to the following product family and its accessories:

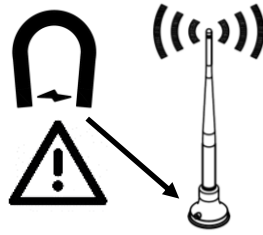
MAST II (Mobile Advanced Step Tester) (Models: MAST2BOMUK153)

Comprising:

- MAST II Tx unit and MAST II Rx unit
- Mains-powered chargers
- Accessories (carry case, cables, antennae, tripod)
- Pulse-head flow sensor

### IMPORTANT SAFETY NOTE:

 This equipment uses a high strength magnet and should not be carried by or be placed in the proximity of anyone with a **heart pacemaker**.



### SAFETY

- Carefully read the information in this document, the MAST II User Manual, and on the packaging before using the product. Retain all documentation for future reference.
- The MAST II Tx and MAST II RX units each contain a rechargeable Lithium battery. Fire, explosion, and severe burn hazard. Do not crush, disassemble, heat above 100°C, incinerate, or expose contents to water.
- CHOKING HAZARD – Contains small parts. Keep out of the reach of small children.
- The MAST II Tx and MAST II RX units are designed for outdoor use.
  - Do not immerse in water or leave the equipment in locations where water can pool. Water ingress may cause damage to equipment, including risk of explosion.
- Do not disassemble or modify the equipment, except where detailed instructions are given in the user manual; follow the instructions within the user manual.
- The MAST II carry case is designed for indoor use or in-vehicle use only.
  - Ensure all equipment is dry before placing into the carry case.
  - When carry case is used to transport mains-powered charger, protect from water.
  - Keep the carry case closed whenever possible to protect from rain. Keep the case covered during bad weather conditions (e.g., store within a vehicle).
- The mains-powered charger, power cord, and MAST II to PC communications cable are designed for indoors use or in-vehicle use only.
  - Protect from water. Water ingress may cause damage to equipment, including risk of electric shock.
  - Do not touch the mains-powered charger with wet hands.
  - Do not clean any equipment whilst it is connected to the mains supply.
  - If the mains charger becomes damaged, it must not be used. It must be replaced.

### Use and Handling

- The equipment contains sensitive parts that can be damaged by incorrect handling. Do not throw or drop the equipment or subject it to mechanical shock. When transporting in a vehicle, ensure the equipment is secured and adequately cushioned. Use of the carry case for storing equipment is recommended.
- No user-serviceable parts inside. The internal battery pack is not user replaceable. The equipment must only be serviced or disassembled by the manufacturer or its authorised repair centre.

- The MAST II Tx unit and MAST II Rx unit are each powered by an internal battery which may present a risk of fire or chemical burn if the equipment is mistreated. Do not disassemble, heat above 100°C, or incinerate.
- Normal operating temperature: -10°C to +50°C. Do not expose to direct sunlight for prolonged periods. Do not mount on apparatus that can exceed this temperature range. Do not store above 30°C for prolonged periods. A different temperature range applies during charging.
- Normal operating temperature (mains adapter): 0°C to 40°C.
- Use the carrying handle when carrying the equipment. Do not handle or carry equipment using cables. This can cause permanent damage and is not covered by warranty.
- When removing cables from the equipment, do not pull the cable; be sure to hold the cable by its connector. When separating the mains cord from the mains-powered charger, hold the body of the charger, not the built-in lead.
- Store the equipment in the carry case. The equipment can become damaged by applying heavy loads or forces to it. Ensure the equipment is dry before storage.
- Ensure the MAST II equipment and accessories are always placed in a suitable location so that they do not fall, get knocked over or where someone can tread onto it; damage to the equipment could result. Do not place in a position which may present a hazard to people passing by; fence off the area where the equipment is being used, if required. Consider whether weather conditions will require additional measures to be taken to ensure equipment is safe from damage or causing damage. (E.g., Very strong wind may cause equipment to be blown over).
- The equipment may be cleaned by use of a soft cloth lightly moistened with a mild cleaning fluid (e.g., a diluted domestic dish-washing liquid). Dry immediately after cleaning using a dry soft cloth. Avoid wetting the connectors during cleaning. Keep the inside of the connectors clean whilst in storage and prior to use. Do not allow liquid, moisture, or small particles to enter the equipment or connectors.
- Only use the equipment when it is safe to do so. The user should ensure they are using the equipment in a safe environment, and not at risk from road traffic, etc.
- Ensure the the aerial / antenna is connected to the Transmitter unit before turning the unit on. Do not remove the aerial / antenna from the Transmitter unit whilst the unit is powered. Failure to observe either of these instructions may cause internal damage to the unit.

### Radiation Exposure Statement

- This equipment contains a radio transmitter and receiver. Use of antennas and accessories not authorised by HWM may void the compliance of the product and may result in RF exposures beyond the safety limits established for this equipment.
- When installing and using this product, maintain a 20 cm (or greater) distance between the antenna and the head or body of the user or nearby persons. Attached antenna must not be touched during transmitter operation.

### Battery – Caution Points.

- The MAST II Tx unit and MAST II Rx unit each contain a rechargeable lithium-ion battery.
- The battery is not user replaceable.
- In the event of damage to the battery or the equipment, do not handle without appropriate protective clothing and protective eyewear.
- Do not attempt to open, crush, heat or set fire to the battery.
- In the event of damage to the battery or equipment, ensure there is no risk of short-circuit whilst handling or shipping. Pack with non-conductive materials that give suitable protection. Refer to sections Waste Electrical and Electronic Equipment and Battery Directive.
- If the battery fluid leaks, stop using the product immediately. If the battery fluid gets onto your clothes, skin, or eyes then rinse

the affected area with water and consult a doctor. The fluid can cause injury and blindness.

- Always dispose of batteries in accordance with local laws or requirements.

#### Battery – Lifetime.

- The ability of the battery to hold charge reduces gradually with age and use. Consider replacing the battery when it holds insufficient charge. The batteries may only be replaced by returning to the manufacturer or its authorised repair centre; confirm the service is available and obtain instructions prior to shipping the equipment.
- Do not store above 30 °C for prolonged periods, as this will reduce the life of the battery.

#### Battery – Charging.

- The MAST II batteries may be recharged using only the HWM supplied mains-powered charger.
- Do not charge for more than 24 hours.
- Temperature limits during charging: 0°C to 40°C.

#### Waste Electrical and Electronic Equipment and the Battery Directive



Disposal and recycling: When the equipment or its batteries reach the end of their useful life, they must be disposed of responsibly, according to any applicable country or municipal regulations. Do not dispose of Waste Electrical and Electronic Equipment or batteries as normal domestic waste; they must be taken by the user to a separate waste collection point designated for safe handling and recycling in accordance with local laws.

Waste Electrical and Electronic Equipment and batteries contain materials that, when correctly processed, may be recovered, and recycled. Recycling product reduces the need of new raw materials and also reduces the amount of material that is sent for disposal as landfill. Improper handling and disposal can be harmful to your health and the environment. For more information regarding where the equipment can be accepted for recycling, please contact your local authority, recycling center, distributor or visit the website <http://www.hwmglobal.com/company-documents/>

#### Waste Electrical and Electronic Equipment (WEEE).

HWM-Water Ltd is a registered producer of Electrical and Electronic Equipment in the United Kingdom (registration number WEE/AE0049TZ). Our products fall under category 9 (Monitoring and Control Instruments) of The Waste Electrical and Electronic Equipment Regulations. We take all environmental issues seriously and fully comply with the requirements for collection, recycling and reporting of waste products.

HWM-Water Ltd is responsible for Waste Electrical and Electronic Equipment from customers in the United Kingdom provided that:

The equipment was produced by HWM-Water Ltd (Palmer Environmental / Radcom Technologies / Radiotech / ASL Holdings Ltd) and supplied on or after 13th August 2005. or

The equipment was supplied before 13th August 2005 and has been directly replaced by HWM-Water Ltd with products manufactured since 13th August 2005.



HWM-Water products supplied after 13th August 2005 can be identified by the following symbol:

Under HWM-Water Ltd.'s Terms and Conditions of Sale, customers are responsible for the cost of returning waste electrical and electronic equipment to HWM-Water Ltd and we are responsible for the costs of recycling and reporting on that waste.

Instructions for returning Waste Electrical and Electronic Equipment:

- (1) Ensure that the Waste Electrical and Electronic Equipment meets one of the two conditions above.
- (2) The waste will need to be returned in accordance with the regulations for transporting equipment with lithium batteries.
  - a. Pack the equipment in strong, rigid outer packaging to protect them from damage.
  - b. Attach a Lithium Warning Label to the package.  
MAN-073-0005-A

- c. The package must be accompanied by a document (e.g., consignment note) that indicates:
  - i. The package contains lithium-ion cells.
  - ii. The package must be handled with care and that a flammability hazard exists if the package is damaged.
  - iii. Special procedures should be followed in the event the package is damaged, to include inspection and repacking if necessary.
  - iv. A telephone number for additional information.
- d. Refer to the ADR regulations on shipping dangerous goods by road. Do not transport damaged, defective, or recalled lithium batteries by air.

- (3) Return the Waste Electrical and Electronic Equipment to HWM-Water Ltd using a licensed waste carrier.

In accordance with the regulations, customers outside of the UK are responsible for Waste Electrical and Electronic Equipment.

#### The Battery Directive

As a distributor of batteries HWM-Water Ltd will accept old batteries back from customers for disposal, free of charge, in accordance with the Battery Directive.

PLEASE NOTE: All lithium batteries (or equipment containing lithium batteries) MUST be packaged and returned in accordance with the relevant regulations for transporting lithium batteries.

A licensed waste carrier must be used for transporting all waste.

For more information on Waste Electrical and Electronic Equipment compliance or the Battery Directive please e-mail [CSservice@hwm-water.com](mailto:CSservice@hwm-water.com) or phone +44 (0)1633 489 479

#### Radio Equipment Directive (2014/53/EU):

1. Radio frequencies and Powers.

The frequencies used by the wireless features of this product are in the 153 MHz ranges.

Power:

- MAST II Tx unit: Proprietary radio - less than 5W.
- MAST II Rx unit: Proprietary radio - 0mW.

2. Antennas

Only antennas supplied by HWM should be used with this product.

#### Regulatory Compliance Statement:

Hereby, HWM-Water Ltd declares that this equipment is in compliance with the following:

Radio Equipment Directive: 2014/53/EU and the relevant UK Statutory Instruments requirements.

A copy of the full text of the UK and EU (Valid only within Northern Ireland) declarations of conformity is available at the following URL:

[www.hwmglobal.com/product-approvals/](http://www.hwmglobal.com/product-approvals/)



HWM-Water Ltd  
Ty Coch House  
Llantarnam Park Way  
Cwmbran NP44 3AW  
United Kingdom  
+44 (0)1633 489479  
[www.hwmglobal.com](http://www.hwmglobal.com)

©HWM-Water Limited. This document is the property of HWM-Water Ltd. and must not be copied or disclosed to a third party without the permission of the company. Copyright reserved.