Operating Instructions RTM1 Radio Receiver

Remote control of hidden traps:

Whenever setting up, changing or testing radio systems, it is likely that a trap will fire at some point, often in an out of sight location.

All traps that are likely to fire should be safely guarded to ensure that no personnel are working in immediate proximity to the trap or are standing within the potential flight path of the clay target.

This guide contains only information relating to the Promatic / Claymate radio product, and not the trap(s) that it will control. If you have not already done so, we recommend you view the full user manual specific to your trap model.

Detailed manuals are available free of charge on our website: www.promatic.co.uk or www.promatic.biz

This document must be read in full before attempting to operate the machine

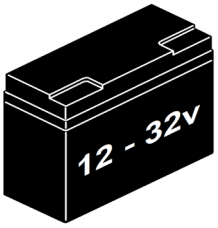
Please retain this information for future reference

12v DC Power Source:

This equipment (radio receiver) is designed to be powered from a 12v – 32v DC source (Power supply or Battery)

The Promatic radio products described here are only certified for use at the voltages stated

CLAYMATE PRODUCTS MUST NEVER BE DIRECTLY CONNECTED TO MAINS AC POWER



Siting the receiver:

The receiver should be placed upright and for best results positioned a minimum of 1 metre from the trap and between 1 - 2 metres height, ideally within line of sight of the operator. If mounting on the back of a structure or wall, i.e. hidden from the operator's viewpoint then please be aware that this could reduce the effective transmission distance.

The metal wall mount bracket is also designed to work with many styles of tube clamp (U clamp types - not supplied) and to also enable pole mounting if required (For instance to improve reception in difficult terrain).

Caution: The receiver must be mounted vertically, this provides the best reception pattern and will maintain the integrity of the moisture seals. Refer to the panel opposite for some receiver mounting Do's & Don'ts

Plug into the trap:

The receiver is supplied ready to connect to any of the current Promatic professional trap range. If it is required to mount the receiver at a greater height to improve reception, an extension cable will be required to connect back to the trap. These cables are available (at extra cost) from Promatic in various lengths to suit the situation and receiver type being used.

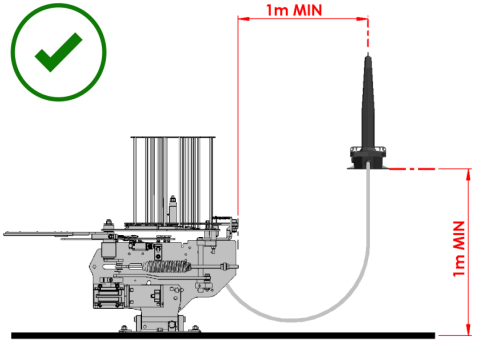
Compatibility with Older Promatic Traps:

For use with older models fitted with a Rubber 3-pin plug an alternative connector is available (at extra cost) to allow the trap to be easily upgraded, please ask for details.

Compatibility with other makes of traps:

For use with older models or certain other brands of trap adaptor cables or alternative plugs are available (at extra cost) to suit the application, please call Promatic for details.

The receiver has been developed to be able to control other brands of trap up to 32V. Where a suitable cable is not available, the connector will need to be changed to connect to these other brands. Remember - Regardless of trap voltage, the receiver will still require a stable 12-32v DC power supply (e.g. external plug-in power supply) to enable it to function. If in doubt, or for use with mains powered traps, please call Promatic.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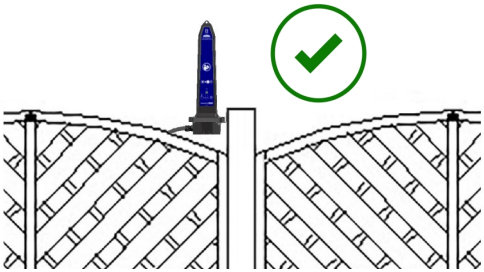
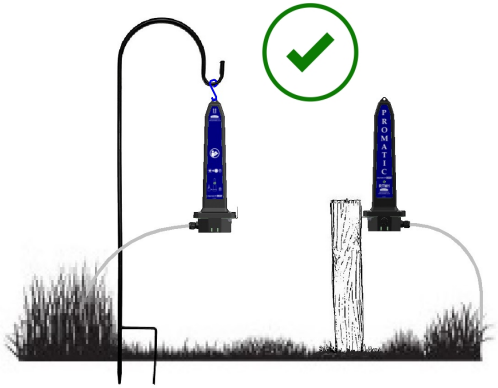
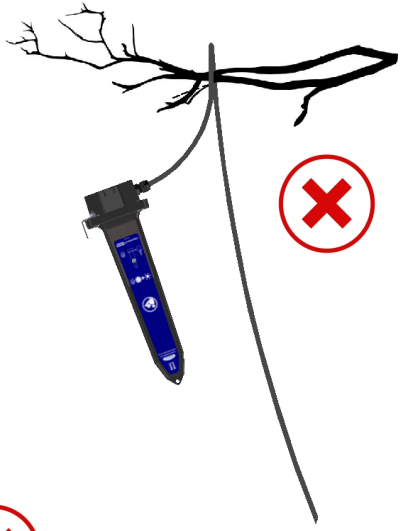
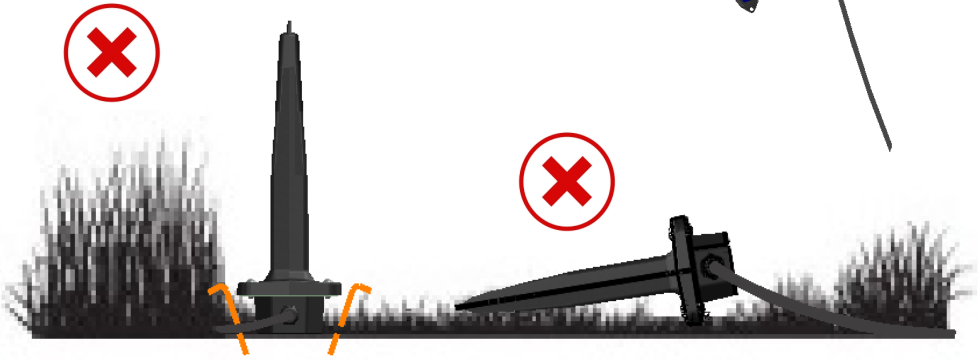








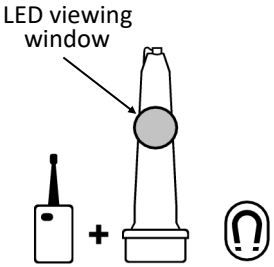
Pairing a transmitter (handset) and a receiver:

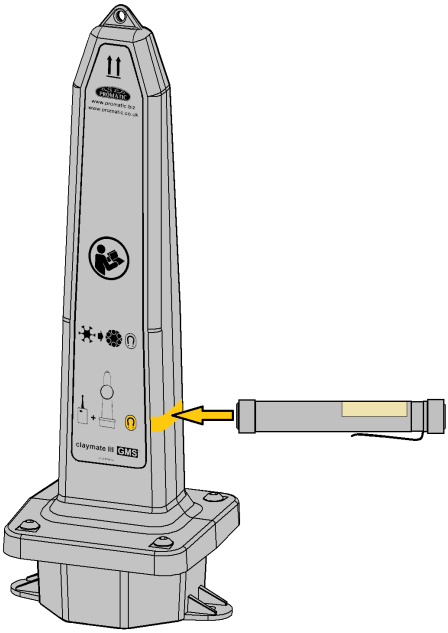
Generally receiver / transmitter sets are paired at the factory, however you may wish to to customise your setup and have more than one handset control a particular receiver, or swap existing pairings. Each receiver can be paired to operate with up to 8 handsets.

Plug the receiver into a trap, and power the trap on (The trap does not need to be armed - however take note of trap safety warnings and keep a safe distance). For best results the handset and receiver should be within 2 Meters of each other whilst pairing.

Caution: Make sure that no other PROMATIC radio transmitters are operating within 300 Metres of the receiver being paired. This will avoid accidentally pairing a receiver to another radio operating elsewhere which could lead to unpredictable and undesirable operation.

A symbol on the receiver's rear label shows the magnet sensor position and contains an LED viewing window. Place a magnet (Cartridge pick-up stick etc..) on the small magnet symbol, you will hear an initial beep and the LED will flash. Hold for a second or so until you get a double beep/flash, then remove the magnet. You are now in pairing mode and have approximately 10 seconds to pair a handset to the Receiver as detailed in the following chapters.





The magnet sensors in the receiver can interact with certain magnets in slightly different ways and sometimes it may be easier to set the magnet to the side of the receiver casing inline with the magnet symbol as shown opposite. This can also give better results in the case of a weaker magnet.

RT1 or SP1 (Single) Handset with 1 receiver:

With the receiver in pairing mode, Press the fire button for 1 second and release. After about 5 seconds, the receiver will beep/flash to confirm that it has accepted the pairing.

RT2 or SP2 (A-Hi / B-Lo / Pair) Handset with 2 receivers:

Pair the first receiver as above then repeat using the other button to pair the second receiver. The Pair (A & B) button will work automatically.

ABT / DTL Handset with ABT receiver (version with 7 pin plug):

With the receiver in pairing mode, press and hold the fire button for at least 5 seconds. The receiver should give a single short tone, however continue to hold until a double beep/flash is given. This shows that the receiver has now accepted the pairing - you may now release the button. The Rotation and/or Elevation buttons will work automatically.

Note: After pairing any handset & receiver you should test fire the trap a few times to confirm that the desired pairing is working correctly.

Clearing the receiver memory:

Place the magnet as before but this time hold a lot longer until a repeated beep/flash is given and then remove the magnet. The receiver is now de-programmed and will give a repeating beep/flash as long as it powered up to indicate this. It will no longer respond to any handset until it has once again been paired.

Changing RF Capabilities:

All new receivers (supplied since January 2021) are supplied pre-programmed with the latest RF RadioX PLUS (unmeshed) mode, this will match any newly supplied transmitter.

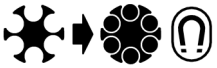
For compatibility with older equipment, the receiver can be changed between any of 3 types of RF capabilities, which are shown below:

- **RF RadioX PLUS** (The latest and most robust radio standard)
- **RF Standard** (Installed in most older Baton and Shuttle receivers)
- **RF RadioX** (Only found in a small number of specialised installations)

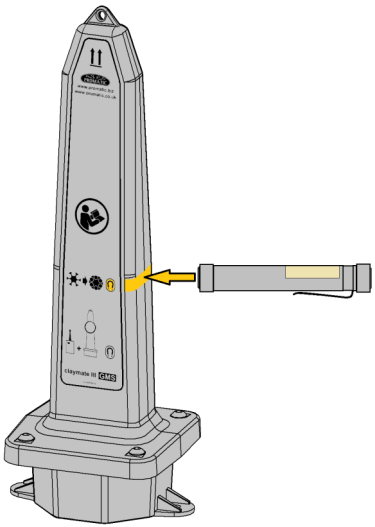
The RF capabilities are changed by the following steps:

1. Disconnect the receiver from any power source.

2. Hold a magnet next to the, “clear stack” sensor (NOT pair sensor).



As with the pairing sensor it may be easier to set the magnet to the side of the receiver casing inline with the magnet symbol as shown opposite, this can also give better results in the case of a weaker magnet.



3. Connect the receiver to a power source whilst the magnet remains in position. After 5 seconds the unit will beep (and flash) the morse code for 'R' **. _ .** and then beeps/flashes a further 8 times provided the magnet remains held in position.

At the 9th beep the receiver will migrate from the current RF mode to the next in sequence, it will now announce its RF type using beep/flashes again signalling the morse letter for the RF mode as shown below (only one switch is achieved at each power cycle).

The pattern **. . .** (Letter S) identifies that **Standard RF** has been activated

The pattern **_ . . _** (Letter X) identifies that **RFX (Radio X)** has been activated

The pattern **. _ _ .** (Letter P) identifies that **RFX+ (Radio X PLUS)** has been activated

All pairings are cleared by this operation, any transmitters required will need to be paired to the receivers once again. The transmitter will remain in the selected mode through power cycles.

DECLARATION OF CONFORMITY

We

Manufactuer:	**Promatic International LTD.**
Address:	**Hooton, Hooton Road, Ellesmere Port, CH66 7PA**

declare that the DoC is issued under our sole responsibility and belongs to the following product:

Model:	**RTM1**
Drawing Number:	**E41/RTMSP1**

The object of the declaration described above is in conformity with the relavant Union Harmonisation legislation:

RED 2014/53/EU
RoHS 2011/65/EU

The following haromised standards and technical specifications have been applied:

EN300-220-2 V 3.1.1
EN301-489-1 V 2.2.3
EN301-489-3 V 2.1.1
EN62311:2008
EN62479:2010

Additional information:

Place of Issue:	Date	Name and function:
Hooton, UK	**03/02/2021**	**Mr S.D.Thomas**

claymate GMS

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