

# MCT-212

## PowerCode Wrist/Pendant Transmitters



# Visonic®

## User Guide

### 1. INTRODUCTION

The MCT-212 is a miniature, waterproof, UHF transmitter, designed for use in advanced, high-security alarm and remote control systems. Transmission is activated by depressing the recessed pushbutton at the center of the unit. When activated, the transmitter sends out a 24-bit ID code and an alarm code, identifiable by compatible wireless receivers of the PowerMax family. Each transmitter's code is randomly selected in the factory from 16 million possible combinations. The code is therefore unique and virtually impossible to reproduce.

Operating power is obtained from an internal 3-volt Lithium battery.

All MCT-212 are supplied with a wrist band and neck strap. They can be worn on the wrist or around the neck.

The LED (see Fig. 1) lights during a transmission to indicate a good battery. If the LED flashes during a transmission, this means that the battery voltage is low and since the transmitter is hermetically sealed the transmitter should be replaced by a new transmitter. Anytime the MCT-212 is pressed when the battery is low, a trouble signal is automatically sent to the compatible wireless receivers of the PowerMax family.

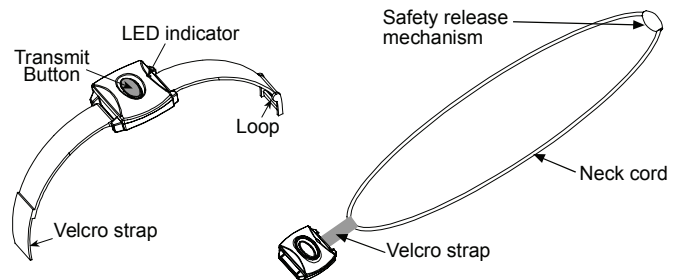


Figure 1. MCT-212

The transmitter case is waterproof, hermetically sealed (no screws) and therefore disposable. Do not attempt to open the transmitter case or replace the battery; such action will void the warranty.

### 2. SPECIFICATIONS

**Frequency (MHz):** 315 or other frequency according to local requirements.

**Modulation:** ASK (ON-OFF keying)

**Transmitter ID:** 24 bit digital word. Over 16 million possible code combinations, pulse width modulation.

**Total Message Length:** 36 bits

**Minimum Transmit Duration:** 2 sec

**Power Supply:** 3-volt Lithium cell type CR-2032

**Battery Life Expectancy:** 3 years (for typical use)

**Caution!** Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the manufacturer's instructions.

**Battery Supervision:**

Good battery - LED lights steadily upon activation.

Low battery - LED flashes upon activation.

**Note:** If transmission is still possible despite the battery condition, the MCT-212 will send a low battery report to the receiver.

**Operating Temperature:** 0° to 50°C (32° to 122°F).

**Dimensions:** 39 x 37 x 13 mm (1-9/16 x 1-7/16 x 5/8 in.).

**Compliance with standards:** UL 1023, UL 985 (UL file S9102)

**Weight:** 25 g (0.9 oz).

**Color:** Gray

This device complies with Part 15 of the FCC Rules and RSS-210 of Industry and Science Canada. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**WARNING:** Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### 3. ENROLLING AND TESTING

#### 3.1 Enrolling

For proper function of the transmitter, its ID must be enrolled into the compatible wireless receiver of the PowerMax family.

"Teach" the target receiver the ID code of the tested transmitter, as instructed in the target receiver's installation manual.

#### 3.2 Testing

A. Stand 3 m (10 ft) away from a target receiver and operate the MCT-212 by depressing its transmit pushbutton. Verify that the transmitter LED lights, indicating good battery condition.

**Note:** The LED will light for 2 seconds even if you press the button for a shorter duration.

B. Verify that the received signal at the compatible PowerMax system is STRONG or GOOD (see compatible PowerMax system installer guide – DIAGNOSTIC TEST).

C. Operate the transmitter from various locations within the area covered by the target receiver to determine "dead" locations, where transmission is blocked by walls and large objects, or affected by structural materials.

**Note:** If dead/marginal zones are a problem, relocating the receiver may improve the performance.

### 4. PRODUCT LIMITATIONS

Our wireless systems are very reliable and are tested to high standards. However, due to their low transmitting power (required by FCC, DTI and other regulatory authorities) there are some limitations to be considered:

A. Receivers may be blocked by radio signals occurring on or near their operating frequencies, regardless of the code selected.

B. A receiver can only respond to one transmitted signal at a time.

C. Wireless equipment should be tested regularly (at least once a week) to determine if there are sources of interference and to protect against faults.

## WARRANTY

Visonic Limited (the "Manufacturer") warrants this product only (the "Product") to the original purchaser only (the "Purchaser") against defective workmanship and materials under normal use of the Product for a period of twelve (12) months from the date of shipment by the Manufacturer.

This Warranty is absolutely conditional upon the Product having been properly installed, maintained and operated under conditions of normal use in accordance with the Manufacturers recommended installation and operation instructions. Products which have become defective for any other reason, according to the Manufacturers discretion, such as improper installation, failure to follow recommended installation and operational instructions, neglect, willful damage, misuse or vandalism, accidental damage, alteration or tampering, or repair by anyone other than the manufacturer, are not covered by this Warranty.

The Manufacturer does not represent that this Product may not be compromised and/or circumvented or that the Product will prevent any death and/or personal injury and/or damage to property resulting from burglary, robbery, fire or otherwise, or that the Product will in all cases provide adequate warning or protection. The Product, properly installed and maintained, only reduces the risk of such events without warning and it is not a guarantee or insurance that such events will not occur.

**THIS WARRANTY IS EXCLUSIVE AND EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, OBLIGATIONS OR LIABILITIES, WHETHER WRITTEN, ORAL, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR OTHERWISE. IN NO CASE SHALL THE MANUFACTURER BE LIABLE TO ANYONE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR BREACH OF THIS WARRANTY OR ANY OTHER WARRANTIES WHATSOEVER, AS AFORESAID.**

**THE MANUFACTURER SHALL IN NO EVENT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES OR FOR LOSS, DAMAGE, OR EXPENSE, INCLUDING LOSS OF USE, PROFITS, REVENUE, OR GOODWILL, DIRECTLY OR INDIRECTLY ARISING FROM PURCHASER'S USE OR INABILITY TO USE THE PRODUCT, OR FOR LOSS OR DESTRUCTION OF OTHER PROPERTY OR FROM ANY OTHER CAUSE, EVEN IF MANUFACTURER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.**

**THE MANUFACTURER SHALL HAVE NO LIABILITY FOR ANY DEATH, PERSONAL AND/OR BODILY INJURY AND/OR DAMAGE TO PROPERTY OR OTHER LOSS WHETHER DIRECT, INDIRECT, INCIDENTAL, CONSEQUENTIAL OR OTHERWISE, BASED ON A CLAIM THAT THE PRODUCT FAILED TO FUNCTION.**

However, if the Manufacturer is held liable, whether directly or indirectly, for any loss or damage arising under this limited warranty, **THE MANUFACTURER'S MAXIMUM LIABILITY (IF ANY) SHALL NOT IN ANY CASE EXCEED THE PURCHASE PRICE OF THE PRODUCT**, which shall be fixed as liquidated damages and not as a penalty, and shall be the complete and exclusive remedy against the Manufacturer.

When accepting the delivery of the Product, the Purchaser agrees to the said conditions of sale and warranty and he recognizes having been informed of.

Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so these limitations may not apply under certain circumstances.

The Manufacturer shall be under no liability whatsoever arising out of the corruption and/or malfunctioning of any telecommunication or electronic equipment or any programs.

The Manufacturers obligations under this Warranty are limited solely to repair and/or replace at the Manufacturer's discretion any Product or part thereof that may prove defective. Any repair and/or replacement shall not extend the original Warranty period. The Manufacturer shall not be responsible for dismantling and/or reinstallation costs. To exercise this Warranty the Product must be returned to the Manufacturer freight pre-paid and insured. All freight and insurance costs are the responsibility of the Purchaser and are not included in this Warranty.

This warranty shall not be modified, varied or extended, and the Manufacturer does not authorize any person to act on its behalf in the modification, variation or extension of this warranty. This warranty shall apply to the Product only. All products, accessories or attachments of others used in conjunction with the Product, including batteries, shall be covered solely by their own warranty, if any. The Manufacturer shall not be liable for any damage or loss whatsoever, whether directly, indirectly, incidentally, consequentially or otherwise, caused by the malfunction of the Product due to products, accessories, or attachments of others, including batteries, used in conjunction with the Products. This Warranty is exclusive to the original Purchaser and is not assignable.

This Warranty is in addition to and does not affect your legal rights. Any provision in this warranty which is contrary to the Law in the state or country where the Product is supplied shall not apply.

**Warning:** The user must follow the Manufacturer's installation and operational instructions including testing the Product and its whole system at least once a week and to take all necessary precautions for his/her safety and the protection of his/her property.

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### W.E.E. Product Recycling Declaration

For information regarding the recycling of this product you must contact the company from which you originally purchased it. If you are discarding this product and not returning it for repair then you must ensure that it is returned as identified by your supplier. **This product is not to be thrown away with everyday waste.** Directive 2002/96/EC Waste Electrical and Electronic Equipment.

The technical documentation as required by the European Conformity Assessment procedure is kept at:

UNIT 6 MADINGLEY COURT CHIPPENHAM DRIVE KINGSTON MILTON KEYNES MK10 0BZ. Telephone number: 0870 7300800, Fax number: 0870 7300801



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