

# MCT-237

## Wireless CodeSecure™ Two-Way Keyfob Transmitter

**Visonic®****User Guide**

## 1. INTRODUCTION

### 1.1 Description

The MCT-237 is a miniature CodeSecure™ 6-button keyfob transmitter, designed for use with the PowerMax Pro, PowerMaxComplete, PowermaxExpress unit. The device enables the user to arm/disarm the alarm system and to view system status.

For each control panel, a maximum of eight MCT-237 keyfob devices may be enrolled. Operating power is obtained from an internal 1.5 V alkaline battery. Each transmitter is supplied with a small keyring.

Transmission is initiated by pressing any one of the six pushbuttons. Upon pressing a specific button, the keyfob transmits a CodeSecure™ digital sequence identifiable by the PowerMax unit, and a 4-bit function code associated with the button that was pressed. The next time a button is pressed, the keyfob will transmit a digital sequence of three transmissions that differs from the one used in the previous transmission and the respective function code. As a result, malicious "code grabbing" is virtually impossible.

The MCT-237 includes an optional partition feature. Partitioning allows you to have up to three independently controllable areas with different user codes assigned to each partition or one user code assigned to up to three partitions. A partition can be armed or disarmed regardless of the status of the other partitions within the system.

**Note:** The Partition feature appears only if Partitioning is enabled via the control panel.

The main features of the MCT-237 are:

- Status, alarm memory, and trouble data retrieval from the control panel.
- Visual indications by LCD icon display.
- LCD backlighting activation.
- Various audible signals sounded by the speaker in response to specific actions.
- 1.5 Volt Alkaline battery.

### 1.2 LCD Icons

The following table provides definitions for each of the eight icons that appear on the LCD display.

Icon	Definition
	Lights steadily when the system / a system partition is in Arm Home mode. Flashes when the system / a system partition is in progress of an exit delay.
	Lights steadily when the system / a system partition is in Arm Away mode. Flashes when the system / a system partition is in progress of an exit delay When the system / a system partition is in progress of an entry delay both arm and home icons flash.
	Lights steadily when the system / a system partition is disarmed.
<b>123</b>	Lights steadily to indicate a system partition or a combination of up to three system partitions.
	Lights steadily when a trouble state is detected within the control panel / a system partition.

Icon	Definition
	Lights steadily when the battery must be replaced without delay. A "low battery" report is transmitted with the outgoing digital message.
	Lights steadily when there is a communication failure
	Flashes when the alarm has been activated or if there is a memory condition.

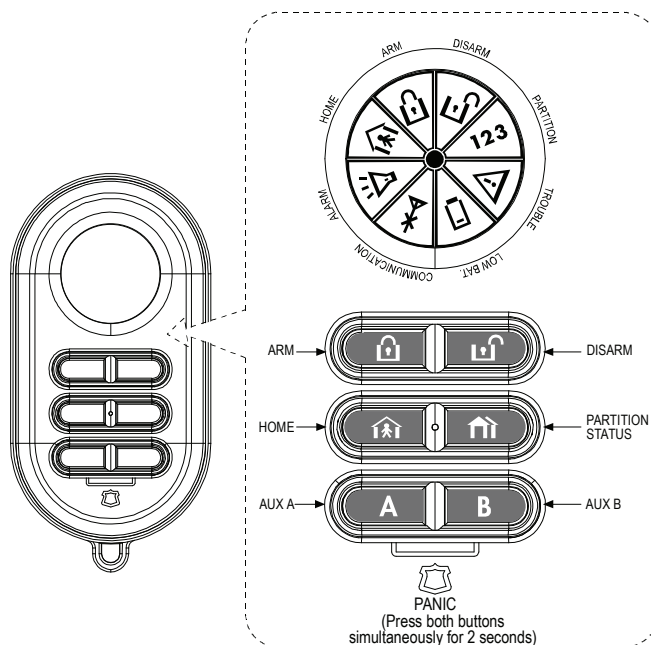


Figure 1. External View

### 1.3 Selecting a Partition / Partitions and Partition Status

The MCT-237 two-way wireless keyfob is used to control single or all partitions.

#### Arming/Disarming All Partitions

To arm/disarm all partitions, press the HOME / AWAY / DISARM button on the keyfob.

#### Partition Status and Arming/Disarming a Single Partition

Press the PARTITION STATUS button on the keyfob once; the display reads the status of the partition. In this state repeated pressing of the PARTITION STATUS button will display the status of the enabled partitions and Partition All. To arm/disarm the desired partition(s), press the HOME/AWAY/DISARM button.

**Note:** When displaying all partitions, the various statuses of partitions are displayed simultaneously.

## 2. SPECIFICATIONS

**Frequency (MHz):** 315, 433, 868.95 or according to local requirements.

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

**Coding:** CodeSecure

**Transmission Range:** The transmission range depends on the sensitivity of the receiver. When the MCT 237 is used with Powermax Express @ 315 MHz, the typical line of sight reception range according to UL testing requirements is up to 55 m (180 ft).

**Battery:** 1.5 V AAA alkaline battery, type GP or equivalent.

**Current Consumption:** 85 mA during transmission.

**Battery Life Expectancy:** 2 years (for typical use).

**Note:** If transmission is still possible despite the battery condition, the unit will send a low battery signal to the receiver.

D-300280

**Control Functions:** Home Arming, Away Arming, Disarming, System Partition/Status, AUX 1 and 2

**Operating Temperature:** -10° to 55°C (14° to 131°F).

**Dimensions:** 75 x 38 x 18 mm (2-15/16 x 1-1/2 x 11/16 in.).

**Weight (including battery):** 36 g (1¼ oz).

**Color:** Black

**Compliance with Standards:** CE/RTTE and EN 50131-1 Grade 2, Class II

**USA:** (FCC) CFR 47part 15, UL 1023, UL 985, UL 1635, UL 1637

**Canada:** RSS 210, ULC S545-02, ULC C1023, CSA C22.2#205

# 3. TESTING AND MAINTENANCE

## 3.1 Testing a New Unit

Since the keyfob transmitter is supplied with the battery already installed, the unit is practically ready to be tested.

**IMPORTANT! Before testing, "teach" the control panel the ID code of the keyfob, as instructed in the control panel Installer Guide.**

- A. Stand near the control panel and press the keyfob button marked with a closed padlock icon.
- B. Make sure that the control panel responds as programmed and as stated in the Installer Guide.
- C. Operate the keyfob from various locations within the area covered by the receiver to determine "dead" locations, where transmission is blocked by walls and large objects, or affected by structural materials. For optimum operation, point the keyfob directly toward the control panel.

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

## 3.2 Replacing the Battery

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

The battery should be replaced upon receiving a low battery LCD indication. A replacement 1.5 V AAA alkaline battery, such as GP (or equivalent), should be used. Replace the battery as follows:

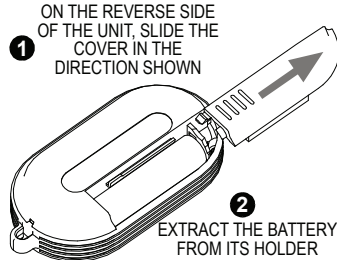
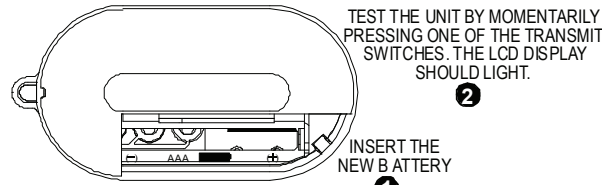


Figure 2. Battery Removal



**NOTE:** INSERT B BATTERY WITH NEGATIVE (-) EDGE PRESSED AGAINST THE SPRING

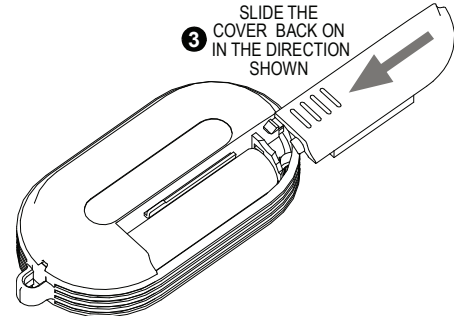


Figure 3. Inserting New Battery

## 3.3 Cleaning

The transmitter may get dirty if touched with greasy fingers. Clean it only with a soft cloth or sponge moistened lightly with a mixture of water and mild detergent, and wipe it dry immediately.

**The use of abrasives of any kind is strictly forbidden. Also never use solvents such as kerosene, acetone or thinner.**

# 4. DEFINING KEYFOB OPTIONS

To enroll the MCT-237, refer to the control panel User Guide section 7 (User Settings) – Enrolling Keyfob Transmitters.

To select the function of each AUX button (STATUS / INSTANT / SKIP EXIT DELAY / PGM / X-10) refer to the control panel installer guide par. 4.4.17, Par. 4.4.18 and Figure 4.4.

# 5. GENERAL COMMENTS

This device complies with Part 15 of the FCC Rules. 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.

Any changes or modification not expressly approved by the party responsible could void the uses' authority to operate the device

### 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.

1/08



### W.E.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



VISONIC LTD. (ISRAEL): P.O.B 22020 TEL-AVIV 61220 ISRAEL. PHONE: (972-3) 645-6789, FAX: (972-3) 645-6788  
VISONIC INC. (U.S.A.): 65 WEST DUDLEY TOWN ROAD, BLOOMFIELD CT. 06002-1376. PHONE: (860) 243-0833, (800) 223-0020. FAX: (860) 242-8094  
VISONIC LTD. (UK): UNIT 6 MADINGLEY COURT CHIPPENHAM DRIVE KINGSTON MILTON KEYNES MK10 0BZ. TEL: (0870) 7300800 FAX: (0870) 7300801

PRODUCT SUPPORT: (0870) 7300830

VISONIC GmbH (D-A-CH): KIRCHFELDTSTR. 118, D-40215 DÜSSELDORF, TEL: +49 (0)211 600696-0, FAX: +49 (0)211 600696-19  
VISONIC IBERICA: ISLA DE PALMA, 32 NAVE 7, POLÍGONO INDUSTRIAL NORTE, 28700 SAN SEBASTIÁN DE LOS REYES, (MADRID), ESPAÑA.  
TEL (34) 91659-3120, FAX (34) 91663-8468. www.visonic-iberica.es

INTERNET: www.visonic.com

©VISONIC LTD. 2010 MCT-237 D-300280 (Rev 3, 2/10)

