# **Installation Instructions**

#### 1. INTRODUCTION

The MCT-320 is a fully supervised, PowerCode magnetic contact transmitter, for use with PowerCode products. The transmitter includes a built-in reed switch (that opens upon removal of a magnet placed near it).

The magnet switch has a unique 24-bit PowerCode ID, selected in the factory from over 16 million possible code combinations.

Since messages transmitted by the MCT-320 might collide with transmissions from other PowerCode transmitters, a "smart" anti-collision transmission sequence is used.

The MCT-320 tamper switch is activated when the cover is removed or when the detector is removed from the wall.

A periodic supervision message is transmitted automatically. The target receiver is thus informed, at regular intervals, of the unit's active participation in the system.

An LED lights whenever alarm or tamper events are reported. The LED light can be disabled if desired. The LED does not light while a supervision message is being transmitted.

Operating power is obtained from an on-board 3 V Lithium battery. When the battery voltage is low, a "low battery" message is sent to the receiver.

## 2. SPECIFICATIONS

Frequency (MHz): 315, 433.92, 868.95, or according to local requirements (UL has only investigated at 315 MHz).

**Transmitter's ID Code:** 24-bit digital word, over 16 million combinations, pulse width modulation.

Overall Message Length: 36 bits

**Power Source:** 3 V Lithium CR-2 type battery, Panasonic or Sanyo only

**Note:** Dispose of used battery according to manufacturer's instructions.

Battery Life Expectancy: 5 years (for typical use)

**Battery Supervision:** Automatic transmission of battery condition data as part of any status report.

Operating Temperature:  $0^{\circ}$ C to  $49^{\circ}$ C ( $32^{\circ}$ F to  $120^{\circ}$ F). Dimensions:  $51 \times 30 \times 21 \text{ mm}$  ( $2 \times 1-3/16 \times 13/16 \text{ in.}$ )

Weight (including battery): 36g (1.27 oz)

**Standards:** Meets FCC Part 15, MPT1349 and Directive 1999/5/EC.

EN 50131-1, Grade 2, Class II.

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.

This device complies with the essential requirements and provisions of Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999 on radio and telecommunications terminal equipment.

## 3. GENERAL INFORMATION

It is highly recommended to attach the transmitter to the top of the door/window on the fixed frame and the magnet to the movable part (door or window). Make sure that the magnet is located not more than 6 mm (0.25 in.) from the transmitter's marked side.

**Note:** Once the cover is removed, a tamper message is transmitted to the receiver. Subsequent removal of the battery prevents transmission of "TAMPER RESTORE", leaving the receiver in permanent alert. To avoid this, during the enrolling process, press the tamper switch while you remove the battery.

#### 4. MOUNTING

The transmitter should be mounted on the fixed surface and the magnet on the moving surface (see figure 1).

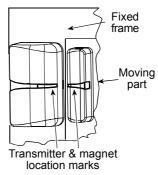
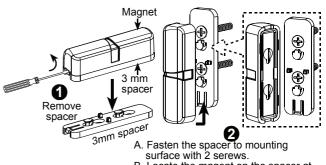


Figure 1 - MCT-320

#### 4.1 Magnet Mounting

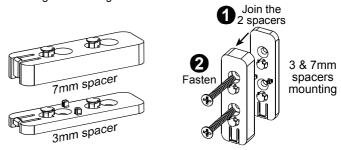


B. Locate the magent on the spacer at the correct direction and push it upwards.

Figure 2 - Magnet Mounting

#### 4.2 Magnet Mounting with Optional Spacer(s)

Optional spacer(s), 3 mm width, 7mm with, or both, can be used for the magnet mounting.



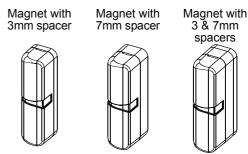


Figure 3 - Magnet Spacers

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#### 4.3 Transmitter Mounting

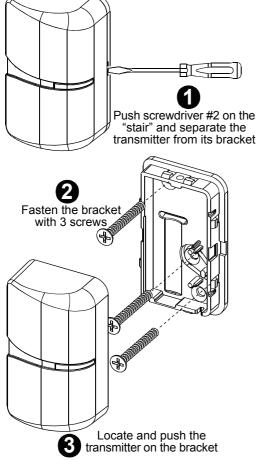


Figure 4 – Transmitter Mounting

## 4. TEST

A. Insert the battery between the battery clips, at the correct polarity. For proper operation, only Lithium Thionyl Chloride battery (Panasonic or Sanyo type CR2) should be used.

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

#### 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

neglect, wilfful 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 WHATSOFVER AS AFORES AID. 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.

**B.** Press the tamper switch once and release it.

B. Press the tamper switch once and release it.
Note: Since the cover is removed and power is applied, a tamper situation exists. Verify that the MCT-320 transmits (the LED lights briefly) once every 3 minutes.
C. When you are satisfied that tamper signals are transmitted properly, put the cover on to return the tamper switch to its normal (undisturbed) position. Wait slightly over 3 minutes to verify that tamper transmissions cease.
D. Momentarily open the door or window and verify that the

D. Momentarily open the door or window and verify that the transmitter LED lights, indicating that transmission is in

progress.

E. Close the door or window, thus restoring it to the undisturbed state and watch the LED.

F. Refer to the target receiver's installation instructions, and let the receiver "learn" the ID codes associated with the reed

With the target receiver in the LEARN mode, an alarm transmission from each input will enroll the input's ID in the receiver's memory

## 5. LED LIGHT ENABLING/DISABLING

The LED light can be enabled or disabled as desired.

The disabling and enabling process is identical, as follows:

- a. Pull out the transmitter rear cover (to activate rear tamper
- Hold the magnet in your hand, near and parallel to the transmitter.
- c. Push and pull the magnet to and from the transmitter, 5-6 times
- d. Close the transmitter rear cover.
- During disabling process the LED flashes and then stops flashing

During enabling process the LED does not flash and then flashes

#### 6. MISCELLANEOUS COMMENTS

Visonic Ltd. wireless systems are very reliable and are tested to high standards. However, due to low transmitting power and limited range (required by FCC 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 digital code used.
- A receiver responds only to one transmitted signal at a time.
- Wireless devices should be tested regularly to determine whether there are sources of interference and to protect against faults

The user is cautioned that changes or modifications to the unit, not expressly approved by Visonic Ltd., could void the



wser's FCC or other authority to operate the equipment.

W.E.E.E. Product Recycling Declaration
For information regarding the recycling of this product you must contact the company from which you orignially 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 everyday waste

European Directive 2002/96/EC Waste Electrical and Electronic Equipment.

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 anothe under cartain incrumentages.

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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 be responsible for dismantling and/or reinstallation costs. To exercise this Warranty the Product must be returned to the Manufacturer freight pre-paid and insurance. costs are the responsibility of the Purchaser and are not included in this 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 were the Product is supplied shall not apply. <u>Warning:</u> 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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