elmes®
electronic

WIRELESS OPEN/CLOSE MONITOR MAGNET DETECTORS
MODELS CTX3H & CTX4H (EN)

Detectors with built-in reed contact and external switching magnet feature low power radio transmitter and are used in wireless alarm & security applications. Detectors signal opening and, if selected so, closing of windows and doors. In addition, the detectors are provided with connectors for external wired contacts monitoring. Programmed to Elmes Electronic receiver detectors allow operating mode selection by jumper **J1**, as described below:

	Opening of door/window	Closing of door/window
J1 shorted	Single transmission – setting receiver's channel output to ON for a programmed time	No transmission – no reaction of the receiver
J1 opened	Three transmissions in random time intervals – setting receiver's channel output to ON	Three transmissions in random time intervals – receiver's channel output set to OFF

IMPORTANT! After operating mode change the detectors must be always re-learned to receiver.

On board, reed contact is marked **A** and wired contacts connector is marked **B**. They are connected in series and their activation is made by jumper marked **A/B**. Shorted pins **A** of the jumper mean active reed contact. Shorted pins **B** mean active wired connector. No shunt on jumper **A/B** allows simultaneous activation of both reed contact and wired connector. Wires from external reed contact should be put through a hole made in plastic housing of detector.

Detectors signal anti-sabotage alarm by setting on relay at receiver's output while low battery information is transmitted to receiver and signalled the way according to receiver's specification. Jumper LED is user set battery life saving feature and sets on/off LED indication while radio transmission is made by detector.

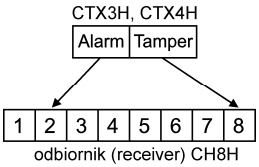
Learning CTX3H & CTX4H detectors to Elmes Electronic receivers.

The detectors are recommended to operate with CH4HR, U4HR, CH8HR or CH20HR receivers. Low battery warning is indicated in receiver and send with every transmission. Corresponding relay output selection is made in receiver. For detailed detector learning instruction please follow receivers' manuals.

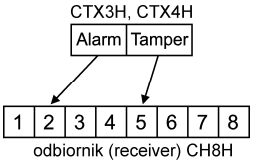
There are two ways of learning CTX3 and CTX4 detectors to receivers:

1. With TAMPER alarm diverted to the last output of a receiver:

learning the detector to a receiver (example: to output 2 of the CH8HR receiver as shown on side diagram) trigger transmissions using the external magnet (detector's box closed and TAMPER not active). After learning output 2 signals open/close alarm while TAMPER alarm will be active in output 8 (last).



2. Without TAMPER alarm diversion – allowing identification of TAMPER alarm source. Learn detector using only its TAMPER switch to any output of a receiver (example: to output 5 of CH8HR.). After learning, TAMPER alarm is active in output 5 while open/close alarming is always signalled three outputs backward, in case of the example at output 2, as shown on side diagram.



With jumper **J1** shorted, CTX detectors can operate with one or two outputs Elmes Electronic receivers. With these receivers TAMPER alarm and contact closing is not signalled. Jumper **J2** of CTX4H detector allows alarm output selection when operating with two outputs receiver. With J2 shorted alarm is set to output 1. With J2 opened alarm is set to output 2.

Installation

Detector operating range is up to 100m. Concrete, metal screening, sources of electromagnetic interference and wet obstacles may vastly reduce operating range. Therefore test should be made to determine practical operating range on site before firm installation. Level of received signals may be evaluated using RFM monitor (optional).

Specification

- 433.92 MHz frequency, hopping code and up to 100m operating range in open field,
- CTX3H power: 12V GP23A alkaline battery, typical 1 – 2 years operation;
- CTX4H power: 9V alkaline battery, typical 3 – 5 years operation;
- max. Distance of external magnet 10mm from box reed contact side;
- anti-sabotage TAMPER alarm lasting ca 20 seconds;
- operating temperature range 0°C to +40°C.

CE

Manufacturer's Limited Warranty:

This product carry manufacturer's one year limited warranty as from date of purchase. The warranty is limited to the replacement of faulty original parts or repair defects of improper manufacture. Damage, faulty use or improper handling by user or installer, changes in product's hardware or software made by unauthorized person violets the warranty and repair costs will be charged. Elmes Electronic shall not be liable for any personal or material damage resulting from any of its products direct, indirect or partial failure to operate properly.