



Detectors with built-in reed contact and external switching magnet include low power radio transmitter and are used in wireless monitoring of doors, window, gates, etc., in alarm & security applications. Programmed to Elmes receiver the detectors operate in one of the two modes selected by jumper **J1**, as shown in table 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 every operating mode selection the detectors must be re-learned to receiver.**

The CTX3H & CTX4H detectors’ main features: dynamic hopping code encryption for highest level of signal security; low current consumption allowing up to 1 (CTX3H) and 3 (CTX4H) years of operation on single battery; low battery warning and sabotage TAMPER alarm; LED alarm indication selectable to OFF for battery saving.

**Learning CTX3H & CTX4H detectors to Elmes receivers**

The detectors are recommended to operate with CH4H, CH8H or CH20H receivers. Low battery warning is indicated in receiver and sent with every transmission. Operating channel output selection is made in receiver. For detailed learning instruction please follow receivers’ manuals. There are two modes of learning the detectors to receivers:

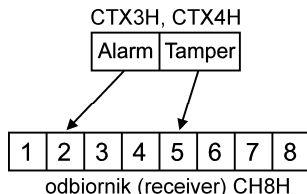
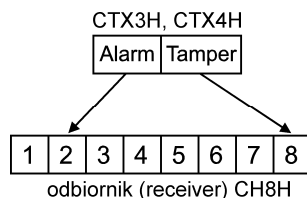
1. With TAMPER alarm diverted to the last channel of a receiver:

learning the detector to a receiver (example: to ch.2 of the CH8H receiver as shown on side diagram) trigger transmissions using the external magnet (detector’s box closed and TAMPER not active). After learning channel signals open/close alarm while TAMPER alarm will be active in ch.8 (last).

2. Without TAMPER alarm diversion – allowing identification of TAMPER alarm source.

Learning the detector to any channel of a receiver (example: to channel 5 of the CH8H rec.) trigger transmissions by the use of TAMPER switch. After learning TAMPER alarm is active in channel 5 while open/close alarming is signalled in channel 2 output.

On jumper **J1** shorted, CTX detectors can operate with one/two channel receivers UMB100H and DWB100H. With these receivers TAMPER alarm and closing state is not signalled. Jumper **J2** in CTX4H detector allows alarm output channel selection when set to operate with DWB100H receiver. With J2 shorted alarm is set to channel 1. With J2 opened alarm is set to channel 2.



**Installation**

The detector operates indoors, within temp. range of 0 to +40°C. Place of installation should be dry and far from electromagnetic lines, radio modules, metal screening and other devices that may cause interference and reduce operating range. Prior to firm installation tests should be made to determine practical operating range. The level of receiving signals may be evaluated using Elmes RFM1 monitor. The external magnet should be installed on movable part of the monitored object, so that in closest position the magnet is at no more than 10mm distance from the detector’s box reed side. Plastic cup is supplied to cover centre screw hole.

**Specification**

- 433.92 MHz frequency band and 50-100m operating range in open field,
- CTX3H power supply: 12V GP23A alkaline battery (current 0,006mA at standby),
- CTX4H power supply: 9V alkaline battery (current 0,010mA at standby),
- External magnet maximal distance 10mm from box reed contact side,
- Anti-sabotage TAMPER alarm,
- Operating temperature range 0°C to +40°C.



**Manufacturer’s Limited Warranty.** Elmes products 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 violates 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.