elmes ® electronic

WIRELESS PHOTOELECTRIC SMOKE DETECTOR   MTS-166/9V   (EN)

Detector consists of autonomous battery operated audible smoke alarm and wireless alarm module transmitting smoke alarm signal to alarm control panel or dedicated receivers. Detection of smoke obscuration generates loud 85dB horn alarm along with wireless alarm transmissions to corresponding Elmes CB32 wireless control panel or receiver where emergency state is further notified. Operated with Elmes receivers may constitute a smoke alarm zone as part of any existing or newly designed security alarm system installation in households. Powered by carbon-zinc 9V battery the detector operates up to one year while up to three years operation may be obtained when powered by alkaline or lithium battery. When operating with Elmes CB32 panel or dedicated Elmes receivers CH8HR or CH20HR, the detector features monitoring of detector presence and battery voltage level. After 24 hours of no test signal from the detector, the receivers and the control panel indicate its absence (sabotage or failure function). Also, low battery in the detector is indicated in the receivers and the control panel. Random timing of test and alarm transmissions of the wireless module allows many MTS detectors to be installed in close vicinity. The detector does not emit hazardous radiation and its operation is entirely based on photoelectric chamber obscuration by incoming smoke. The detector is intended for use in single occupancy dwellings only and should not be installed in public and industrial places. Read this leaflet fully before MTS installation and retain for future reference.

Locating and installing smoke detectors.

Proper location of detectors is a critical factor for early smoke detection and fire alarming. Prior to installation a judgment of potential fire hazards and ways of smoke penetration is recommended. When installing, avoid areas where there is no air circulation e.g. corners of rooms. For maximum protection detectors should be fitted in every room.

Smoke detectors **should be installed in ceiling center** in sleeping and living room areas as well as in ways of expected smoke distribution in stair ways, hallways and their immediate vicinity. Place detector at least 300mm from light fittings or decorative objects that may obstruct smoke entering the detector. When mounting detector on side wall, allow minimum 300mm free distance from ciling. Installing detector in areas with sloping ceilings or walls keep 900mm distance from the highest point measured.

Do not install detector in room corners where there may not be sufficient smoke circulation for its detection. Do not fit detectors in kitchen, bathroom, workshop or garage where natural cooking fumes, steam, dust or car exhaust fumes may trigger false alarms.

Suggested installation places of the MTS detectors in apartments and houses are shown on side figures 1 and 2 with detector

marked ⊙ .

Fig. 1

MTS smoke detector is battery powered device and requires no additional wiring. Having established a mounting location remove the base part by means of squeezing two clip brackets of the detector and mark two installation holes to be drilled in ceiling or wall. Insert supplied wall plugs into drilled holes and screw in the base part. Now connect 9V battery to battery clip observing polarity and insert the battery into battery compartment at the rear of the detector. Fit the detector part to the base part firmly observing different widths of clip brackets.

NOTE! For the safety of the end user the smoke detector cannot be fitted to the base part without 9V battery installed.

After installation or battery replacement always test correct operation of the smoke detector by shortly pressing center positioned TEST/SILENCE button. Properly functioning unit emits short loud signals, indicates LED pulsing and sends wireless transmissions.

Fig. 2

Learning detector to Elmes CB32 control panel or Elmes receivers.

In order to operate MTS detector with Elmes made wireless module it must be learned to Elmes receiver or control panel. To do so, receiver or control panel must be set ready to learn transmitters according to procedure described in its operation manual followed by MTS detector activation by pressing its central placed TEST/SILENCE button. Receiver/control panel confirms properly learned detector by slow pulsing of its LED (receivers) or displaying "OK – correct" (CB32 control panel). Unsuccessful learning may be due to improper learning steps or radio frequency disturbance by other transmitters and should be repeated. Deleting MTS detector in receiver/control panel is done according to procedure steps described in their respective manuals. Maximum number of wireless detectors learned to one receiver/control panel is also specified in their manuals.

When learning MTS detector to CB32 control panel (version 3.00 and up) it is automatically recognized as smoke detector and assigned to 24hour alarm line. In emergency, control panel displays "fire alarm" message along with "line number" and, if the control panel operates with Elmes GSM monitoring module, appropriate SMS messages are sent to registered phone number. Older versions of CB32 panel would recognize the smoke detector as wireless PIR detec-
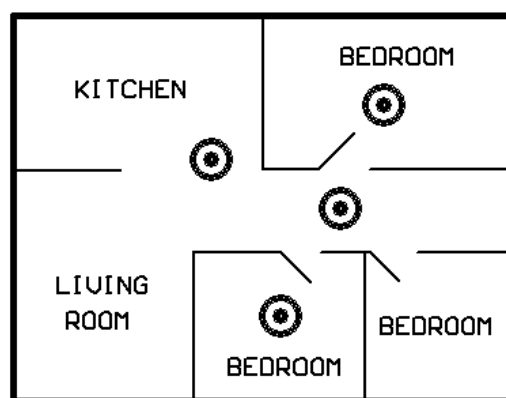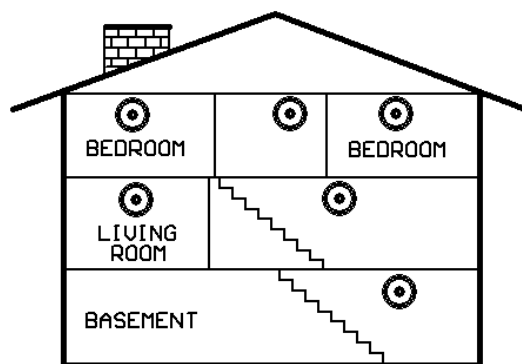
tor and signal intruder alarms in the line of the detector even if smoke is detected. It is therefore very important to assign a 24h alarm line type to the line/zone with MTS smoke detector learned.

Operating wireless MTS smoke detectors with alarm system of other manufacturer requires Elmes Electronic made receiver with MTS learned output to be wire connected to 24h fire or sabotage line/zone of that installation.

MTS smoke detectors with wireless module must be operating within safe wireless distance range to receiver/control panel and **must not be installed on limits of maximal operating range.** Prior to firm installation, practical operating range tests should be conducted to ensure safe wireless connection. To assess the level of radio signals received from activated MTS detector, a signal level test mode should be selected in wireless CB32 control panel or, dedicated Elmes RFM4 signal level indicator used when operating with Elmes receivers. In the case of MTS detectors installed in distant locations Elmes TRX signal repeater use is suggested to ensure reliable operation.

Operating and testing your smoke alarm.

Operation of MTS wireless smoke detector starts as soon as battery is connected. Smoke monitoring activity is indicated by LED flashing every minute and positioned beside of TEST/SILENCE button. If smoke is detected the unit will emit a loud pulsing acoustic alarm (85dB at 3m distance) and fast LED flashing until the air is cleared. Also, its wireless module emits signals to be received by Elmes CB32 control panel or receiver it is learned to, to set up alarm state in fire or security monitoring system.

MTS detector is equipped with **Hush (Silence) Feature** activated by TEST/SILENCE button. If cooking or other non-hazardous sources cause unwanted alarm, it can be temporarily silenced by depressing the TEST/SILENCE button for approximately 3 seconds. The alarm will enter into a dormant period for 10 minutes and then reset to normal mode after this period. During this period its LED flashes every 10 seconds indicating reduced sensitivity. If smoke density increases during this period (i.e. from a fire) the unit will go into alarm mode automatically.

If the smoke detector emits a short "beep" once a minute the battery is at the end of its life and requires immediate replacement. Battery low voltage warning "beep" is indicated by at least 30 days. If the red LED indicator does not flash every minute then replace the battery.

MTS smoke detector with wireless module operating with Elmes CB32 panel or Elmes CH8HR & CH20R receivers indicates smoke alarm, low battery warning and its presence in alarm system (sabotage or/and failure function).

Test your smoke detector regularly to ensure its working properly. Push and hold the TEST/SILENCE button until a loud, pulsating alarm indicates its correct function. Clean your MTS detector with vacuum cleaner with brush attachment. Never use cleaners, water or solvents since they may damage the smoke detector.

Specification

- Autonomous smoke alarm GARVAN MTS166/9V(*) designed and certified to EN14604:2005 standard, BSI license No KM544515, CE 13, 0086-CPR-550565.
- Elmes Electronic wireless module (433.92MHz, <10mW) with up to 100m operating range made to comply with 1999/5/CE directive and its relevant standards.
- Power supply: 9Vcarbon-zinc battery (1 year operation), alkaline or lithium (up to 3 years operation).
- Current consumption: <20uA in standby and <50mA in alarming,
- Operating temperatures range from 0°C to +40°Celsius,
- Operation ambient humidity range: 10% to 90%,
- Internal horn acoustic alarm level: 85dB at three meters.

(*) The name GARVAN and graphic marking are property and registered trademarks of GARVAN Enterprises Ltd. Hong Kong.

Assembled and distributed by: Elmes Electronic, 54-611 Wroclaw - PL, Avicenny 2 Str., Phone +48717845961, Fax +48717845963.

Limited Warranty

This product is guaranteed to be free from defects in material and workmanship under normal use and service for a period of two years as from date of purchase. Damage, faulty use or improper handling by user or installer as well as any unauthorized changes or repairs violate manufacturer's guarantee and all due repair costs will be charged. In all cases, customer covers product repair delivery costs to and from manufacturer or service station.

Manufacturer or distributor shall not bear any liability for any personal or material injury, damage or material loss resulting from its products' direct, indirect or partial failure to operate properly. Smoke detector or smoke alarm that this detector is a part of is not a substitute of proper protection against fire or disability, injury, loss of life or property damage of any kind that may occur in case of fire. Appropriate fire protection measures and insurance coverage is the product end-user responsibility.

Place & date of product purchase (confirmed by the seller)………………………………………………………………….