## 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 Electronic made CB32 (any model) or CBP32 wireless control panel, or rolling code receiver where emergency state is further notified. Operated with Elmes Electronic receivers may constitute a smoke alarm zone as part of any existing or newly designed security alarm system installation. 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 or CBP32 control panel or dedicated Elmes Electronic receivers CH8HR or CH20HR, the detector features monitoring of detector's presence and its battery voltage level. If no test signal from the detector is detected within 24 hours period, control panels and receivers indicate its absence. Low battery in the detector is indicated in the detector (acoustic), also in the receivers and the control panels (LED). Random timing of test and alarm transmissions of the wireless module allows many MTS wireless smoke detectors to be installed in close vicinity. The detector does not emit any hazardous radiation and its operation is entirely based on photoelectric chamber obscuration by incoming smoke. Read this instructions fully before its 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.

<u>Do not install detector</u> 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.

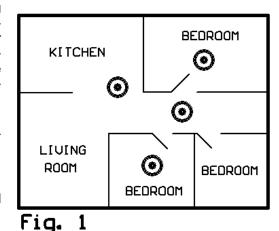
Suggested installation places of the MTS detectors in apartments and houses are shown on side figures 1 and 2 with detector

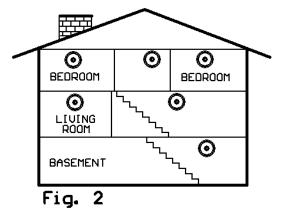


MTS smoke detector is battery powered device and requires no additional wiring. Having established a mounting location remove the base part by means of squeezing two clip brackets of the detector and mark two installation holes to be drilled in ceiling or wall. Insert supplied wall plugs into drilled 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 (hold the button at least 2s) center positioned TEST/SILENCE button. Properly functioning unit emits short loud signals once or twice times , indicates LED pulsing and sends wireless transmissions.





#### Learning MTS detector to Elmes Electronic control panels or receivers.

In order to operate MTS detector with Elmes Electronic made wireless module it must be learned to Elmes Electronic 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 or CBP32 control panel, it is automatically recognized as smoke detector and assigned to 24-hour alarm zone. In emergency, control panel displays "fire alarm" message along with "line number" and, if the control panel features GSM module, appropriate SMS messages are sent to registered phone number.

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 <u>must not be installed on limits of maximal operating range</u>. 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 RFM4 signal level indicator used when operating with receivers. In the case of MTS detectors installed in distant locations Elmes Electronic 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 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 <u>Hush (Silence) Feature</u> activated by TEST/SILENCE button. If cooking or other non-hazardous sources cause unwanted or accidental 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 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 Electronic CB32 and CBP32 panels or CH8HR & CH20R receivers besides smoke alarm indicate low battery warning and its presence in alarm system. Low battery warning in the detector (acoustic) and the corresponding receiver (LED) may not start simultaneously but always mean battery replacement necessity.

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 chemical cleaners, water or solvents since they may damage the smoke detector.

#### Specification

- Optical autonomous smoke detector GARTEC(\*) MTS166/9V designed and certified to EN14604:2005/AC:2008 standard,BSI license 2797 CPR 796170
- Elmes Electronic wireless module (433.92MHz, <10mW) with up to 100m operating range in the open made to comply with CE directives and its relevant standards.
- Power: 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 GARTEC and graphic marking are property and registered trademarks of GARTEC Safety Technology (Shenzhen).

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#### 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.