elmes® electronic

WIRELESS ALARM, ACCESS CONTROL & GATES AUTOMATION PRODUCTS

Dear Installers

This short form catalogue is intended for presentation and review of features and basic technical specification of wireless short-range devices manufactured by Elmes Electronic. Contained information should allow installer to acquire adequate description of functions and requirements of the products, needed to select proper products to projected wireless solution. Standard features of the products such as dynamic signal coding KEELOQ® including unique Elmes identification mask code, combined with common radio operating band, allow the advantage of the devices' wide range configuration options in variety of applications.

Cost-effective products along with lasting customer satisfaction are most important goals of our manufacturing. Therefore, due to products' continuing update and modification, detailed and up-to-date technical and feature specification, including installation recommendations and examples, can be obtained from our internet homepage. The site also contains ready to print or download manufacturer's product CE and RoHS compliance declarations, certificates approving products use in alarm systems as well as current and outdated instruction manuals. Customers willing to obtain the data in form of CD-ROM archive are requested to e-mail their request to our sale offices.

Thanking you for over fifteen-year long confidence extended to our wireless ideas and products, we would like to assure of our continuous effort to improve products reliability and functionality, particularly taking advantage of the opinions, advices and comments expressed in phone calls and mail sent to us.

Elmes Electronic

CB32

WIRELESS CONTROL PANEL

This compact, wireless digital control panel is designed for use in security systems, burglary and emergency alarms, access control in houses, offices and other premises. The panel can be operated by up to 16 users and controls up to 32 wireless Elmes detectors identified as alarm zones with choice of types (e.g. "day armed", "delayed", "active 24h" and others). System users and alarm zones can have any, installer defined names. The panel features loud internal acoustic siren, two wired perimeter alarm inputs for connection of standard wired detectors and three 1A fused programmable alarming and signalling outputs for connection of wired external siren, strobe, phone dialer and other devices. It operates with wireless external siren Elmes WSS in two way communication mode, with periodical siren's presence check-up. Other standard features and options include: two modes of partial arming (day & night); monitoring and notification with the use of GSM phone or dedicated Elmes GSM module cable interfaced with the panel; keypad or hand transmitter arming/disarming with audible internal/external signalling beeps; easy accessible to verify register log of last 256 events (e.g. arming/disarming, power supply and battery failures, alarms) with precise dates and times. Its two typical (AA size 2500mAh) internal rechargeable batteries allow autonomy operation of up to 72 hours on mains supply failure. Clear lit LCD readout display, on-board power supply for connected external GSM phone or module and full size keypad allow easy programming and installation of the panel as well as simplify its daily arming & disarming use.

SPECIFICATION :

- operation with up to 32 wireless detectors and two wired detectors,
- monitoring and alarm paging with the use of mobile GSM phone or module,
- up to 16 characters user-defined alarm zones and user names,
- 72h power backup with two AA size 2500mAh rechargeable batteries,
- three 1A fused programmable signalling outputs,
- keypad or remote hand transmitter arming & disarming of the panel,
- emergency panic alarm activated remotely by hand transmitter,
- integral acoustic siren 92dB (measured at 0,4m distance),
- sensitive super heterodyne receiver 433,92MHz with signal level monitor,
- GSM phone battery charging with mains AC/DC adapter fitted,
- mains power adapter with 12VDC/300mA output (with mobile phone used),
- indoor operation with ambient temperature range from 0 do +40°C,
- external dimensions without antenna: (L/W/D) 122/110/32mm.

PTX50

WIRELESS PIR MOTION DETECTOR

This popular intrusion detection device is designed for installation in wireless alarm systems and operates with Elmes control panel CB32 and Elmes made receivers. The detector is an infrared sensitive appliance responding to detected radiation generated by human body. Thanks to its high quality wide angle Fresnel lens used together with IR reflection-free protective sleeve, the detector features excellent infrared sensitivity characteristics and is highly effective in human motion detection within the protected distance range. Very low power consumption along with advanced microprocessor controlled energy saving procedures allow up to three years of autonomous operation with single 9V alkaline battery. Other main features of the detector include: user set detection speed (IR pulse count); walk-test operating mode; anti-sabotage TAMPER alarm detection; optional use of animal alley or vertical barrier lenses in place of the standard wide angle lens; variety of wall and corner multi-angle installation options including installation with optional swivel grip (Elmes PTU). The detector finds widespread application in wireless alarms and security installations in houses, flats and offices.

SPECIFICATION :

- powered by 9V alkaline battery with 0,014mA current draw at standby,
- passive infrared motion detection in the range of 15m and 90ş angle,
- highly secure dynamic KEELOQ® coded alarm transmissions,
- selectable IR pulse count detection speed (1-2-3-5),
- walk-test operating mode and LED signalling on/off selectable,
- low battery and TAMPER function signalling,
- EU standards compliant 433,92MHz transmitter with integral antenna,
- resistance to radio interference better than 10V/m in up to 1GHz range,
- indoor operation with ambient temperature range from 0 do +40°C,
- external dimensions: (L/W/D) 95/62/50mm.

WINDOW GLASS BREAK WIRELESS DETECTOR

GBX 1

The detector is advanced multiprocessor's controlled device designed for application in alarm and security systems. It features advanced acoustic frequency double trace system allowing effective detection of window glass breakage and elimination of false alarms. The sound detection system continuously analyses all incoming sounds. When specific sequential glass break sounds are detected the device starts sending alarm transmissions and illuminate the red LED. Software controlled energy saving system enable up to three years operation on single alkaline 9V battery. Other characteristic features of the detector include: multiple alarm transmissions with KEELOQ® dynamic encryption code hopping; simple learning procedure with practical installation test mode; acoustic low frequency detection sensitivity adjustment; low battery warning and anti-sabotage TAMPER alarm. The device operates with all Elmes receivers and the CB32 control panel and is capable of breakage detection of glass window except for windows with multilayer or foiled glass, in range of up to 10m from place of installation. The GBX1 typical installation sites are wired and wireless alarm systems in shops, offices, houses and flats.

SPECIFICATION :
- powered by 9V alkaline battery with 0,012mA current draw at standby,
- glass break detection in windows of minimal size 600x600mm,
- highly secure dynamic KEELOQ® coded alarm signal transmissions,
- low battery and TAMPER function signalling,
- EU standards compliant 433,92MHz transmitter with integral antenna,
- resistance to radio interference better than 10V/m in up to 1GHz range,
- indoor operation with ambient temperature range from 0 do +40°C,
- external dimensions: (L/W/D) 104/30/24mm.

CTX3H

WIRELESS MAGNET DETECTOR

This miniature version of the popular magnet detection transmitter, widely used in alarm and monitoring systems, incorporates reed contact device inside and external magnet triggering alarm transmission on either outwards or inwards moving of the magnet thus, signalling opening and closing of the monitored door or window. Detector offers up to 100 meters operating range in open field and one or two way operating modes user selected. Operating two ways with Elmes CB32 control panel or dedicated Elmes CH4H, CH8H or CH20H receivers the detector causes the receiver's channel relay output to operate in real-time bistable (on-off) mode, with output state corresponding to open or close detection signals received from the magnet detector. The two way operation feature allows full monitoring of doors and windows in the alarm system, securing that none will be left opened on system arming. Detector's signal transmissions are KEELOQ® dynamic code encrypted providing highest level of security while very low power consumption at standby allows up to one year autonomy operation on a single miniature 12V battery. Other features of the detector include low battery warning, anti-sabotage TAMPER switch and on-off user selectable LED indication.

SPECIFICATION :
- powered by 12V alkaline GP23A battery with 0,003mA current at standby,
- one or two way detection operating modes user selected,
- LED signalling on/off user selectable,
- low battery and TAMPER function signalling,
- EU standards compliant 433,92MHz transmitter with integral antenna,
- resistance to radio interference better than 10V/m in up to 1GHz range,
- indoor operation with ambient temperature range from 0 do +40°C,
- external dimensions: (L/W/D) 58/32/19mm.

WIRELESS MAGNET DETECTOR WITH EXTENDED OPERATION TIME

Thanks to its alkaline 9V battery supply this magnet detection transmitter used in alarm and monitoring systems offers up to 200 meters operating range in open field and up to three years autonomy without battery change. The detector can operate one or two way modes user selected. Used in two way mode with dedicated Elmes receivers CH4H, CH8H or CH20H, the detector causes the receiver's channel relay output to operate in real-time bistable (on-off) mode, with output state corresponding to open or close detection signals received from the magnet detector. The two way operation feature allows full monitoring of doors and windows in the alarm system, securing that none will be left opened on system arming. Operating with the Elmes CB32 wireless control panel the detector not only signals open or close state of monitored door or window but also sends repeated presence identification transmissions. Detector's signal transmissions are KEELOQ® dynamic code encrypted providing highest level of security. Other features of the detector include low battery warning, anti-sabotage TAMPER switch and on-off user selectable LED indication.

SPECIFICATION :

- powered by 9V alkaline battery with 0,007mA current at standby,
- one or two way detection operating modes user selected,
- periodic identification transmissions,
- LED signalling on/off user selectable,
- low battery and TAMPER function signalling,
- EU standards compliant 433,92MHz transmitter with integral antenna,
- resistance to radio interference better than 10V/m in up to 1GHz range,
- indoor operation with ambient temperature range from 0 do +40°C,
- external dimensions: (L/W/D) 104/30/24mm.

UMB100H   UMB100Hhet

ONE CHANNEL UNIVERSAL REMOTE CONTROL SET

One relay output channel universal remote control set consists of receiver and two single button key-fob hand transmitters (remotes). The set is used in alarm systems for remote starting of entry delay, system arming/disarming, access control and as personal panic button. Transmissions sent from the remotes are KEELOQ® dynamic code encrypted allowing highest level of security. The receiver operates with up to 12 remotes at a time (up to 112 on option) and provides one programmable and isolated NO/NC (NO-normally opened, NC-normally closed) relay output and one external beeper/siren output S. Receiver's outputs are provided with terminals for easy wiring of external devices. The relay output action may be latched (on/off) or time-lapse mode operating depending on programming made by the user. The S output (open collector type) is for connecting external siren or beeper device and delivers two short pulses (two beeps) on relay set and one (one beep) on relay reset. The receiver features built in bicolour LED that is used for programming and signalling relay set (changes colour). The set may be optionally ordered with super heterodyne receiver (UMB100Hhet) offering better operating range and greater rejection of interfering radio signals.

SPECIFICATION :

key-fob transmitter (UMB100HT):
- EU standards compliant 433,92MHz transmitter,
- powered by miniature 12V GP23A type battery,
- external dimensions: (L/W/D) 37/33/13mm,

receiver super regenerative (UMB100HR) or s.heterodyne (UMB100HRhet):
- power supply 12VDC ±15%,(20mA at standby, 40mA on relay set),
- one relay output NO/NC handling 60VA (128VAC/1A),
- output relay's set time in time-lapse mode from 0,5s up to 4 hours,
- anti-sabotage TAMPER switch with terminals,
- operating temp. range: 0 do +40°C (-20 to +40°C: UMB100HRhet),
- external dimensions: (L/W/D) 96/63/28mm.

NOTICE! When ordering transmitters and receivers separately please use ordering codes listed in brackets.

WIRELESS PANIC BUTTON CONTROL SET

This single output channel emergency remote control set consists of receiver and one hand transmitter powered by 9V battery. The set is used in security and alarm systems as wireless personal panic button. May also be used for remote starting of entry delay, system arming/disarming and access control. Signals from key-fobs are KEELOQ® dynamic code encrypted allowing highest level of security. The receiver operates with up to 12 hand transmitters at a time (up to 112 on option) and provides one programmable and isolated from power supply NO/NC relay output and one external beeper/siren output S. Outputs are terminals equipped allowing easy connection of external devices. The relay output action may be latched (on/off) or time-lapse mode depending on programming made by the user. The S output (open collector type) connects to external sounder device and delivers two short pulses (two beeps) on relay set and one (one beep) on relay reset. The receiver features built in bicolour LED used for programming and signalling output relay set. The set may be optionally ordered with super heterodyne receiver (AN200Hhet) offering better operating range and greater rejection of interfering radio signals.

SPECIFICATION :

hand transmitter (AN200HT):
- EU standards compliant 433,92MHz transmitter,
- powered by 9V alkaline battery,
- external dimensions: (L/W/D) 113/33/21mm,

receiver super regenerative (AN200HR) or super heterodyne (AN200HRhet):
- power supply 12VDC ±15%,(20mA at standby, 40mA on relay set),
- one relay output NO/NC handling 60VA (128VAC/1A),
- output relay's set time in time-lapse mode from 0,5s up to 4 hours,
- anti-sabotage TAMPER switch with terminals,
- operating temp. range: 0 do +40°C (-20 to +40°C for AN200HRhet),
- external dimensions: (L/W/D) 96/63/28mm.

NOTICE! When ordering transmitters and receivers separately please use ordering codes listed in brackets.

DWB100H   DWB100Hhet

TWO CHANNEL REMOTE CONTROL SET

Two channels universal remote control set consists of receiver and two double button key-fob hand transmitters (remotes). The set is used in alarm systems for remote starting of entry delay, system arming/disarming and access control. Control signals are KEELOQ® dynamic code encrypted providing highest level of security. The receiver operates with up to 12 remotes at a time (up to 112 on option) and provides two programmable and isolated NO/NC relay outputs and external beeper control output S. Outputs are terminals equipped allowing easy connection of external devices. The output relay action may be latched (on/off) or time-lapse (pulse) mode depending on programming made by the user. The S output (open collector type) connects to external signalling device and delivers two short pulses (two beeps) on relay set and one (one beep) on reset. The receiver features bicolour LED used for programming and first channel set indication. Two other LED diodes indicate channel 1 & 2 outputs set on. The set is optionally available with super heterodyne receiver (DWB100Hhet) offering better operating range and additional, real-time output mode meaning that receiver's output remains set on for as long as the remote transmitter's button is pressed.

SPECIFICATION :

key-fob transmitter (DWB100HT):
- EU standards compliant 433,92MHz transmitter,
- powered by miniature 12V GP23A type battery,
- external dimensions: (L/W/D) 50/36/14mm,

receiver super regenerative (DWB100HR) or s. heterodyne (DWB100HRhet):
- power supply 12VDC ±15%,(20mA at standby, 40mA on relay set),
- two relay outputs NO/NC handling 60VA (128VAC/1A) each,
- outputs' relay set on time in time-lapse mode 0,5s up to 4 hours,
- anti-sabotage TAMPER switch with wire terminals,
- operating temp. range: 0 do +40°C (-20 to +40°C: DWB100HRhet),
- external dimensions: (L/W/D) 96/63/28mm.

When ordering transmitters and receivers separately please use codes listed in brackets.

TWO CHANNEL LONG RANGE REMOTE CONTROL SET

DW200H   DW200Hhet

This long range operating two channel universal remote control set consists of receiver and one double button 9V battery hand transmitter. The set offers 200 meters operating range and is used in automation of gates, doors and window rollers. It is also used in alarms and security for variety of applications including personal double action (loud & quiet) panic button. Control signals are KEELOQ® dynamic code encrypted. The receiver operates with up to 12 transmitters at a time (up to 112 on option) and provides two programmable and isolated NO/NC relay outputs and external beeper control output S. Outputs are equipped with easy connection terminals. The output relay action may be latched (on/off) or time-lapse (pulse) mode depending on programming made by the user. The S output (open collector type) is for connecting external signalling device and delivers two short pulses on relay set and one on relay reset. The receiver features built in bicolour LED used for programming indication and first channel relay set. Two other LED diodes indicate channel 1 & 2 outputs set on. The set is optionally available with super heterodyne receiver (DW200Hhet) offering better operating range and additional, real-time output mode meaning that receiver's output remains set on for as long as the remote transmitter's button is pressed.

SPECIFICATION :

hand transmitter (DW200HT):
- EU standards compliant 433,92MHz transmitter,
- powered by alkaline 9V battery,
- external dimensions: (L/W/D) 113/33/21mm,

receiver super regenerative (DW200HR) or s. heterodyne (DW200HRhet):
- power supply 12VDC ±15%,(20mA at standby, 40mA on relay set),
- two relay outputs NO/NC handling 60VA (128VAC/1A) each,
- outputs' relay set on time in time-lapse mode 0,5s up to 4 hours,
- anti-sabotage TAMPER switch with wire terminals,
- operating temp. range: 0 do +40°C (-20 to +40°C: DW200HRhet),
- external dimensions: (L/W/D) 96/63/28mm.

NOTICE! When ordering transmitters and receivers separately please use ordering codes listed in brackets.

DWM50HM

TWO CHANNEL MINIATURE REMOTE CONTROL SET

This extremely compact two channels universal remote control set consists of mini receiver and two double button miniature key-fob hand transmitters. Though the set is intended for universal application, it may also be used in alarms and security installations. Control transmissions from the key-fobs are KEELOQ® dynamic code encrypted providing highest level of security. The receiver can operate with up to 12 transmitters at a time (up to 112 on option) and provides two programmable and isolated from power supply NO/NC relay outputs and external beeper control output S. Receiver's outputs are provided with wiring terminals allowing easy connection of external devices. The output relay action may be latched (on/off) or time-lapse mode depending on programming made by the user. The S output (open collector type) is for connecting external signalling device and delivers two short pulses (two beeps) on relay set and one (one beep) on relay reset. The receiver features built in bicolour LED that is used for programming indication and first channel output relay set.

SPECIFICATION :

key-fob transmitter (DWM50HT):
- EU standards compliant 433,92MHz transmitter,
- powered by miniature 3V CR1616 battery,
- external dimensions: (L/W/D) 49/28/10mm,

super regenerative receiver (DWM50HR):
- power supply 12VDC ±15%,(20mA at standby, 40mA on relay set),
- two relay outputs NO/NC handling 60VA (128VAC/1A) each,
- outputs' relay set on time in time-lapse mode 0,5s up to 4 hours,
- operating temperature range: 0 do +40°C,
- external dimensions: (L/W/D) 58/32/19mm.

NOTICE! When ordering transmitters and receivers separately please use ordering codes listed in brackets.

FOUR CHANNEL SET WITH CONTROL PANEL FUNCTION

CH4H   CH4Hhet

Four channels universal remote control set consists of receiver and one four button key-fob hand transmitter. The set is designed for use in alarm systems and operates with up to 40 (up to 112 on option) Elmes made KEELOQ® encrypted signal transmitters and wireless detectors. Advanced software options of the receiver allow simple wireless control panel operation mode to be selected by set of jumpers on receiver's board. In that mode receiver's outputs adopt special functions required in control panel. In standard operation mode receiver provides four programmable and isolated NO/NC relay outputs and external siren/beeper control output S. Output terminals allow easy connection of external devices. The outputs relay action may be latched (on/off) or time-lapse mode depending on programming made by the user. The S output (open collector type) is for connecting external signalling device and delivers two short pulses (two beeps) on relay set and one (one beep) on relay reset. The receiver features built in bicolour LED that is used for programming indication. Four other LED diodes indicate channel outputs set on. The set may be optionally ordered with super heterodyne receiver (CH4Hhet) offering better operating range and greater rejection of interfering signals.

SPECIFICATION :

key-fob transmitter (CH4HT):
- EU standards compliant 433,92MHz transmitter,
- powered by miniature 12V GP23A type battery,
- external dimensions: (L/W/D) 50/39/14mm,

receiver super regenerative (CH4HR) or super heterodyne (CH4HRhet):
- power supply 12VDC ±15%,(20mA at standby, 40mA on relay set),
- four relay outputs NO/NC handling 60VA (128VAC/1A) each,
- outputs' relay set on time in time-lapse mode 0,5s up to 4 hours,
- anti-sabotage TAMPER switch with wire terminals,
- operating temperature range: 0 do +40°C (-20 to +40°C for CH4HRhet),
- external dimensions: (L/W/D) 96/63/28mm.

When ordering transmitters and receivers separately please use codes listed in brackets.

CH4H200   CH4H200het

FOUR CHANNEL LONG RANGE SET WITH CONTROL PANEL FUNCTION

This four channel set offers up to 200 meters operating range and consists of receiver and one 9V battery four button hand transmitter. The set is used in alarm systems and operates with up to 40 (up to 112 on option) Elmes made transmitters and wireless detectors. Advanced software options of the receiver allow simple wireless control panel operation mode to be selected by set of jumpers on receiver's board. In that mode receiver's outputs adopt special functions required in control panel. In standard operation mode receiver provides four programmable and isolated NO/NC relay outputs and external siren/beeper control output S. Output terminals allow easy connection of external devices. The outputs relay action may be latched (on/off) or time-lapse mode depending on programming made by the user. The S output (open collector type) is for connecting external signalling device and delivers two short pulses (two beeps) on relay set and one (one beep) on relay reset. The receiver features built in bicolour LED that is used for programming indication. Four other LED diodes indicate channel outputs set on. The set may be optionally ordered with super heterodyne receiver (CH4H200het) offering better operating range and greater rejection of interfering signals.

SPECIFICATION :

hand transmitter (CH4H200T):
- EU standards compliant 433,92MHz transmitter,
- powered by alkaline 9V battery,
- external dimensions: (L/W/D) 113/33/21mm,

receiver super regenerative (CH4H200R) or super heterodyne (CH4H200Rhet):
- power supply 12VDC ±15%,(20mA at standby, 40mA on relay set),
- two relay outputs NO/NC handling 60VA (128VAC/1A) each,
- outputs' relay set on time in time-lapse mode 0,5s up to 4 hours,
- anti-sabotage TAMPER switch with wire terminals,
- operating temperature range: 0 do +40°C (-20 to +40°C for CH4HRhet),
- external dimensions: (L/W/D) 96/63/28mm.

NOTICE! When ordering transmitters and receivers separately please use ordering codes listed in brackets.

UNIVERSAL THREE CHANNEL MAINS CONTROL PANEL

ST100H-3K

The controller is a modified version of Elmes ST100H unit and allows remote switching on-off three 230VAC mains powered devices. These could be lamps, electric inductive motors, power relays, etc. The unit accepts control signals received from Elmes made KEELOQ® code-hopping key-fob remotes or hand transmitters and features individual or sequential control of its three relay outputs. The unit allows option of outputs wire control by external switches connected to terminals on board of the unit. The outputs may be programmed for latched (on/off) or time-lapse (pulse) operation. In time-lapse operation mode the output will be switched off after preset time ranging from 0,5 second up to 4 hours. Individual control of all three outputs requires the use of four or more channel Elmes hand transmitters, e.g. CH4HT, CH8HT, CH32HT. Using only one or two channel transmitters learned to the unit allows sequential control of the outputs. The maximal number of transmitters learned to the unit is 12 (up to 112 optionally). Power relay outputs with hermetic panel housing and wide operating temperature range of used super heterodyne receiver module allow variety of application fields of the unit and installation in and outdoors.

SPECIFICATION :

- EU standard 433,92MHz band super heterodyne receiver,
- control unit power supply 230VAC (4VA),
- two programmable NO type outputs 16A/250VAC,
- one programmable NO output 5A/250VAC,
- on-off or time-lapse (from 0,5s to 4 hours) operation of the outputs,
- operating temperature range: -20 to +40°C,
- external dimensions: (L/W/D) 87/87/39mm.

CH8H

EIGHT CHANNEL UNIVERSAL RECEIVER

Operation with up to 40 Elmes made KEELOQ® hopping code transmitters and wireless detectors and eight relay outputs channels are the main characteristic features of the receiver. Designed for operation in alarm systems and access control this small size compact receiver is recommended for applications with required transmitter and detector identification or, where wireless devices need to be multi-channel interfaced with wired alarm environment. The receiver provides eight programmable and isolated form supply voltage NO/NC (NO-normally opened, NC-normally closed) relay outputs and one open collector type output S for connecting external signalling device. The output channels may be programmed for momentary (pulse) operation or latched (on/off) operation. The S output delivers two short pulses (two beeps) on any relay set and one (one beep) on any relay reset. The receiver comes with super heterodyne, highly sensitive radio signals receiving module and features built in bicolour LED used for power supply and programming steps indication. Eight signalling LED diodes indicate output relay set in channels. Other important features of the receiver include anti-sabotage TAMPER function alarming and low battery warning of all wireless detectors learned and operating with the receiver.

SPECIFICATION :

- EU standards compliant 433,92MHz super heterodyne receiver,
- power supply 12VDC ±15%,(20mA at standby, 40mA on relay set),
- eight relay outputs NO/NC handling 1A/24VDC or 0,5A/125VAC each,
- outputs' relay momentary mode from 0,5s up to 4 hours,
- anti-sabotage TAMPER switch with wire terminals,
- operating temperature range: -20 to +40°C,
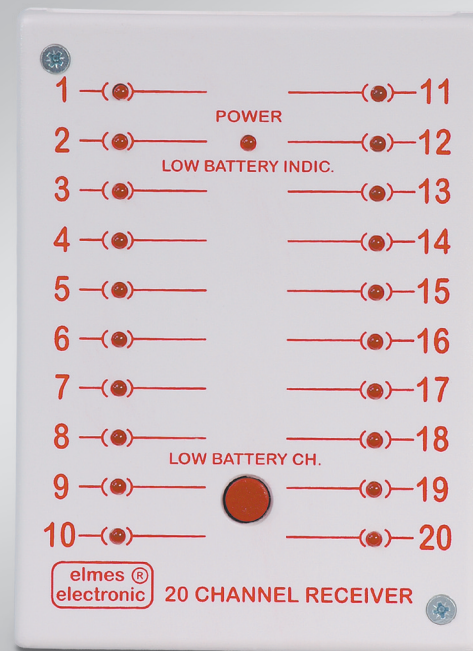- external dimensions: (L/W/D) 96/63/28mm.

TWENTY CHANNEL UNIVERSAL RECEIVER

CH20H

Operation with up to 60 Elmes made KEELOQ® dynamic code transmitters and wireless detectors and twenty relay outputs are the main characteristic features of the receiver. Designed for operation in alarm systems and access control this compact receiver offers transmitter and detector identification and can interface wireless devices to wired alarms. The receiver provides twenty programmable and isolated NO/NC (NO-normally opened, NC-normally closed) relay outputs and one open collector output S for external signalling device. The outputs may be programmed for momentary (pulse) operation or latched (on/off) operation. Except for channel 1 that may be programmed for standard on/off remote transmitter controlled operation, all remaining channel outputs can be set off (reset) only by the use of big red button in the centre of the receiver's front panel. This specific feature allows receiver's application in call up systems. The S output delivers two short pulses (two beeps) on any relay set and one (one beep) on any relay reset. The receiver comes with super heterodyne module and features built in bicolour LED used for power supply and programming steps indication. Twenty signalling LED diodes indicate output relay set in channels. Other features of the receiver include anti-sabotage TAMPER function and low battery warning of all wireless detectors learned to the receiver.
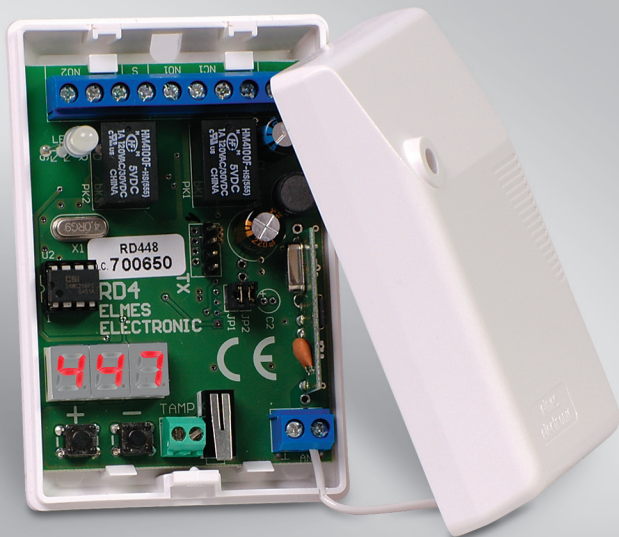
SPECIFICATION :

- EU standards compliant 433,92MHz super heterodyne receiver,
- power supply 12VDC ±15%, 35mA standby plus 25mA on each relay set,
- twenty relay outputs NO/NC handling 1A/24VDC or 0,5A/125VAC each,
- outputs' relay momentary mode from 0,5s up to 4 hours,
- anti-sabotage TAMPER switch with wire terminals,
- operating temperature range: -20 to +40°C,
- external dimensions: (L/W/D) 129/95/25mm.

RD448   RD1000

ACCESS CONTROL RECEIVER WITH USER IDENTIFICATION

There are two versions of this advanced microprocessor's controlled receiver. The RD448 can operate with up to 448 remotes while the RD1000 can operate with up to 1000 Elmes made KEELOQ® hopping code remotes allowing their identification number to be displayed on three digits panel. Both receivers feature two relay outputs for interfacing with other control equipment. Main application field of the receivers is access control in large premises such as housing estates, car parks and other areas of restricted access. Only the users of the remotes learned to the receiver's memory are allowed to access the premises remotely opening door, gate or car park security barrier. Both receivers allow system administrator to easy edit the remotes' memory by adding and removing single users without affecting its entire content. User is identified by memory cell number to which its remote is learned. There could be only one remote learned to single memory cell. The RD448 receiver exclusively is equipped with memory log of last 6144 events (dates, key-fobs numbers, used key-fob buttons). The content of this log can be PC computer read, displayed and stored. Unauthorised opening of the receivers' housing can be monitored with the help of TAMPER switch installed on receiver's board.

SPECIFICATION :

- EU standards compliant 433,92MHz super heterodyne receiver,
- key-fob transmitter memory: 448 (RD448) or 1000 (RD1000)
- power supply 10..35 VDC or 24VAC, max. current 100mA, standby 13mA,
- two relay outputs NO/NC handling 1A/30VDC or 1A/120VAC each,
- output S open collector type (1A/60V) for external signalling device,
- operating temperature range: -20 to +40°C,
- external dimensions: (L/W/D) 94/62/29mm.

FOUR CHANNEL CONTROL PAGING SET

RP501

This transmission set offers four channel data paging, suitable in remote control and security system applications. The set uses microprocessor with 64-bit signal coding and features up to 500m operating range. Even better range is obtainable with dipole UHF band TV antenna fitted with coaxial cable to the receiver. One receiver can operate with many transmitters. The transmitter is powered by 12VDC supply or 9V battery. The receiver is 12VDC powered and has four programmable NO/NC relay outputs. Output S (open collector) connects to external signalling device. Receiver features TAMPER switch and bicolour LED for programming and output status indication. The RP501 offers four operation modes: (1) Real time paging in which transmitter's signalling lasts as long as one of its inputs remain open; (2) Prolonged (best recommended in alarm systems) pulse paging lasting 15s or 40s (selectable) on any, even very short opening of any of transmitter's inputs; (3) Relay paging in which every change of transmitter's inputs state (input open or input close) is signalled and corresponding receiver's relay outputs activated exactly the same way; (4) Modified relay paging meaning that transmitter sends signals not only on every input state change (as in mode 3) but also it sends refreshing data every 80 seconds updating receiver's outputs as protection in case of power supply malfunction or radio interference.

SPECIFICATION :

transmitter (RP501T):
- EU compliant 433,92MHz transmitter with 64 bits data encryption,
- powered by 12VDC supply or alkaline 9V battery,
- external dimensions: (L/W/D) 94/62/29mm,

receiver super heterodyne (RP501Rhet): p. supply 12VDC ±15%, 100mA max.,
- four relay outputs NO/NC handling 60VA (128VAC/1A) each,
- operation with up to 60 transmitters in memory,
- operating temperature range: -20 to +40°C,
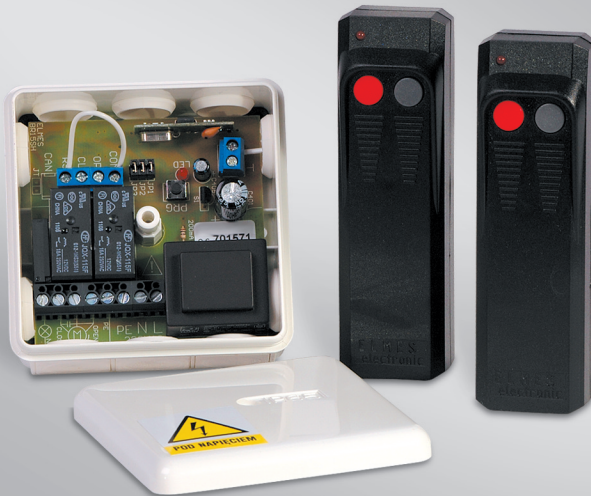- external dimensions: (L/W/D) 94/62/29mm.

NOTICE! When ordering transmitters and receivers separately please use ordering codes listed in brackets.

ST200H

CONTROL SET FOR ROLLERS AND GATES AUTOMATION
(up to 200m operating range)

   This wireless control set consists of control unit receiver and two double button 9V battery powered remote controls with KEELOQ® dynamic code encryption. The set is designed for window rollers and gates automation with up to 200m operation range. The control unit is 230VAC mains supplied and equipped with three power relay outputs with terminals for connecting roller or gate 230VAC electric motor and warning lamp. Other terminals are for wired control switch and optional infrared barrier. The panel is programmable and features number of practical functions including remote control operation with the use of one or two transmitter's buttons, automatic roller or gate closing after opening with programmed pause time and auto-opening function on obstacle signal received from infrared barrier while in closing mode. The control panel with its highly sensitive super heterodyne receiver module and hermetic housing is also suitable for outdoor installations and withstands wide range of operating temperatures. Optionally available is special version of the controller (ST200H-pz) featuring closed roller guard. On attempts to manually lift up a closed roller its motor is triggered to reverse action and holds the roller in closed position.

SPECIFICATION :

hand transmitter (DW200HT):
- EU standards compliant 433,92MHz transmitter,
- powered by alkaline 9V battery,
- external dimensions: (L/W/D) 113/33/21mm,

control unit with super heterodyne receiver (ST200HRhet):
- control unit power supply 230VAC (4VA),
- motor control outputs 2 x NO, 16A/250VAC,
- warning lamp output 5A/230VAC,
- programmable motor rotation and pause timing: from 0,5s to 4 minutes,
- operating temperature range: -20 to +40°C,
- external dimensions: (L/W/D) 87/87/39mm.

NOTICE! When ordering transmitters and receivers separately please use ordering codes listed in brackets.

CONTROL SET FOR ROLLERS AND GATES AUTOMATION
(up to 100m operating range)

ST100H

This wireless control set consists of control unit receiver and two miniature remotes with KEELOQ® dynamic code encryption. The set is designed for window rollers and gates automation with up to 100m operation range. The control unit is 230VAC mains supplied and equipped with three power relay outputs with terminals for connecting roller or gate 230VAC electric motor and warning lamp. Other terminals are for wired control switch and optional infrared security barrier. The panel is programmable and features number of practical functions including remote control operation with the use of one or two remote's buttons, automatic roller or gate closing after opening with programmed pause time and auto-opening function on obstacle signal received from infrared barrier while in closing mode. The panel features also sensitive super heterodyne receiver and hermetic housing suitable for outdoor installation withstanding wide range of operating temperatures. Optionally available is special version of the controller (ST100H-pz) featuring protective closed roller guard. On attempts to manually lift up a closed roller its motor is triggered to reverse action and holds the roller in closed position.

SPECIFICATION :

key-fob transmitter (DWB100HT):
- EU standards compliant 433,92MHz transmitter,
- powered by miniature 12V GP23A type battery,
- external dimensions: (L/W/D) 50/36/14mm,

control unit with super heterodyne receiver (ST100HRhet):
- control unit power supply 230VAC (4VA),
- motor control outputs 2 x NO, 16A/250VAC,
- warning lamp output 5A/230VAC,
- programmable motor rotation and pause timing: from 0,5s to 4 minutes,
- operating temperature range: -20 to +40°C,
- external dimensions: (L/W/D) 87/87/39mm..

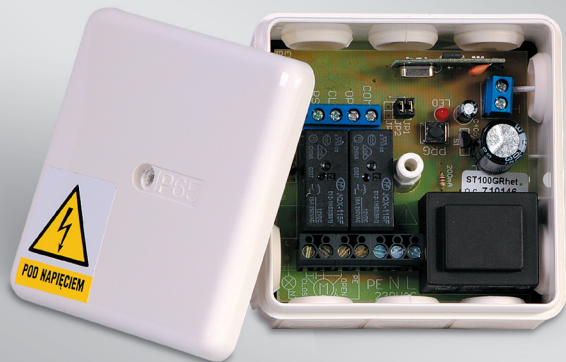NOTICE! When ordering transmitters and receivers separately please use ordering codes listed in brackets.

ST100GR

WIRELESS ROLLER CONTROL UNIT WITH GROUP CONTROL FUNCTION

With enhanced software and included series CAN bus adapter, this specially designed wireless unit can control operation of either single or a group of window rollers. The control unit is 230VAC mains supplied and equipped with two power relay outputs and terminals for connecting roller 230VAC electric motor, wall switch and the CAN bus twisted wire. There are also D/N terminals for external clock input controlling closing and opening rollers at preset times. The unit can be operated by wired wall switch or any Elmes made remote control transmitter. When controlled by remotes, it may be set for operation with the use of one or two transmitter's buttons. When chosen as master control unit with group control function set on, it can sequentially (with 0,5s intervals) close or open a group of up to 42 rollers operated by the same type control units connected to the CAN bus. With the Elmes CH32HT multi-channel transmitter learned to the master unit, up to 30 window rollers can be wireless controlled individually with two control channels of the transmitter reserved for opening and closing control of the entire group of rollers. The control unit device features highly sensitive super heterodyne receiver and withstands wide range of operating temperatures.
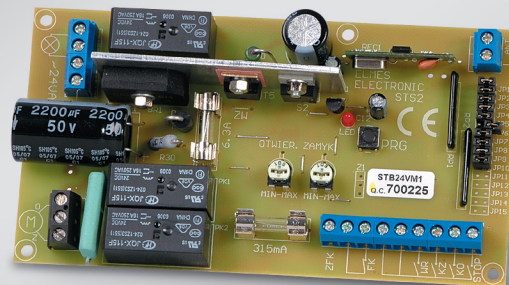
SPECIFICATION :

- EU standard 433,92MHz band super heterodyne receiver,
- control unit power supply 230VAC (4VA),
- up to 64 roller control units connected to CAN bus,
- up to 42 roller control units in one group,
- maximal CAN bus length up to 500m with twisted wires,
- motor control outputs 2 x NO, 16A/250VAC,
- warning lamp output 5A/230VAC,
- programmable motor rotation timing: from 0,5s to 4 minutes,
- operating temperature range: -20 to +40°C,
- external dimensions: (L/W/D) 87/87/39mm.

CONTROL PANEL FOR AUTOMATIC
SLIDING GATE WITH DC MOTOR

STB24VM1

This advanced remotes' operated panel is designed to control 24VDC motor powered sliding gate operation. The panel features sensitive super heterodyne receiver module and accepts wireless control by up to 112 Elmes Electronic made KEELOQ® code-hopping remotes learned to its memory. The change of the gate movement direction is obtained by reversing 24VDC voltage polarity supplied to the motor. Main functions and features of this control unit include: gate's slow down movement protecting against mechanical disorders; pulse opening to loosen gate's tension in closed position; obstacle caused overload protection separately adjusted for opening and closing movements; automatic close function after programmed pause time and parking mode of operation. The terminals provided on panels board allow connecting end-of-line NO or NC type switches, courtesy lamp or gate movement warning lamp and photo/infrared NC type protection barrier. Other features include gate's closing signalled by three seconds warning lamp prior to gate movement and programmable motor operation time protecting against end of line switch failure. For outdoor operation the panel requires installation in a hermetic box housing.

SPECIFICATION :

- standard 433,92MHz band super heterodyne receiver,
- power supply 24VDC, 100mA at standby & max. motor current 6,3A,
- adjustable overload current sensing protection in range of 2..7,5A,
- courtesy/warning lamp power 40W maximum,
- programmable pause/lamp on time from 1 to 255 seconds,
- programmable motor operation time from 1s to 60 minutes,
- operating temperature range: -20 to +40°C,
- external dimensions: (L/W/D) 140/75/30mm

ST6H

The panel is designed for wireless and wired control of up to 6 window rollers individually or as one group. The receiver panel is fully programmable and features six double-relay outputs for connecting up to six 230VAC inductive roller motors equipped with eol (end of line) switches for opening and closing rotation. With the use of any Elmes Electronic made transmitter, the panel may be remotely controlled. Best recommended are the CH8HT (eight channels) or CH32HT allowing wide operating range and group or individual control of each roller. As with other Elmes made control sets, used remote control transmitter (encoder) and the receiver (decoder) use KEELOQ® code-hopping technology securing high level of control code protection. The panel accepts also wire control of connected rollers. With the assistance of connected external matrix of switches any or all rollers may be opened or closed. Clock control is also possible with optional clock connected to D/N inputs of the panel.

SPECIFICATION :

- EU standard 433,92MHz band super heterodyne receiver,
- control unit power supply 230VAC (4VA),
- remote control with up to 32 Elmes Electronic transmitters,
- motor control outputs 12 x NO, 16A/250VAC,
- programmable motor rotation timing: from 0,5s to 4 minutes,
- operating temperature range: -20 to +40°C,
- external dimensions: (L/W/D) 186/137/47mm.

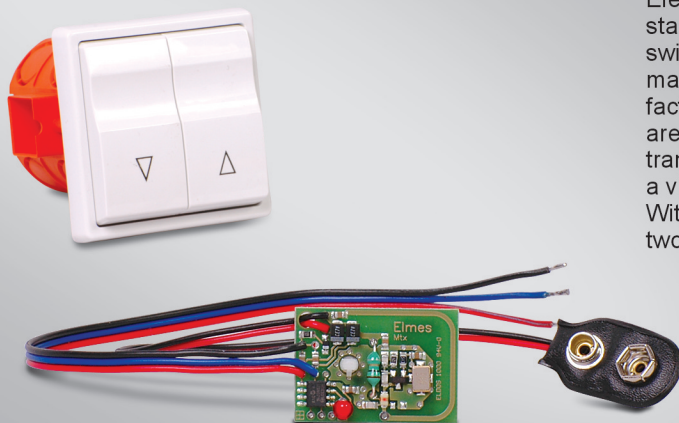# UNIVERSAL MULTI-CHANNEL HAND TRANSMITTERS

CH8HT   CH32HT

These 9V battery powered, 8 (CH8HT) and 32 (CH32HT) control channels hand transmitters feature up to 200 meters maximum operating range in open field. Used KEELOQ® dynamic code encryption secure highest protection level and operation with all Elmes Electronic receivers. The transmitters have universal activation meaning in remote control and security systems. They may activate sliding gate movement or switching on and off any device connected to receiver control panel as well as be used in access control to activate entery at many security levels. Both remotes have common designed electronic circuitry, the same colors of main control buttons and similar managing software. The difference lies in number of memory banks of available control channels. The CH8HT remote features two memory banks each having four control channels operated by four coloured buttons of the remote. The banks are selected by pressing small black switch on the side of the remote. The CH32HT model have two side switches for selecting control channel banks. Both remotes feature red LED diodes indicating selected control channels bank.

SPECIFICATION :

  - EU compliant 433,92MHz transmitters,
  - powered by alkaline 9V battery,
  - external dimensions: (L/W/D) 113/33/21mm,

MTX

Simple construction and mini size of this printed circuit board transmitter are advantages for its universal application in construction of any remote controlled system. The device is Elmes remotes compatible KEELOQ® dynamic code encryption transmitter and operates with all Elmes Electronic receivers. Maximal operating range in open field is 100m. As standard, it is 9V battery powered and could be installed in an ordinary wall switch for wireless control of window roller or a garage door with Elmes made ST.. series controllers. Its design is that of any remote except for the fact that it does not include any switches on board. Instead, couple of wires are provided for connecting to external switching devices that triggers transmission. The MTX may also be powered from alarm system and play a vital role in wireless security protection, alarm detection and signalling. With simple operation mode based on transmission triggerred by shorting two wire interface, there are numerous application fields for the device.

SPECIFICATION :

- EU compliant 433,92MHz transmitters,
- power supply by 9V alkaline battery or 12VDC 13,8VDC line,
- operating temperature range: -20 to +40°C,
- external dimensions: (L/W) 31/22mm.

MICROPROCESSOR CONTROLLED RADIO SIGNAL REPEATER

This microprocessor controlled repeater is designed for extending operation range of low power radio devices and features integrated transceiver allowing reliable receiving and retransmitting of selected radio signals in compliance with relevant R&TTE standards. Elmes TRX repeater identifies, stores and retransmits signals received exclusively from Elmes Electronic made transmitters. With long or large communication distance to cover many repeaters can be used in a chain or configured for simultaneous operation in large field. The repeater may be user set to retransmit data messages from all or selected Elmes devices offering multiple configurations and solving communication gap problems in wireless security and remote control applications. Weak radio signals may not be reliably detected at large monitored area by a receiver thus requiring one or more repeaters to secure wide area coverage. Other application examples include: harsh propagation conditions limiting practical operation range; required distance between transmitter and receiver being greater than operating range of radio equipment thus requiring retransmitting of signals; existing local object (wall, building, etc.) attenuating or reflecting wireless signals requiring repeater use to extend wireless devices operating range.
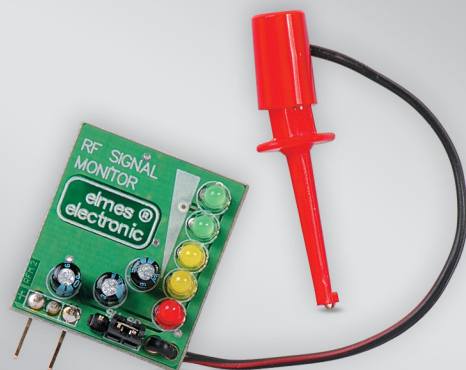
SPECIFICATION :

- EU compliant 433,92MHz band transceiver,
- power supply 8..15VDC, 20mA,
- maximum operating range 200m in open field,
- preset retransmission delay range: 0...8s,
- preset inactivity time range: 0..8s,
- operating temperature range: -20 to +40°C,
- external dimensions: (L/W/D) 58/32/19mm.

RFM2

RF Signal Monitor is a simple but useful gauge indicating level of radio signals received by Elmes receivers. Five colour LED scale of signal level enable the installer to evaluate optimal operation range of selected transmitter-receiver set. It will also indicate level of some other local radio signals that may interfere with Elmes transmitters and affect the operating range. Installation of the monitor is easy and needs the monitor power pins to be screwed in the supply terminals of the receiver while its test connector to be clipped to the receiver's board test terminal marked VP1. Installation example is shown on the photograph below. Five colour LED diodes are used as RF level indication elements in the monitor. The red diode is lit on as soon as power is applied while two orange and two green LED diodes are for RF signal level indication. Before any firm installation is made, the installer should test received signal level to determine effective operating range of the receiver-transmitter set. Maximal signal level and thus best operating performance is obtained when all five LED indicators are lit on. Only one green LED lit indicates still reliable operation. Insufficient signal level is indicated with only two or one orange LED diodes lit.
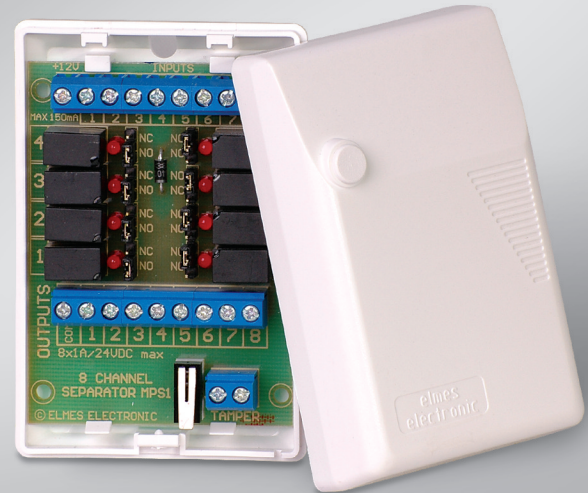
SPECIFICATION :

- power supply 10..15VDC ,
- operating temperature range: -20 to +40°C,
- external dimensions: (L/W) 31/22mm.

This control panel is designed for separated switching of up to eight signals coming from external security equipment, especially surveillance cameras. Eight isolated control inputs with common +11...15VDC supply allow switching of up to eight cameras, locks, sounders, etc., connected to outputs side with one common (COM) point. The panel outputs can be individually preset by the user to NO (normally opened) or NC (normally closed) at standby operation with the use of jumpers provided for each of the eight relays. In addition, all relays are equipped with LED "set on" indication simplifying installation and marking of channel in use. The board is protected against reverse power supply and each of the eight relays is diode protected against surge voltages. The outputs relay are capable of carrying up to 1A/24VDC or 0,5A/125VAC rated loads.

SPECIFICATION :

   - eight isolated relay control channels for supervision cameras,
   - output relay rating (1A/24VDC or 0,5A/125VAC),
   - input power supply is 11...15VDC, 150mA maximum,
   - anti-sabotage TAMPER alarm switch,
   - operating temperature range: -20 to +40°C,
   - external dimensions: (L/W/D) 78/58/15mm.

WSS

The WSS is supervised outdoor signalling device providing loud intrusion alarm as well as arming and disarming confirmation sounds allowing home or property owner to arm and disarm alarm system from outside using a key-fob transmitter just like setting on & off any car alarm. Design of the WSS is based on microprocessor control and transceiver communication with the control panel featuring remote setting of the siren functions from control panel's keypad. Two way communication between the siren and corresponding Elmes CB32 control panel secures commands and monitoring signals receipt and confirmation as well as anti-sabotage notification and alarming. Included in the siren 12V/1.2Ah accumulator is the premier source of power supply to the siren and the strobe light both in normal operation and in case of external power failure. The accumulator is charged from external not stabilized 12VDC/100mA power pack (included) plugged into 230VAC mains outlet. It may also be charged from wired alarm 13.8VDC power line or any 13.8VDC battery backup power supply.

SPECIFICATION :

- microprocessor controlled with EU compliant 433,92MHz transceiver,
- supervised two-way communication with arming and disarming signals,
- 115dB piezo siren & strobe light with Tamper protection,
- powered by 12V/1.2Ah battery charged by 230VAC/12VDC100mA pack,
- weather resistant with operating temperature range: -20 to +40°C,
- external dimensions: (L/W/D) 260/150/70mm.

GSM ALARM NOTIFICATION MODULE

Elemes GSM module is designed to replace commercial mobile phone used for CLIP or SMS alarm and event notification functions and is recommended for monitoring operation with Elmes CB32 control panel. The Elmes GSM module does not support voice communication and its operation with alarm control panel is based on responding to received AT commands requesting sending SMS notice or CLIP notification to defined in CB32 panel phone numbers. It includes backup battery and requires SIM card insertion to be connected to cellular phone network of selected operator. The GSM module battery is charged by the control panel and communication between the control panel and the module is supported by included wire interface ready to plug into the GSM input-output socket on board of the control panel. Programming notification phone numbers as well as setting user selectable alarming and reporting options are performed in the CB32 control panel. Easy installation and reliable operation of the GSM module in connection with the Elmes CB32 wireless control panel allow low-cost continuous monitoring of secured home or any other object even in remote locations without land based telephone lines.

SPECIFICATION :

- CE0681 approved SIM300CZ cellular network phone module included,
- AT commands (RS232 – TTL3,3V) communication with CB32 control panel,
- battery charging 5VDC/300mA, not required if operated with CB32 panel,
- operating temperature range: 0 to +40°C, strictly indoor use only,
- external dimensions: (L/W/D) 96/63/28mm without antenna mast.

NOTES :

Elmes CB32 panel basic connection diagram

CB32

GSM

VDC
+ −

TAMP GND EXT OUT1 OUT2 OUT3

Power Supply
230VAC/12VDC
300mA

ALARM
NC
3.3kOhm
TAMPER
NC
1kOhm
WIRED DETECTOR 1

3.3kOhm
ALARM
NC
TAMPER
NC
1kOhm
WIRED DETECTOR 2

Elmes GSM module
or
GSM Phone (see manual CB32)

NC = normally closed