



WIRELESS DYNAMIC CODE CONTROL SETS: UMB, AN, DW, DWB, DWM INSTRUCTION MANUAL

A set consists of radio receiver and one (AN and DW sets) or two key-fob hand transmitters designed for use in radio remote control and access control systems. Dynamic encoding of the control transmissions use the *KEELOQ*[®] hopping code technology ensuring highest level of security with encryption keys and code combination programmable but read-protected. The keys can only be verified by the receiver after programming operation. Number of transmitters used in one standard set is limited to 12 and programming 13th will delete 1st, etc. Deleting from the receiver's memory of one or more of lost or stolen key transmitters requires deleting of all transmitters (in one simple programming operation described further) and learning by the receiver all of the remaining transmitters again.

The receiver provides programmable and galvanic separated NO/NC relay outputs and external sounder/beeper control output S delivering two pulses on relay set and one pulse on relay reset. The channels may be individually programmed for time lapse (0,5 sec. up to 4 hours) or latched (on/off) mode of operation. The receiver features built in bicolour LED for programming and relay output status indication. It should be installed indoor at 2-3m level high on non-metal or non-screening dry surface. Prior to firm installation practical operating range tests are recommended. Low battery warning in hand key transmitters is indicated either by its LED illumination dimming or blinking.

The sets are delivered ready to install with pre-programmed hand transmitters and receiver decoder in time lapse output mode of operation with short reset time of the relays. To change the receiver's relay output mode of operation to latched or learning/deleting hand transmitters requires performing one or more of the programming procedures described further.

PROGRAMMING PROCEDURES

Prior to programming make sure the receiver's LED lights red, otherwise shortly disconnect the power supply.

1. Programming - learning transmitter(s) to receiver's memory (maximum 12):

- press receiver's **PRG** switch (LED lights green) for less than 3 seconds. Releasing the switch LED continues to light green indicating entering the programming mode of the decoder,
- press shortly hand transmitter switch once and LED changes colour to red,
- press shortly hand transmitter switch again and after 2 seconds LED changes colour several times ending the procedure.

2. Programming - setting channel/s to time-lapse output mode and reset time:

- press receiver's **PRG** switch (LED lights green) for more than 3 and less than 8 seconds. Releasing the switch LED light changes to red indicating entering this programming mode,
- press once hand transmitter switch (the one of the selected channel in two channel sets). Corresponding relay in the receiver switches on and counting of reset time is started,
- when desired reset time has lapsed (up to 4 hours) press the same transmitter switch shortly again. The relay switches off and after 2 seconds the receiver's LED changes the light colour several times confirming end of the procedure.

3. Programming - setting selected channel/s to latched (on/off) output mode:

- press receiver's **PRG** switch (LED lights green) for more than 3 and less than 8 seconds. Releasing the switch LED light changes to red indicating entering this programming mode,
- press three times transmitter switch (the one of the selected channel in two channel sets) in less than 2 seconds intervals. Corresponding relay in the receiver switches on and off and the receiver's LED changes the colour several times confirming end of the procedure.

4. Programming - deleting all transmitters from the receiver's memory:

press receiver's **PRG** switch (LED lights green) for more than 8 seconds until the receiver LED starts changing the light colour and then release the switch. The receiver's memory is cleared but the channels' programmed modes of operation remain unchanged. To learn new transmitter(s) to the receiver's memory follow procedure 1 above.

Important! Procedures 2, 3 and 4 can be performed with the use of transmitter(s) programmed to the receiver's memory.

SPECIFICATION:

- * ASK radio high security code-hopping receiver and one or two hand key transmitters (less than 5mW) set,
- * standard 433,92 MHz radio frequency and up to 200m (AN200H, DW200H)) operation range in open field,
- * one or two relay NO or NC outputs galvanic separated and handling up to 1A/30VDC or 0,5A/125VAC,
- * receiver relay outputs fully programmable for time lapse or latched (on/off) operation,
- * bicolour LED (red/green) indication and TAMPER switch,
- * S terminal (open collector type 1A/60V) delivering pulses to external sounder on relay action,
- * receiver power supply is 12VDC \pm 15%, 20mA standby plus 25mA on one relay set.

CE - This product complies with the following European Community Directives:

The Electromagnetic Compatibility Directive 89/336/EEC. The Low Voltage Directive 73/23/EEC,

The Low Power Radio Directive ETSI 300 220-1

This product is certified by Z.R.T.O.M. TECHOM-PL for class "C" (AN set) and "B" security application.

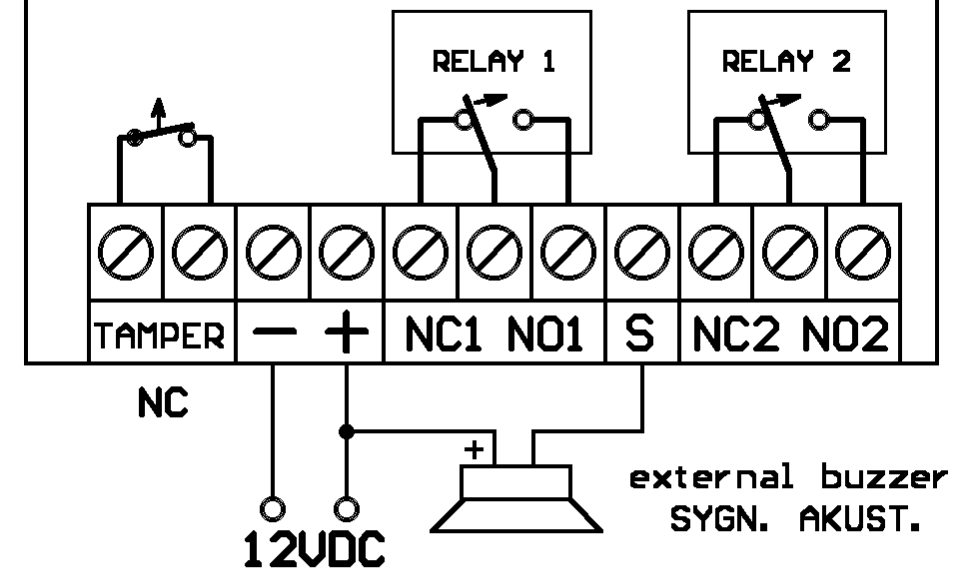
Warning! The S output (open collector type) cannot be connected directly to (+) of the supply voltage (see connection diagram).

Manufacturer's Warranty: Elmes Electronic remote control sets carry one-year 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 the user or installer as well as any changes in product's hardware or software caused by the user voids the warranty and all due repair costs will be charged.

Elmes Electronic reserves the right to change product specification without prior notice.

KEELOQ[®] is a registered trademark of Microchip Technology Inc., USA.

INSTALLATION GUIDE
SCHEMAT INSTALACYJNY



NC-normally closed outputs

-wyjścia zwarte (rozwarne po przelaczeniu)

NO-normally opened outputs

-wyjścia rozwarne (zwarne po przelaczeniu)