elmes® electronic

DOUBLE OUTPUT WIRELESS CONTROL SETS WITH DYNAMIC CODE
TYPE: DWB100HShet & DW200HSset (GB)

Wireless control set consists of radio receiver and one (DW200HShet) or two (DWB100HSset) key-fob hand transmitters designed for use in radio remote control and access control systems. Dynamic coding of control transmissions use *KEELOQ*® code hopping technology ensuring highest level of security. Number of transmitters used in one set is limited to 12 (112 in option). Learning 13th transmitter will delete 1st, etc. Deleting lost or stolen transmitter/s from the receiver's memory requires deleting all transmitters (in one simple programming step described further) and learning all of the remaining transmitters to the receiver again.

The receiver provides two NO/NC relay outputs, external sounder/beeper control output S and bi-color LED shining green on output 1 relay set and red on relay reset. The S output delivers two pulses shorting to ground on relay set and one pulse on relay reset. Operating range of sets may be limited by walls, metal screens, iron-concrete construction of buildings, or local radio interference. Prior to firm installation practical operating range tests are recommended. The level of received radio signals may be evaluated using Elmes RMF2 monitor connected to receiver. Receiver's relay outputs may be individually programmed to operate in one of the following modes:

1. **Time-lapse (pulse)** – JP1 shorted and programming procedure 2 performed. The use of transmitter's button sets on receiver's relay output to programmed time. Next use of button prolongs set on time. Constant pressing of button does not prolong set on time.
2. **Latched (on/off)** – JP1 shorted and programming procedure 3 performed. First use of button sets output on, second use sets output off.
3. **Supported real time** – JP1 opened. Pressing transmitter's button sets on relay's output for as long as the button is pressed. On button release the output sets off after programmed time delay support. The support protects output against unwanted disconnection intervals due to generated electric interference (e.g. by electric motors). Support time is factory set to minimum (0,25s). To prolong the support time programming procedure 2 must be performed. For precision setting of short support time eight fold longer time is allowed at programming. Example: to obtain 0,5s real support time, 4 to 4,5 seconds support time should be used at programming.

PROGRAMMING PROCEDURES

1. Learning transmitter(s) to receiver's memory (maximum 12):
- a) press receiver's **PRG** switch (LED lights green) for less than 2 seconds.
- b) press shortly hand transmitter button once and LED changes colour to red,
- c) press shortly hand transmitter button again and after 2 seconds LED changes colour several times ending the procedure.

2. Setting channel/s output to time-lapse (pulse) operation mode and support time:
- a) press receiver's **PRG** switch (LED lights green) for more than 2 and less than 8 seconds. Releasing the switch LED changes to red,
- b) press once hand transmitter button (the one of required output channel). Corresponding relay in the receiver sets on and support time lapse is started,
- c) when desired time has lapsed press the same transmitter button shortly again. The relay sets off and after 2 seconds the receiver's LED changes the light colour several times confirming end of the procedure.

3. Setting selected channel/s output to latched (on/off) operation mode:
- a) press receiver's **PRG** switch (LED lights green) for more than 2 and less than 8 seconds. Releasing the switch LED changes to red,
- b) press three times transmitter button (the one of corresponding channel) in less than 2 seconds intervals. Corresponding relay in the receiver switches on and off and the receiver's LED flashes green confirming end of the procedure.

4. Deleting transmitters in receiver's memory:

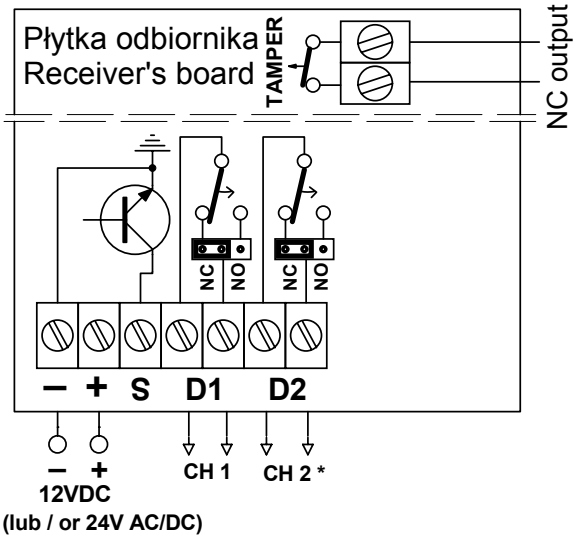
press receiver's **PRG** switch (LED lights green) for more than 8 seconds until the receiver LED starts changing the light colour and then release the switch. The receiver's memory is cleared but the channels' programmed modes of operation remain unchanged. To learn new transmitter(s) to the receiver's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

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

SPECIFICATION:

* ASK 433,92 MHz radio band high security code-hopping superheterodyne receiver and one or two hand key transmitters (<5mW),
* two relay NO or NC outputs galvanic separated and handling up to 1A/30VDC or 0,5A/125VAC,
* S terminal (open collector type 1A/60V) delivering pulses to external sounder on relay action,
* receiver power supply is 12VDC ±15%, 50mA.

WARNING! Output S (open collector type) **must not** be connected directly to (+) of the supply voltage!



*** występuje tylko w odbiornikach dwukanałowych (applies only to two channel receivers)**

Manufacturer's Limited Warranty. This product carries one year warranty as from the date of purchase. The warranty is limited to the replacement of faulty original parts or repair defects of improper manufacture. Damage, misuse or improper handling by the user or installer as well as any alterations in product's hardware or software caused by unauthorized person violet warranty obligations and all due repair costs will be charged. Elmes Electronic shall not be liable for any personal or material damage or loss resulting from any of its products direct, indirect or partial use or failure to operate properly.

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