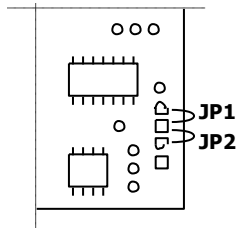


## MINIATURE SET/RECEIVER DWB50HM/DW200HM

Elmes Electronic DWB50HM set and DW200HM receiver is a miniature version of standard Elmes Electronic two output channel DW200H receiver/set with applied dynamic *KEELOQ*® hopping code technology ensuring highest level of control signal security. The receiver may be controlled by up to 12 (or up to 112 on option) Elmes Electronic 434MHz band compatible hand transmitters such as DWM50H, UMB100H, AN200H, DWB100H, DW200H, CH4H, CH4H-200, CH8H or CH32HT. Need of deleting one or more lost transmitters in the receiver's memory require deleting of all transmitters (in one simple programming operation described further) and learning all remaining transmitters again.

The receiver provides two programmable (pulse or on/off operation), galvanic separated NO outputs (user selectable to NC by solder joints made on board's SMT solder side – see installation schematic) and external sounder/beeper control output "S" delivering two pulses on any relay set and one pulse on relay reset. Installed bicolor LED indicates programming and relay output status indication. The "S" output is open collector transistor type and by shorting jumper **JP2** may be user set to signal operation in channel no one only. The DW200HM receiver may also be set to operate as single output channel receiver by shorting **JP1**. In that case, channel no one remains operational while channel two is not active.

**IMPORTANT!** Jumpers JP1, JP2 and NO/NC solder joints can be user changed by the use of low power soldering iron only.



### PROGRAMMING PROCEDURES

**Make sure the receiver's LED lights red otherwise shortly disconnect the power supply.**

#### 1. Learning transmitter to receiver's memory:

- press receiver's **PRG** switch (LED lights green) for less than 2 seconds.
- press shortly hand transmitter switch once and receiver's LED changes color to red,
- press shortly hand transmitter switch again, flashing LED in the receiver ends the procedure.

#### 2. Setting channel/s outputs to time-lapse (pulse) or latched (on/off) operation mode:

- This programming is possible only with the help of transmitter learned to the receiver.
- press receiver's **PRG** switch (LED lights green) for more than 2 and less than 8 seconds. LED light changes to red indicating entering this mode,
  - press once hand transmitter switch of the corresponding channel in the receiver. Relay in the receiver sets on and time-lapse counting is started;

##### In setting the output to time-lapse mode:

- After required time has lapsed (0,25s up to 2h) Press the same transmitter switch again – the relay sets off.

##### In setting to latched (on/off) mode:

- Press twice the same transmitter switch with time interval less than two seconds. The relay sets off.

- Flashing receiver's LED confirms end of the procedure.

#### 3. Deleting all transmitters from receiver's memory:

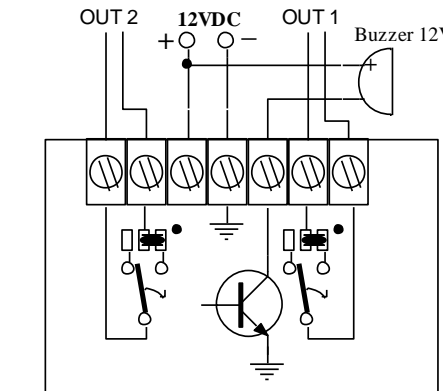
Press receiver's **PRG** switch (LED lights green) for more than 8 seconds until the receiver LED starts flashing and then release the switch. The receiver's memory is cleared but the channels' programmed modes of operation remain unchanged. To learn new transmitter(s) follow procedure 1 above.

### INSTALLATION:

It is advised that the DWB50HM/DW200HM receiver should be installed indoor on non-metal or non-screening dry surface. Prior to firm installation practical operating range tests are recommended.

The sets and the receivers are delivered ready to install with pre-programmed hand transmitters and receiver outputs in time lapse operation mode with short reset time. 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 earlier.

Installation schematic diagram of the DW200HM miniature receiver:



### SPECIFICATION:

- 433,92 MHz band code-hopping receiver & transmitters;
- two relay NO or NC separated outputs handling up to 0,5A/125VAC or 1A/24VDC;
- maximal number of learned transmitters: 12 (optionally 112);
- signal output S (open collector type 1A/60V) delivering signal pulses to external sounder;
- battery type used in DWM transmitters: 2 x CR1616;
- receiver power supply 10..15 VDC/50mA.
- manufacturer's CE conformity declaration.



**MANUFACTURER:** Elmes Electronic, Avicenny 2, 54-611 Wroclaw-PL.

**Manufacturer's Limited 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 vitiates the warranty and all due repair costs will be charged.

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