



# TWO CHANNEL RF REMOTE CONTROL SET



# **Table of contents**

Description	3
Features and specifications	4
Transmitter instructions	4
Receiver instructions	5

Let's get started!

Velleman nv hereby certifies that the device VM130 meets the essential requirements and all other relevant stipulations of directive ETS 300-220

For the complete conformity declaration check out : http://www.velleman.be/downloads/doc/ce\_vm130.pdf

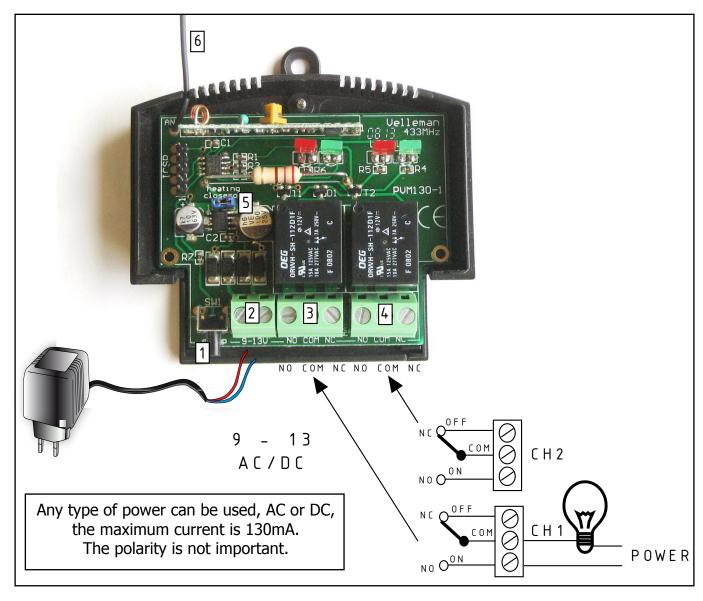
# **Description**

Disconnect relay outputs during setup!

- 1. 'Setup' button
- 2. 9 to 13Vac or 10 to 15Vdc input
- 3. Channel 1 output
- 4. Channel 2 output
- 5. Heating ON/OFF selection jumper
- 6. Antenna
- 7. Channel 1 indication
- 8. Mode / timer indicator CH1
- 9. Channel 2 indication
- 10. Confirm / timer indicator CH2



# Do not mount the unit in the proximity of other electronic devices or metal objects. Straighten the antenna!



# **Specifications**

## Receiver:

- power supply: 9 to 13 Vac or 10 to 15 Vdc / 130 mA max.
- selectable timers per output: 0.5, 5, 30 s / 1, 5, 15, 30, 60 min
- open field range of up to 30 m

#### Transmitter:

- 12 V battery type: V23GA, GP23GA...
- CE compliant 433 MHz operation
- over 1.000.000.000 combinations

# **Features**

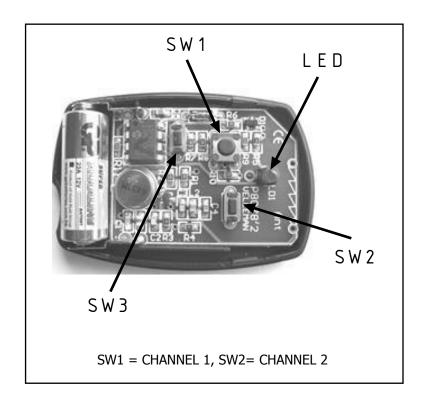
- two relay contact outputs (5 A resistive load)
- ON/OFF (toggle) or timer-mode (pulse)
- learning unique 32-bit random code
- up to 31 different transmitters can be stored
- code memory can be erased for safety purposes
- internal heating option for cold environment

# **Transmitter instructions**

The transmitter comes with a factory set default code.

# Open the enclosure:





# Changing the code:

- 1. Hold SW1 (left button).
- 2. Briefly press the 'program'-button (SW3) 3 times. The LED will flash 3 times.
- 3. Release SW1.
- 4. Your unique 32-bit code has been generated and stored.

### Return to the default code:

- 1. Hold SW1 (left button).
- 2. Hold the 'program'-button (SW3). After +/- 10s the led will flash 5 times.
- 3. Release both buttons.
- 4. Your code has been reset to the default code.

## **Receiver instructions**

Each transmitter generates a code that must be "known" by a receiver in order to operate. Proceed to the next step to store one or more transmitters in the receiver memory.

#### To learn a remote:

- 1. Connect the power supply to the receiver unit (see page 2)
- 2. Hold 'setup' button, 'MODE'-led (8) turns on after a few seconds.
- 3. Press any remote control transmitter button.
- 4. 'CONFIRM'-led (10) lights when the code has been grabbed.
- 5. Release 'setup' button.

If neccesary repeat steps 2 to 5 to learn the codes for other transmitters.

△ 31 transmitters can be stored. If memory is full, 'MODE' and 'CONFIRM' will flash simultaneously when 'setup' button is pressed (see also next page to erase the memory).

The relay outputs can be set to different modes, from a simple on/of contact to a short or long timer.

## Configuration of channel 1 'CH1' and channel 2 'CH2':

(Factory defaults: CH1: 1h timer, CH2: 0.5s pulse)

- 1. Connect the power supply to the receiver unit (see page 2).
- 2. Push 'setup'-button repeatedly to select CH1 (left) or CH2 (right) output relay.
- 3. Confirm with a long push (**'CONFIRM'** flashes 3 times). The selected relay will remain ON.
- 4. Push '**setup**'-button a number of times, depending on the desired mode (see table). At each press, '**MODE**' will flash a number of times, indicating the current mode
- 5. Confirm with a long push (**'CONFIRM**' flashes 3 times). The selected channel will turn off and the unit is ready for use.

If necessary, repeat steps 2 to 5 for the remaining channel.

 $\triangle$  The unit returns to normal operation when left idle for 10s.

Flashes	Mode
1 2 3 4 5 6 7 8 9	ON/OFF 0.5 s pulse 5 s timer 30 s timer 1 min timer 5 min timer 15 min timer 30 min timer 1 h timer

#### Use:

NOTE: Operate the transmitter during at least 2 seconds.

The left remote button controls CH1 relay, the right remote button controls CH2 relay. Each relay is equipped with a status LED. In '0.5s timer'-mode, a relay will remain on for as long as the remote button is held.

If a timer has been set for a particular channel, the relay will turn on when the button is pushed. When the preset time has elapsed, the relay will turn off. A timer can be turned off at any time by pressing the transmitter button again. As long as the timer is running, the corresponding led will flash.

In 'ON-OFF'-mode, the relay will toggle between ON and OFF every time a button is pushed.

IMPORTANT: To minimise the idle current, remove the heating jumper if the unit is used inside a car.

## To remove all learned remotes from memory:

- turn off the power (disconnect power supply)
- hold 'setup' button
- turn on power (connect power supply)
- 'MODE' and 'CONFIRM' start flashing
- release 'setup' after the LED's turn off

⚠ This process takes about 10 seconds.

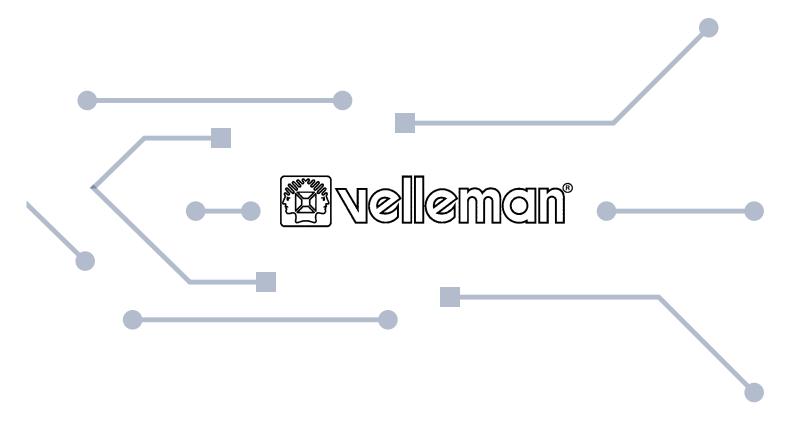
 $\triangle$  If the button is released before the LED's turn off, the memory will not be cleared.

The unit will now respond to the default code only. Please also reset the transmitter to the default code.

#### **WARRANTY**

This product is guaranteed against defects in components and construction from the moment it is purchased and for a period of TWO YEAR starting from the date of sale.

This guarantee is only valid if the unit is submitted together with the original purchase invoice. VELLEMAN components Ltd limits its responsibility to the reparation of defects or, as VELLEMAN components Ltd deems necessary, to the replacement or reparation of defective components. Costs and risks connected to the transport, removal or placement of the product, or any other costs directly or indirectly connected to the repair, will not be reimbursed by VELLEMAN components Ltd. VELLEMAN components Ltd will not be held responsible for any damages caused by the malfunctioning of a unit.







Velleman nv, Legen Heirweg 33 - Gavere (Belgium) Vellemanprojects.com ORDERCODE: VM130 REVISION: VM130'3

