UVR-2 Receiver Operating manual

I. Used terms

- Monostable output mode – turn on for programmed time after pushing the button
- Bistable output mode – switch to opposite (turn on or turn off) after pushing button
- Momentary output mode – turn on as long as the button is being pushed
- Manual control – operating controled by momentary buttons connected to UVR-2 board.

II. General information

Remote control receiver UVR-2 was made for universal use – remote or manual control of electrical devices of heavy 230V loads, up to 600W. UVR-2 is compatible with DTM remotes. Exemplary application: control of gate automatic, pomps, lightning, alarm system and more.

III. Technical data

- receiver supply 230 V AC
- superherterodyne receiver, work frequency: 433.92 MHz,
- dynamically variable code Keeloq gives high class safety
- two separated relay outputs, NO or NC, max load for each output 600W
- max peak current 16A/230V AC
- two manual control inputs
- three working mode: bistable, momentary, monostable (1s resolution for times up to 1 minute and 1min resolution for times from 1min to 127min)
- discretion with ascribing remote buttons to receivers outputs
- hardware interface with 6 diodes
- receiver's memory containing 35 remote controls of ZSP series
- remote radio range up to 150m
- single remote removing possibility
- working temperatures from -20 C to +55 C
- two enclosure versions: surface mounted, inside mounted, IP55
- dimensions: surface mounted enclosure: 89 x 89 x 52 mm or install box of 80 mm diameter, 40 mm depth

IV. Receiver installation

CAUTION!!
This installation should be made by a qualified service person and should conform to all local codes.
Device is designed to operate with high voltages.
Turn all power off while installing. System should be installed with safety, to minimalize potential risk of using.
Fitter is responsible for any presumptive damages.

1. Device description and installation

Receiver consists of main board and case. Main board contains: power supply, microprocessor user interface with LED diodes, buttons and jumper, executive circuit on two relays, terminal blocks for: power supply, controlled

devices, manual control buttons and aerial. Case has bottom and side weakenings to mount receiver and installation wires. After making hole in the receiver case mount rubber gland available in set.

2. Electrical connection

Power supply – 230V supply input. Power supply circuit should be fuse protected. Use cable suitable for controlled devices power.

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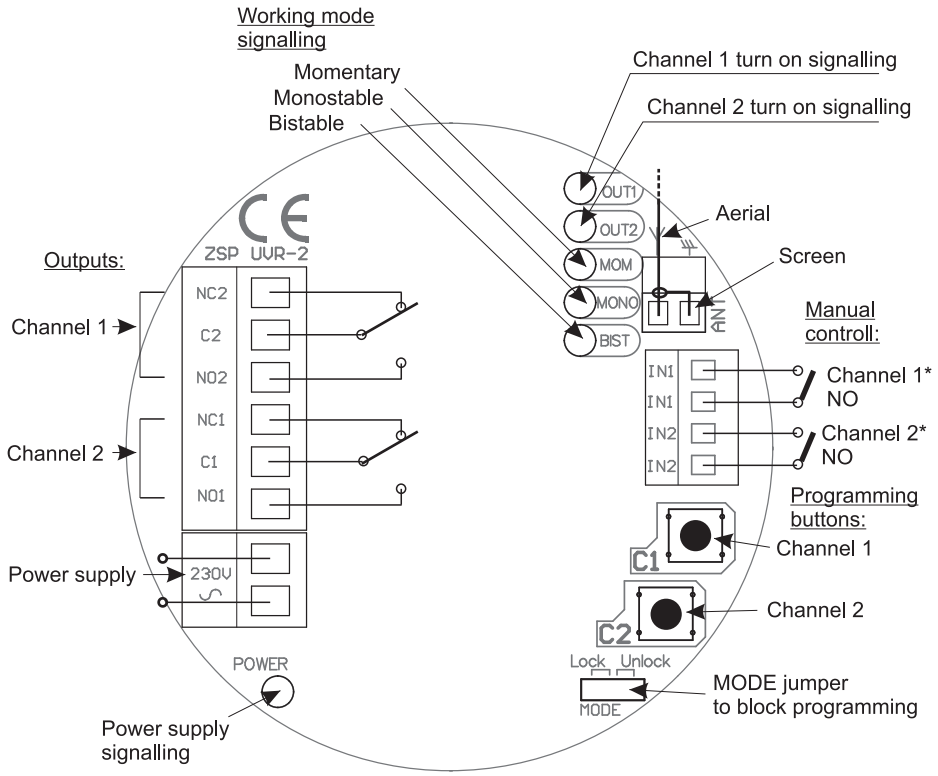
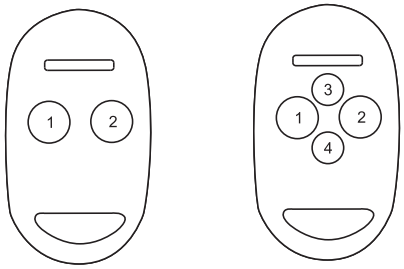
Channel 1 and 2 – two relay outputs NO/NC type. Max loads of 600W. Use cable suitable for controlled device power

IN1 and IN2 – information inputs (low voltage) NO type for manual control (of output 1 and 2). Manual control buttons are priority over remote buttons (manual control on prevents output remote control) That is why it is recommended to use momentary buttons only for manual control. Recommended cable - twisted pair.

Aerial – radio receiver aerial. Sturb aerial of 170 mm length is switched to aerial block in new receiver. To enhance radio range use outdoor aerial. Outdoor aerial's concentric cable should be switched to Y marked terminal block and ground marked terminal block.

Hints for making the radio range optimal:
- neighborhood of the energetic devices and metal elements will short the range
- radio interference from other sources will short the range
- avoid wet and concrete walls for mounting the receiver
- remember to remove old used batteries from remotes
- mount the receiver's outdoor aerial as high as possible
- use the good quality coaxial cable for making the outdoor aerial





*** Use only momentary buttons for manual control**

Fig. 1 Receiver board scheme

Fig. 2 DTM System remote controls

V. Programming

Universal receiver has capability of programming that influence it's working mode. Before programming fimilarize with **fig. 1**. Next to LED diodes there are short descriptions of signaling function. Output channels can be controlled by remote control buttons or momentary buttons switched to manual control inputs. Manual control is priority mode over remote control mode.

Special **MODE** jumper (fig.1) to secure from unwanted programming must be in ***UNLOCK*** position for availability of all programming functions. If **MODE** jumper is in **LOCK** position only remote registering function is available. (point 1)

1) Remote control registering

Remote registering is to assign remote button to receiver output.

Button registering

Push and hold chosen output programming button (C1 or C2), push chosen remote control button. LED diode **OUT1/OUT2** will blink.

Remarks! Releasing output button (C1/C2) before remote control button pushing cause output working mode programming. (point 3) To quit working mode programming function push shortly next output button.

2) Single remote control removing.

To remove single remote control from receiver's memory push and hold simultaneously both programming output buttons **(C1/C2)**. All LED diodes will blink. While diodes blink push any button of remote control that you want to remove. Diodes wane and remote control will be removed.

3) Output Working mode change (C1/C2) to bistable or momentary

Output factory settings:
C1 output working mode – bistable
C2 output working mode – monostable (0,5s)
For monostable mode check **point 4**

To change working mode C1 or C2, push and release chosen output button (C1/C2), red LED diode will light (OUT1/OUT2) and yellow LED diode which shows actual working mode will light. Push output channel button several times to set desired working mode. Yellow LED diode with MOM sign for momentary mode, BIST sign for bistable, MONO sign for monostable (check point 4) To approve working mode push and hold output button (C1/C2). Red LED diode which shows edited output will blink and wane. Working mode is registered.

4) Output working mode change (C1/C2) to monostable

For monostable mode push and release chosen output button (C1/C2), red LED diode will light (OUT1/OUT2) and yellow LED diode which shows actual working mode will light. Push several times output button (C1/C2) to set monostable mode, signalized by yellow LED diode with MONO sign. To approve push and hold edited output button (C1/C2). LED diode with MONO sign wane and than start to blink. Hold button (C1/C2) for wanted turn on time and release button. Number of LED diode blinking set time in seconds (or minutes if after releasing in short time button is being pushed for second again).

Remarks! To set turn on time 0,5s release C1/C2 button before yellow diode with MONO sign start to blink.

Receiver's memory formating

To format receiver memory push and hold simultaneously C1 and C2 buttons. All LED diodes will pulsate. Release buttons when LED diodes wane (after about 15 seconds). Receiver memory has been formated.

Remarks! Format is irreversible. All remotes will be removed and receiver return to factory settings (channel 1 in bistable, channel 2 monostable 0,5s turn on time)

V. Examplary electric scheme

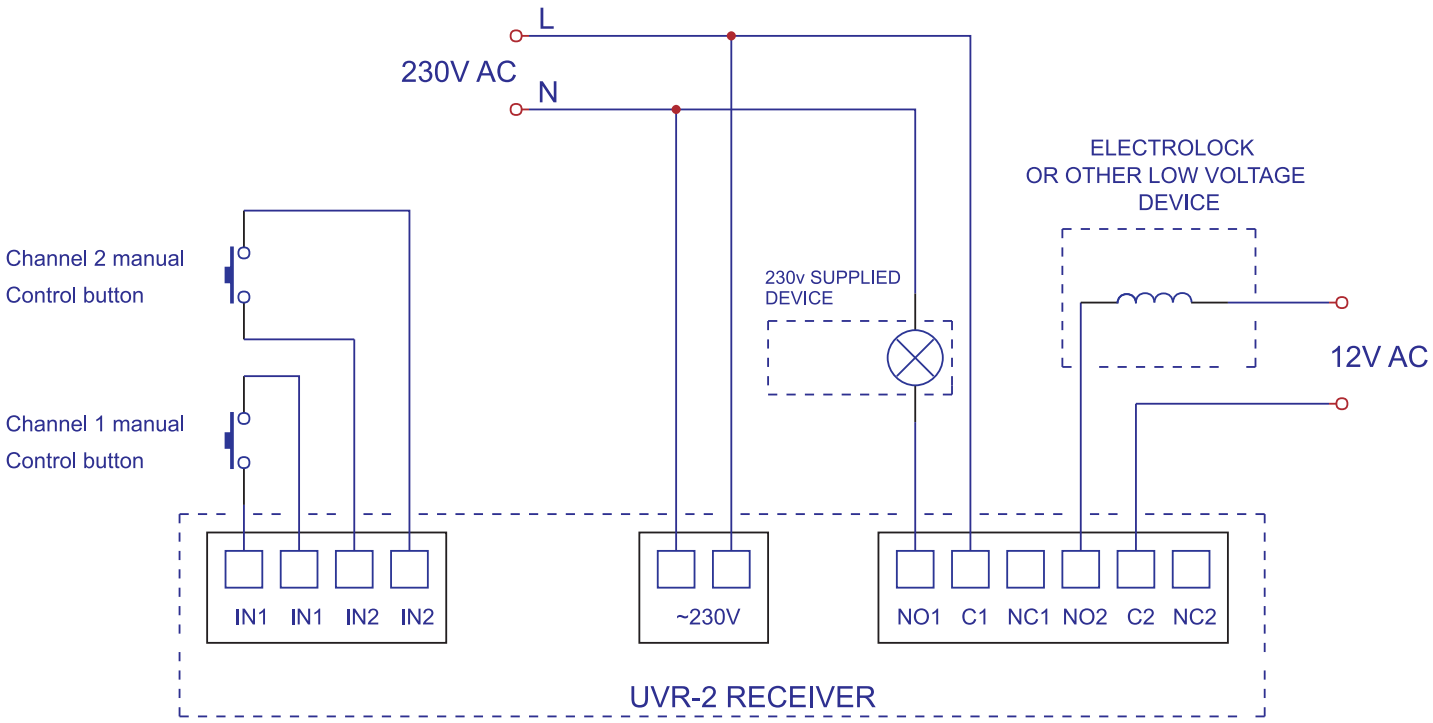


Fig.3 UVR-2 receiver and electrical devices conection exemplary scheme

VII. Warranty

DTM System provides operational and ready to use devices. The producer gives 24 months warranty from the selling date to the end customer. This time is counted according to the producer warranty labels or serial numbers placed on every product. Producer obliges himself to repair the device for free if during the warranty period there are problems which come because of his fault. Broken device should be supplied on customer's expense to the place of purchase and enclose clear and brief description of the breakage. The cost of mount/dismount is covered by the user. The warranty does not cover: batteries in the remote controls, faults caused by improper usage, user self repairs and adaptations, lightning strikes, voltages or short circuits in the electrical grid. Appropriate legal acts regulate details of the warranty.

VII. Declaration

CE

DTM System hereby declares that the radio receiver complies with Directive 2014/53 / EU. The full text of the EU Declaration of Conformity is available at the Internet address.

www.dtm.pl

The intention of the WEEE Directive (Directive 2002/96/EC on waste electrical and electronic equipment) is to reduce the amount of hazardous substances in waste. The underlying purpose is to promote the avoidance, recovery and risk-free disposal of waste.