

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


VII. Warranty

DTM System checks all the devices before shipping. The warranty time is 24 months from the selling date. This time is counted according to the warranty label. The manufacturer will fix all the problems which come because of his fault. Non functioning device should be delivered back to the distributor with short problem description. The cost of mount/dismount is covered by user. The warranty do not cover: batteries in the remotes, faults caused by improper usage, user self repairs and adaptations, lightning strikes, over voltages or short circuits in the mains supply. Appropriate legal acts regulates details of the warranty.



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.

VII. Declaration

Declaration of conformity		Nr 01/2006	CE
Manufacturer: DTM System, ul.Brzeska 7, PL 85-145 Bydgoszcz			
Product: Remote control receiver, ZSP series, model: UVR-2			
Description: Radio receiver with coded transmission, 2 controlled outputs, working frequency: 433.92MHz. Supplied with 230VAC. Works with radio remote controls, battery supplied, 2 or 4 button versions (NEO 4-P, NEO 2-P, TIP). Device can control low voltage devices like gate automatics, intercoms, alarm systems.			
Product is compatible with European Directives: R&TTE 99/5/EC			
Radio device in CLASS 1 according to R&TTE			
Product is compatible with harmonized norms: R&TTE: EN 300 220-1; EN 300 330-3 EMC: EN 301 489-1; EN 301 489-3 LVD: EN 60950-1:2001			
Acceptance procedure: Receivers and remote controls were tested during internal production tests according to R&TTE 99/5/EC directive (annex II). In addition, according to annex III of the same directive, devices were tested in detail using equipment mentioned in harmonized norms. All tests were passed. Additional confirmation for this and related products was carried out by Instytut Łączności, Szachowa 1, PL 04-894 Warszawa			
Bydgoszcz, Poland	01-04-2006	Owner Daniel Kuiwaiski	

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 controlled 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, pumps, 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!!

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 minimize 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.

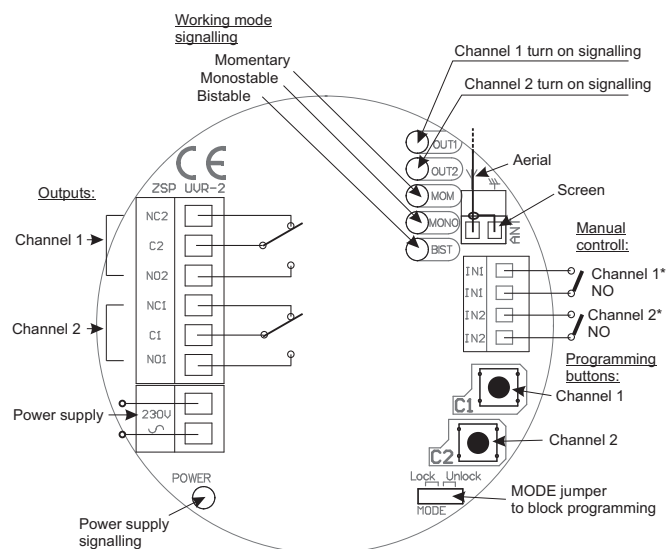
Channel 1 and 2 – two relay outputs NO/NC type. Max loads of 600W. Use cable suitable for controlled device power

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

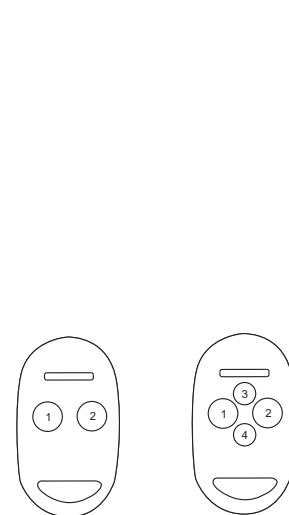


Fig. 2 DTM System remote controls

V. Programming

Universal receiver has capability of programming that influence it's working mode. Before programming familiarize 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 then 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 formatting

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 formatted.

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)