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RECEIVERS TVRCL868A04

Attention!

The subject appliance must be installed only by qualified technical personnel in compliance with the standards. All connections must be rated for a single-phase power supply of 230V. For the disconnection from the power line, use an all-pole switch with contact with an opening of at least 3mm. Only suitable materials for the connections must be used to guarantee insulation that complies with current standards on the subject of electrical safety. The programmer carries out movement commands by radio; all the necessary safety devices are to be seen to separately. The appliance is not intended for use by people (including children) with reduced physical, sensorial or mental facilities, or with a lack of experience or knowledge, unless they are supervised by a person responsible for their safety or instruction concerning the use of the appliance. Children must be supervised to ensure that they do not play with the appliance.

The earth wire must be longer of the other wires because it must be the last to break off if the cable clamps slacking.

The installation of the control unit has to be done by fixing the box vertically with the clamps downwards. It's necessary to mount the supplied cable glands or cable clamps with the same mechanical and protection features.

The line wire must have a nominal T temperature characteristic of 90°C.

The main power supply must have connecting cables with a cross section suitable for the load applied to the relays.

The connecting cables of the main power supply and of the loads must have adequate section and electrical isolation; their installation must comply with the standards on electrical systems.

Table showing (roughly) what are the typical values of maximum resistance for km and maximum tolerable current of a copper electrical wire, according to its section. Section (mm²) R (ohm/Km) Max. current (A)

1	19.5	5
1.5	13.3	10
2.5	7.98	16
4	4.95	26
6	3.30	32

If the line wire is damaged, it must be replaced by the millwright, by its technical assistance or by a person with a similar qualification in order to prevent risks. The equipment must be used only with loads in which its functioning does not create danger if they remain activated permanently.

GENERAL DESCRIPTION

Radio receiver with $10 \, A \, 230 \, V \sim$ relay contacts, transmitter channel memorization by means of an internal button or remote (via radio) using channel code addressing. Housed in an outdoor plastic box fitted with PG11 cable pipes. Centralised commands are possible allowing you to simultaneously switch on more than one appliance. Programmable relay functions: impulsive or ON/OFF.

It can be commanded either by standard radio controls or directly through commands sent from the TVLINK. The specific TVLINK codes are encoded directly by the manufacturer inside an EEprom memory module that maintains the information even in case of blackouts. They are also printed on the product label so they can be inserted into the TVLINK device. These codes cannot be cancelled or modified as they are an integral part of the receiver.

Each one of code ch1,ch2,ch3,ch4 command respectively the relè n° 1,2,3,4 while the "ALL" code command all relay at the same time.

The transmitter code can be inserted (memorised) either directly into the receiver or via radio from the transmitter. The second possibility allows you to insert new transmitters into an existing system without having to have the receiver on hand. This may be carried out easily by the user without the help of the installer whilst still guaranteeing the total secrecy of the code.

The user code is memorised under EEprom in the receiver which maintains the code information even when faced with blackouts.

Transmitters

The transmitters are encoded in the factory and each transmitter has its own unique code.

Caution! If you keep a channel button pressed down for more than 30 seconds the transmitter will automatically switch off.

The receiver is compatible with all transmitters of the TVLink range: TVTXV, TVTXP, TVTXC, TVTXK, TVTXQ, TVTXL, TVTXS.

Choosing the decoding method

Before powering up the system set the dip-switch SW1 to the desired function. SW1 functions (the "ON" position is indicated by the arrow on the dip-switch)

Dip 1 in the "OFF" position: the output which is associated to the relay n° 1 is impulsive type with 180milliseconds timeout.

Dip 1 in the "ON" position: the output which is associated to the relay n° 1 is bi-stable type.

Dip 2 in the "OFF" position: the output which is associated to the relay n° 2 is impulsive type with 180milliseconds timeout.

Dip 2 in the "ON" position: the output which is associated to the relay n° 2 is bi-stable type.

Dip 3 in the "OFF" position: the output which is associated to the relay n° 3 is impulsive type with 180milliseconds timeout.

Dip 3 in the "ON" position: the output which is associated to the relay n° 3 is bi-stable type.

Dip 4 in the "OFF" position: the output which is associated to the relay n° 4 is impulsive type with 180milliseconds timeout.

Dip 4 in the "ON" position: the output which is associated to the relay n° 4 is bi-stable type.

4- Memorization

Attention! The first transmitter must be memorized using the receiver (each time you start a new installation you should cancel the entire memory content by pressing MT in the receiver).

Each channel is associated with a button:

M1 with relay CH1, M2 with relay CH2, M3 with relay CH3, M4 with relay CH4.

4.1- Memorization single channel

The channels of transmitters will be memorised one by one.

- 1- Press and hold down one of the push-button M1, M2, M3, M4 of the receiver, the buzzer will sound continuously.
- 2- Transmit the channel which is to be memorised, once the channel is memorised, the buzzer will sound intermittently, release the push-button.

Repeat points 1 and 2 to memorise ulterior channels from receiver.

See paragraph 5 to memorise ulterior channels from transmitter.

4.2- Memorization couple of channels

The channels of transmitters will be memorised in couple.

- 1- Press for two times and hold down tone of the push-button M1, M2, M3, M4 of the receiver, the buzzer will sound continuously.
- 2- Transmit one of the couple of channel which is to be memorised, once the channel is memorised, the buzzer will sound intermittently, release the push-button.

Repeat points 1 and 2 to memorise ulterior channels from receiver.

See paragraph 5 to memorise ulterior channels from transmitter.

4.3- Memorization of ALL channels

The channels of transmitters will be memorised in couple.

- 1- Press and hold down the push-button MT of the receiver, the buzzer will sound continuously.
- 2- Transmit the channel which is to be memorised, once the channel is memorised, the buzzer will sound intermittently, release the push-button.

5- How to insert a transmitter via radio without having to access the receiver by means of an already memorized transmitter (memory indexing procedure)

The type of memorization of the channels (single, couple) depends on how the channel, which is used in point 2, has been memorized.

- 1) Press the button P3 located inside the already memorized transmitter. The enabled receiver sound continuously for 5 seconds.
- 2) Transmit a channel present in the memory of the receiver, in which the new code is to be memorized, within 5 seconds and the buzzer will interrupt the sound for 1 sec, and then carry on for another 5 seconds.
- 3) Transmit the new channel to be memorized within 5 seconds and once memorized the buzzer will sound intermittently.

To insert other transmitters another code repeat operations 1,2 and 3

If the receiver's memory is full it cannot be enabled and this will be indicated by the buzzer B1 sounding intermittently.

6- To cancel a code with the push button MT in the receiver

- 1- Press MT for two times at regular intervals within 5 seconds, buzzer will sound intermittently slowly.
- 2- Transmit the code which is to be cancelled, once it has been cancelled, buzzer will sound continuously.

 If the push-button MT will not be pressed for more than 1 sec. the receiver will turn to

If the push-button MT will not be pressed for more than 1 sec. the receiver will turn to the normal functioning mode.

6.1- To cancel via radio a code through a transmitter already set in the memory

- 1- Press "P3" for three times at regular intervals within 5 seconds, buzzer will sound intermittently slowly.
- 2-Transmit the code which is to be cancelled within 5 seconds, once the code has been cancelled buzzer will sound continuously.

To cancel ulterior codes repeat points 1 and 2 $\,$

6.2- To cancel all memorised coedes with the push button DEL in the receiver

Press MT for three times and hold it down for at least 10 seconds (during this period buzzer will sound intermittently and quickly) as buzzer will sound continuously. Release the button after completing the operation.

7- Errors during the memorising

If the code is not memorised it could be due to the following conditions:

- -The code already exists in memory
- -The memory is full (max. 42 codes). In this case the buzzer the Buzzer will make 3 bip each time the power is switched on and during the memorization.

Antenna

The correct installation and connection of the antenna is fundamental in order to obtain a good range for the installation. Connect a 8,5 cm piece of wire to the antenna pole connection on the device. As an alternative (and for better results) use a tuned antenna connected to the receiver via a coaxial cable RG 58 (impedance 50 Ohm) with a maximum length of 15 metres (mod. ANT868).

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