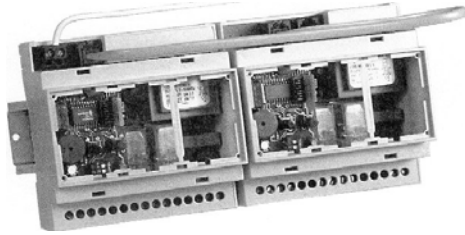


## DIGITAL RADIO CONTROL SYSTEM TVRCD868



### 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 3,5mm. 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.

### Product description

Superheterodyne radio control devices, with the carrier frequency in the UHF band controlled by quartz, for the remote control of electronic and electrical appliances in conformity with the laws and standards in force.

The type of rolling code transmission signal makes it impossible to duplicate.

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 and they are also printed on the label on the side of product (see Fig.1). Each one of code ch1, ch2, ch3, ch4 command respectively the relé n° 1,2,3,4, while the "ALL" code command all relay at the same time.

These codes cannot be cancelled or modified as they are an integral part of the receiver.

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.

The receiver has 4 channels 230V with 16 A relay, with ON/OFF and impulsive channels, for DIN rail guide. The relays can work or all ON/OFF or all impulsive.

The receiver will have a telephone plug in connector to connect it to another receiver of the same but without RF module.

The radio reception of the device can be jammed by some factors, such as:

- if there are radio-electrical jamming effects coming from other devices that transmit on the same frequency
- if the device is covered by metal components; use only plastic containers
- if the antenna wire is placed together with the feeding wires; place the antenna in such a way as it is the most possible far from electrical cables.

### 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.

### Receivers with radio

TVRCD868A04N 4-channel 230V receiver with 16 Amp. relays IP20

### Receivers without radio

TVRCD868M04 4-channel 230V receiver with 16 A relays IP20

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

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

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

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

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

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

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

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

Dip 5 in the "ON" position: during the memorizing phase from receiver (see paragraph) the transmitter channel is memorized as "single".

Dip 5 in the "OFF" position: during the memorizing phase from receiver (see paragraph) the transmitter channel is memorized as "couple".

### Code memorising

Memorizing with MEM is possible to command only one relay.

Memorizing with MEM TOT is possible to command all relay at the same time (only for bi-stable type channel).

### Single command memorizing

-To associate a command to channel 1: press the button MEM and hold down, the buzzer will sound continuously; press the channel which is to be memorized, the buzzer will sound intermittently and rapidly.

-To associate a command to channel 2: press twice the button MEM and hold down, the buzzer will sound continuously; press the channel which is to be memorized, the buzzer will sound intermittently and rapidly.

-To associate a command to channel 3: press the button MEM three times and hold down, the buzzer will sound continuously; press the channel which is to be memorized, the buzzer will sound intermittently and rapidly.

-To associate a command to channel 4: press the button MEM four times and hold down, the buzzer will sound four bip for four regularity times; press the channel which is to be memorized, the buzzer will sound continuously.

### Total command memorizing

-To associate a command to all channels: press the button MEM TOT and hold down, the buzzer will sound continuously; press the channel which is to be memorized, the buzzer will sound intermittently and rapidly.

When the code has not been stored:

- 1) The code is already in memory.
- 2) The receiver memory is full (the Buzzer will sound intermittently for 3 seconds).

### To cancel all memorised codes:

- 1) Press and hold down "DEL", after 0.8 seconds the buzzer will sound intermittently and slowly. At this point release button "DEL" and press it again within 0.5 seconds, hold it down for at least 10 seconds until either the buzzer sounds continuously. Release the button after completing the operation.

### To cancel a code:

- 1) Press and hold down "DEL" after 0.8 seconds, the buzzer will sound intermittently and slowly.
- 2) Transmit the channel which is to be cancelled, when the code has been cancelled the buzzer will sound continuously.

### 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 "B1" will sound intermittently and slowly.
- 2) Transmit the code which is to be cancelled within 5 seconds, when the code has been cancelled buzzer will sound continuously.

### How to insert a transmitter via radio without accessing the receiver when a transmitter is already memorised:

- 1) Press the button "P3" (of an already memorised transmitter). The buzzer will sound continuously for 5 seconds.
- 2) Press the button of a channel already in the receiver memory (you have activated the memory of the desired receiver) where you want to address the new transmitter channel. The Buzzer will stop sounding for 1 second and will begin sounding for 5 seconds. Unless desired, do not use channels with the centralised function to avoid storing the code in all receiver memories. Transmit the channel which is to be memorised within 5 seconds. When the channels is memorised the buzzer will sound intermittently

When the code has not been stored:

- 1) The code is already in memory.
- 2) The receiver memory is full (the Buzzer will sound intermittently for 3 seconds).

### Antenna

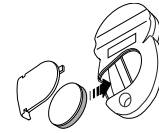
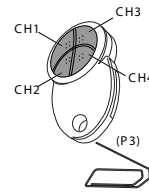
The correct installation and connection of the antenna is fundamental in order to obtain a good range for the installation. Connect a 8.5 cm piece of wire to the antenna pole connection on the device. As an alternative (and for better results) use a tuned antenna connected to the receiver via a coaxial cable RG 58 (impedance 50Ω) with a maximum length of 15 metres (mod. ANT868).

| Code Number:     | Series | Model number | Draft   | Date     |
|------------------|--------|--------------|---------|----------|
| TVRCD868A04N-M04 | RS868  |              | T117.01 | 20-03-06 |

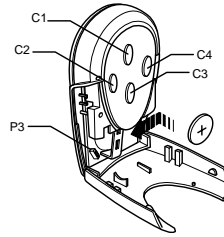
**RECEIVER**

- reception frequency 868.3 MHz
- intermediate frequency IF 10.7 MHz
- antenna impedance in input 50 Ω
- sensibility (finely tuned signal) 1 μV
  
- power supply 230 V ~
- maximum power consumption at reset 14 mA
- maximum power consumption with activated 1 relay 40 mA
  
- maximum commutable power at the relay with resistive load:  
 maximum voltage 230 V ~  
 contact on relay witch cos(φ)1 16 A
- excitation delay 150 ms
- dropout delay 300 ms
- operating temperature range -20° - + 55°C

**TVTXP**



**TVTXV**



**TVTXC**

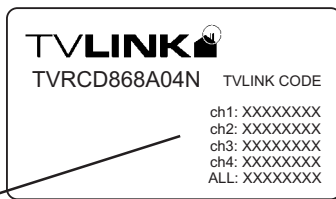
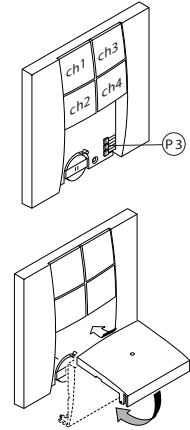


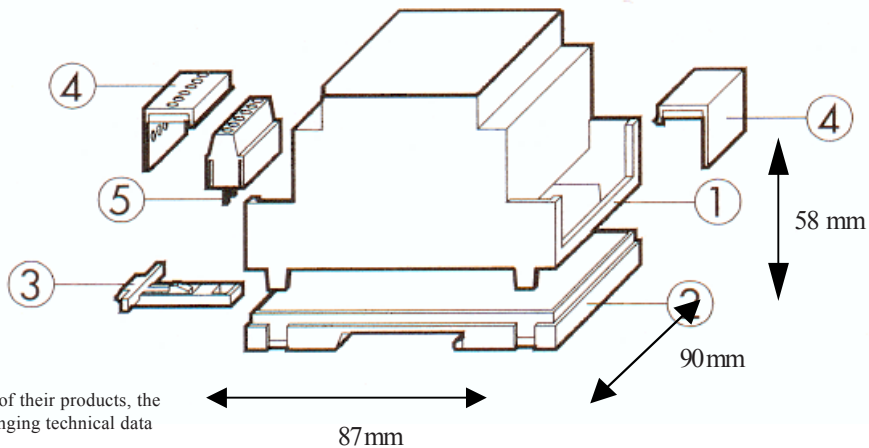
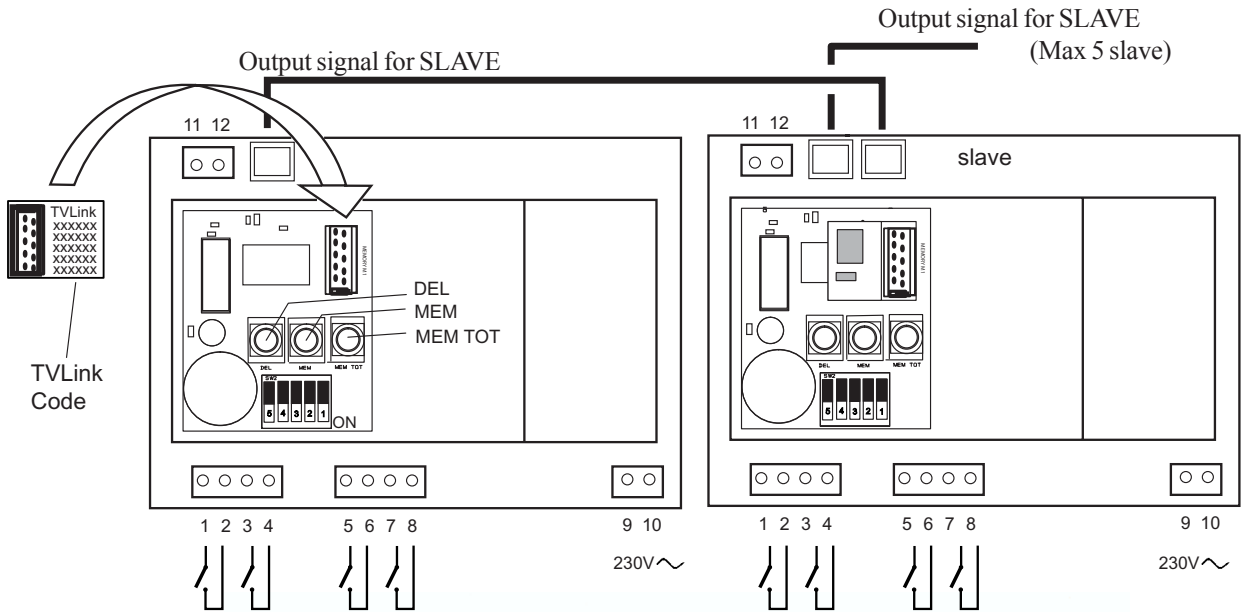
Fig. 1

TVLINK CODE: codes to be inserted in the TVLINK device in order to encode it.

**Terminal board connections**

- Relay n°1 Binding post n.1-2
- Relay n°2 Binding post n.3-4
- Relay n°3 Binding post n.5-6
- Relay n°4 Binding post n.7-8
  
- Binding post n.9-10
  
- Binding post n.11
- Binding post n.12

- Relay contact output N.O. channel CH.1
- Relay contact output N.O. channel CH.2
- Relay contact output N.O. channel CH.3
- Relay contact output N.O. channel CH.4
  
- Power supply input 230V ~ 1.5V/A
  
- Antenna mass
- Antenna pole



In the view of a constant development of their products, the manufacturer reserves the right for changing technical data and features without prior notice.