

Product code: TVRCL868A60 Radio receiver for ON/OFF commands of 230Vac loads 10A max.
Receiver for the remote control of 230V appliances up to a maximum resistive power of 2000W compatible with the TVLINK system.

Attention: before using the product, read carefully information on paragraph 5 (Warning).

The diagram illustrates the PCB layout for the GSM module. Key components and their locations are as follows:

- GSM MODULE:** Located at the top center.
- RF MODULE:** Located at the top right, labeled "not available".
- Fuses:** Four 10A 250V fuses are labeled L1, L2, L3, and L4, positioned along the bottom edge.
- Relays:** Four relays are labeled CH1, CH2, CH3, and CH4, positioned along the right edge.
- Connectors:** A 10-pin connector is located at the bottom left, and a 16-pin connector is at the bottom right.
- Antenna Input:** A 16-pin connector is labeled "antenna input (wire 8.5cm)".
- Power Supply:** A 10A 250V power supply is located at the bottom left.
- Earth Connection:** A 10A 250V earth connection is located at the bottom left.
- Relay Outputs:** Four relay outputs are labeled "Relay out L1", "Relay out L2", "Relay out L3", and "Relay out L4", each with a 230Vac output.
- Legend:** A legend at the bottom identifies the color coding for the components: Blue for N, Brown for L, Green for Earth connection, and Yellow for 230Vac.

- | | | |
|------|-------|--|
| DIP1 | - ON | L1 Relay with ON/OFF function |
| | - OFF | L1 Relay with impulsive function timeout 180ms |
| DIP2 | - ON | L2 Relay with ON/OFF function |
| | - OFF | L2 Relay with impulsive function timeout 180ms |
| DIP3 | - ON | L3 Relay with ON/OFF function |
| | - OFF | L3 Relay with impulsive function timeout 180ms |
| DIP4 | - ON | L4 Relay with ON/OFF function |
| | - OFF | L4 Relay with impulsive function timeout 180ms |

Code Number:	Series		Model number	Data
TVRCL868A60MR	TVLink RS868	Teleco Automation	Temporary	28/10/2013

2 - Transmitters memorization

The first transmitter can only be memorized using the receiver (you are advised to cancel the entire memory content at the beginning of each installation by pressing the MT button).

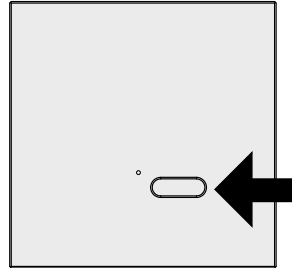
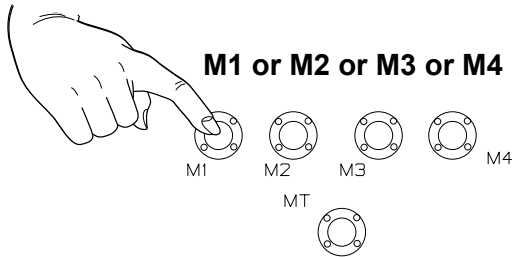
Each channel is associated with a button for the memorization:

M1 with relay L1, M2 with relay L2, M3 with relay L3, M4 with relay L4.

It's possible to memorize the same channel on different relays.

2.1 - Memorization single push-button

The push-button will be memorised one by one with dynamic function On-Off-On-Off or impulsive.



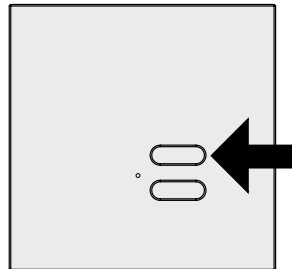
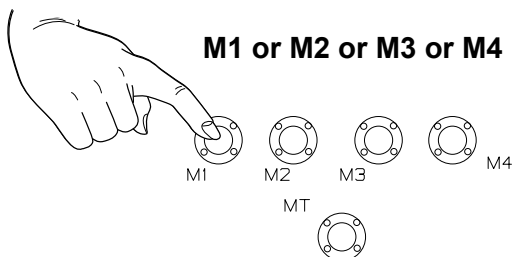
1- Press and hold down one of the push-button **M1** **o** **M2** **o** **M3** **o** **M4** of the receiver, the buzzer will make a beep each time and then sound continuously.

2- During the sound press the push-button which has to be memorised; the memorization is indicated by the intermittently sound of the buzzer.

2.2 - Memorization couple of push-button

The channels CH1-CH2, CH3-CH4, CH6-CH7 will be memorised in couple with following function:

CH1: On CH3: On CH6: On
CH2: Off CH4: Off CH7: Off



Use transmitters with at least 2 push-buttons.

In transmitters with 3, 6 and 7 push-buttons, push-button CH5 does not memorize.

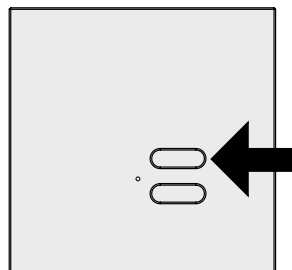
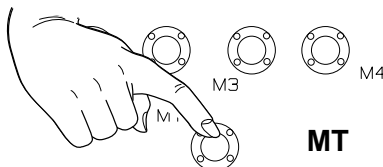
1- Press **twice** and hold down one of the push-button **M1** **or** **M2** **or** **M3** **or** **M4** of the receiver, the buzzer will make a beep each time and then sound continuously.

2- During the sound press one of the couple of channel which is to be memorised; the memorization is indicated by the intermittently sound of the buzzer.

2.3 - Memorization of group command (only couple push-button memorization)

The channels CH1-CH2, CH3-CH4, CH6-CH7 will be memorised in couple with following function:

CH1: On CH3: On CH6: On in all output with setted the on/of function (dip ON)
CH2: Off CH4: Off CH7: Off



Use transmitters with at least 2 push-buttons.

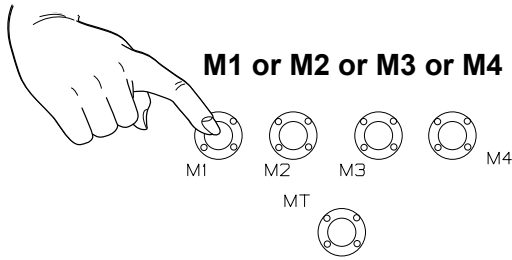
In transmitters with 3, 6 and 7 push-buttons, push-button CH5 does not memorize.

1- Press and hold down the push-button **MT** of the receiver, the buzzer will make a beep each time and then sound continuously.

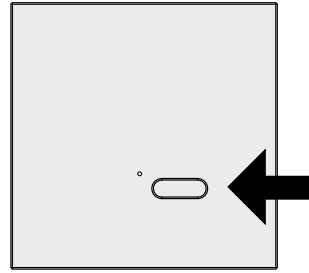
2- During the sound press one of the couple of channel which is to be memorised; the memorization is indicated by the intermittently sound of the buzzer.

2.4 - Memorization single timer controlled push-button

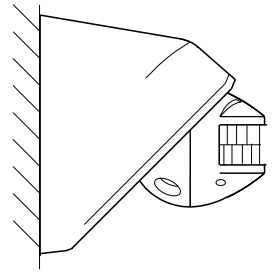
The push-button will be memorised one by one with timer controlled function.



1- Press **three times** and hold down one of the push-button **M1 o M2 o M3 o M4** of the receiver, the buzzer will make a beep each time and then sound continuously.

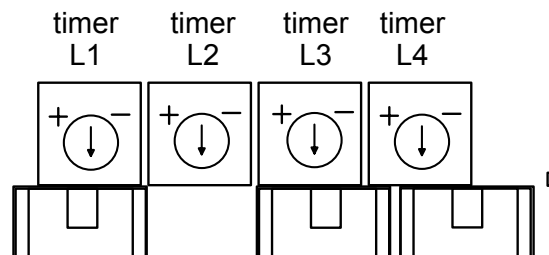


2- During the sound press the push-button which has to be memorised; the memorization is indicated by the intermittently sound of the buzzer.



Use this type of memorization for the motion sensor. Memorize the ON command. The timer is managed by the receiver.

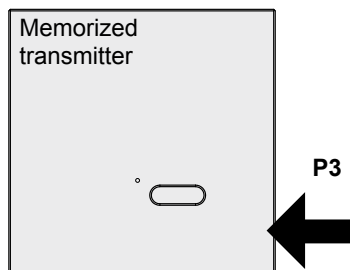
Adjust the value of the timer:
from 5sec. to 15min.



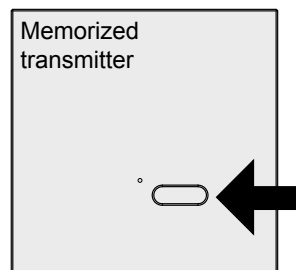
Every time that a radio command is received the timer starts to count the time.

2.5 - To copy a function of transmitter push-button to a new transmitter

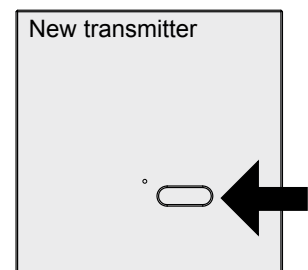
The new transmitter will have the same functions as the transmitter used for the memorization.



1- Press the button **P3** located inside the **already memorized transmitter**. The enabled receiver sounds continuously.

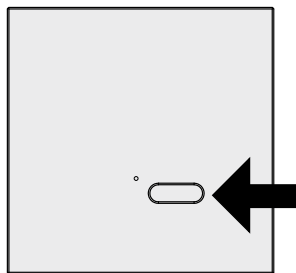
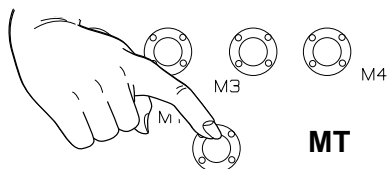


2- Within 5 seconds press a push-button of the **already memorized transmitter** from which the function has to be copied. The buzzer will interrupt the sound for 1 sec., and then will carry on for 5 seconds.



3- During the sound press the push-button of the **new transmitter** which has to be memorised; the memorization is indicated by the intermittently sound of the buzzer.

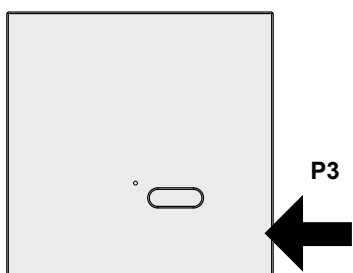
3 - To delete a transmitter from receiver



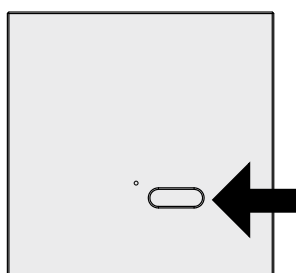
1- Press **twice** and hold down the push-button **MT** of the receiver, the buzzer will make a beep each time and then sound intermittently and slowly.

2- During the intermittent sound press the push button which is to be deleted; the deletion is indicated by the continuously sound of the buzzer.

3.1 - To delete a transmitter from transmitter

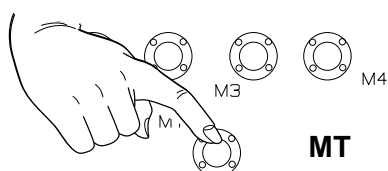


1- Press **three times** the button **P3** placed inside of the transmitter. Buzzer will sound intermittently and slowly.



2- During the intermittent sound press the push button which is to be deleted; the deletion is indicated by the continuously sound of the buzzer.

3.2 - To delete all transmitter



1- Press **three times** the button **MT** and hold down. The buzzer will make a beep each time and then will sound intermittently and rapidly.
2- Hold down the push-button for 10 seconds; after that the buzzer will sound continuously indicating that the memory has been cancelled.

4 - Errors during the memorising or deleting

If the code hasn't been memorised it could be due to the following reasons:

- the code already exists in memory.
- the memory is full.
- the indexing procedure has not been correctly started up.

If the code hasn't been cancelled it could be due to the following reasons:

- the code doesn't exist in memory.

Memory full or empty

If the memory of the receiver is full or empty the buzzer will sound three times either during the memorization phase or after the reset of the receiver.

5 - Warning



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 receiver only carries out ON/OFF commands and all safety devices required by the system must be prepared a part. Ground connection must be provided separately.

In the connection to power line and to outputs follow the indications of line and neutral. Connections wire must have a section suitable to the applied load.

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

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.

Must necessarily be fitted the cable glands provided or the cable glands with the same mechanical and safety characteristics.

The power cable must have a nominal characteristic of 90 ° C temperature T.

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.

The following table shows (roughly) the typical values of maximum resistance for km and maximum tolerable current of a copper electrical wire, according to its section:

Section (mm ²)	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 power cable is damaged, it must be replaced by the manufacturer or by the technical assistance service or by a similarly qualified person, in order to avoid all the risks. Use the appliance only with loads in which the functioning isn't dangerous in the case that they remain permanently activated.

The device's signal reception could be disturbed by several factors such as:

- the presence of electrical frequency noise being transmitted by other appliances working in the same environment and on the same frequency.
- appliances installed in metal containers or shielded from metal parts; only use containers made of plastic.

6 - TECHNICAL SPECIFICATIONS

-Power supply 230 V ~
-Relay out 10A 230 V ~ cos φ 1
4000W total maximum load *

-Reception frequency 868.3 MHz
-Intermediate frequency 10.7 MHz
-Sensitivity (finely tuned signal) 1 μV
-Operating temperature range -20° — +50°C

* The sum of the loads on the 4 outputs can not exceed 4000W
The product is characterized by outputs with 5A slow blow fuse protection. Verify, according to the applied load on each output, if its value is correct or if it should be replaced with a different value.

-The maximum number of transmitters that can be memorized is 42.