

## RECEIVER TVRGB868 CONTROLLING RGB LEDS WITH DIMMING FUNCTION

### Attention!

Connect the power supplier and the LED RGB in a correct way to the receiver before connecting the power supplier to the electricity network.

A faulty connection of the LED diodes (polarity inversion) could damages them, therefore pay attention during their connection by respecting the polarity.

### GENERAL DESCRIPTION

Electronic for the scenes regulation with LED RGB via radio and with external push buttons. Possibility to create scenes, ON/OFF control, automatic cycles of light variation with adjustment of the cycle time and the direction of the colours rotation.

Possibility to dimmer the selected light from the transmitter.

(see point 8)

- Separate 24 Vdc power supplier.

- Possibility to connect three different LEDs (RGB) with connection on 6 or 4 wires with common cathode.

### Models:

TVRGBD868A01 Master for 350mA Leds

TVRGBD868B01 Master for 700mA Leds

TVRGB868M01 Slave for 350mA Leds

TVRGB868N01 Slave for 700mA Leds

- Functioning:

a) by means of a 7- channel transmitter, or 1-channel transmitters.

b) by means of manual push buttons.

### Functions of transmitter channels

It is possible to memorise the channels of the transmitters individually or completely.

- **Individually:**

1) The channels of the transmitter are memorised individually, the colour changes at each impulse between the 8 pre-programmed colours. To turn off the colour, press the push button for more than 2 sec.

At each turning-on will restart the colour that has been previously selected.

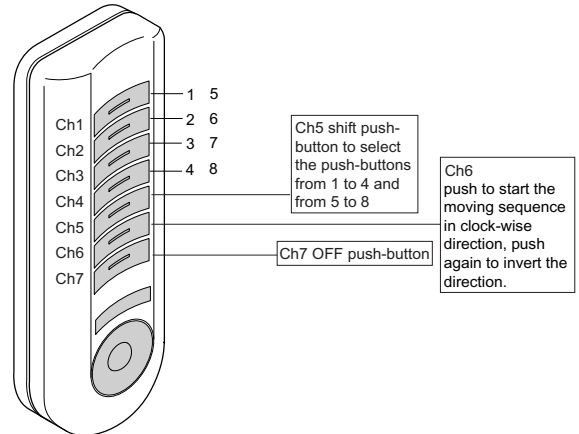
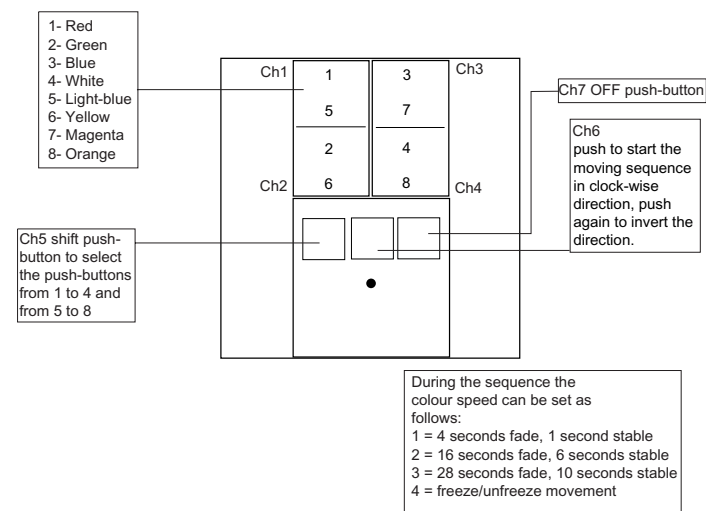
2) The channel of the transmitter operates only on the white light, with short impulses (<300 ms.) it turns the light on and off, by holding it pressed, increases or decreases the intensity.

At each turning-on will restart the intensity of white light that has been previously selected.

- **Completely:** This memorisation requires the utilisation of 7-channel transmitters, the functions of the push buttons are described on the pictures here below.

### 1- Functioning with 7-channel transmitters

a) The 4 first control channels can control up to 8 pre-programmed base colours which are changeable.



1= red, 2=green, 3=blue, 4=white, 5=light-blue, 6=yellow, 7= magenta, 8=orange

b) The first push button Ch5 selects the first 4 colours or the second 4 colours.

c) The push button Ch6 activates the automatic cycle of colour variation (point 2).

d) The push button Ch7 carries out the turning-off function.

### 2- Fonctionning of automatic sequence mode

This sequence activates automatically a colour variation, both in clockwise, both in anti-clockwise direction. The starting colour will be the last selected colour or the colour which is active in that moment.

#### Procedure to activate rotation

- Press the central push button Ch6, the turning-off and returning-on of the lights indicates that you have entered the mode, release the push button to start the sequence with rotation in clockwise direction.

- To change the rotation direction, anti-clockwise, push again Ch6, the control is signalled by the turning-off and returning-on of the lights.

When the sequence will be activated, the scanning speed between a colour and another one is taken from the last setting or of a default value of 4 sec., when you are in rotation mode it is possible to vary the scanning speed by pressing one of the channel push buttons with the following function:

Schedule 1:

Ch1= 4 sec. cycle, 1 sec. stationary on the light value

Ch2= 16 sec. cycle, 6 sec. stationary on the light value

Ch3= 28 sec. cycle, 10 sec. stationary on the light value

Ch4= stop the movement at the current light value/ restart the movement.

To turn off the sequence press the push button Ch7

Each selection is signalled by the turning-off and turning-on of the lights.

### 3- How to change the light value of one of the 8 pre-programmed on the transmitter

1- Press the channel with the colour which is to be modified, the light will turn-on on its value.

2- Press and hold down the automatic cycle- push button Ch6 for more than 4 sec., the light will turn off and return on one time after 2 sec. and a second time after 4 sec. which indicates that you have entered the new-colour-memorisation-mode.

After you have entered the mode, the colour variation will start with a speed of 4 sec. between a colour and the next one and a pause of 1 sec. at each colour, by pressing again the Ch6 push button it is possible to change immediately the rotation direction.

3- Press for 3 sec. one of the 8 colour push buttons in order to memorise the new light value, the light will turn off and return on for confirmation, afterwards you will turn back to the standard mode.

Code Number:	Series	Model number	Draft	Date
TVRGBD868	TVLink RS868		T271.03	15-11-07

4- If you want to leave the mode without memorising the new colour, press the turning-off push button Ch7.

#### 4- Functioning with manual push buttons

- Arrange three manual push buttons for a wire-control with the following functions:

##### a) Push button Ch1

It turns on the lights at the value previous the turning-off, when the lights are turned on, you can select with impulses in sequence one of the 8 colour values.

By pressing the pushbutton Ch3 the lights will turn off.

##### b) Push button Ch2

Activates an automatic cycle in clockwise direction.

-Press the push button Ch2, the turning-off and returning-on of the lights indicates that you have entered the mode, release the push button in order to start the sequence, clockwise direction.

- By re-pressing it, you will stop the rotation direction at the present colour value.

- By re-pressing it you will reactivate the rotation direction.

- By re-pressing it for more than 2 sec. you will change the rotation direction, anti-clockwise.

To turn off press Ch3.

##### c) Push button Ch3

Turning-off

#### Procedure to modify the scanning speed by means of push buttons:

The modification is only possible in colour scanning mode. The default speed is 4 sec. with a pause of 1 sec. between a colour and the next one.

#### To modify the speed:

Press the push button P1 as many times as the desired speed value.

1 time = 4 sec. cycle, 1 sec. stationary on the light value, the light will turn off and than re-turn on.

2 times = 16 sec. cycle, 6 sec. stationary on the light value, the light will turn off and than turn on two times.

3 times = 28 sec. cycle, 10 sec. stationary on the light value, the light will turn off and than turn on three times.

#### 5-How change by means of push buttons one of the 8 pre-programmed light colours.

1- Select with short impulses on Ch1 the colour value which is to be modified.

2- Press and hold down the push button Ch2 for more than 4 sec., the light will turn off and turn on a first time after 2 sec. and a second time after 4 sec. by indicating that you have entered the new colour memorisation mode.

The colour variation will now start with a speed of 4 sec. between a colour and the next one and a pause of 1 sec. at each colour, by pressing again the push button Ch2 it is possible to change the rotation direction.

3- Press the push button Ch1, the present light value will be memorised and the light will turn off and turn on at its new value.

4- If you want to leave the mode without memorising the new colour, press the push button Ch3.

6- At the power- on- reset the condition previous the turning-off will be resumed.

7- It is possible to connect SLAVE devices which will take the same control of the MASTER device; each SLAVE can control unlimited other SLAVES.

#### Programming push buttons on the box

T1- Push button for the programming and delete of the transmitters

T2- Push button for LED-outputs functioning test, by pressing the push button the turned off lights will turn on with a white light.

T3- Push button for colours reset, by pressing this push button for 2 sec., the 8 default colours will be reset, after the 2 sec. the LEDs will indicate with an intermittence the reset.

#### Procedure to memorise 7-channel transmitters

1- press one time the push button T1 and hold it down, the buzzer will make a bip and then sound continuously.

2- Press the channel, of the 7-channel transmitter, which has to be memorised, the memorisation is indicated by the intermittently sound of the buzzer. The memorisation of the channel activates automatically the other channels.

#### Procedure to memorise transmitters with single channels with color function.

The channels of the transmitter are memorised individually, the colour changes at each impulse between the 8 pre-programmed colours. To turn off the colour, press the push button for more than 2 sec.

At each turning-on will restart the colour that has been previously selected.

1- Press two times the push button T1 and hold it down, the buzzer will make a bip at each pressure and then sound continuously.

2- Press the channel of the transmitter which has to be memorised, the memorisation is indicated by the intermittently sound of the buzzer.

#### Procedure to memorise transmitters with single channels with white light function.

The channel of the transmitter operates only on the white light, with short impulses (<300 ms.) it turns the light on and off, by holding it pressed, increases or decreases the intensity. At each turning-on will restart the intensity of white light that has been previously selected.

1- Press three times the push button T1 and hold it down, the buzzer will make a bip at each pressure and then sound continuously.

2- Press the channel of the transmitter which has to be memorised, the memorisation is indicated by the intermittently sound of the buzzer.

#### Procedure to delete a channel of the transmitter

1- Press four times and hold down the push-button T1, the buzzer will make a bip at each pressure and then sound slowly and intermittently.

2- Press the channel which has to be cancelled, the delete is indicated by the continuously sound of the buzzer. The delete of a channel of a 7-channel transmitter deactivates also the other channels.

#### Procedure to delete the whole memory

1- Press five times the push-button T1 and hold it down, the buzzer will make a bip at each pressure and than sound quickly and intermittently.

2- Hold down the push button for 10 sec., after this 10 sec. the buzzer will sound continuously by indicating that the whole memory has been cancelled.

#### 8- Dimmer function from the transmitter

By pressing one of the eight colours, when the light is turned-on, it is possible by holding pressed the colour selection push-button, increase or decrease the intensity.

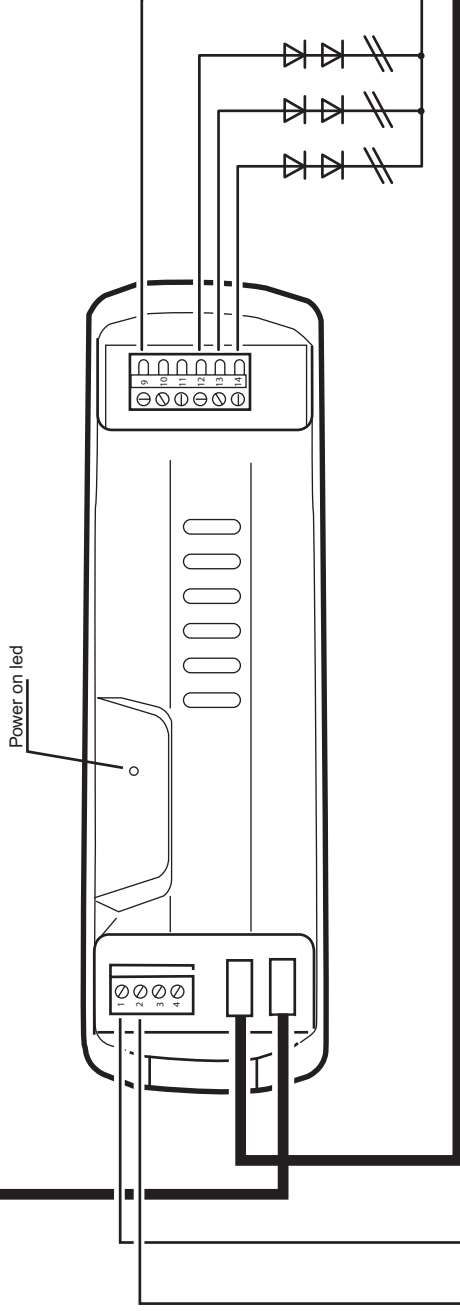
Attention: it is possible that, for particular colour values, by decreasing the intensity the colour changes sensibly.

#### TECHNICAL SPECIFICATIONS

	TVRGBD868A01 TVRGB868M01	TVRGBD868B01 TVRGB868N01
-Power supply	24 V dc, 21 W	24 V dc, 45 W
-Current on the RGB outputs	350 mA	700 mA
-Max. power for each output	7 W	15 W
-N° LED connectable for each output	1 to 5	1 to 5
-Cable sections in input and output	1,5 mm	1,5 mm
-Reception frequency	868.3 MHz	
-Intermediate frequency IF	10.7 MHz	
-Sensibility (finely tuned signal)	1 µV	
-Operating temperature range	-20° - +60°C	

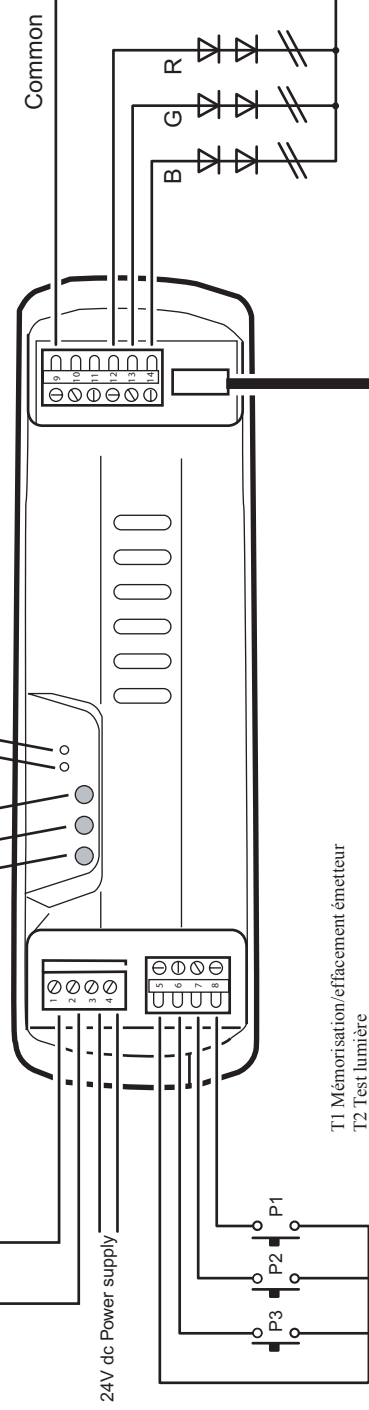
In the view of a constant development of their products, the manufacturer reserves the right for changing technical data and features without prior notice.

Uscita per lo slave  
Output for slave  
Sortie pour slave



T3 Reset light programming  
T2 Light test  
T1 Memorisation/delete transmitter

Led ricezione comandi RF  
Led réception comands RF  
Led reception RF commands  
Led reception IR commands  
Led réception comands IR  
Led ricezione comandi IR



T1 Mémorisation/effacement émetteur  
T2 Test lumière  
T3 Reset programmation lumières

T1 Memorizzazione/cancellazione trasmettitori  
T2 Test luci  
T3 Reset programmazione luci

T1 Memorisation/delete transmitter  
T2 Light test  
T3 Reset light programming

Uscita per lo slave  
Output for slave  
Sortie pour slave

Attention to the leds polarity  
Attention pour la polarité des leds  
Attenzione alla polarità dei led

