

## Tally Light Number

### Introduction

It is designed to accompany a prompter and / or a camera and indicate the number of equipment within the work setting (the prompter one take the number 1 on the display, the prompter 2 the number 2 and so on). The color display can be changed by an external tally signal, so it is able to know if the associated signal to the Tally Light Number is On Air or not.

### Features:

Power supply: 12-24V DC

Consumption: <250 mA

Display colors: green and red

Tally: tension and contact closure using stereo minijack 3.5 "

Represented Numbers: 0 to 9

Set the represented number: by switches

### Supply

The device is designed to be fed in two possible scenarios:

- 12v DC standard power supply
- Power range from 14-24V DC

#### 12v DC Standard power supply

Factory set default. Just connect the power supply to the device and the display will be lighted.

#### Power range from 14-24V DC

This workflow is designed for users who want to feed the Tally Light Number from camera batteries. It is needed to open the plastic box. On the circuit board there are two configuration jumpers (as shown in Figure 2). For supply purposes jumper 1 is used. The bridge is the default connection between the pins marked +12 v and IN. You have to move it and place it between +14.4 and IN pins.

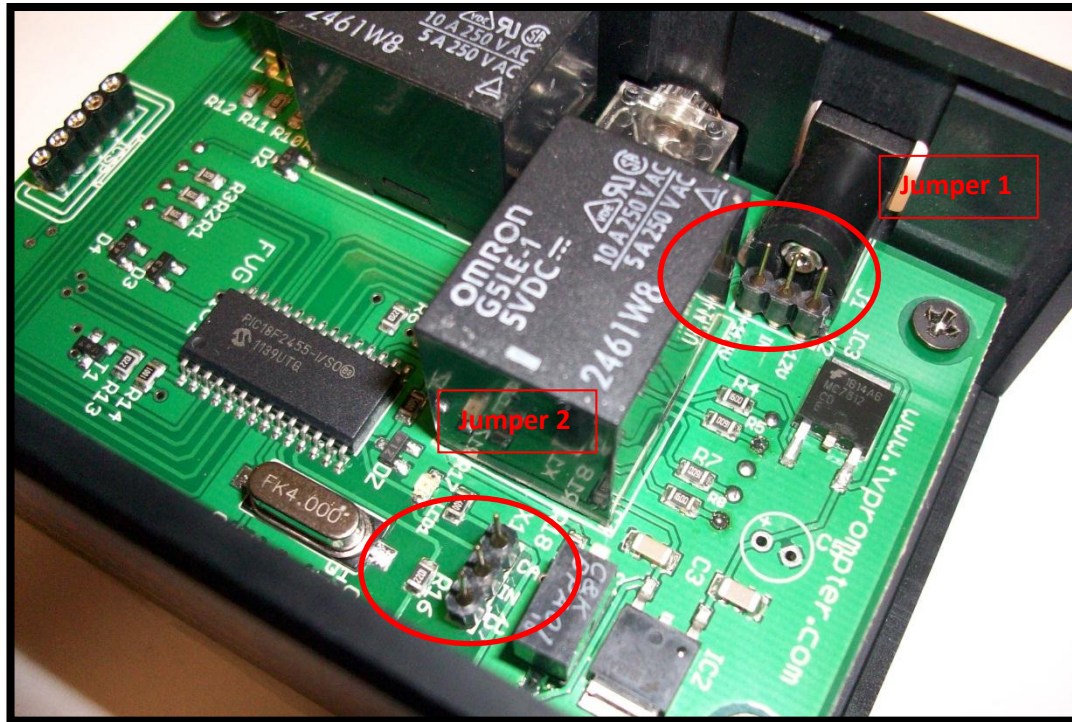


Figure 2. Configuration jumpers

Figure 3 shows how the bridge must be located for a supply in the range of 14 to 24 volts.

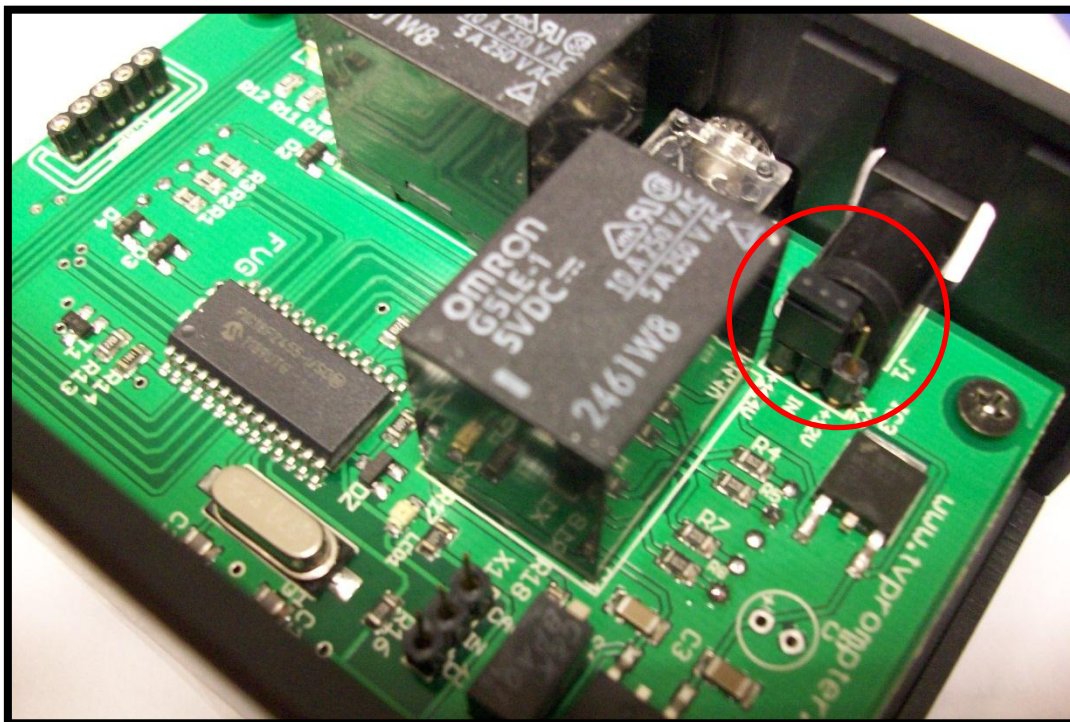


Figure 3. Bridge location for a supply within the range 14-24v DC

### Color display

By default, the display color is green unless tally signal is received, when red. If you want to change this behavior and, consequently, the display lights up red in general and turns green on receiving the tally signal is needed to move the switch which is in the PCB. Figure 4 shows the switch.

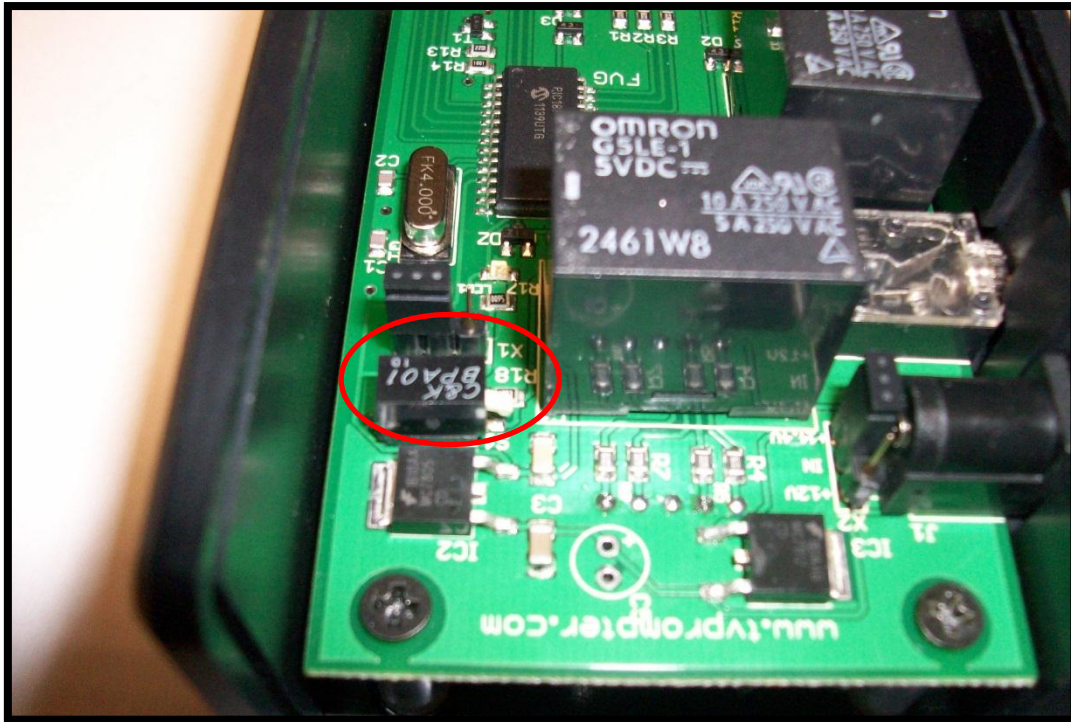


Figure 4. Switch to change the default color between green and red

### Number show non the display

It can represent numbers from 0 to 9. To do this, on the side of the box there are 4 switches (Figure 5).



Figure 5. Switches to configure the displayed number

A zoom can be seen in figure 6.



Figure 6. Switches

Table 1 shows the configuration of the switches for each of the possible numbers.

| Number | Switch 1 | Switch 2 | Switch 3 | Switch 4 |
|--------|----------|----------|----------|----------|
| 0      | Up       | Up       | Up       | Up       |
| 1      | Up       | Up       | Up       | Down     |
| 2      | Up       | Up       | Down     | Up       |
| 3      | Up       | Up       | Down     | Down     |
| 4      | Up       | Down     | Up       | Up       |
| 5      | Up       | Down     | Up       | Down     |
| 6      | Up       | Down     | Down     | Up       |
| 7      | Up       | Down     | Down     | Down     |
| 8      | Down     | Up       | Up       | Up       |
| 9      | Down     | Up       | Up       | Down     |

Table 11. Position of the switches for each number

The other combinations are not effective. So, if the device is connected with a combination that does not match any one of the table 1 the display will not light. If, once the display is operating with a valid number, it is entered an invalid combination the previous represented number will remain unchanged.

### Tally signal

Tally control is accessed through a minijack connector on the side of the device (Figure 7).



Figure 7. Tally connector

The tally operation modes are:

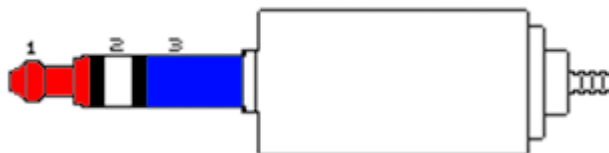
- Tension: External signal between 5v and 12v dc
- Contact closure: Contact closure between a pin and GND

Tension mode:

1: External signal between 5v and 12v dc

2: Not connected

3: GND

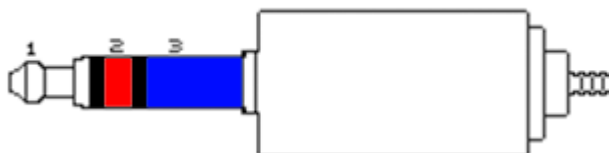


Contact closure mode:

1: Not connected

2: Pin to contact closure

3: GND



Example for contact closure:

The configuration tally for the KM-H3000E video switcher from JVC (contact closure) is the next one:



Figure 12 Tally Port

Table 8 Tally Port Pinout

| Pin | Input         |
|-----|---------------|
| 1   | 1             |
| 2   | 3             |
| 3   | 5             |
| 4   | 7             |
| 5   | Common Ground |
| 6   | 2             |
| 7   | 4             |
| 8   | 6             |
| 9   | 8             |

If we associate the Tally Light Number Tally to the output number 1 of the switcher (Pin1), it is required to do the following connections:

| <b>D-Sub 9 connector (KM-H3000E)</b> | <b>Minijck connector (<i>Tally Light Number</i>)</b> |
|--------------------------------------|--|
| PIN 1 (tally number 1)               | PIN 2 (Contact closure pin)                          |
| PIN 5 (GND)                          | PIN 3 (GND)  |