

# TALLYTEC

## Quick Start Manual for TallyTec Pro Systems



## CONTENTS

Introduction.....	1.0
Overview.....	1.1
Setting up.....	1.2
Receivers.....	1.3
a) Antenna	
b) Power	
c) Charging	
d) Tally lights	
Transmitters...	1.4
a) Set up menu	
b) Enabling the receivers menu	
c) Channel selection	
d) GPI input	
d.1 Tricaster USB Connection	
e) Program/preview LED colour change	
f) Time code	
g) Configuration	
h) Firmware Upgrade	
Operation.....	2.0
Test function...	3.0
GPI and Remote	
Connections	Appendix 1
Warranty	

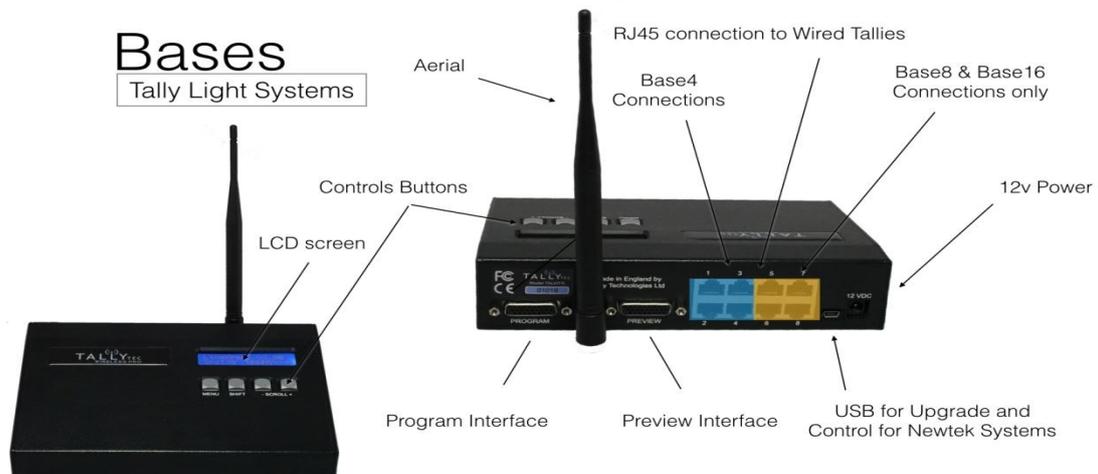
## Receiver

Tally Light Systems



## Bases

Tally Light Systems



gives you a maximum 8 channels of wired and 16 wireless tally per Transmitter

**1.0 Introduction - please read the following notes. They will help you to get the most from your system.**

**Note:** Please go online [www.tallytechnologies.com](http://www.tallytechnologies.com) for updates to this manual

**1.1 Overview**

TallyTec tally transmission system consists of a transmitter unit and a number of receiver units. The system purchased will operate with 4 (Base4), 8 (Base8) or 16 (Base 16) rechargeable wireless receivers outputting to 1 of 4 channels on 866/915MHz and/or wired receivers via RJ45 ports on the back of the transmitter.

**1.2 Setting Up**

This manual assumes that the system is configured for 2 receivers

**1.3 The Receivers**

**a. Antenna**

Attach the antenna provided to the SMA ports at the rear of each wireless receiver and connect any wired receivers via the RJ45 ports to their corresponding camera channels.

**b. Power**

Switch the power on for each wireless receiver using the rocker switch on the rear panel. The middle position is off, up is front and rear LEDs on, down is rear LED only. A green power light will appear to indicate the power is on. If no light appears recharge the batteries (wireless only).

**c. Charging**

Receivers are recharged (wireless receivers) or powered (wired receivers) via connection to the RJ45 ports. The battery life is typically 40-50 hours of continuous operation. After a few seconds, the small yellow led on the rear of the receiver will light up. Normal charging time is about 6 hours, and the led will go out when the charging is complete.

**d. Tally Lights**

The receiver can show preview (green) and live (red) lights both rear and front. Preview is dependent on the function being available on your mixer.

The front lights can be turned off via the rocker switch (refer to b. Power)

**1.4 The Transmitter**

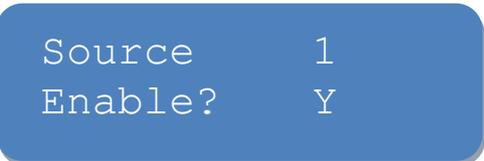
**a. Set Up Menu**

Apply power to the unit. This display will appear depending on the model purchased (showing Base16). N indicates the system is looking for a receiver (2 in example) but has not connected. The display will show channels 1-8. To see channels 9-16 on Base16 press scroll+.



**b. Enabling The Receivers Menu**

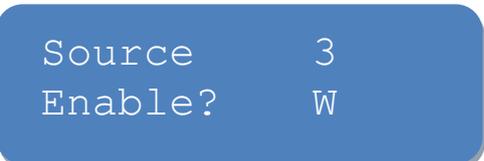
Press the menu button to display the next menu which enables sources. The Y display shows that source 1 is enabled for wireless receivers.



Pressing the shift and scroll+ buttons together changes the source to W for wired receivers, N to disable and back to Y to enable again.

When you have the correct set up for each source press scroll+ to change the display to the next source and repeat the set up procedure until all required sources are enabled and set to wireless or wired.

This display shows source 3 is enabled for a wired receiver



```
Source      4
Enable?    N
```

Press the menu button to display the next menu to change the channel frequency. There are 4 available channels (1-4). The display below shows channel 1 selected. Change channel selection by pressing shift and scroll+ buttons together. When the desired channel is selected, press the menu button to reconfigure.

```
Channel      Select
(1..4)      1
```

The display below shows the channel selected is updating its configuration.

```
Channel      Select
Updating RF  Cfg
```

The next menu function will appear as below when configuration is complete. Remote handshake when ON will activate an alarm on the transmitter display panel if any connected wireless receiver loses signal. Pressing the shift and scroll+ buttons together changes from OFF to ON. This display show the remote handshake is disabled.

```
Remote Handshake
<OFF>
```

#### d. GPI Input

Press the menu button to display the next menu. GPI can be set to NORMAL or INVERTED. In normal mode the transmitter will look for open and closed contact signals from any vision mixer on both program and preview inputs. Certain computer based vision mixers, in particular Tricasters, do not give standard open and closed contact signals from their assigned tally output ports. Tricaster outputs +/-5V and GPI needs to be set to REVERSE. Change GPI to INVERTED by pressing shift and scroll+ buttons together.

```
GPI Input Sense
<NORMAL>
```

Use <NORMAL> setting for all mixers except TRICASTERS where <INVERTED> should be selected.  
NB. Tricaster will only output program tally via this connection.

#### d.1 Tricaster USB Connection

If you require program and preview commands you will need to connect via the USB output of your Tricaster to the USB input on your transmitter, then download the Tricaster software application from our web site. This software is Newtec approved and needs to be downloaded to your PC then copied onto your Tricaster hard drive via a memory stick. Follow the instructions on our web site [www.tallytechnologies.com](http://www.tallytechnologies.com).

#### e. Program/Preview LED Colour Change

Press the menu button to display the next menu.

```
PGM/PVW Reverse
Rem1>8 RNNNNNNN
```

This menu allows you to swap the colours of the live and preview LEDs. Press shift and scroll+ together to change from green preview, red live. N = normal mode, red program LED; R = reverse mode, green program LED.

#### f. Time Code

Press the menu button to display the next menu to set the time code. Connect the time code BNC from the receiver to a camera or external recorder. All connected receivers will now receive synchronised time code from the transmitter. NB: This feature only works with TallyTec wireless receivers only.

```
LTC <+> = EDIT
12:10:44:18
```

This displays the current running time code. Press scroll+ to enter the LTC format menu.

```
LTC FORMAT :
<24 fps>
```

Press shift and scroll+ together to change the format. The format can be set to 24 fps, 25 fps, 29.97 fps, 30 fps.

Press the menu button to display the next menu to reset the time code.

```
LTC <MENU> = SET
H:12 M:00 S:00
```

Press scroll+ to move between each number and shift/scroll+ to change the clock settings. The new setting will start when you press the menu button.

#### g. Configuration

Pressing the menu button displays the next menu to configure the system.

```
Config System
<Shft> <+> = GO
```

Press shift and scroll+ together to enter the configuration set up menu. This menu allows you to configure single or multiple receivers to your transmitter or to identify a specific receiver for information on which frequency and channel it is currently set to. To enter the receiver identify menu press scroll+

```
Identify Rx <+>
Config Rx <->
```

Press scroll+ to begin identification.

```
Identify Rx <+>
<Shft> <+> = GO
```

Press shift/scroll+. This indicates identification process for receiver 2 which has power on.

```
CfgRx2: Power on
Target Rx ONLY
```

Press scroll+ to begin scanning.

```
CfgRx2: Scanning
.....
```

Once the receiver is identified the following display will appear depending on which channel you have selected and the number of receivers enabled.

```
Rx Identified OK
Ch: 04      ID: 02
```

To configure the receivers press the menu button. This will take you back to the beginning of the menu. Press the menu button until the configuration screen appears again. You can now identify additional receivers through repeating the above procedure.

Press menu button until the configuration menu shows again.

```
Config System
<Shft> <+> = GO
```

Press shift and scroll+ together to enter the configuration set up menu.

```
Identify Rx <+>
Config Rx   <->
```

Press scroll- to enter the configuration menu.

```
Multiscan   <+>
Singlescan  <->
```

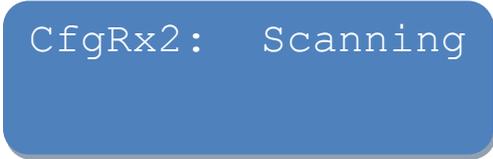
Configuration automatically sets your transmitter and receivers to the same channel. To configure a single receiver, turn on the receiver and press scroll-. This display indicates single receiver configuration (S), receiver ID 1. To change the receiver ID press shift and scroll+ together.

```
Configure RX (S)
Set ID   [01]
```

Scroll + shows the receiver ID and power is on.

```
CfgRx2: Power on
Target: Rx ONLY
```

Scroll + to scan for configuration. This shows receiver 2 is scanning for the set channel.



When the receiver is configured the main menu appears. If the system fails to configure, please turn off the receiver and transmitters for at least 20 seconds then retry. To set up multiple receivers return to the multi scan/single scan menu and press scroll+. Select number of receivers in the multi scan. Turn power on to one receiver at a time to set configuration using the scroll+ button to scan for each in turn.

**h. Firmware Upgrade**

Press menu button to firmware upgrade button. When updates are available, connect your transmitter to the USB port and download from our web site [www.tallytechnologies.com/downloads](http://www.tallytechnologies.com/downloads)  
Please register on the web site to ensure you are informed of all updates.



**2.0 Operation**

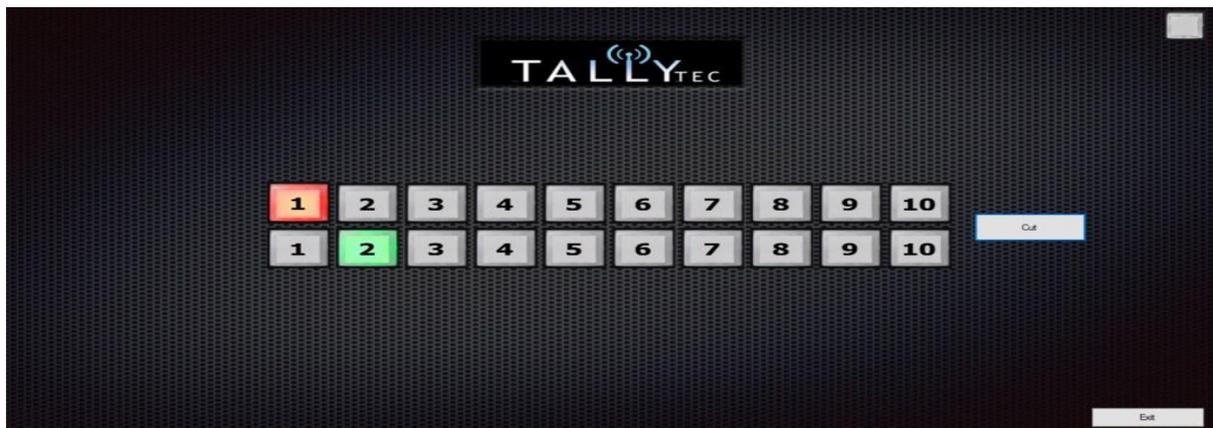
Connect the GPI output from the vision mixer/switcher with a GPI cable to the 26 pin HD connectors on the rear of the transmitter. If you do not have a cable please contact us to order, or for details of how to wire refer to appendix 1.

Operation of the mixer program bus will operate the receiver tally lights. The system uses coded channels in the license free 866/915MHz band, therefore interference with or from other equipment is unlikely. The range of the transmission can vary according to frequency and structural interference.

**3.0 Test Function**

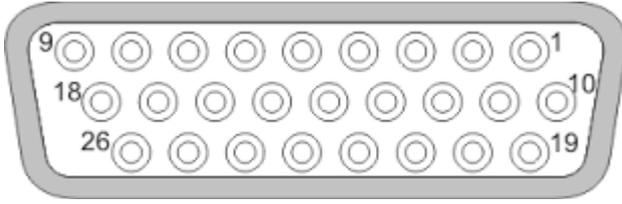
The system can be tested using the TallyTec tester tool which can be downloaded from our web site [www.tallytechnologies.com/downloads](http://www.tallytechnologies.com/downloads).

Download the tester onto a windows PC and connect your transmitter via the USB port. The display represents a basic switcher and can be used to test, demonstrate or troubleshoot the set up.



If the top right hand corner is flashing red the USB is not communicating with the test tool. A solid green light indicates connection. The mouse selects program or preview on the 10 receiver icons and switches the connected receivers from red, green or off.

**Appendix 1: Rear panel connector wiring**



GPI in: These inputs are driven by active-low logic levels / contact closures. Each connector is wired as follows:

- Pin 1.....GPI input 1
- Pin 2.....GPI input 2
- Pin 3.....GPI input 3
- Pin 4.....GPI input 4
- Pin 5.....GPI input 5
- Pin 6.....GPI input 6
- Pin 7.....GPI input 7
- Pin 8.....GPI input 8
- Pin 9.....9GND
- Pin 10.....GPI input 9
- Pin 11.....GPI input 10
- Pin 12.....GPI input 11
- Pin 13.....GPI input 12
- Pin 14.....GPI input 13
- Pin15.....GPI input 14
- Pin 16.....GPI input 15
- Pin 17.....GPI input 16

**Warranty**

In the event that a Tally Technologies product develops a fault due to a manufacturing error, our customers are covered by our Warranty System which ensures that the fault is resolved free of charge for a period up to a year after the date of purchase.

If a product develops a manufacturing fault during the warranty period then it must be returned to the dealer for repair or replacement where appropriate. Products returned with serial numbers denoting they were distributed as part of an offer pack will only be repaired under warranty with proof of purchase of the pack.

Tally Technologies Ltd  
+ 44 (0) 1666 666 777  
[sales@tallytechnologies.com](mailto:sales@tallytechnologies.com)  
[www.tallytechnologies.com](http://www.tallytechnologies.com)