

# PULSE

LED RGB Colour Wash Bar

**Model: LEDBAR 320**



[www.pulse-light.co.uk](http://www.pulse-light.co.uk)

## Safety Information



The lightning bolt within a triangle is intended to alert the user to the presence of dangerous voltage levels within the product's enclosure.

This voltage may be of sufficient magnitude to constitute an electric shock risk.

To reduce the risk of electric shock, do not remove cover of this device. There are no user serviceable parts inside. Refer servicing only to qualified service personnel.

The exclamation point within a triangle is intended to alert the user to important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

## Safety Precautions

- Read and retain these instructions
- Follow all instructions and heed warnings
- Do not use this device near water or in damp environments
- If the surface becomes dirty, clean only with dry cloth, do not use solvents or thinners
- Install in accordance with the manufacturer's instructions
- Do not install near heat sources such as radiators, heat registers, stoves, or other devices that produce heat
- Only use accessories specified by the manufacturer
- Refer all servicing to qualified personnel
- If mounting on a stand please ensure the stand has a sufficient load capacity to hold the unit. The stand must be operated in accordance with the stand manufacturer's instructions.
- Rigging of lighting products should only be carried out by a competent person in accordance with current guidelines. All fixings used should be correctly rated taking care to observe 10:1 safety factors and utilise "Secondary" fixings as backup to the primary fixing methods.
- This device must not be exposed to water in any way. No object filled with liquids should be placed on apparatus

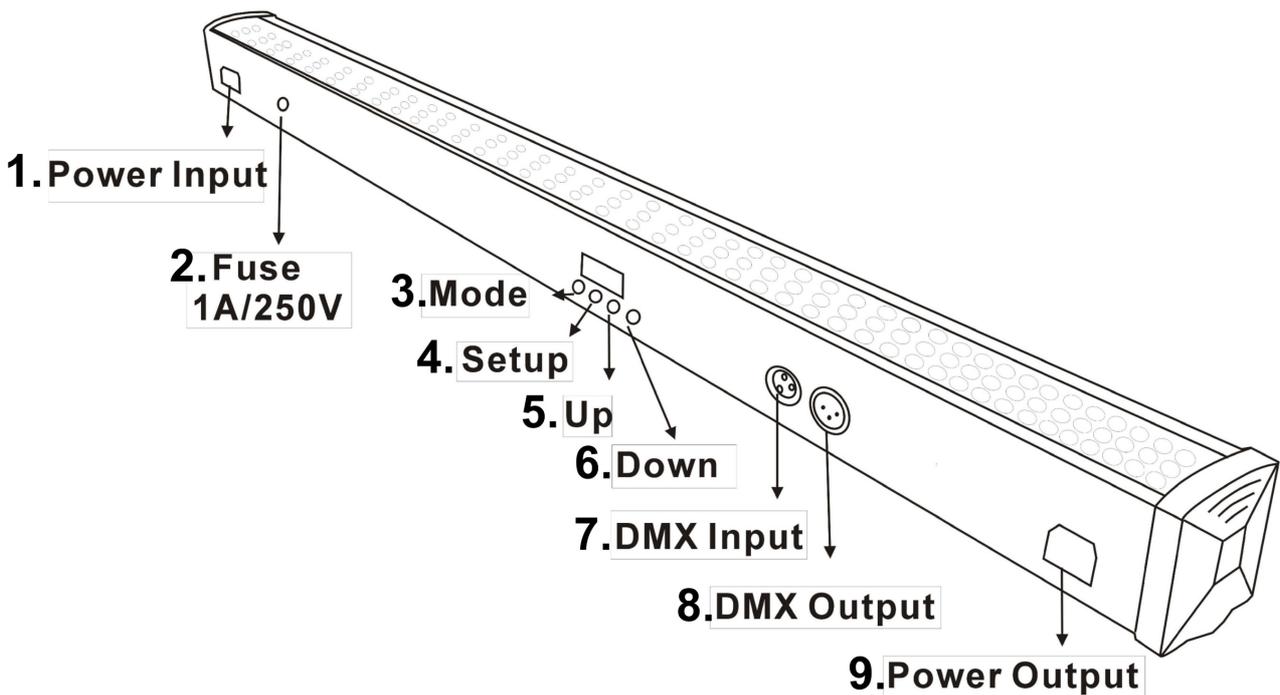
## Pulse LEDBAR 320 – Colour LED Wash Bar

The Pulse LEDBAR 320 features eight segments and a total of 320 super bright, 10mm LED's offering greater output than the standard 252 LED products. Ideal for use indoors adding effects to stages, washing walls in colour or general up lighting. The LED's are split along the length of the bar in diagonal stripes to ensure a smooth wash across the wall without any hotspots from any of the colours.

### Features

- 320x 10mm super bright LED's split into eight segments (128 red, 96 green, 96 blue)
- 6 selectable DMX modes: 2, 3, 4, 7, 14 and 26 channels
- Selectable operating modes including Auto, DMX, Master/Slave, Sound Active and Static Colour
- Black aluminium housing supplied complete with feet/hanging brackets
- 40 degree beam angle
- LED display with four button menu system for ease of setup
- IEC power in/out
- 3-pin XLR DMX connections
- Integral microphone for Sound Active mode
- Low power consumption: 36W
- Dimensions (WxHxD): 1025x65x65mm (not including brackets)
- Universal input voltage: AC120-240V/50-60Hz

### Operation:



### 1) Mains Power Inlet

The LEDBAR320 operates from a standard mains voltage outlet (AC120-240V/50-60Hz). DO NOT connect this to a dimmer pack as this can damage the unit and/or the dimmer pack. Dimming or control of this product is done utilising the onboard DMX functions.

### 2) Mains Fuse

1A 250V rated 20mm mains fuse. Should the fuse require replacement the unit must be isolated from the mains power supply before removing the fuse cover. The replacement fuse must be of the same type and rating.

### 3) Mode

After the unit has powered up Press the "MODE" button to access the menu system and select the required operating mode.

### 4) Setup

Press the "SETUP" button to access the parameters relevant to the selected mode.

### 5) Up

Press the "UP" button to increase the value of the selected parameter.

### 6) Down

Press the "DOWN" button to decrease the value of the selected parameter.

### 7) DMX Input

Standard 3-pin XLR male chassis socket for DMX input. Pin configuration for this product is Pin1= Ground, Pin2= Negative (-ve) and Pin3= Positive (+ve).

### 8) DMX Output

Standard 3-pin XLR female chassis socket for DMX input. Pin configuration for this product is Pin1= Ground, Pin2= Negative (-ve) and Pin3= Positive (+ve).

### 9) Mains Power Output

The LEDBAR 320 features a mains power pass through for daisy chaining the power on multiple LEDBAR 320 units.

After power on, Press "**MODE**" button to activate the main menu: Built-in programs mode, Auto running mode, DMX mode, Slave mode, sound-activated mode.

"**SETUP**" is to set the relative specification for current mode.

"**UP**" is to add the value of current specification.

"**DOWN**" is to decrease the value of current specification.

**Built-in Programs:** 22 built-in programs allow the user to generate a light show without the need for a controller. Each program can be adjusted for speed or fade time.

**Auto Run:** This adds variety to the light show by running the built-in programs one after another in continuous loop.

**DMX mode:** Controlled by DMX controller

**Slave Mode:** Used in conjunction with the Program, Auto, Sound Active or Static Colour modes

**Sound Active Mode:** In Sound Active mode the fixture will react to the mid/low tones, with each beat the fixture will move the program forward one step.

**Static Colour mode:** Static Colours can be preset with each colour featuring 255 levels from 0-255

## 1. Built-in Programs Mode

Press mode until it shows Prxx, you can select 22 different built-in Programs. Press "SETUP" and "UP" "DOWN" buttons to select the programs (from Pr01 to Pr22) and select the desired program values.

When it shows Pr01, press "SETUP" to choose from seven static colours.

When it is Pr02 to Pr22, press "SETUP" and "UP" "DOWN" buttons, you can set the values for flash(FS00-FS99), fading time(Fd00-Fd99), running speed(SP00-SPFL).

When it is Pr21 and Pr22, you can set the background color and chasing color for this effect, switch it from 1- -r (background color) to 2- -r(chasing color) by "SETUP", adjust different colors by "UP" and "DOWN" buttons.

## 2. Auto Run Mode

You can press "MODE" button to select auto run mode, it shows **AUTO**, then it will run the built-in programs automatically.

Press "SETUP", it shows n. 001, then you can adjust the running loops number by "UP" "DOWN"

If continuing pressing "SETUP", it will show SPxx, Fdxx, FSxx, then you can set the value for speed, fading and flash by "UP" "DOWN"

## 3. DMX Mode

You can control the devices individually via your DMX-controller. Press "MODE" button until it shows **d.001**, this means DMX address is 001, you can set the DMX address by "UP" and "DOWN" buttons. If press "SETUP" button, it will show d-p1, it means the device is in which DMX mode 1. You can switch these DMX modes by "UP" and "DOWN" buttons. There are 6 DMX modes.

### DMX Profiles:

#### DMX mode1: d-P1

|               |               |               |
|---------------|---------------|---------------|
| CH1           | CH2           | CH3           |
| R             | G             | B             |
| 0–255 dimming | 0–255 dimming | 0–255 dimming |

#### DMX mode2: d-P2

|               |               |               |               |
|---------------|---------------|---------------|---------------|
| CH1           | CH2           | CH3           | CH4           |
| R             | G             | B             | Master dimmer |
| 0–255 dimming | 0–255 dimming | 0–255 dimming | 0–255 dimming |

#### DMX mode3: d-P3

|               |               |               |               |               |                       |               |
|---------------|---------------|---------------|---------------|---------------|-----------------------|---------------|
| <b>CH1</b>    | <b>CH2</b>    | <b>CH3</b>    | <b>CH4</b>    | <b>CH5</b>    | <b>CH6</b>            | <b>CH7</b>    |
| R             | G             | B             | R             | G             | B                     | R             |
| 0–255 dimming         | 0–255 dimming |
| <b>CH8</b>    | <b>CH9</b>    | <b>CH10</b>   | <b>CH11</b>   | <b>CH12</b>   | <b>CH13</b>           | <b>CH14</b>   |
| G             | B             | R             | G             | B             | flash                 | Master dimmer |
| 0–255 dimming | 0–255 Flash frequency | 0–255 dimming |

### DMX mode4: d-P4

|               |               |               |               |               |               |                        |                      |               |
|---------------|---------------|---------------|---------------|---------------|---------------|------------------------|----------------------|---------------|
| CH1           | CH2           | CH3           | CH4           | CH5           | CH6           | CH7                    | CH8                  | CH9           |
| R             | G             | B             | R             | G             | B             | R                      | G                    | B             |
| 0-255 dimming | 0-25 dimming  | 0-255 dimming          | 0-255 dimming        | 0-255 dimming |
| CH10          | CH11          | CH12          | CH13          | CH14          | CH15          | CH16                   | CH17                 | CH18          |
| R             | G             | B             | R             | G             | B             | R                      | G                    | B             |
| 0-255 dimming          | 0-255 dimming        | 0-255 dimming |
| CH19          | CH20          | CH21          | CH22          | CH23          | CH24          | CH25                   | CH26                 |               |
| R             | G             | B             | R             | G             | B             | flash                  | Master dimmer        |               |
| 0-255 dimming | 0-255 Flash<br>0 = OFF | 0-255 Light<br>0=OFF |               |

### DMX mode5: d-P5

| CH1 |           |            | CH2            |
|-----|-----------|------------|----------------|
| NO. | DMX value | FUNCTION   | SPEED          |
| 1   | 0-7       | OFF        | Value=0 OFF    |
| 2   | 8-15      | red        | SPEED<br>0-255 |
| 3   | 16-23     | Yellow     |                |
| 4   | 24-31     | Green      |                |
| 5   | 32-39     | Cyan       |                |
| 6   | 40-47     | Blue       |                |
| 7   | 48-55     | Purple     |                |
| 8   | 56-63     | White      |                |
| 9   | 64-71     | PROGRAM01  |                |
| 10  | 72-79     | PROGRAM02  |                |
| 11  | 80-87     | PROGRAM03  |                |
| 12  | 88-95     | PROGRAM04  |                |
| 13  | 96-103    | PROGRAM05  |                |
| 14  | 104-111   | PROGRAM06  |                |
| 15  | 112-119   | PROGRAM07  |                |
| 16  | 120-127   | PROGRAM08  |                |
| 17  | 128-135   | PROGRAM09  |                |
| 18  | 136-143   | PROGRAM10  |                |
| 19  | 144-151   | PROGRAM11  |                |
| 20  | 152-159   | PROGRAM12  |                |
| 21  | 160-167   | PROGRAM13  |                |
| 22  | 168-175   | PROGRAM14  |                |
| 23  | 176-183   | PROGRAM15  |                |
| 24  | 184-191   | PROGRAM16  |                |
| 25  | 192-199   | PROGRAM17  |                |
| 26  | 200-207   | PROGRAM18  |                |
| 27  | 208-215   | PROGRAM19  |                |
| 28  | 216-223   | PROGRAM20  |                |
| 29  | 224-231   | PROGRAM21  |                |
| 30  | 232-255   | Sound Mode |                |

## DMX mode6: d-P6

| CH1                    | CH2                    | CH3                    | CH4 |           |           | CH5    | CH6      | CH7                     |
|------------------------|------------------------|------------------------|-----|-----------|-----------|--------|----------|-------------------------|
| R                      | G                      | B                      | NO. | DMX value | FUNCTION  | SPEED  | FLASH    | Master dimmer           |
| 0–255 dimming<br>0=OFF | 0–255 dimming<br>0=OFF | 0–255 dimming<br>0=OFF | 1   | 0–7       | OFF       | NO USE | NO USE   | 0–255 dimming (0 = OFF) |
|                        |                        |                        | 2   | 8–15      | red       |        |          |                         |
|                        |                        |                        | 3   | 16–23     | Yellow    |        |          |                         |
|                        |                        |                        | 4   | 24–31     | Green     |        |          |                         |
|                        |                        |                        | 5   | 32–39     | Cyan      |        |          |                         |
|                        |                        |                        | 6   | 40–47     | Blue      |        |          |                         |
|                        |                        |                        | 7   | 48–55     | Purple    |        |          |                         |
|                        |                        |                        | 8   | 56–63     | White     |        |          |                         |
|                        |                        |                        | 9   | 64–71     | PROGRAM01 |        |          |                         |
|                        |                        |                        | 10  | 72–79     | PROGRAM02 |        |          |                         |
|                        |                        |                        | 11  | 80--87    | PROGRAM03 |        |          |                         |
|                        |                        |                        | 12  | 88–95     | PROGRAM04 |        |          |                         |
|                        |                        |                        | 13  | 96–103    | PROGRAM05 |        |          |                         |
|                        |                        |                        | 14  | 104–111   | PROGRAM06 |        |          |                         |
|                        |                        |                        | 15  | 112–119   | PROGRAM07 |        |          |                         |
|                        |                        |                        | 16  | 120–127   | PROGRAM08 |        |          |                         |
|                        |                        |                        | 17  | 128–135   | PROGRAM09 |        |          |                         |
|                        |                        |                        | 18  | 136–143   | PROGRAM10 |        |          |                         |
|                        |                        |                        | 19  | 144–151   | PROGRAM11 |        |          |                         |
|                        |                        |                        | 20  | 152–159   | PROGRAM12 |        |          |                         |
|                        |                        |                        | 21  | 160–167   | PROGRAM13 |        |          |                         |
|                        |                        |                        | 22  | 168–175   | PROGRAM14 |        |          |                         |
|                        |                        |                        | 23  | 176–183   | PROGRAM15 |        |          |                         |
|                        |                        |                        | 24  | 184–191   | PROGRAM16 |        |          |                         |
|                        |                        |                        | 25  | 192–199   | PROGRAM17 |        |          |                         |
|                        |                        |                        | 26  | 200–207   | PROGRAM18 |        |          |                         |
|                        |                        |                        | 27  | 208–215   | PROGRAM19 |        |          |                         |
|                        |                        |                        | 28  | 216–223   | PROGRAM20 |        |          |                         |
|                        |                        |                        | 29  | 224–231   | PROGRAM21 |        |          |                         |
|                        |                        |                        |     |           |           | 30     | 232--255 |                         |

### 4. Slave mode

Press "MODE" button to select SLAu to run the slave mode. The LEDBAR will then replicate the effect from the first unit in the signal chain. The first unit in the chain must be running in one of the standalone modes such as Program, Sound Active, Static Colour or Auto.

### 5. Sound active mode

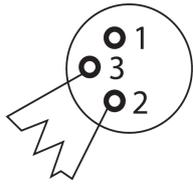
Press "MODE" button to select SU31 to be run, once activated the LEDBAR will advance one step at a time triggered by the bass beat, adjust the sensitivity by using the "UP" and "DOWN" buttons.  
Sensitivity Scale: SO01 - SO31, 01 = low, 31 = high

### 6. Static Colour Mode

Press "MODE" button to select Colr to be run, press "SETUP", it will show r/G/b255, then you can adjust the colors by "UP" and "DOWN" buttons.

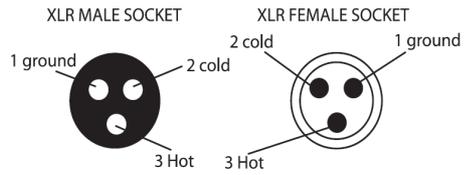
## Connection:

Pulse DMX fixtures should be connected using high quality, digital signal specific cables to help prevent connection issues or data errors. It is also best practice to terminate all DMX lines using a DMX Terminator are available from Pulse retailers & distributors (Code: DMXTERM-3P or DMXTERM-5P). The terminator should be inserted into the last fixture in each DMX chain.



### DMX Pin Configuration

Pin1= Ground  
 Pin2= Negative (-ve)  
 Pin3= Positive (+ve).



Care should be taken when manufacturing DMX cables to ensure above pinout is observed. Do not connect the cable's shield conductor to the ground lug or allow the shield conductor to come in contact with the XLR's outer casing. Grounding the shield could cause a short circuit and erratic behaviour.

### Trouble Shooting:

**Unit does not power up:** Check mains supply. If mains supply is correct check the fuses in all power cords and on the fixture. Disconnect all cabling and fixtures from the mains supply before changing mains fuses.

**Unit does not respond to DMX:** Check DMX cabling to ensure reliable data connection including DMX polarity (see diagram above). Check DMX address settings in line with the DMX controller or console.

**Unit does not respond to SOUND:** The internal microphone features a filter to cancel out high pitched tones including treble. The fixture will respond to the lower mid and bass tones. The microphone requires a reasonable sound level before it will activate and trigger the next step.

### Compliance

When this product reaches the end of its life, do not dispose with household waste. See [www.recycle-more.co.uk](http://www.recycle-more.co.uk) for details of how to dispose of PULSE products in an environmentally sound fashion, or contact PULSE directly via [www.pulse-audio.co.uk](http://www.pulse-audio.co.uk)



### Warranty

Pulse products are warranted, by Pulse, against manufacturer defects for a period of one year from the original date of purchase. This warranty is limited to manufacturer defects, in either materials or workmanship. PULSE, or any other worldwide divisions of Premier Farnell PLC, is not responsible for any consequential or inconsequential damage to any other component, structure or the cost of installation or removal of said items. Defective items should be returned to the retailer/distributor from whom they were originally purchased. Batteries are classed as a consumable item, as a result any battery will only carry a 90 day warranty from date of purchase.

This warranty will not cover damage due to improper use such as (and not limited to) damaged cones, mounting frames, voice coils or items damaged by weather including exposure to moisture.

For questions or specific information regarding warranty replacement or repair, contact:

**PULSE**  
[www.pulse-light.co.uk](http://www.pulse-light.co.uk)