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# Pixel Bar

(Order code: LEDJ73A)

## USER MANUAL

**WARNING**

**FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY  
BEFORE YOUR INITIAL START-UP!**

**CAUTION!**

**Keep this equipment away from rain,  
moisture and liquids.**

**SAFETY INSTRUCTIONS**

Every person involved with the installation, operation & maintenance of this equipment should:

- Be competent
- Follow the instructions of this manual



**CAUTION! TAKE CARE USING THIS EQUIPMENT!  
HIGH VOLTAGE-RISK OF ELECTRIC SHOCK!!**



Before your initial start-up, please make sure that there is no damage caused during transportation. Should there be any, consult your dealer and do not use the equipment.

To maintain the equipment in good working condition and to ensure safe operation, it is necessary for the user to follow the safety instructions and warning notes written in this manual.

Please note that damages caused by user modifications to this equipment are not subject to warranty.

**IMPORTANT:**

**The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorised modification to the equipment.**

- Never let the power-cable come into contact with other cables. Handle the power-cable and all mains voltage connections with particular caution!
- Never remove warning or informative labels from the equipment.
- Do not open the equipment and do not modify the equipment.
- Do not connect this equipment to a dimmer-pack.
- Do not switch the equipment on and off in short intervals, as this will reduce the system's life.
- Only use the equipment indoors.
- Do not expose to flammable sources, liquids or gases.
- Always disconnect the power from the mains when equipment is not in use or before cleaning! Only handle the power-cable by the plug. Never pull out the plug by pulling the power-cable.
- Make sure that the available voltage is between 220v/240v.
- Make sure that the power-cable is never crimped or damaged. Check the equipment and the power-cable periodically.
- If the equipment is dropped or damaged, disconnect the mains power supply immediately. Have a qualified engineer inspect the equipment before operating again.
- If the equipment has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation might damage the equipment. Leave the equipment switched off until it has reached room temperature.
- If your product fails to function correctly, discontinue use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Prolight dealer for service.
- Only use fuses of same type and rating.
- Repairs, servicing and power connection must only be carried out by a qualified technician. **THIS UNIT CONTAINS NO USER SERVICEABLE PARTS.**
- **WARRANTY;** One year from date of purchase.

**OPERATING DETERMINATIONS**

If this equipment is operated in any other way, than those described in this manual, the product may suffer damage and the warranty becomes void.

Incorrect operation may lead to danger e.g.: short-circuit, burns, electric shocks, lamp failure etc.

Do not endanger your own safety and the safety of others!

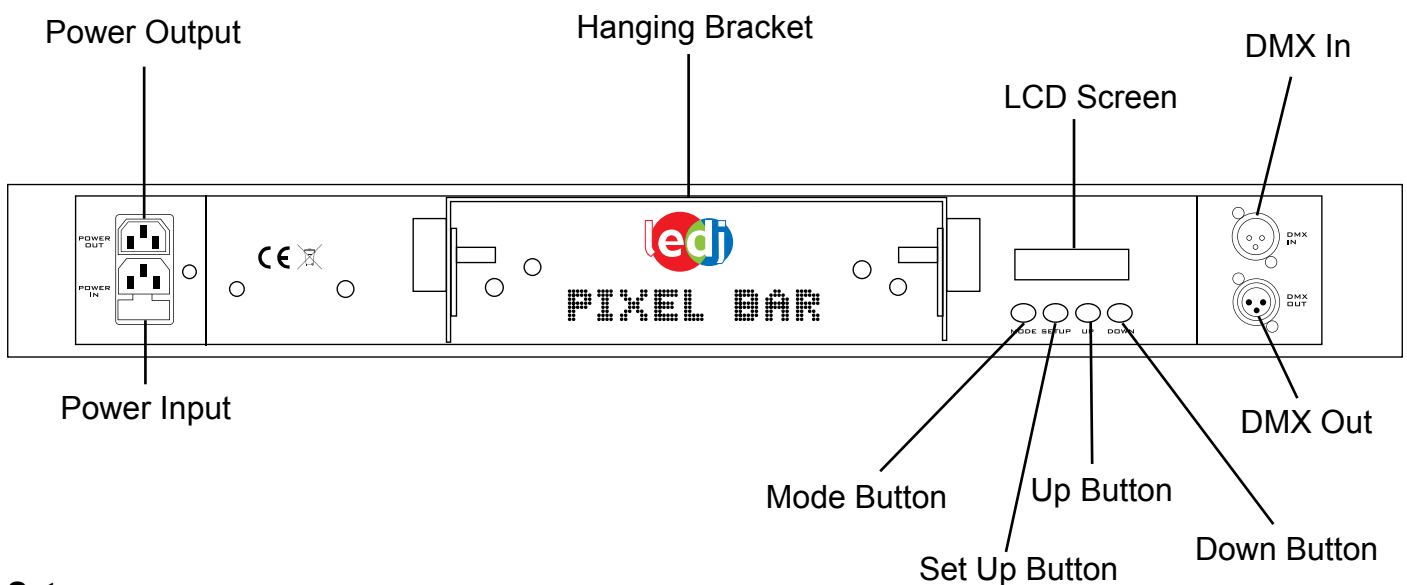
Incorrect installation or use can cause serious damage to people and property.

## Introduction

### Features

- DMX channels: 27/24/15/9/6 selectable
- 504 Ultra Bright 5mm LEDs (R: 168, G:168, B: 168)
- Sound control via internal microphone
- 3-pin XLR In/Out for DMX linking
- Power IEC In/Out spockets
- 14 built-in programmes & 7 static colours
- Master/Slave functions
- Auto run mode
- Consumption: 51W
- Beam 25 degrees
- Lamp life: 100,000 hours
- Fuse: 1A/240V

### Over view



### Setup

### Operating Instructions

The LEDJ Pixel Bar is a DMX-512 controllable unit made up of high efficiency and Ultra Bright LEDs and will operate in stand alone, master/slave, sound activated or DMX control modes.

## Operation modes

### **Sound Active mode:**

To activate the unit in sound active mode, press the “**MODE**” button to show “**SOUND MODE**” on the LCD screen. Now press the “**SET UP**” button to select the desired sensitivity level by using the “**UP**” and “**DOWN**” buttons. Press the “**SET UP**” button again to select the frequency number and adjust by using the “**UP**” and “**DOWN**” buttons.

“**SENS**” 00 - 31 (00 = low, 31 = high)

“**FQN**” 01-99 (01 = low, 99 = high)

### **Auto run mode:**

To activate the unit in auto run mode, press the “**MODE**” button to show “**AUTO RUN**” on the LCD screen. Now press the “**SET UP**” button to select the desired frequency number by using the “**UP**” and “**DOWN**” buttons.

“**FQN**” 01-99 (01 = low, 99 = high)

Note: When the Pixel Bar is set to “sound” or “auto run” mode it will scroll through all of its built-in programmes one after the other. The term “FQN” refers to the number of times it displays the built-in programmes: for example if you set the “FQN” to 3, it will then repeat each programme 3 times before going on to the next one.

### **Slave mode:**

To activate the unit in slave mode, first you must link multiple units together and press the “**MODE**” button to show “**SLAVE MODE**” on the LCD screen. Now on the master unit press the “**MODE**” button to select the desired mode and the slave units will now run in sequence with the master unit.

### **Built-in programmes:**

To activate the units built-in programmes, press the “**MODE**” button to show “**01.STATIC**” on the LCD screen. Press the “**SET UP**” button to choose between the 14 built-in programmes by using the “**UP**” and “**DOWN**” buttons. Now press the “**SET UP**” button to select the desired speed and adjust by using the “**UP**” and “**DOWN**” buttons. Press the “**SET UP**” button once more to select the desired flash value and adjust by using the “**UP**” and “**DOWN**” buttons.

**Speed values: 00 - 99 (00 = slow, 99 = fast)**

**Flash values: 00 - 99 (00 = slow, 99 = fast)**

For the 14 built-in programmes please see page 5.

### **DMX mode:**

To activate the unit in DMX mode, press the “**MODE**” button to show “**DMX MODE**” on the LCD screen. Press the “**SET UP**” button and select the desired DMX address setting by using the “**UP**” and “**DOWN**” buttons. Then to select one of the 5 DMX modes 27, 24, 15, 9 or 6 channel, press the “**SET UP**” button again to choose the desired DMX mode by using the “**UP**” and “**DOWN**” buttons.

For the 27, 24, 15, 9 and 6 channel DMX address information please see pages 6 & 7.

NOTE: Once the desired settings have been selected in each of the above modes, **ALWAYS** confirm the settings by pressing the “**SET UP**” button.

**14 Built-in programme chart**

STATIC COLOR BLACKOUT - RGB Flash00-99	BLA=Blackout, R=Red, RG=Yellow, G=Green, GB=Cyan, B=Blue, BR=Purple, RGB=White Flash speed adjustable.
DREAM Speed 00-99 Flash 00-99	Seven colour fade Speed & Flash adjustable
METEOR Speed 00-99 Flash 00-99	Seven colour flow Speed & Flash adjustable
FADE Speed 00-99 Flash 00-99	Seven colour fade in, fade out Speed & Flash adjustable
CHANGE Speed 00-99 Flash 00-99	Seven colour change Speed & Flash adjustable
FLOW 1 Speed 00-99 Flash 00-99	Seven colour chase (forward) Speed & Flash adjustable
FLOW 2 Speed 00-99 Flash 00-99	Seven colour chase (forward & reverse) Speed & Flash adjustable
FLOW 3 Speed 00-99 Flash 00-99	Seven colour fade chase in relay pattern (forward) Speed & Flash adjustable
FLOW 4 Speed 00-99 Flash 00-99	Seven colour fade chase in relay pattern (forward & reverse) Speed & Flash adjustable
FLOW 5 Speed 00-99 Flash 00-99	Seven colour chase from sides to centre Speed & Flash adjustable
FLOW 6 Speed 00-99 Flash 00-99	Seven colour chase from centre to sides Speed & Flash adjustable
FLOW 7 Speed 00-99 Flash 00-99	Seven colour rotating chase Speed & Flash adjustable
FLOW 8 Speed 00-99 Flash 00-99 1.BLA-RGB 2. BLA-RGB	Two colour chase (forward) Speed & Flash adjustable Blackout, Red, Yellow, Green, Cyan, Blue, Purple, White
FLOW 9 Speed00-99 Flash 00-99 1.BLA-RGB 2. BLA-RGB	Two colour chase (forward & reverse) Speed & Flash adjustable BLA=Blackout, R=Red, RG=Yellow, G=Green, GB=Cyan, B=Blue, BR=Purple, RGB=White

**6 channel mode DMX chart**

CH 1	CH 2	CH3	CH4	CH5	CH6
0-10	blackout	blackout	blackout	blackout	blackout
11-21	Master dimmer (0-255)	Flash (0-255)	Red (0-255)	Green (0-255)	Blue (0-255)
22-32 Red		Flash(0-255)			
33-43 Yellow		Flash (0-255)			
44-54 Green		Flash (0-255)			
55-65 Cyan		Flash (0-255)			
66-76 Blue		Flash (0-255)			
77-87 Purple		Flash (0-255)			
88-98 White		Flash (0-255)			
99-109 Dream	Speed (0-255)	Flash (0-255)			
110-120 Meteor	Speed (0-255)	Flash (0-255)			
121-131 Fade	Speed (0-255)	Flash (0-255)			
132-142 Change	Speed (0-255)	Flash (0-255)			
143-153 Flow 1	Speed (0-255)	Flash (0-255)			
154-164 Flow 2	Speed (0-255)	Flash (0-255)			
165-175 Flow 3	Speed (0-255)	Flash (0-255)			
176-186 Flow 4	Speed (0-255)	Flash (0-255)			
187-197 Flow 5	Speed (0-255)	Flash (0-255)			
198-208 Flow 6	Speed (0-255)	Flash (0-255)			
209-219 Flow 7	Speed (0-255)	Flash (0-255)			
220-230 Flow 8	Speed (0-255)	Flash (0-255)	Color select		
231-241 Flow 9	Speed (0-255)	Flash (0-255)	Color select		
242-255 Sound active	Sensitivity (0-255)	Flash (0-255)			

Note that from address 0 - 10 and 22 - 255 on channel 1 also applies to DMX channel modes 9, 15 and 27.

**9 channel mode DMX chart**

CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8	CH9
11-21	Master Dimmer (0-255)	Flash (0-255)	R1	G1	B1	R2	G2	B2

**15 channel mode DMX chart**

CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8	CH9	CH10	CH11	CH12	CH13	CH14	CH15
11-21	Master Dimmer (0-255)	Flash (0-255)	R1	G1	B1	R2	G2	B2	R3	G3	B3	R4	G4	B4

**24 channel mode DMX chart**

CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8	CH9	CH10	CH11	CH12	CH13	CH14	CH15
R1	G1	B1	R2	G2	B2	R3	G3	B3	R4	G4	B4	R5	G5	B5

CH16	CH17	CH18	CH19	CH20	CH21	CH22	CH23	CH24
R6	G6	B6	R7	G7	B7	R8	G8	B8

**27 channel mode DMX chart**

CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8	CH9	CH10	CH11	CH12	CH13	CH14	CH15
11-21	Master Dimmer (0-255)	Flash (0-255)	R1	G1	B1	R2	G2	B2	R3	G3	B3	R4	G4	B4

CH16	CH17	CH18	CH19	CH20	CH21	CH22	CH23	CH24	CH25	CH26	CH27
R5	G5	B5	R6	G6	B6	R7	G7	B7	R8	G8	B8

**DMX-512:**

- DMX (Digital Multiplex) is a universal protocol used as a form of communication between intelligent fixtures and controllers. A DMX controller sends DMX data instructions from the controller to the fixture. DMX data is sent as serial data that travels from fixture to fixture via the DATA “IN” and DATA “OUT” XLR terminals located on all DMX fixtures (most controllers only have a data “out” terminal).

**DMX Linking:**

- DMX is a language allowing all makes and models of different manufactures to be linked together and operate from a single controller, as long as all fixtures and the controller are DMX compliant. To ensure proper DMX data transmission, when using several DMX fixtures try to use the shortest cable path possible. The order in which fixtures are connected in a DMX line does not influence the DMX addressing. For example; a fixture assigned to a DMX address of 1 may be placed anywhere in a DMX line, at the beginning, at the end, or anywhere in the middle. When a fixture is assigned a DMX address of 1, the DMX controller knows to send DATA assigned to address 1 to that unit, no matter where it is located in the DMX chain.

**DATA Cable (DMX cable) requirements (for DMX operation):**

- The Pixel Bar can be controlled via DMX-512 protocol. The DMX address is set on the back of the unit. Your unit and your DMX controller require a standard 3-pin XLR connector for data input/output (figure 1).

**Figure 1**

Further DMX cables can be purchased from all good sound and lighting suppliers or Prolight dealers.

Please quote:

CABL10 – 2M

CABL11 – 5M

CABL12 – 10M

**Also remember that DMX cable must be daisy chained and cannot be split.**

**Notice:**

- Be sure to follow figures 2 & 3 when making your own cables. 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.

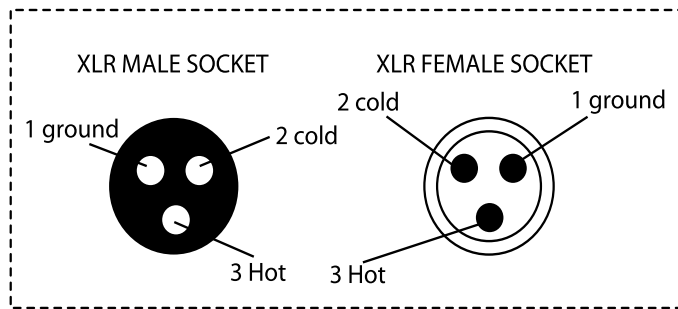
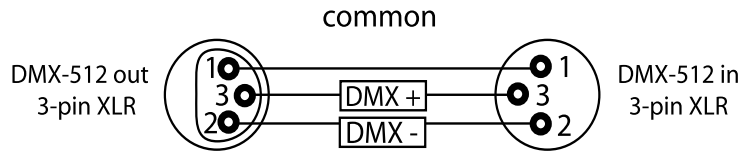


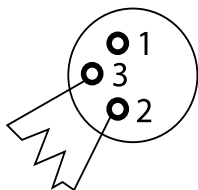
FIGURE 3

XLR Pin Configuration
Pin 1 = Ground
Pin 2 = Negative
Pin 3 = Postive

FIGURE 2

**Special Note: Line termination:**

- When longer runs of cable are used, you may need to use a terminator on the last unit to avoid erratic behaviour.



Termination reduces signal transmission problems and interference. it is always advisable to connect a DMX terminal, (resistance 120 Ohm 1/4 W) between pin 2 (DMX-) and pin 3 (DMX+) of the last fixture.

Using a cable terminator (part number CABL90) will decrease the possibilities of erratic behaviour.

**5-Pin XLR DMX Connectors:**

- Some manufactures use 5-pin XLR connectors for data transmission in place of 3-pin. 5-Pin XLR fixtures may be implemented in a 3-pin XLR DMX line. When inserting standard 5-pin XLR connectors in to a 3-pin line a cable adaptor must be used. The chart below details the correct cable conversion.

3- Pin XLR to 5-PIN XLR Conversion		
Conductor	3-Pin XLR out	5-Pin XLR in
Ground shield	Pin 1	Pin 1
Negative (-)	Pin 2	Pin 2
Positive (+)	Pin 3	Pin 3

## Technical Specifications

### Weight & Dimensions

- Length.....809mm
- Width.....100mm
- Height.....135mm
- Weight.....4.2kgs

### Power

- AC input.....240V/50hz
- AC output.....240V/50hz
- Power consumption.....51W

### • Fuse

- Main.....F1A/240V

### Control & Programming

- Data input.....Locking 3-pin XLR male socket
- Data output.....Locking 3-pin XLR female socket
- Protocols.....DMX-512 USITT
- DMX channels.....27, 24, 15, 9 and 6



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