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## **STAGE BAR 16**

(Order code: LEDJ160)

## **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!

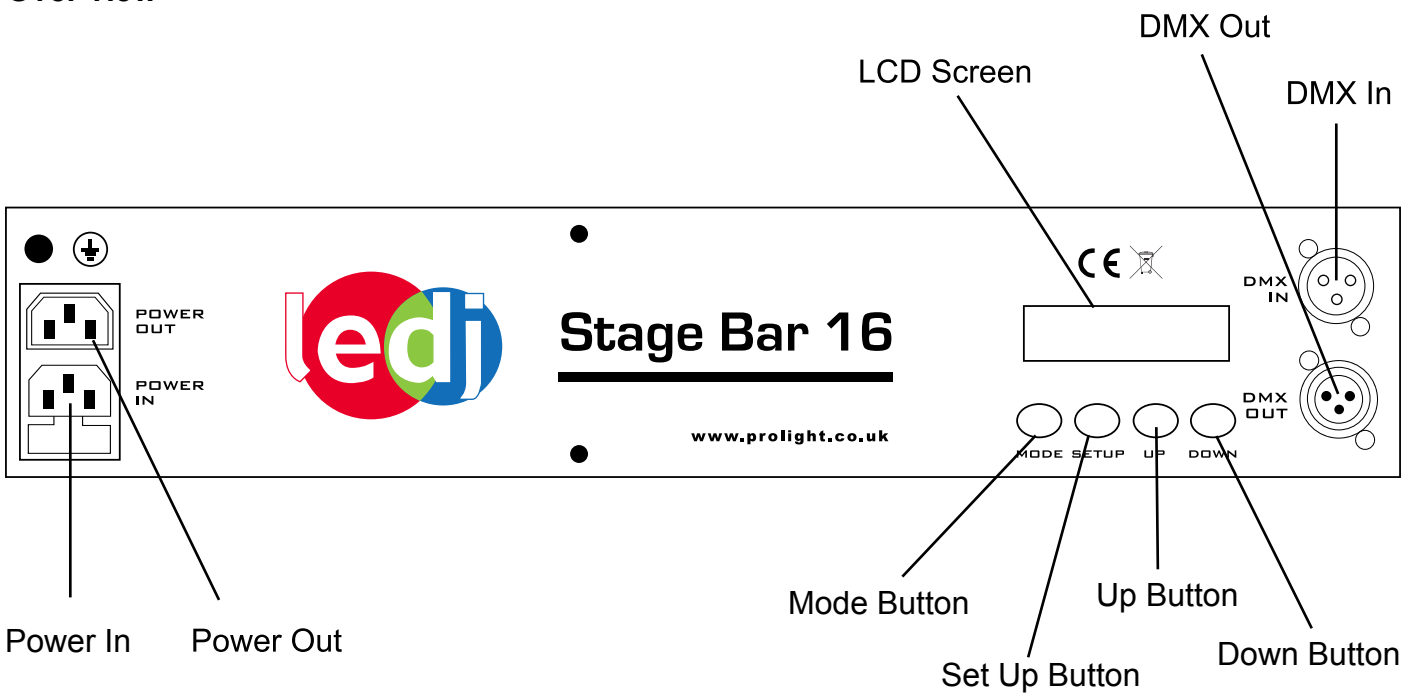
Incorrect installation or use can cause serious damage to people and property.

**Introduction**

**Features**

- DMX channels: 19/6/4 selectable
- 16 Ultra Bright 3W LEDs (R: 4, G:4, B: 4, A: 4)
- Sound activated, Auto run, Master/slave and DMX modes
- Sound control via internal microphone
- 13 built-in programmes
- Consumption: 60W
- Beam 25 degrees
- Lamp life: 100,000 hours

**Over view**



**Setup**

**Operating Instructions**

The Stage Bar 16 is a DMX-512 controllable unit made up of high efficiency and Ultra bright LEDs and will operate in auto run, 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 Stage Bar 16 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 13 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 13 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 3 DMX modes 19, 6 or 4 channel, press the “**SET UP**” button again to choose the desired DMX mode by using the “**UP**” and “**DOWN**” buttons.

For the 19, 6 and 4 channel DMX address information please see page 6.

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

**13 Built-in programme chart**

01, Static colour Blackout - RGBA Flash: 00 - 99	Static colour selection. R: 00 - 99, G: 00 - 99, B: 00 - 99, A: 00 - 99 NB: See static colour selection below.
02, Colour Jump Speed: 00 - 99 Flash: 00 - 99	Jumps through its built-in 15 colours one after the other. Speed and flash adjustable.
03, Colour Fade Speed: 00 - 99 Flash: 00 - 99	15 colour fade in, fade out Speed and flash adjustable.
04, Colour Dream Speed: 00 - 99 Flash: 00 - 99	15 colour fade Speed and flash adjustable.
05, Colour Flow Speed: 00 - 99 Flash: 00 - 99	15 colour flow from left to right. Speed and flash adjustable.
06, Colour Overlap Flow Speed: 00 - 99 Flash: 00 - 99	15 colour flow from left to right, right to left Speed and flash adjustable.
07, Colour Chase Speed: 00 - 99 Flash: 00 - 99	15 colour chase from left to right, right to left Speed and flash adjustable.
08, Multi-Colour Speed: 00 - 99 Flash: 00 - 99	Multi-colour chase from left to right, Speed and flash adjustable.
09, Fade Flow Speed: 00 - 99 Flash: 00 - 99	15 colour fade flow from left to right, Speed and flash adjustable.
10, Two Flow Speed: 00 - 99 Flash: 00 - 99	2 colour flow from left to right, Speed and flash adjustable.
11, One Way Speed: 00 - 99 Flash: 00 - 99	2 colour chase from left to right, Speed and flash adjustable.
12, Two Way Speed: 00 - 99 Flash: 00 - 99	2 colour flow from left to right, right to left Speed and flash adjustable.
13, Two Colour Speed: 00 - 99 Flash: 00 - 99	2 colour chase from left to right, right to left Speed and flash adjustable.

**Static colour selection:**

To select a static colour press the “**MODE**” button to show “**01.STATIC**” on the LCD screen. Now press the “**SETUP**” button to select the desired light output value of each individual colour, for example for RED and AMBER on only set the values to R:99,G:00,B:00,A99.

**Light output values: 00 = Off, 99 = On.**

**Flash speed values: 00 = Off, 99 = Fast**

**4 channel mode DMX chart**

CH1	CH2	CH3	CH4
Red 0-255	Green 0-255	Blue 0-255	Amber 0-255

**6 channel mode DMX chart**

CH1	CH2	CH3	CH4	CH5	CH6
Red 0-255	Green 0-255	Blue 0-255	Amber 0-255	Master dimmer 0-255	0 = On 1-5 = Sound 6-10 = On 11-255 = Flash

**19 channel mode DMX chart**

CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8	CH9	CH10	CH11	CH12	CH13	CH14	CH15	CH16	CH17	CH18	CH19
0-5: BLACKOUT																		
6-10 DIMMER	0-255 ALL	0-255 Flash	0-255 R	0-255 G	0-255 B	0-255 A												
11-15 DIMMER	0-255 ALL	0-255 Flash	0-255 R1	0-255 G1	0-255 B1	0-255 A1	0-255 R2	0-255 G2	0-255 B2	0-255 A2	0-255 R3	0-255 G3	0-255 B3	0-255 A3	0-255 R4	0-255 G4	0-255 B4	0-255 A4
16-20 R	0-255 Speed	0-255 Flash																
21-25 G	0-255 Speed	0-255 Flash																
26-30 B	0-255 Speed	0-255 Flash																
31-35 A	0-255 Speed	0-255 Flash																
36-40 RA	0-255 Speed	0-255 Flash																
41-45 RG	0-255 Speed	0-255 Flash																
46-50 RB	0-255 Speed	0-255 Flash																
51-55 GB	0-255 Speed	0-255 Flash																
56-60 AB	0-255 Speed	0-255 Flash																
61-65 AG	0-255 Speed	0-255 Flash																
66-70 RGB	0-255 Speed	0-255 Flash																
71-75 RGA	0-255 Speed	0-255 Flash																
76-80 RBA	0-255 Speed	0-255 Flash																
81-85 GBA	0-255 Speed	0-255 Flash																
86-90 RGBA	0-255 Speed	0-255 Flash																
91-100 Colour lump	0-255 Speed	0-255 Flash																
101-110 Colour fade	0-255 Speed	0-255 Flash																
111-120 Dreaming	0-255 Speed	0-255 Flash																
121-130 Colour flow	0-255 Speed	0-255 Flash																
131-140 Overlap flow	0-255 Speed	0-255 Flash																
141-150 Colour chase	0-255 Speed	0-255 Flash																
151-160 Multi- Colour	0-255 Speed	0-255 Flash																
161-170 Fade flow	0-255 Speed	0-255 Flash	0-255 Colour select															
171-180 Two flow	0-255 Speed	0-255 Flash	0-255 Colour select	0-255 Colour select														
181-190 One way	0-255 Speed	0-255 Flash	0-255 Colour select	0-255 Colour select														
191-200 Two way	0-255 Speed	0-255 Flash	0-255 Colour select	0-255 Colour select														
201-210 Two Colour	0-255 Speed	0-255 Flash	0-255 Colour select	0-255 Colour select														
211-255 SOUND	0-255 Sens																	

**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 Stage Bar 16 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.

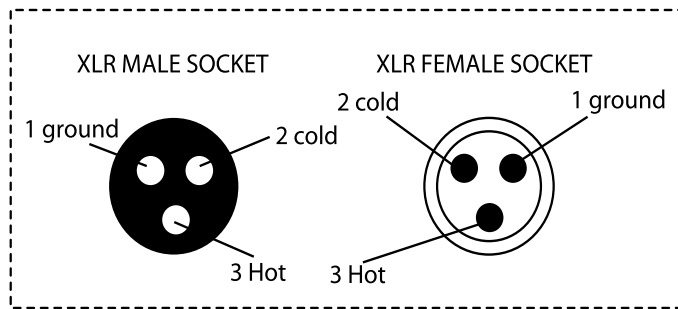
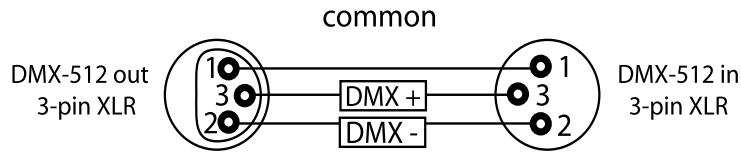


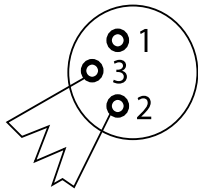
FIGURE 3

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.....550mm
- Width.....120mm
- Height.....155mm
- Weight.....3.6kgs

### Power

- AC input.....240V/50hz
- Power consumption.....60W

### • Fuse

- Main.....2A/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.....19, 6 and 4





**CREATE THE RIGHT EFFECT**

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