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# **COLOUR STORM** **TRI**

(Order code: LEDJ165)

## **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!

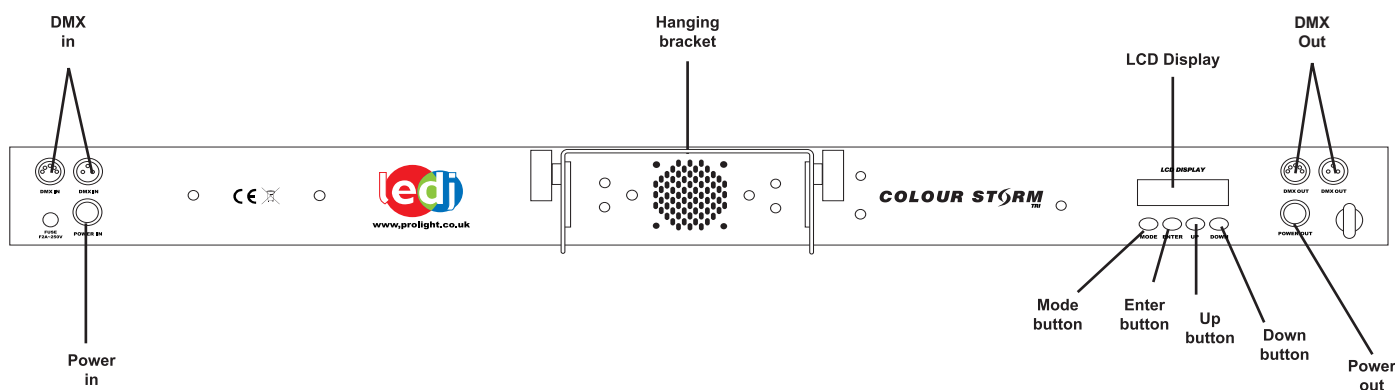
Incorrect installation or use can cause serious damage to people and property.

## Introduction

### Features

- 16 x 3W tri-colour LEDs
- Beam angle: 25 degrees
- 400Hz Refresh rate
- 0-100% dimming and variable strobe
- DMX channels: 3/5/6/9/12/15/24/27/48 or 51 selectable
- Sound active, auto, master/slave and DMX modes
- 4 push button menu with LCD display
- Powercon in/out sockets
- 3-Pin XLR in/out sockets
- 5-pin XLR in/out sockets

### Overview



### Setup

### Operating Instructions

The Colour Storm Tri is a DMX-512 controllable unit made up of high efficiency tri-colour LEDs and will operate in auto, master/slave, sound activated or DMX control modes.

#### HBR-1D Operation (optional)

To operate the Colour Storm Tri via the (optional) LEDJ HBR-1D controller (LEDJ123), please ensure that the Colour Storm Tri has been set into “**SLAVE MODE**” and connect the controller to the 3-pin XLR socket on the rear of the unit.

The HBR-1D can be used in conjunction with the MB-2 Footswitch (LEDJ124), by plugging the 5-pin XLR from the MB-2 into the HBR-1D controller.

**Note:** please follow the user manuals supplied with the optional MB-2 and HBR-1D controllers for details of various operation 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 **"ENTER"** button to select the desired sensitivity level by using the **"UP"** and **"DOWN"** buttons. Press the **"ENTER"** button again to select the frequency level 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 **"ENTER"** button to select the desired frequency level by using the **"UP"** and **"DOWN"** buttons.

**"FQN" 01-99 (01 = low, 99 = high)**

Note: In this mode, it will run 13 built-in programmes in a continuous loop.

### **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 **"ENTER"** button to choose between the 14 built-in programmes by using the **"UP"** and **"DOWN"** buttons. Now press the **"ENTER"** button to select the desired speed and adjust by using the **"UP"** and **"DOWN"** buttons. Press the **"ENTER"** 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 **"ENTER"** button and select the desired DMX address setting by using the **"UP"** and **"DOWN"** buttons. Then to select one of the 10 DMX modes 51, 48, 27, 24, 15, 12, 9, 6, 5 or 3 channel, press the **"ENTER"** button again to choose the desired DMX mode by using the **"UP"** and **"DOWN"** buttons.

For the 51, 48, 27, 24, 15, 12, 9, 6, 5 or 3 channel DMX address information please see pages 6, 7 and 8.

NOTE: Once the desired settings have been selected in each of the above modes, **ALWAYS** confirm the settings by pressing the **"ENTER"** button.

**Invert mode:**

To activate the Invert function, press the “**MODE**” button to show “**FLOW INVERT**” on the LCD screen. Press the “**ENTER**” button to turn the function “**ON**” or “**OFF**” by using the “**UP**” and “**DOWN**” buttons.

**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

### 3 channel mode DMX chart

CH1	CH2	CH3
All Red 0-100%	All Green 0-100%	All Blue 0-100%

### 5 channel mode DMX chart

Channel	Value	Function
1	0-255	Red
2	0-255	Green
3	0-255	Blue
4	0-255	Master dimmer
5	0	ON
	1-5	Sound active (7 colour)
	6-10	ON
	11-255	Strobe (slow to fast)

### 6 channel mode DMX chart

CH1	CH2	CH3	CH4	CH5	CH6
R1	G1	B1	R2	G2	B2

### 9 channel mode DMX chart

CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8	CH9	
0-21	Master dimmer 0-255	Flash 0-255	R1 0-255	G1 0-255	B1 0-255	R2 0-255	G2 0-255	B2 0-255	
22-32 Red									
33-43 Yellow									
44-54 Green									
55-65 Cyan									
66-76 Blue									
77-87 Purple	Speed 0-255								
88-98 White									
99-109 Dream									
110-120 Meteor									
121-131 Fade									
132-142 Change									
143-153 Flow 1									
154-164 Flow 2									
165-175 Flow 3									
176-186 Flow 4									
187-197 Flow 5									
198-208 Flow 6									
209-219 Flow 7									
220-230 Flow 8									
231-241 Flow 9				Colour Select	Colour Select				
242-255 Sound				Colour Select	Colour Select				

**Note: For 15, 27 and 51 channel modes, please follow the 9 channel DMX chart for channels 1, 2 and 3.**

### **12 channel mode DMX chart**

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

### **15 channel mode DMX chart**

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

CH13	CH14	CH15	CH16	CH17	CH18	CH19	CH20	CH21	CH22	CH23	CH24
R5	G5	B5	R6	G6	B6	R6	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
0-21	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



**48 channel mode DMX chart**

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

CH13	CH14	CH15	CH16	CH17	CH18	CH19	CH20	CH21	CH22	CH23	CH24
R5	G5	B5	R6	G6	B6	R6	G7	B7	R8	G8	B8

CH25	CH26	CH27	CH28	CH29	CH30	CH31	CH32	CH33	CH34	CH35	CH36
R1	G1	B1	R2	G2	B2	R3	G3	B3	R4	G4	B4

CH37	CH38	CH39	CH40	CH41	CH42	CH43	CH44	CH45	CH46	CH47	CH28
R5	G5	B5	R6	G6	B6	R6	G7	B7	R8	G8	B8

**51 channel mode DMX chart**

CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8	CH9	CH10	CH11	CH12	CH13	CH14	CH15
0-21	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	CH28	CH29	CH30
R5	G5	B5	R6	G6	B6	R7	G7	B7	R8	G8	B8	R9	G9	B9

CH31	CH32	CH33	CH34	CH35	CH36	CH37	CH38	CH39	CH40	CH41	CH42	CH43	CH44	CH45
R10	G10	B10	R11	G11	B11	R12	G12	B12	R13	G13	B13	R14	G14	B14

CH46	CH47	CH48	CH49	CH50	CH51
R15	G15	B15	R16	G16	B16

**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 Colour Storm Tri 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 or 5-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.

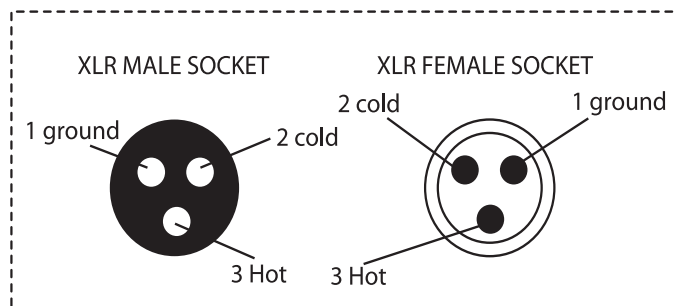
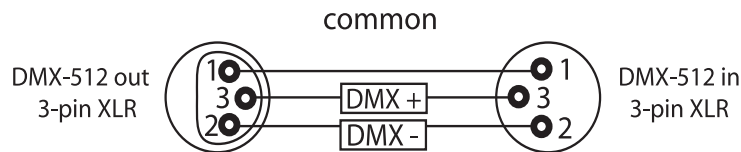


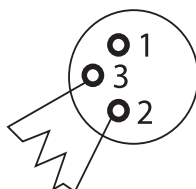
FIGURE 3

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.

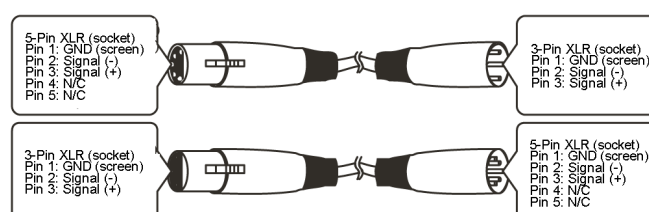


Termination reduces signal transmission problems and interference. it is always advisable to connect a DMX terminal, (resistance 120 Ohm 1/4 W) between pin 2 (DMX-) and pin 3 (DMX+) of the last fixture.

**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.



## Technical Specifications

### Weight & Dimensions

- Length.....1050mm
- Width.....90mm
- Height.....198mm
- Weight.....7.3Kgs

### Power

- AC input.....240V/50hz
- Power consumption.....99W

### • Fuse

- Main.....F2A

### Control & Programming

- Data input.....Locking 3/5-pin XLR male socket
- Data output.....Locking 3/5-pin XLR female socket
- Protocols.....DMX-512 USITT
- DMX channels.....51, 48, 27, 24, 15, 12, 9, 6, 5 & 3