



# LED Controller

ORDERCODE 41002



**SHOWELECTRONICS FOR PROFESSIONALS**

## **Congratulations!**

You have bought a great, innovative product from Showtec.

The Showtec LED Controller brings excitement to any venue. Whether you want simple plug-&-play action or a sophisticated DMX show, this product provides the effect you need.

You can rely on Showtec, for more excellent lighting products.

We design and manufacture professional light equipment for the entertainment industry.

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Thank you!



**Showtec LED Controller™ Product Guide**

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## WARNING



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

## SAFETY INSTRUCTIONS

Every person involved with the installation, operation and maintenance of this device has to:

- be qualified
- follow the instructions of this manual



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

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

Please consider that damages caused by manual modifications to the device are not subject to warranty.

This device contains no user-serviceable parts. Refer servicing to qualified technicians only.

### **IMPORTANT:**

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

- Never let the power-cord come into contact with other cables! Handle the power-cord and all connections with the mains with particular caution!
- Never remove warning or informative labels from the unit.
- Do not open the device and do not modify the device.
- Do not connect this device to a dimmerpack.
- Do not switch the device on and off in short intervals, as this would reduce the system's life.
- Only use device indoor, avoid contact with water or other liquids.
- Avoid flames and do not put close to flammable liquids or gases.
- Always disconnect power from the mains, when device is not used or before cleaning! Only handle the power-cord by the plug. Never pull out the plug by tugging the power-cord.
- Make sure that the available voltage is not higher than stated on the rear panel.
- Make sure that the power-cord is never crimped or damaged. Check the device and the power-cord from time to time.
- If device is dropped or struck, disconnect mains power supply immediately. Have a qualified engineer inspect for safety before operating.
- If the device has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.

- If your Showtec device fails to work properly, discontinue use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Showtec dealer for service.
- For replacement use fuses of same type and rating only.
- Repairs, servicing and electric connection must be carried out by a qualified technician.
- WARRANTY: Till one year after date of purchase.

## **OPERATING DETERMINATIONS**

If this device is operated in any other way, than the one described in this manual, the product may suffer damages and the warranty becomes void.

Any other operation may lead to dangers like short-circuit, burns, electric shock, lamp explosion, crash etc. You endanger your own safety and the safety of others!

*Improper installation can cause serious damage to people and property !*

## Description of the device

### Features

The LED Controller can control up to 4000 RGB LED Tubes

- 21 pre-programmed scenes and chases.
- 144 LEDs per meter tube.
- Controllable DMX or Stand-alone controller.
- 4 Outputs ( 4x1000 Tubes can be controlled)
- DMX IN and DMX OUT.

### Overview



Fig. 1

- 1) ON / OFF
- 2) Ventilation
- 3) Mode: Change the pre-programmed modes
- 4) Set Up: Change the settings of the pre-programmed modes (Speed, Flash, Colors)
- 5) Up: Increase the DMX address or program options.
- 6) Down: Decrease the DMX address or program options.
- 7) LCD Display

### Backside



Fig. 2

- 8) Power
- 9) Output 1
- 10) Output 2
- 11) Output 3
- 12) Output 4
- 13) 3 pin DMX IN connector: XLR male socket used to receive DMX signals.
- 14) 3 pin DMX OUT connector: XLR female socket used to send DMX signals.

## Installation

Remove all packing materials from the LED Controller. Check that all foam and plastic padding is removed. Connect all cables.

**Always disconnect from electric mains power supply before cleaning or servicing.  
Damages caused by non-observance are not subject to warranty.**

## Set Up and Operation

Follow the directions below, as they pertain to your preferred operation mode.

Before plugging the unit in, always make sure that the power supply matches the product specification voltage. Do not attempt to operate a 120V specification product on 230V power, or vice versa.

You can operate this device as:

1. Stand-alone unit
2. DMX-controllable

### Stand-alone

1. Turn the power switch on. The device will start test-mode.
2. Press MODE button to enter mode setting.
3. Switch to System Mode, then press the Set Up-button.
4. Enter the amount of tubes you are using.
5. For **Stand-alone** you have to use **DMX Channel: 0**, then press the Set Up-button again.
6. The LCD now shows "Set Address YES NO"; press NO (=Set Up-Button) to change your previous settings, or YES (=Mode-Button) to store your choice.
7. Now your unit is a stand-alone. You will find all the pre-programmed scenes below.

### Menu

- |                   |              |
|-------------------|--------------|
| 1. Black-out      |              |
| 2. Static RED     |              |
| 3. Static GREEN   |              |
| 4. Static YELLOW  |              |
| 5. Static BLUE    |              |
| 6. Static PURPLE  |              |
| 7. Static CYAN    |              |
| 8. Static WHITE   |              |
| 9. Color Change   | Function Set |
| 10. Slow Flow 1   | Function Set |
| 11. Slow Flow 2   | Function Set |
| 12. Roll Chase 1  | Function Set |
| 13. Roll Chase 2  | Function Set |
| 14. Multi Color   | Function Set |
| 15. Fast Flow 1   | Function Set |
| 16. Fast Flow 2   | Function Set |
| 17. 2 Color Chase | Function Set |
| 18. 2 Color Flow  | Function Set |
| 19. Color Fade    | Function Set |
| 20. Auto Run      | Function Set |
| 21. System Mode   | Function Set |

When “Function Set” appears in the LCD, then you are able to make some extra settings: Run Speed, Flash Freq, etc.

- |                          |  |
|--------------------------|--|
| <b>9. Color Change</b>   | Function Set : Run Speed 0-100 (1X Set Up)<br>Flash Freq 0-100 (2X Set Up)<br>Mode : Return to the Mode Menu   |
| <b>10. Slow Flow 1</b>   | Function Set : Run Speed 0-100 (1X Set Up)<br>Flash Freq 0-100 (2X Set Up)<br>Mode : Return to the Mode Menu   |
| <b>11. Slow Flow 2</b>   | Function Set : Run Speed 0-100 (1X Set Up)<br>Flash Freq 0-100 (2X Set Up)<br>Mode : Return to the Mode Menu   |
| <b>12. Roll Chase 1</b>  | Function Set : Run Speed 0-100 (1X Set Up)<br>Flash Freq 0-100 (2X Set Up)<br>Mode : Return to the Mode Menu   |
| <b>13. Roll Chase 2</b>  | Function Set : Run Speed 0-100 (1X Set Up)<br>Flash Freq 0-100 (2X Set Up)<br>Mode : Return to the Mode Menu   |
| <b>14. Multi Color</b>   | Function Set : Run Speed 0-100 (1X Set Up)<br>Flash Freq 0-100 (2X Set Up)<br>Mode : Return to the Mode Menu   |
| <b>15. Fast Flow 1</b>   | Function Set : Run Speed 0-100 (1X Set Up)<br>Flash Freq 0-100 (2X Set Up)<br>Mode : Return to the Mode Menu   |
| <b>16. Fast Flow 2</b>   | Function Set : Run Speed 0-100 (1X Set Up)<br>Flash Freq 0-100 (2X Set Up)<br>Mode : Return to the Mode Menu   |
| <b>17. 2 Color Chase</b> | Function Set : Run Speed 0-100 (1X Set Up)<br>Flash Freq 0-100 (2X Set Up)<br>Color Sort 0-20 (3X Set Up)<br>Mode : Return to the Mode Menu  |
| <b>18. 2 Color Flow</b>  | Function Set : Run Speed 0-100 (1X Set Up)<br>Flash Freq 0-100 (2X Set Up)<br>Color Sort 0-20 (3X Set Up)<br>Mode : Return to the Mode Menu  |
| <b>19. Color Fade</b>    | Function Set : Run Speed 0-100 (1X Set Up)<br>Flash Freq 0-100 (2X Set Up)<br>Mode : Return to the Mode Menu   |
| <b>20. Auto Run</b>      | Function Set : Unit Times 0-20<br>Mode : Return to the Mode Menu   |
| <b>21. System Mode</b>   | Function Set : Tube Amount 0-1000 (1X Set Up)<br>DMX Channel 0-65535 (2X Set Up)<br>Set Address YES(=Set Up-Button)-NO(=Mode-Button) (3X Set Up)<br>Mode : Return to the Mode Menu |

In menu 17 and 18 you are also able to change the color of the chase or flow.  
There are 20 available color varieties.



## DMX Controlled

1. Turn the power switch on. The device will start test-mode.
2. Press MODE button to enter mode setting.
3. Switch to System Mode, then press the Set Up-button.
4. Enter the amount of tubes you are using.
5. For **DMX Controlled** you have to use **DMX Channel: 1-65535**, then press the Set Up-button again.
6. The LCD now shows "Set Address YES NO"; press NO (=Set Up-Button) to change your previous settings, or YES (=Mode-Button) to store your choice.
7. Now your unit is DMX-Controlled. You will find all the pre-programmed scenes below.

Channel	Program	Select
<b>1</b>	0-28	Black-out
	29-57	Static RED
	58-86	Static GREEN
	87-115	Static YELLOW
	116-144	Static BLUE
	145-173	Static PURPLE
	174-202	Static CYAN
	203-231	Static WHITE
	232-255	Color Change
	<b>2</b>	0-12
13-25		Slow Flow 2
26-38		Roll Chase 1
39-51		Roll Chase 2
52-64		Multi Color
65-77		Fast Flow 1
78-90		Fast Flow 2
91-103		2 Color Chase
104-116		2 Color Flow
117-129		Color Fade
130-142		B+W Flow
143-155		R+G Flow
156-168		G+B Flow
169-181		R+B Flow
182-194		R+G Chase
195-207		R+B Chase
208-220		R+W Chase
221-233	B+G Chase	
234-246	W+G Chase	
247-255	Rainbow Chase	
<b>3</b>	Strobe Setting Variable from OFF to 20Hz (0-255). 255=ON	

To select programs via DMX Mode you have to make combinations of CHANNEL 2 and CHANNEL 1.

## **Maintenance**

The Showtec LED Controller requires almost no maintenance. However, you should keep the unit clean. Disconnect the mains power supply, and then wipe the cover with a damp cloth. Do not immerse in liquid. Do not use alcohol or solvents.

Keep connections clean. Disconnect electric power, and then wipe the DMX and audio connections with a damp cloth. Make sure connections are thoroughly dry before linking equipment or supplying electric power.

## **Troubleshooting**

### Showtec LED Controller

This troubleshooting guide is meant to help solve simple problems. If a problem occurs, carry out the steps below in sequence until a solution is found. Once the unit operates properly, do not carry out following steps.

- 1.** If the device does not operate properly, unplug the device.
- 2.** Check power from the wall, all cables, the fuse, etc.
- 3.** If all of the above appears to be O.K., plug the unit in again.
- 4.** If nothing happens after 30 seconds, unplug the device.
- 5.** Return the device to your Showtec dealer.

## Product Specification

Model: Showtec LED Controller

Voltage : AC 230V-50Hz (CE)

Power consumption : 300W(230V)

Fuse :16A

Output : 12V DC

Dimensions : 320 x 210 x 90 mm (LxWxH)

Weight : 2,3 kg

Design and product specifications are subject to change without prior notice.





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