



# LED Spere & Cube Controller 50

ORDERCODE 41141



**SHOWELECTRONICS FOR PROFESSIONALS**

## **Congratulations!**

You have bought a great, innovative product from Showtec.

The Showtec 19" LED Sphere & Cube Controller 50 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.

New products are being launched regularly. We work hard to keep you, our customer, satisfied.

For more information: [iwant@showtec.info](mailto:iwant@showtec.info)

You can get some of the best quality, best priced products on the market from Showtec.

So next time, turn to Showtec for more great lighting equipment.

Always get the best -- with Showtec !

Thank you!



**Showtec 19" LED Sphere & Cube Controller 50™ Product Guide**

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## WARNING



**CAUTION!**  
**Keep this device away from rain and moisture!**  
**Unplug mains lead before opening the housing!**



**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



**CAUTION! Be careful with your operations.**  
**With a dangerous voltage you can suffer**  
**a dangerous electric shock when touching the wires!**



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.
- Never look directly into the light source.
- Never leave any cables lying around.
- 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 device is not exposed to extreme heat, moisture or dust.
- 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!

### Rigging

*Please follow the European and national guidelines concerning rigging, trussing and all other safety issues.*

*Do not attempt the installation yourself !*

*Always let the installation be carried out by an authorized dealer !*

### Procedure:

- If a LED Sphere/Cube is lowered from the ceiling or high joists, professional trussing systems have to be used.
- Mount the LED Sphere/Cube to the trussing system.
- The LED Sphere/Cube must never be fixed swinging freely in the room.
- The installation must always be secured with a safety attachment, e.g. an appropriate safety net or safety-cable.
- When rigging, derigging or servicing the LED Sphere/Cube, always make sure, that the area below the installation place is blocked and staying in the area is forbidden.

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

## Description of the device

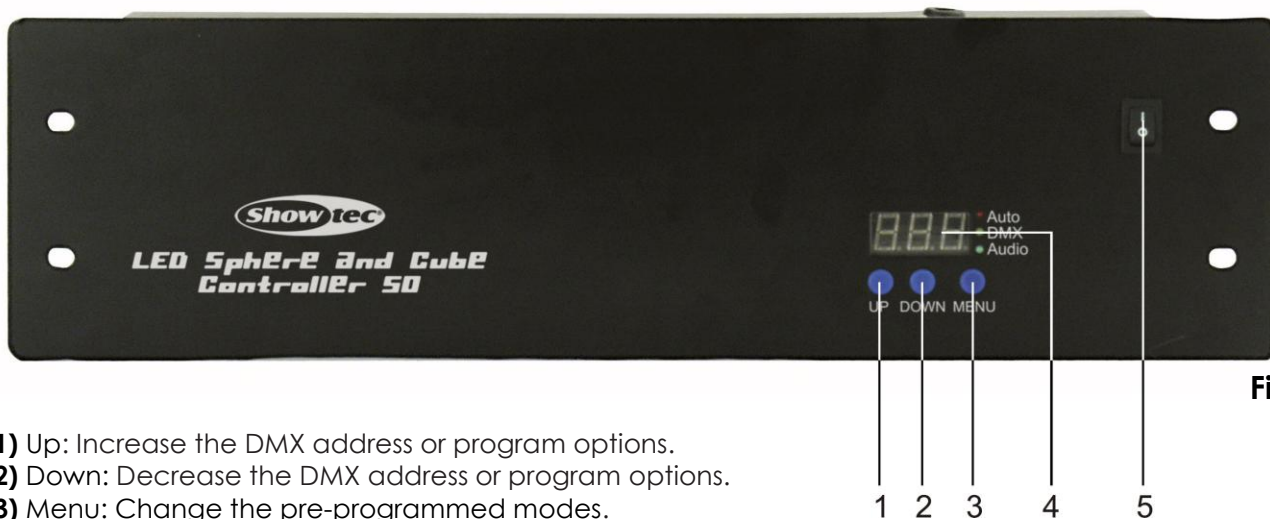
### Features

The 19" LED Sphere & Cube Controller 50 is designed for the more demanding user:

- 4/48 DMX Channels
- Controllable by DMX or Stand-alone controller.
- 12 Outputs for LED Sphere 30, LED Sphere 50 or LED Cube 30
- DMX IN and DMX OUT.
- Accessories: Extension Cable for LED Sphere & Cube 3m. (41150)  
Extension Cable for LED Sphere & Cube 6m. (41151)

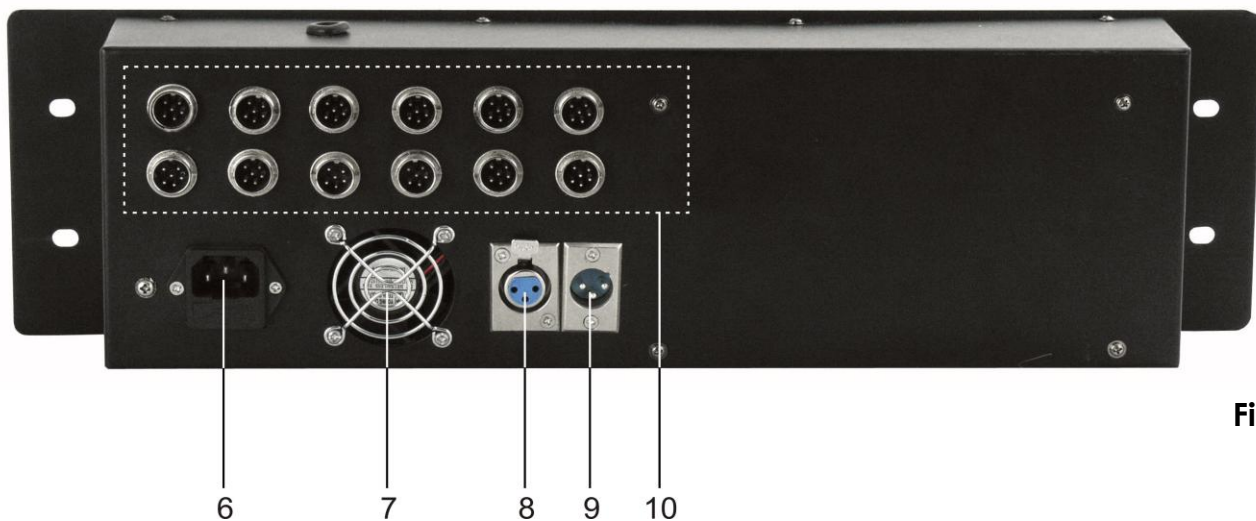
**Note: You can connect the LED Sphere 30, LED Sphere 50 and LED Cube 30 to the LED Sphere Controller 50**

### Overview



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

### Backside



- 6) IEC power connector + Fuse F2A 250V
- 7) Cooling Fan
- 8) 3 pin DMX OUT connector: XLR female socket used to send DMX signals.
- 9) 3 pin DMX IN connector: XLR male socket used to receive DMX signals.
- 10) 12X Output to LED Sphere 30cm (41120), LED Sphere 50cm (41121) or LED Cube (41130).

## Installation

Remove all packing materials from the LED Sphere & Cube Controller 50. Check that all foam and plastic padding is removed. Connect all cables.

**Note:** It's necessary to insert a XLR termination plug (with 120 Ohm) in the last fixture in order to ensure proper transmission on the DMX data link.

**Do not supply power before the whole system is set up and connected properly.  
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.

## Menu Settings

Menu	Value	Description
COL	0-7	0-Blackout, 1-R, 2-G, 3-B, 4-Y,5-C, 6-M, 7-W
CHS	0-15	Built-in chases
SPD	1-16	Speed Control
CHA	0-511	DMX Address
CE	4 or 48	Channel Control
SOU	ON / OFF	Sound-controlled

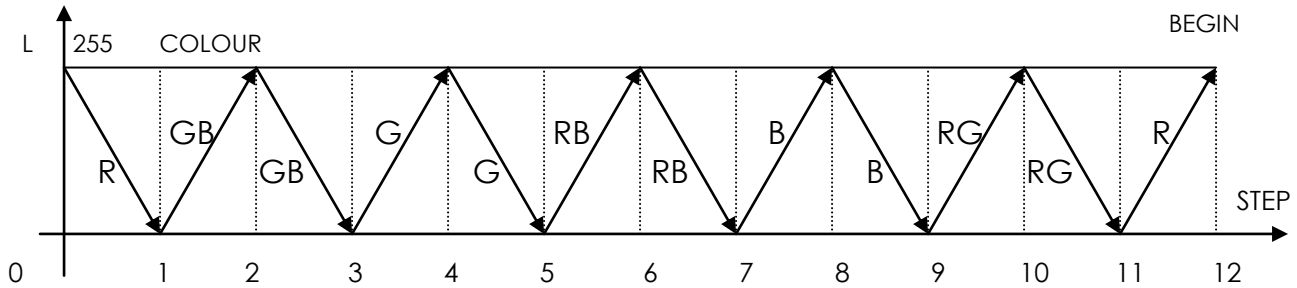
You can operate this device as:

1. Stand-alone unit
2. DMX-controllable

## Stand-alone

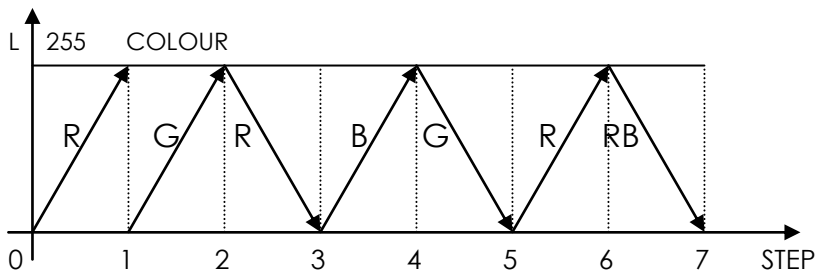
1. Turn the power switch on. The device will start.
2. If you want to use the COL menu, be sure to set CHS to 0 and SPD to 1  
If you want to use the CHS and SPD menu, be sure to set COL to 0.
3. You will find all the pre-programmed chases below.

### CHASE 1



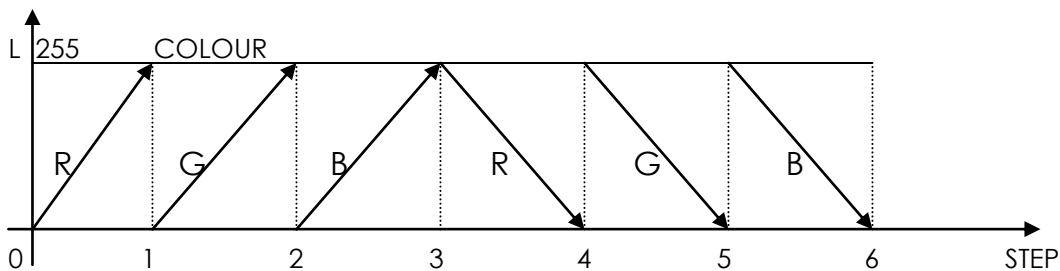
All lights operate synchronously with a fade effect.

### CHASE 2:



All lights operate synchronously with a fade effect.

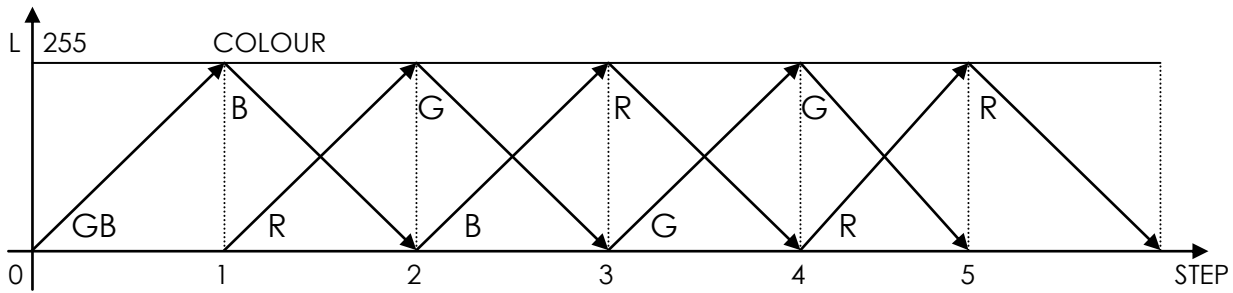
### CHASE 3:



All lights operate synchronously with a fade effect.

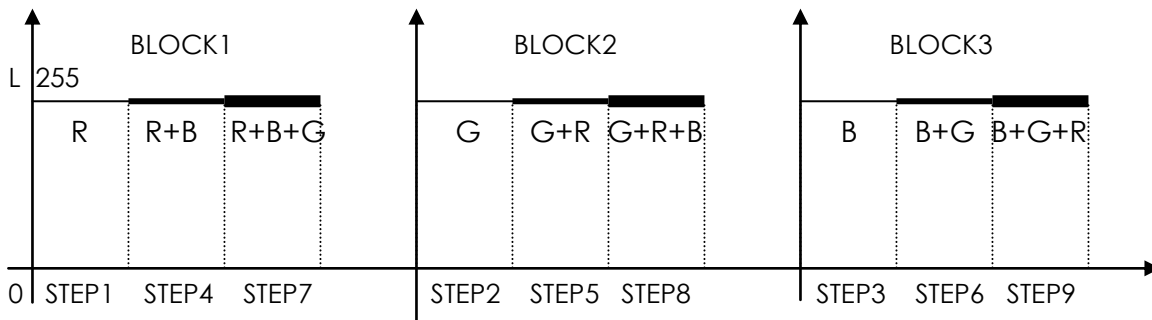


### CHASE 4:



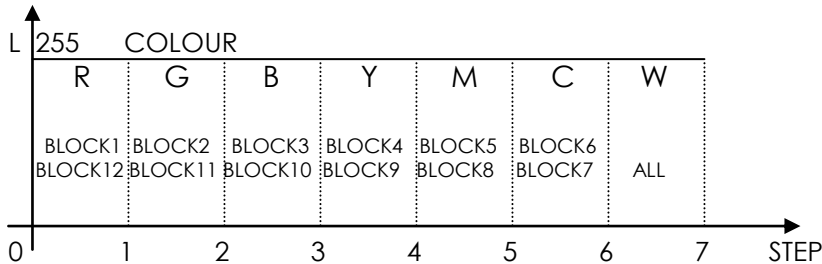
All lights operate synchronously with a fade effect.

### CHASE 5:



Divide the 12 steps into 4 parts (BLOCK1, BLOCK2, BLOCK3); there is no fade effect.

### CHASE 6:

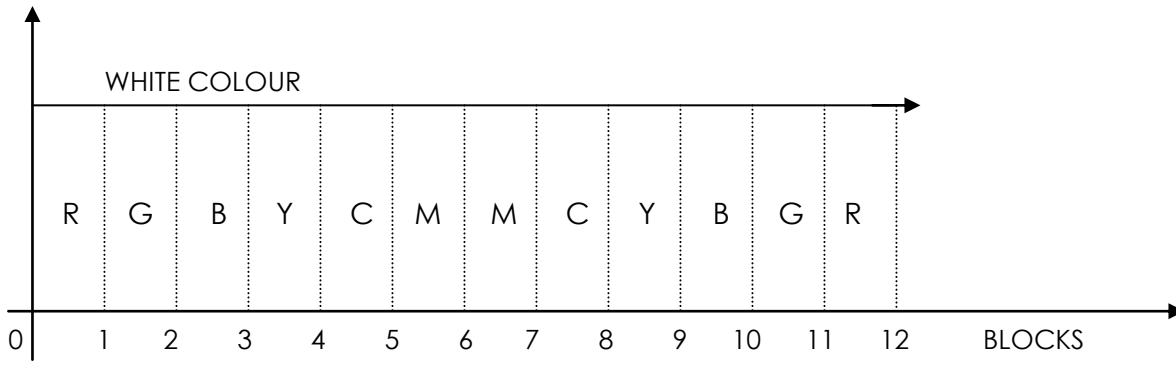


There is no fade effect.

### CHASE 7:

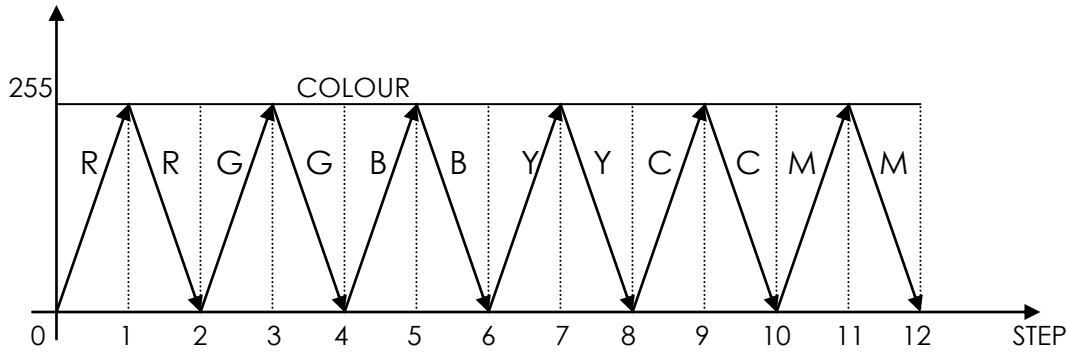
The course for every unit showing is the same as chase 2.  
12 units do not operate synchronously, this is a random chase.

### CHASE 8:



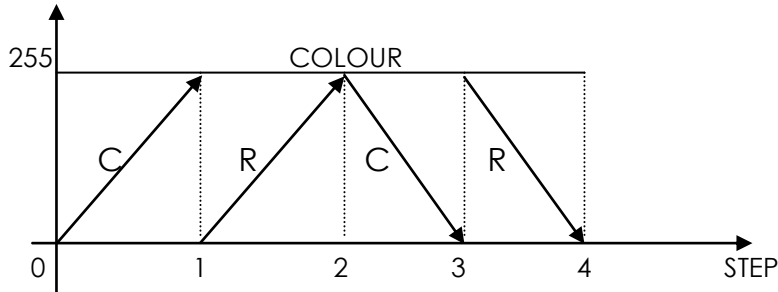
With fade effect.

### CHASE 9:

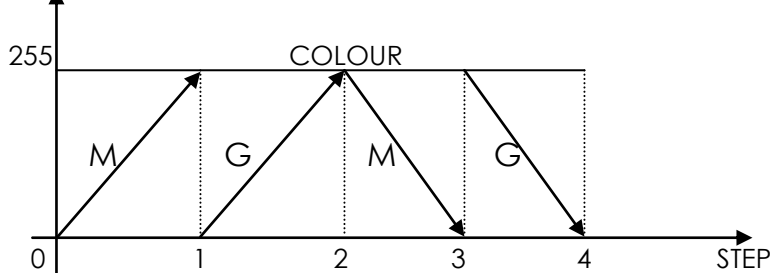


All lights operate synchronously with a 7 color fade effect.

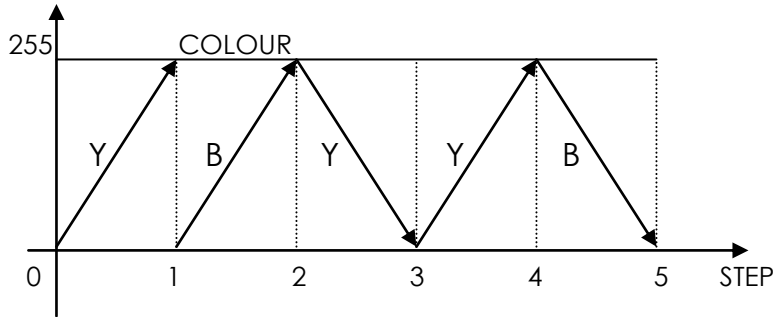
### CHASE 10:



### CHASE 11:

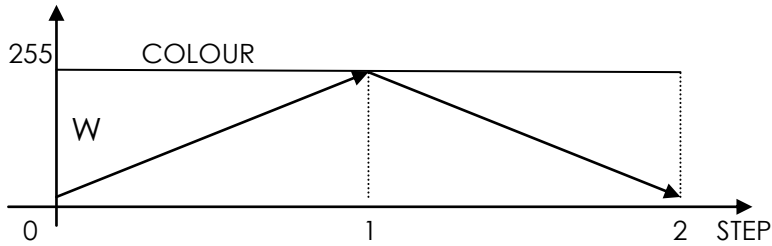


### CHASE 12:



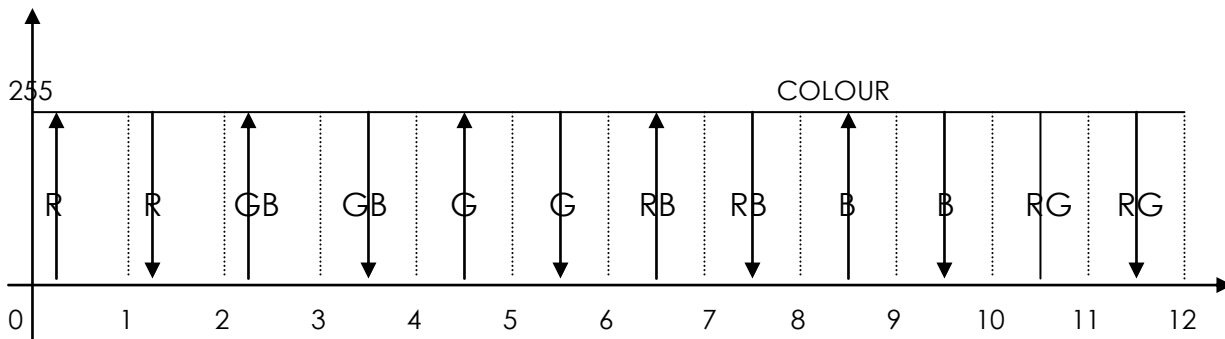
All lights operate synchronously with a fade effect.

### CHASE 13:



All lights operate synchronously with a fade effect.

### CHASE14:



explanation all BLOCK are synchronization without fade effect and keep the COLOUR in highest brightness.

### CHASE15:

Auto-run all chases.

## DMX Controlled

1. Turn the power switch on. If the DMX cable has been plugged in, the LED next to the display will blink.
2. Now your unit is DMX-Controlled.
3. In menu CE you can choose 2 different DMX modes, receiving the channel 4 or channel 48.

## DMX Protocol - 4 Channel Mode

### Channel 1 – Colors

0-15	OFF
16-31	Red
32-47	Green
48-63	Blue
64-79	Yellow
80-95	Cyan
96-111	Magenta
112-127	White
128-255	OFF

### Channel 2 – Chases

0-15	Chase 0
16-31	Chase 1
32-47	Chase 2
48-63	Chase 3
64-79	Chase 4
80-95	Chase 5
96-111	Chase 6
112-127	Chase 7
128-143	Chase 8
144-159	Chase 9
160-175	Chase 10
176-192	Chase 11
193-208	Chase 12
209-224	Chase 13
225-240	Chase 14
241-255	Chase 15

**Note: When using the Chase Programs, please set CH1 to 0**

### Channel 3 – Speed

0-15	Stop
16-255	Gradual speed adjustment from 0 – 100%

### Channel 4 – Dimmer

0-255	Gradual adjustment intensity from 0 – 100%
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## DMX Protocol - 48 Channel Mode

Channel 1 – Red Sphere/Cube 1  
Channel 2 – Green Sphere/Cube 1  
Channel 3 – Blue Sphere/Cube 1  
Channel 4 – Dimmer Sphere/Cube 1  
Channel 5 – Red Sphere/Cube 2  
Channel 6 – Green Sphere/Cube 2  
.  
.  
.  
Channel 47 – Blue Sphere/Cube 12  
Channel 48 – Dimmer Sphere/Cube 12

## Maintenance

The Showtec 19" LED Sphere & Cube Controller 50 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 Sphere & Cube Controller 50

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 19" LED Sphere & Cube Controller 50 (41041)  
Voltage : AC 230V-50Hz (CE)  
Power Consumption: 150W  
Dimensions : 482,6 (19") x 95 x 133,5 mm (3HE) (LxWxH)  
Weight : 3,76 kg



Model: Showtec LED Sphere 30 (41120)  
Total LEDs: 81 (27 red, 36 green, 18 blue)  
Power Supply: 24V (by controller: 41140)  
Power Consumption: 12W  
Protection rating: IP-66  
Dimensions: ø30cm  
Weight: 1,64Kg



Model: Showtec LED Sphere 50 (41121)  
Total LEDs: 81 (27 red, 36 green, 18 blue)  
Power Consumption: 12W  
Power Supply: 24V (by controller: 41141)  
Protection rating: IP-66  
Dimensions: ø50cm  
Weight: 3,72 Kg



Model: Showtec LED Cube 30 (41130)  
Total LEDs: 81 (27 red, 36 green, 18 blue)  
Protection rating: IP-66  
Power Supply: 24V (by controller: 41140)  
Power Consumption: 12W  
Dimensions: 30x30x30 cm (LxWxH)  
Weight: 2,6 Kg



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



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