



LED Operator 1

ORDERCODE 50718



SHOWELECTRONICS FOR PROFESSIONALS

Congratulations!

You have bought a great, innovative product from Showtec.

The Showtec LED Operator 1 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

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!



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

Unpacking Instructions

Immediately upon receiving this product, carefully unpack the carton and check the contents to ensure that all parts are present, and have been received in good condition. Notify the dealer immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

Your shipment includes:

- LED Operator 1
- Power adapter included
- User manual



WARNING



CAUTION!
Keep this device away from rain and moisture!



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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.
- 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 device'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.
- Repairs, servicing and electric connection must be carried out only by Showtec.
- WARRANTY: Till one year after date of purchase.

OPERATING DETERMINATIONS

This device is not designed for permanent operation. Consistent operation breaks will ensure that the device will serve you for a long time without defects.

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 !

Connection with the mains

Connect the device to the mains with the power-plug.

Always pay attention, that the right color cable is connected to the right place.

International	EU Cable	UK Cable	US Cable	Pin
L	BROWN	RED	YELLOW/COPPER	FASE
N	BLUE	BLACK	SILVER	NUL
	YELLOW/GREEN	GREEN	GREEN	EARTH

Make sure that the device is always connected properly to the earth!

Return Procedure

Returned merchandise must be sent prepaid and in the original packing, call tags will not be issued. Package must be clearly labeled with a Return Authorization Number (RMA number). Products returned without an RMA number will be refused. Highlite will not accept the returned goods or any responsibility. Call Highlite 0031-455667723 or mail aftersales@highlite.nl and request an RMA prior to shipping the fixture. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to properly pack fixture, any shipping damage resulting from inadequate packaging is the customer's responsibility. Highlite reserves the right to use its own discretion to repair or replace product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

Note: If you are given an RMA number, please include the following information on a piece of paper inside the box:

- 1) Your name
- 2) Your address
- 3) Your phone number
- 4) A brief description of the symptoms

Claims

The client has the obligation to check the delivered goods immediately upon delivery for any shortcomings and/or visible defects, or perform this check after our announcement that the goods are at their disposal. Damage incurred in shipping is the responsibility of the shipper; therefore the damage must be reported to the carrier upon receipt of merchandise.

It is the customer's responsibility to notify and submit claims with the shipper in the event that a fixture is damaged due to shipping. Transportation damage has to be reported to us within one day after receipt of the delivery.

Any return shipment has to be made post-paid at all times. Return shipments must be accompanied with a letter defining the reason for return shipment. Non-prepaid return shipments will be refused, unless otherwise agreed in writing.

Complaints against us must be made known in writing or by fax within 10 working days after receipt of the invoice. After this period complaints will not be handled anymore.

Complaints will only then be considered if the client has so far complied with all parts of the agreement, regardless of the agreement of which the obligation is resulting.

Description of the device

Features

The LED Operator is a light controller from Showtec and features:

- Easy to use
- 3 DMX Channels
- 9 preset colours (Red, Orange, Yellow, Green, Cyan, Blue, Purple, Magenta, White)
- DMX-512
- Strobe function
- Chases
- Master Dimmer
- 3 faders to control Red, Green and Blue LED of your LED fixture.
- Manual or sound-controlled
- Built-in microphone.
- simple but powerful controller for non-complex light applications
- Power supply: AC 12V- 1A (included)
- Power consumption: 6 Watt
- Power connector: Adapter (included)
- DMX-512: 3-pin XLR
- Strobe Function
- Individual RGB Channel Faders
- Fade/Speed/Strobe fader for Chase control

NOTE:

Knowledge of DMX is required to fully utilize this unit.

Overview



Fig. 1

Controller Front



Fig. 2

- 1) Preset Colors: Red, Orange, Yellow, Green, Cyan, Blue, Purple, Magenta, White
- 2) Preset button
- 3) Chases button
- 4) Marco button: Built-in color Macros.
- 5) Marco/Chase fader or Red Fader
Red Fader: Use the fader to manually set the intensity of the color red.
Macro Fader: Use the Macro fader to manually set one of the built-in macros.
Chase Fader: Use the Chase fader to manually set one of the built-in chases.
- 6) Fade/Speed/Strobe fader or Green Fader
Green Fader: Use the fader to manually set the intensity of the color green.
FADE TIME Fader: Use the Fade Time fader to manually set the Fade Time during playback.
SPEED Fader: Use the Speed fader to manually set the chase speed during playback.
STROBE Fader: Use the Strobe fader to manually set the strobe intensity.
- 7) Master Dimmer or Blue Fader
Blue Fader: Use the fader to manually set the intensity of the color blue.
Use the Master fader to manually control the overall intensity.
- 8) Audio Sensitivity
- 9) Strobe button: Use the Strobe button to activate the strobe function at any time during playback.
- 10) Black Out button: Press the Black Out button to cut all output.
- 11) Manual RGB
- 12) Sound button

Controller Backside



Fig. 3

- 13) ON/OFF
- 14) 12VDC 500mA
- 15) DMX Out

Installation

Remove all packing materials from the LED Operator 1. 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

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.

Preset Mode

The LED Operator 1 has 9 built-in color macros.

- 1) Press the Preset button **(2)**. The red LED above the Preset button lights up.
- 2) Now choose one of the 9 pre-programmed colors **(1)**.
- 3) Adjust the Fade/Speed/Strobe/Green Fader **(6)** to set the desired Fade Time, when switching to another color.
- 4) Adjust the Master Dimmer/Blue Fader **(7)** to set the desired dimmer level.
- 5) The Fade time and/or dimmer may now be readjusted. You can Press the strobe button **(9)** and then use the Fade/Speed/Strobe Fader **(6)** to set the strobe speed.

 Please make sure that the Strobe, Blackout and Manual RGB functions are not overriding the controls. The Sound-control option will not function in Preset Mode.

Chase Mode

The LED Operator 1 has built-in color chases. There are several color combinations to choose from.

- 1) Press the CHASES button **(3)**. The orange LED above the Chases button lights up.
- 2) Adjust the Fade/Speed/Strobe/Green Fader **(6)** to set the desired Fade Time.
- 3) Adjust the Master Dimmer/Blue Fader **(7)** to set the desired dimmer level.
- 4) Use the Chases/Macro/Red Fader **(5)** to select one of the color combinations.
- 5) You can now readjust the Fade time and dimmer. Press the strobe button **(9)** and then use the Fade/Speed/Strobe Fader **(6)** to set the strobe speed.

By moving the Chases/Macro/Red Fader **(5)**, you can choose several built-in preset color chases.

 Please make sure that the Strobe, Blackout, and Manual RGB functions are not overriding the controls. The Sound-control option will work in Chase Mode.

Marco Mode

The LED Operator 1 has built-in color macros. This is a static color selection, so no chase movement or color flows will occur. There are several color macros to choose from.

- 1) Press the Macro button **(4)**. The green LED above the Macro button lights up.
- 2) Adjust the Fade/Speed/Strobe/Green Fader **(6)** to set the desired Fade Time.
- 3) Adjust the Master Dimmer/Blue Fader **(7)** to set the desired dimmer level.
- 4) Use the Chases/Macro/Red Fader **(5)** to select one of the built-in color macros.
- 5) You can now readjust the Fade time and dimmer.

 Please make sure that the Strobe, Blackout, and Manual RGB functions are not overriding the controls. The Sound-control option will not function in Macro Mode.

Strobe

This controller has multiple functions for all 3 faders. One of the functions for the Fade/Speed/Strobe/Green is the strobe function.

- 1) Press the Strobe button **(9)**. The green LED next to the Strobe button lights up.
- 2) Adjust the Fade/Speed/Strobe/Green Fader **(6)** to set the strobe speed.
- 3) In order to deactivate this function, the mode must be entered and the fader must be set to 0 (fader fully down). Then press the Strobe button **(9)** to deactivate this function. The Strobe LED is off.

This function may be activated while operating in any other mode (preset, chases, macro mode).



Strobe can not be recorded in a scene or chase



Blackout

This controller has a dedicated blackout button. This button works in conjunction with the Fade/Speed/Strobe/Green fader.

- 1) Adjust the Fade/Speed/Strobe Fader **(6)** to a certain value, to set how fast the lights will fade out and dim completely.
- 2) Press the Blackout button **(10)**. The red LED next to the Blackout button lights up.

The blackout function will also work with the Fade/Speed/Strobe/Green fader, when disabling the blackout. So if you have set the Fade/Speed/Strobe Fader **(6)** half way, it will take longer for the LED fixture to blackout.



The blackout function will not work, when the controller is in manual RGB mode.

Manual RGB

This controller has the ability to manually choose a custom color combination by using the Red, Green and Blue faders.

- 1) First press the Manual RGB button **(11)**. The green LED next to the Manual RGB button lights up.
- 2) Adjust the Red, Green and Blue Faders **(5, 6, 7)** to the desired levels.

This function may be activated. Please dim all 3 faders to 0 and then press the Manual RGB button **(11)**, until the LED indicator is off.



Blackout will not work in Manual RGB Mode.
Fade/Speed will not work in Manual RGB Mode.

Sound

This LED Operator 1 has several built-in chases. Normally these chases are triggered by the Speed fader, but they can also be triggered by using the built-in microphone.

- 1) Press the CHASES button **(3)**. The orange LED above the Chases button lights up.
- 2) Press the Sound button **(12)**. The green LED next to the Strobe button lights up.
- 3) Adjust the Sensitivity control **(8)** to the desired level. Turn the Sensitivity control clockwise to increase sensitivity.

To disable this mode, press the Sound button **(12)**, until the LED indicator is off.
You are also able to adjust the master dimmer **(7)** and the fade time **(6)** faders.

Maintenance

The Showtec LED Operator 1 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 Operator 1

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. Fixture does not respond to controller: Check the DMX-address of the fixture and the controller. Make sure they match. Make sure the connections are correct.
2. Interference between chases; If the same channel is assigned to different running chases, the one with the highest channel value will be put out.
3. If the device does not operate properly, unplug the device.
4. Check power from the wall, all cables, the settings, etc.
5. If all of the above appears to be O.K., plug the unit in again.
6. If nothing happens after 30 seconds, unplug the device.
7. Return the device to your Showtec dealer.

Product Specification

Model: Showtec LED Operator 1

Power supply: AC 12V- 1A

Power consumption: 6 Watt

Power connector: Adapter (included)

Easy to use

Control RGB fixtures

Adjustable Speed control

Adjustable fade time

Total DMX Channels: 3

DMX-512: XLR 3 pole

Strobe Function

Individual RGB Channel Faders

Grand Master Fader

Speed fader for Chase control

Strobe

Dimensions : 210 x 140 x 50 mm (LxWxH)

Weight : 0,88 kg



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



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