



LED Operator 4 v2

ORDERCODE 50716



SHOWELECTRONICS FOR PROFESSIONALS

Congratulations!

You have bought a great, innovative product from Showtec.

The Showtec LED Operator 4 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 4
- Incl. 2x 19" flaps and Power adapter
- User manual



WARNING



CAUTION!
Keep this device away from rain and moisture!



**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.
- 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
- Control 4 RGB fixtures
- Adjustable Speed control
- Adjustable fade time
- Free patchable RGB and dimmer channels
- Power supply: AC 12V- 500mA
- Power consumption: 20 Watt
- Power connector: Adapter (included)
- 16 chases
- Chase can contain a max. of 99 steps
- 16 chases can contain a max. 392 steps
- 16 Scenes
- Fixtures: 4
- Total DMX Channels: 32 (8 per fixture)
- DMX-512: XLR 3 pole
- Strobe Function
- Individual RGB Channel Faders
- Grand Master Fader
- Record Function to Record Colors and Chases
- Speed & Fade faders for Chase control

NOTE:

Knowledge of DMX is required to fully utilize this unit.

Overview



Fig. 1

Controller Front



Fig. 2

- 1) Fixture buttons and LED indicators 1-4: Use Fixture button 1-4 to select a fixture.
- 2) Scenes buttons and LED indicators 1-8: Push a scene button to activate a scene.
- 3) Chase buttons and LED indicators 1-8: Push a chase button to activate a chase.
- 4) Red Fader: Use the fader to manually set the intensity of the color red.
- 5) Green Fader: Use the fader to manually set the intensity of the color green.
- 6) Blue Fader: Use the fader to manually set the intensity of the color blue.
- 7) MASTER Fader: Use the Master fader to manually control overall intensity.
- 8) Page button + Page 1/2 LED indicators : When the Page 1 indicator is lit, scenes 1-8 and chases 1-8 are active. When the Page 2 indicator is lit, scenes 9-16 and chases 9-16 are active.
- 9) Record button: Use the Record button to enter Record Mode.
- 10) TAP SYNC button
- 11) LCD Display
- 12) Black Out button: Press the Black Out button to cut all output.
- 13) Mode/Up button
- 14) Auto/Music/Manual LED
- 15) Strobe button: Use the Strobe button to activate the strobe function at any time during playback.
- 16) Patch/Down button
- 17) AUDIO Fader: Use the Audio fader to set the audio sensitivity.
- 18) SPEED Fader: Use the Speed fader to manually set the chase speed during playback.
- 19) FADE TIME Fader: Use the Fade Time fader to manually set the Fade Time during playback.

Controller Backside



Fig. 3

- 20) DMX Polarity Switch
- 21) DMX OUT
- 22) DC power
- 23) ON/OFF

Installation

Remove all packing materials from the LED Operator 4. 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.



As **standard Factory Default** Settings, this device is **patched to CH1, CH2, CH3 and CH4**. You have to **unpatch CH4** when used **in combination with LED Entertainer** (Ordercode LEDENTB/LEDENTC)

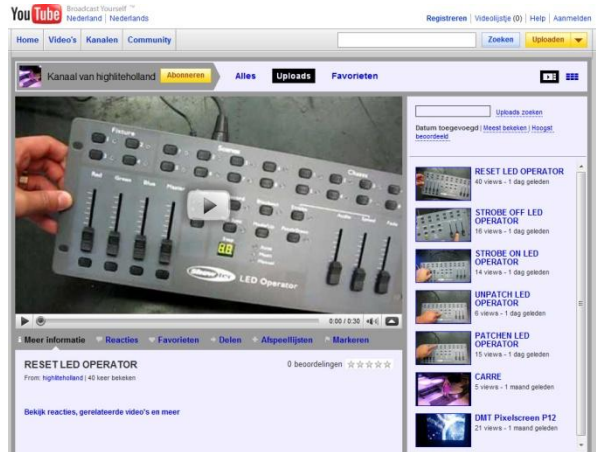


Ordercode **LEDENTB/LEDENTC**

Operation

For more information about working with the LED Operator 4, you can also view: 

Link: <http://www.youtube.com/user/highliteholland>



Channel Assignment

- 1) Scene buttons 1-8 are DMX channels 1-8.
- 2) Press and hold the Patch/Down button for 3 seconds. The Patch LED will light up red.
- 3) Press the fixture button you desire. The Fixture LED will light up blue. You can choose 4 different fixtures.
- 4) Press and release the channel flash button and push the scene button, that refers to the channel you have to patch. First release the channel flash button, then release the Scene button to save the DMX channel. All LEDs will flash, then release the scene button.
- 5) Press Patch button for 3 seconds to exit Patch mode.

Factory Reset

- 1) First turn off the device.
- 2) Now press and hold the Record button + Tap Sync together.
- 3) Now switch on the device.
- 4) The display will show 88 for 10 seconds.
- 5) After that all LEDs will flash 3 times.
- 6) The display will now show 00.



After the factory reset, the fixture is auto patched:

Fixture 1

Red CH1
Green CH2
Blue CH3
Master CH4

Fixture 2

Red CH9
Green CH10
Blue CH11
Master CH12

Fixture 3

Red CH17
Green CH18
Blue CH19
Master CH20

Fixture 4

Red CH25
Green CH26
Blue CH27
Master CH28

Unpatch Channels

- 1) Press and hold the Patch button for 3 seconds.
- 2) Select the fixture by pressing the Fixture button.
- 3) Press and hold the Tap Sync button. Now press the corresponding scene button that you want to unpatch. Scene buttons 1-8 are DMX channels 1-8.
- 4) All LEDs will flash and your operation is successful.
- 3) Press the Patch button for 3 seconds to exit.

Enter Program Mode



- 1) Press and hold the Record button for 3 seconds.

Exit Program Mode

- 1) Press and hold the Record button for 3 seconds.


Record a Scene

- 1) Press and hold the Record button for 3 seconds to enter Program Mode.
- 2) Select the fixture you want to program by pressing the desired Fixture button.
- 3) Set the faders to the desired values.
- 4) Set the proper page by pressing the Page button. You can choose Page 1 or Page 2.
- 5) Press the Record button and then press the desired Scene button you want to record.
- 6) Press and hold the Record button for 3 seconds to exit Program Mode.

 The existing scenes will be overwritten 

Play Scenes

- 1) Deselect all fixtures. All LEDs next to the 4 fixture buttons must be OFF.
- 2) Select the proper Page by pressing the Page button.
- 3) To select the desired scene press the Scene button.
- 4) Scenes can be stored on 2 pages. Each page contains 8 scenes.

 Multiple scenes can be mixed together 

Be sure to use the page button.

As an overview you are immediately able to view which scenes are still active on which page. The LEDs, from the scene or chase that is still active, are on.

Delete a Scene

- 1) Press and hold the Record button for 3 seconds to enter Program Mode.
- 2) Select the proper Page by pressing the Page button.
- 3) Press and hold the Tap Sync button. Now press the corresponding Scene button that you want to delete.
- 4) All LEDs will flash, indicating your scene has been deleted.
- 5) Press and hold the Record button for 3 seconds to exit Program Mode.

Record a Chase

- 1) Enter Record Mode by pressing the Record button.
- 2) Select the proper Page by pressing the Page button.
- 3) Select the desired chase by pressing Chase button 1-8.
- 4) Select the desired fixture by pressing Fixture 1-4.
- 5) Set the faders to the desired values.
- 6) Press the Record button. All LEDs will flash 3 times, indicating your operation has been successful.
- 7) The display will show 01, meaning Step 1 in your chase has been recorded.
- 8) For further steps repeat 5, 6 and 7, until you have completed all the desired steps in your entire chase.
- 9) Exit Record Mode.

More than 1 fixture can be programmed/selected when creating steps.

Playing a Chase

- 1) Deselect all fixtures. All LEDs next to the 4 fixture buttons must be OFF.
- 2) Select your desired chase by pressing the Chase button.

Delete a Chase

- 1) Enter Record Mode by pressing the Record button.
- 2) Select the proper Page by pressing the Page button.
- 3) Press and hold the Tap Sync button. Now press the corresponding Chase button that you want to delete.
- 4) Exit Record Mode by pressing the Record button.

Add an extra Step to an existing Chase

- 1) Enter Record Mode by pressing the Record button.
- 2) Select the chase you want to add a step to.
- 3) Use the Mode/Up and Patch/Down buttons to scroll through the chase. The display will show the current step.
- 4) Select the fixture you want to program by pressing the desired Fixture button.
- 5) Set the faders to the desired values.
- 6) Press the Record button to save a new step. All LEDs will flash 3 times, indicating your operation has been successful.
- 7) If you want to add additional steps repeat 4, 5 and 6, until you have added all the desired steps in your entire chase.
- 8) Exit Record Mode.



There is a maximum of 99 steps in 1 chase



16 chases can hold a maximum of 392 steps

Delete a Step from an existing Chase

- 1) Enter Record Mode by pressing the Record button.
- 2) Select the chase from which you want to delete a step.
- 3) Use the Mode/Up and Patch/Down buttons to scroll through the chase and select the step you want to delete.
- 4) Push the Tap Sync button to delete the step.
All LEDs will flash 3 times, indicating the step has been successfully deleted.
- 5) Continue this procedure (steps 2, 3 and 4) if you want to delete multiple steps.
If you are finished deleting the steps, press Record Mode to exit Record Mode.

Auto / Music /Manual Mode

Auto

- 1) Press the Mode button until the LED in front of Auto lights up green.
- 2) You can control the Speed and Fade Time by adjusting the Speed and Fade Time fader.

Music

- 1) Press the Mode button until the LED in front of Music lights up green.
- 2) You can control the Audio sensitivity by adjusting the Audio fader.

 Fade Time is not available in Music Mode 

Manual

- 1) Press the Mode button until the LED in front of Manual lights up green.
- 2) With Tap Sync you can manually go through the chase steps.

 Fade Time is not available in Manual Mode 

Strobe Mode

- 1) Press the Strobe button to enter Strobe Mode.
- 2) You can control the strobe speed with the Speed fader.
- 3) To exit the Strobe Mode, make sure that the speed fader is at 0.
Now press the strobe button to exit the Strobe Mode.

 Strobe can not be recorded in a scene or chase 

Maintenance

The Showtec LED Operator 4 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 4

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 4

Power supply: AC 12V- 500mA

Power consumption: 20 Watt

Power connector: Adapter (included)

Easy to use

Control 4 RGB fixtures

Adjustable Speed control

Adjustable fade time

Free patchable RGB and dimmer channels

16 chases

Chase can contain a max. of 99 steps

16 chases can contain a max. 392 steps

16 Scenes

Fixtures: 4

Total DMX Channels: 32 (8 per fixture)

DMX-512: XLR 3 pole

Strobe Function

Individual RGB Channel Faders

Grand Master Fader

Record Function to Record Colors and Chases

Speed & Fade faders for Chase control

Dimensions : 372 x 156 x 58 mm (LxWxH)

Weight : 1,74 kg (1,90 kg incl. flaps)



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



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