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BEDIENUNGSANLEITUNG
USER MANUAL

FIB-450
LED Fiber Light RGB DMX

Für weiteren Gebrauch aufbewahren!
Keep this manual for future needs!

CE

English

USER MANUAL

LED Fiber Light RGB DMX

CAUTION!
Keep this device away from rain and moisture!
Never open the housing!

For your own safety, please read this user manual carefully before you initially start-up.

Every person involved with the installation, operation and maintenance of this device has to
- be qualified
- follow the instructions of this manual
- consider this manual to be part of the total product
- keep this manual for the entire service life of the product
- pass this manual on to every further owner or user of the product
- download the latest version of the user manual from the Internet

INTRODUCTION

Thank you for having chosen an FIB-450 LED Fiber Light RGB DMX. If you follow the instructions given in this manual, we are sure that you will enjoy this device for a long period of time.

Unpack your LED Fiber Light.

SAFETY INSTRUCTIONS

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

This device has left our premises in absolutely perfect condition. In order to maintain this 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 user manual.

Important:
Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.

Always plug in the power unit last. Make sure that the power-switch is set to OFF position before you connect the device to the mains.

Keep away from heaters and other heating sources!

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.

This device falls under protection-class III. The device always has to be operated with an appropriate transformer.

Always disconnect from the mains, when the device is not in use or before cleaning it.

Please note that damages caused by manual modifications on the device or unauthorized operation by unqualified persons are not subject to warranty.

Keep away children and amateurs from the device!

There are no serviceable parts inside the device. Maintenance and service operations are only to be carried out by authorized dealers.

OPERATING DETERMINATIONS

This device is a lighting effect for creating decorative effects.

The LED Fiber Light RGB DMX is only allowed to be operated with a direct current of 5 V and was designed for indoor use only. The device may only be operated with the appropriate power unit. The power unit falls under protection-class 2.

This device is designed for professional use, e.g. on stages, in discotheques, theatres etc. or also for home use.

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

Do not shake the device. Avoid brute force when installing or operating the device.

When choosing the installation-spot, please make sure that the device is not exposed to extreme heat, moisture or dust. There should not be any cables lying around. You endanger your own and the safety of others!

This device must never be operated or stockpiled in surroundings where splash water, rain, moisture or fog may harm the device. Moisture or very high humidity can reduce the insulation and lead to mortal electrical shocks. When using smoke machines, make sure that the device is never exposed to the direct smoke jet and is installed in a distance of 0.5 meters between smoke machine and device. The room must only be saturated with an amount of smoke that the visibility will always be more than 10 meters.

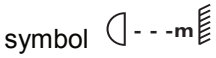
The ambient temperature must always be between -5° C and +45° C. Keep away from direct insulation (particularly in cars) and heaters.

This device must only be operated in an altitude between -20 and 2000 m over NN.

Never use the device during thunderstorms. Over voltage could destroy the device. Always disconnect the device during thunderstorms.

The maximum ambient temperature T_a = 45° C must never be exceeded.

Operate the device only after having familiarized with its functions. Do not permit operation by persons not qualified for operating the device. Most damages are the result of unprofessional operation!

The symbol  determines the minimum distance from lighted objects. The minimum distance between light-output and the illuminated surface must be more than 0.1 meters.

Please use the original packaging if the device is to be transported.

Please consider that unauthorized modifications on the device are forbidden due to safety reasons!

If this device will be operated in any way different to the one described in this manual, the product may suffer damages and the guarantee becomes void. Furthermore, any other operation may lead to dangers like short-circuit, burns, electric shock, etc.

INSTALLATION

Attachment of the Illuminator Housing

Before attaching the device, make sure that the installation area can hold a minimum point load of 10 times the device's weight.

The device must only be installed absolutely planar at a vibration-free, oscillation-free and fire-resistant location. Make sure that the device is installed absolutely planar by using a water-level.

The device must be installed out of the reach of people.

The device must always be installed via all fixation holes. Do only use appropriate screws and make sure that the screws are properly connected with the ground.

The durability of the installation depends very much on the material used at the installation area (building material) such as wood, concrete, gas concrete, brick etc. This is why the fixing material must be chosen to suit the wall material. Always ask a specialist for the correct plug/screw combination indicating the maximum load and the building material.

Procedure:

Step 1: The holes for the installation are on the baseplate.
Step 2: Hold the baseplate onto the location where the device is to be installed.
Step 3: Mark the boreholes with a pen or a suitable tool.
Step 4: Drill the holes.
Step 5: Hold the baseplate in the desired position and tighten it.

You can now design the desired pattern with the fiber optic strands at the desired location.

DMX-512 connection / connection between fixtures

The wires must not come into contact with each other, otherwise the fixtures will not work at all, or will not work properly.

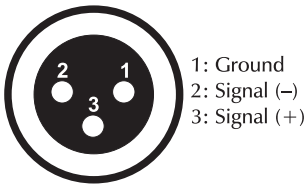
Please note, the starting address depends upon which controller is being used.

Only use a stereo shielded cable and 3-pin XLR-plugs and connectors in order to connect the controller with the fixture or one fixture with another.

Occupation of the XLR-connection:

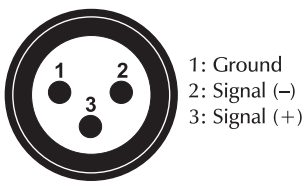
DMX-output

XLR mounting-socket:



DMX-input

XLR mounting-plug:



If you are using controllers with this occupation, you can connect the DMX-output of the controller directly with the DMX-input of the first fixture in the DMX-chain. If you wish to connect DMX-controllers with other XLR-outputs, you need to use adapter-cables.

Building a serial DMX-chain:
Connect the DMX-output of the first fixture in the DMX-chain with the DMX-input of the next fixture. Always connect one output with the input of the next fixture until all fixtures are connected.

Caution: At the last fixture, the DMX-cable has to be terminated with a terminator. Solder a 120 Ω resistor between Signal (–) and Signal (+) into a 3-pin XLR-plug and plug it in the DMX-output of the last fixture.

Master/Slave operation

The master/slave operation enables that several devices can be synchronized and controlled by one master-device.

On the rear panel of the FIB-450 LED Fiber Light RGB DMX you can find an XLR-jack and an XLR-plug, which can be used for connecting several devices.

Choose the device which is to control the effects. This device then works as master-device and controls all other slave-devices, which are to be connected to the master-device via a stereo shielded cable. Connect the OUT-jack with the IN-plug of the next device.

Set DIP Switch 10 to OFF in order to determine the Master device. Set DIP Switch 10 to ON and DIP switches 1 - 9 to OFF in order to determine the Slave device(s).

Connection with the mains

Connect the connection cable of the power unit to the power supply jack. Plug the power unit into your outlet.

After you connected the device to the mains, the FIB-450 LED Fiber Light RGB DMX starts running.

OPERATION

The device has two operating modes. It can be operated via DIP Switches or it can be run in DMX-controlled mode.

OPERATION VIA DIP SWITCHES

Static Mode

In order to select static RED, set DIP switch 1 and 2 to ON (1 for very bright, 2 for medium bright)
In order to select static GREEN, set DIP switch 3 and 4 to ON (3 for very bright, 4 for medium bright)
In order to select static BLUE, set DIP switch 5 and 6 to ON (5 for very bright, 6 for medium bright)

To select static color combinations, set the DIP switches of your choice to ON (1,3,5 for very bright; 2,4,6 for medium bright).

Color Change Mode

Set DIP Switch 9 to ON to obtain the fastest RGB color change effect.

You can adjust the changing speed by using DIP switches 4, 5, or 6: 4 is slow, 4 and 5 is slower, 4, 5 and 6 is slowest.

Flash Mode

Set DIP Switch 9 and 1 to ON to obtain the fastest flash effect.

You can adjust the flashing speed by using DIP switches 4, 5, or 6: 4 is slow, 4 and 5 is slower, 4, 5 and 6 is slowest.

Fade Mode

Set DIP Switch 9, 1 and 3 to ON to obtain RED-GREEN-BLUE fading effect.

Set DIP Switch 9, and 3 to ON to obtain RED-GREEN fading effect.

Set DIP Switch 9, 2 and 3 to ON to obtain RED-BLUE fading effect.

Set DIP Switch 9, 1, 2 and 3 to ON to obtain BLUE-GREEN fading effect.

Blackout

Set all DIP switches to OFF.

Sound Controlled Mode

Set DIP switch 8 to ON to run the internal program via sound control.

DMX-CONTROLLED OPERATION

You can control the spots individually via your DMX-controller. Every DMX-channel has a different occupation with different features.

For DMX-controlled operation set DIP Switch 10 to ON.

Addressing

Each device occupies 4 channels. To ensure that the control signals are properly directed to each device, the device requires addressing. This is to be adjusted for every single device by changing the DIP-switches as set out in the table below.

The starting address is defined as the first channel from which the device will respond to the controller.

Please make sure that you do not have any overlapping channels in order to control each device correctly and independently from any other fixture on the DMX data link. If two, three or more devices are addressed similarly, they will work similarly.

Occupation of the DIP-switches:

Setting the DMX-starting address:	DIP-switch no.	1	2	3	4	5	6	7	8	9
Projector number & channels	DMX-starting address	1	2	4	8	16	32	64	128	256
Device 1 - channels 1-4	Off		△	△	△	△	△	△	△	△
	On	▼								
Device 2 - channels 5-8	Off		△		△	△	△	△	△	△
	On	▼		▼						
Device 3 - channels 9-12	Off		△	△		△	△	△	△	△
	On	▼			▼					
Device 4 - channels 13-16	Off		△			△	△	△	△	△
	On	▼		▼	▼					
Device 5 - channels 17-20	Off		△	△	△		△	△	△	△
	On	▼				▼				

Controlling:
After having addressed the FIB-450 LED Fiber Light RGB DMX device, you may now start operating this via your lighting controller.

DMX protocol

Channel 1 – Shutter, Dimmer, Strobe

Value:	Function:
000 – 000	Blackout
001 – 152	Brightness
153 – 242	Strobe

Channel 2 – Red

Value:	Function:
000 – 255	Red 0 – 100%

Channel 3 – Green

Value:	Function:
000 – 255	Green 0 – 100%

Channel 4 – Blue

Value:	Function:
000 – 255	Blue 0 – 100%

CLEANING AND MAINTENANCE

DANGER TO LIFE!

Disconnect from mains before starting maintenance operation!

We recommend a frequent cleaning of the device. Please use a moist, lint-free cloth. Never use alcohol or solvents!

There are no serviceable parts inside the device. If defective, please dispose of the unusable device in accordance with the current legal regulations.

Should you have further questions, please contact your dealer.

TECHNICAL SPECIFICATIONS

Article no.	50520260 / FIB-450
Power supply (via enclosed power unit):	230 V AC, 50 Hz ~
Power consumption:	max. 12 W
Number of DMX channels:	4
DMX-512 connection:	3-pin XLR
Sound-control:	via built-in microphone
Maximum ambient temperature T_a:	45° C
Max. housing temperature T_B (steady state):	55° C
Min. distance from flammable surfaces:	0.5 m
Min. distance to lighted object:	0.1 m
Fiber optic strand length:	2 m
Number of Fiber optic strands:	450 pcs.
Number of LEDs:	1 x 9W TCL RGB LED
Illuminator dimensions (LxWxH):	195 x 85 x 50 mm
Weight:	1 kg

Please note: Every information is subject to change without prior notice. 14.03.2022 ©