Matrix 5x5 Blinder

ORDERCODE 30711

SHOWELECTRONICS FOR PROFESSIONALS

Congratulations!

You have bought a great, innovative product from Showtec.
The Showtec Matrix Blinder 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!

Showtec

Showtec Matrix Blinder™ Product Guide

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WARNING

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:

- Showtec Matrix Blinder with 25x Osram Par 30 lamp
- Bracket included
- User manual

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

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 use anything to cover the ground contact.
- Never run the device without lamp!
- Never ignite the lamp if the objective-lens or any housing-cover is open, as discharge lamps may expose and emit a high ultraviolet radiation, which may cause burns.

- Never lift the fixture by holding it at the projector-head, as the mechanics may be damaged. Always hold the fixture at the transport handles.
- Never place any material over the lens.
- Never look directly into the light source.
- Never leave any cables lying around.
- Never unscrew the screws of the rotating gobo, as the ball bearing will otherwise be opened.
- Do not insert objects into air vents.
- Do not connect this device to a dimmerpack.
- Do not switch the device on and off in short intervals, as this would reduce the lamp's life.
- Do not touch the device's housing bare-handed during its operation (housing becomes very hot). Allow the fixture to cool for at least 5 minutes before handling.
- Do not shake the device. Avoid brute force when installing or operating the device.
- Only use device indoor, avoid contact with water or other liquids.
- Only operate the fixture after having checked that the housing is firmly closed and all screws are tightly fastened.
- Only operate the device after having familiarized with its functions.
- Avoid flames and do not put close to flammable liquids or gases.
- Always replace the lamp, when it is damaged or deformed due to the heat.
- Always keep case closed while operating.
- Always allow free air space of at least 50 cm around the unit for ventilation.
- Always disconnect power from the mains, when device is not used, before cleaning or when replacing lamp! Only handle the power-cord by the plug. Never pull out the plug by tugging the power-cord.
- To ensure the longest and most efficient use of the lamp always wait 15 minutes before re-applying power after a shutdown. Failure to do so could result in premature aging of the lamp and failure to the electronics that drive it.
- 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 the lens is obviously damaged, it has to be replaced. So that its functions are not impaired, due to cracks or deep scratches.
- 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 adult use only. Movinghead must be installed out of the reach of children. Never leave the unit running unattended.
- Never attempt to bypass the thermostatic switch or fuses.
- For replacement use lamps and fuses of same type and rating only.
- Replace the lamp if it becomes defective or worn out, or before usage exceeds the maximum service life.
- Allow the fixture to cool down for 15 minutes, before opening the fixture and replacing lamp. Protect your hands and eyes with gloves and safety glasses.
- This device falls under protection class I. Therefore it is essential to connect the yellow/green conductor to earth.
- During the initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective.
- Repairs, servicing and electric connection must be carried out by a qualified technician.
- WARRANTY: Till one year after date of purchase.

CAUTION ! EYEDAMAGES !.
Avoid looking directly into the light source.
(meant especially for epileptics) !

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.
- The minimum distance between light-output and the illuminated surface must be more than 1 meter.
- The maximum ambient temperature t_a = 45°C must never be exceeded.
- 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 the Matrix Blinder is lowered from the ceiling or high joists, professional trussing systems have to be used.
- Use a clamp to mount the Matrix Blinder, with the mounting-bracket, to the trussing system.
- The Matrix Blinder 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 Matrix Blinder, always make sure, that the area below the installation place is blocked and staying in the area is forbidden.

The Matrix Blinder can be placed on a flat stage floor or mounted to any kind of truss by a clamp.

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 short-comings 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 Showtec Matrix Blinder is a blinder with high output and great effects.

- Extraordinary and multifunctional Audience blinder.
- 4 different DMX modes: 4 CH Basic Mode
  9 CH Zone Mode
  25 CH Matrix Mode
  29 CH Advanced Mode (control all lamps and all macro's independently)
- Easy to control the Matrix by its built-in macros.
- For easy connection equipped with a fast-lock locking system
- Neutrik Powercon input
- 3-pin and 5-pin XLR Input and Output connectors for data input and linking.
- Digital LED display.
- Power input: AC220-240V, 50Hz~60Hz
- 25x Osram Par 30 lamp (80120 included !!)
- Lamp Angle: 30°
- Total Power Consumption: 1900W
- Fuse: 10A
- Dimensions: 600 x 600 x 140 mm
- Weight: 17,92 kg
- Optionel flightcase for 4 Matrix Blinders (ordercode D7592, not included): 910 x 770 x 870 mm
- Weight: 49 kg

Optionel Flightcase D7592

Overview

Easy Locking Mechanism

Fig. 1

Backside

Fig. 2

1) Locking Mechanism (Hex key 8mm separately available, ordercode SPHK016)
2) Powercon
3) Fuse 10A
4) LCD Display
5) Mode Button
6) Up Button
7) Down Button
8) DMX signal connector (IN) 5-pin
9) DMX signal connector (IN) 3-pin
10) DMX signal connector (OUT) 5-pin
11) DMX signal connector (OUT) 3-pin

Installation

Installing the Lamp

The Showtec Matrix Blinder uses the Par 30 E27 Spot (ordercode 80120) bulb as manufactured by all popular manufacturers. Use only the appropriate lamp for your unit.
Note that, product versions that use other lamps, may be offered in the future. Check your product specification label for information.
Always disconnect from electric mains power supply before changing lamps.
The lamp has to be replaced when it is damaged or deformed due to the heat.
Do not install lamps with a higher wattage! Lamps with a higher wattage generate temperatures the device was not designed for.
Damages caused by non-observance are not subject to warranty.

Procedure :

1. Loosen the 2 screws on the front of the housing where the lamp is damaged/broken.
2. Gently remove the small metal front plate.
3. Read lamp instructions.
4. Insert the lamp into the small E27 screw socket.
5. Put the lamp cover back and fasten the screws snugly.

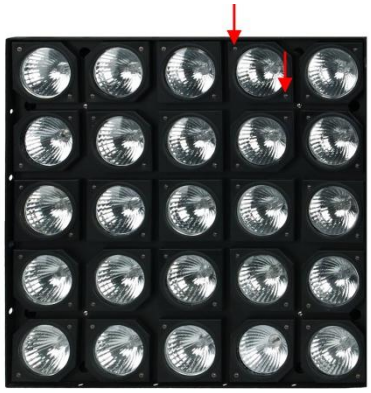


Fig. 3

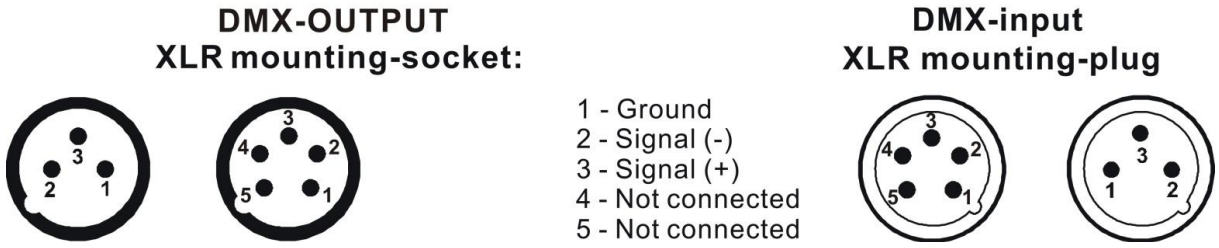
Set Up and Operation

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.

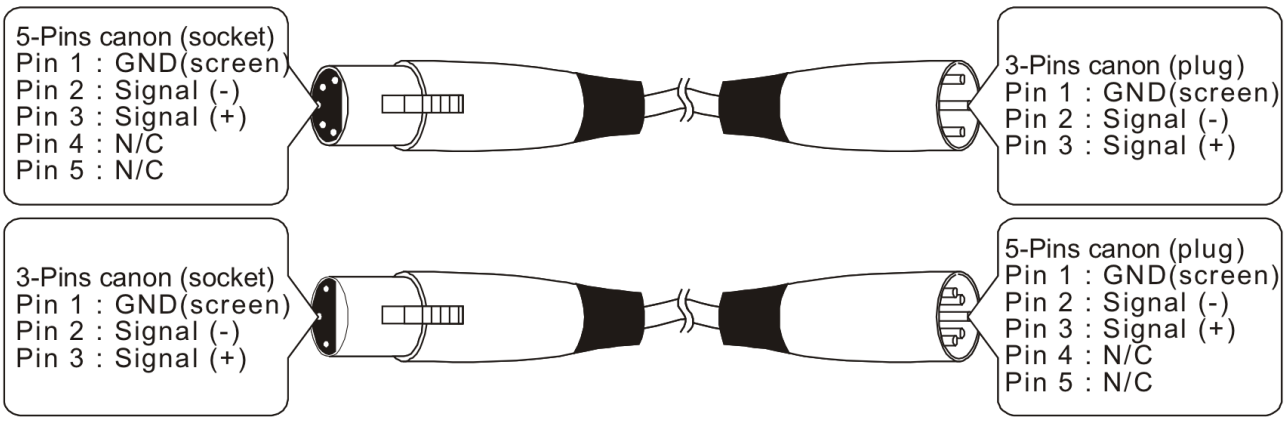
One / Multiple Matrix Blinder(s) DMX Control

1. Fasten the effect light onto firm trussing. Leave at least 1 meter on all sides for air circulation.
2. Use a 3-p or 5-p XLR cable to connect the Matrix Blinders and other devices.

Occupation of the XLR-connection:



The transformation of the controller line of 3 pins and 5 pins (plug and socket)



3. Link the units as shown in (figure 4), Connect a DMX signal cable from the first unit's DMX "out" socket to the second unit's "in" socket. Repeat this process to link the second, third, and fourth units.
4. Supply electric power: Plug electric mains power cords into each unit's Powercon socket, then plug the other end of the mains power cord into proper electric power supply sockets, starting with the first unit. Do not supply power before the whole system is set up and connected properly.

Multiple Matrix Blinders DMX Set Up

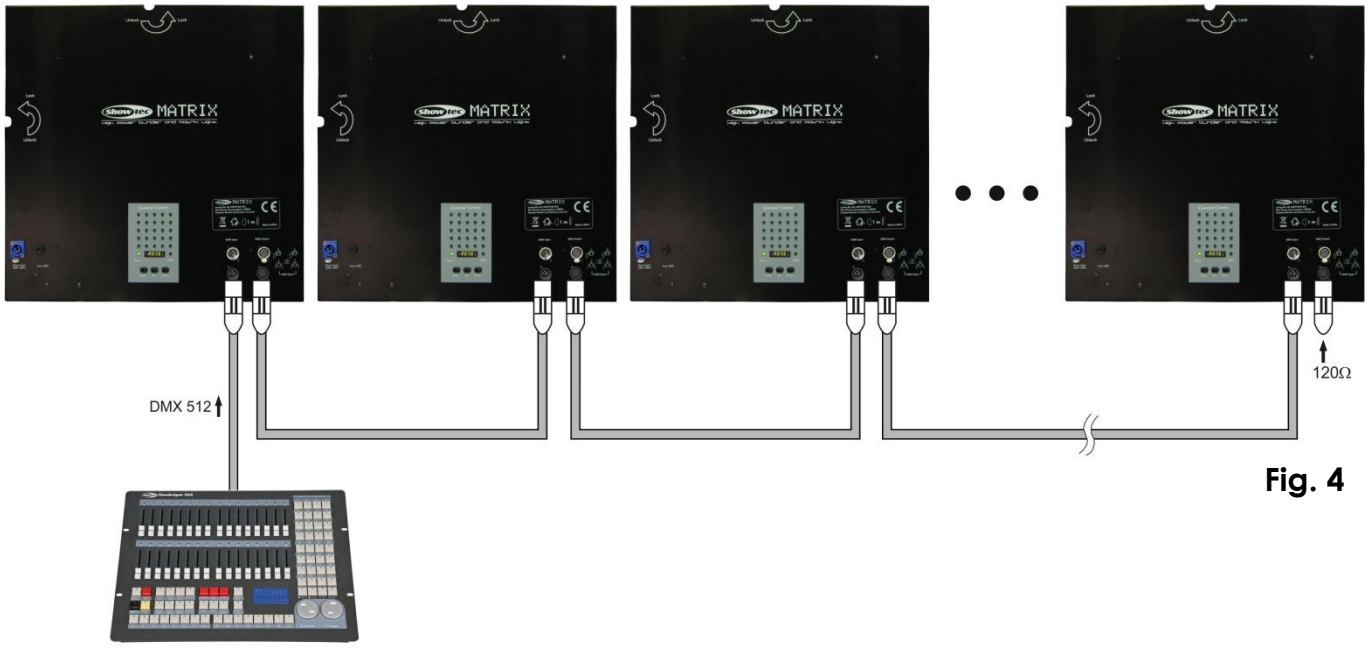


Fig. 4

Note : Link all cables before connecting electric power

Fixture Linking

You will need a serial data link to run light shows of one or more fixtures using a DMX-512 controller or to run synchronized shows on two or more fixtures set to a master/slave operating mode. The combined number of channels required by all the fixtures on a serial data link determines the number of fixtures the data link can support.

Important: Fixtures on a serial data link must be daisy chained in one single line. To comply with the EIA-485 standard no more than 30 devices should be connected on one data link. Connecting more than 30 fixtures on one serial data link without the use of a DMX optically isolated splitter may result in deterioration of the digital DMX signal.
You can only connect 17x Matrix Blinders in the most advanced mode, since it uses 29 channels per device.

Maximum recommended DMX data link distance: 100 meters
Maximum recommended number of Matrix Blinders on a DMX data link: 30 fixtures

Data Cabling

To link fixtures together you must obtain data cables. You can purchase DAP Audio certified DMX cables directly from a dealer/distributor or construct your own cable. If you choose to create your own cable please use data-grade cables that can carry a high quality signal and are less prone to electromagnetic interference.

DAP Audio Certified DMX Data Cables

- DAP Audio Basic microphone cable for allround use. bal. XLR/M 3 p. > XLR/F 3 p. **Ordercode** FL01150 (1,5m.), FL013 (3m.), FL016 (6m.), FL0110 (10m.), FL0115 (15m.), FL0120 (20m.).
- DAP Audio cable for the demanding user with exceptional audio-qualities and connector made by Neutrik®. **Ordercode** FL71150 (1,5m.), FL713 (3m.), FL716 (6m.), FL7110 (10m.).

The Matrix Blinder can be operated with a controller in **control mode** or without the controller in **stand-alone mode.**

Control Panel

When the DMX indicator LED is blinking, means the Matrix Blinder is working

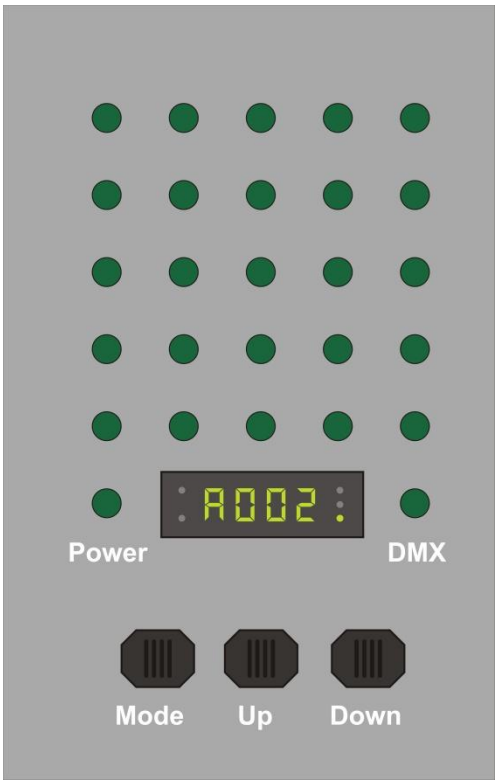


Fig. 5

Control Mode

The fixtures are individually addressed on a data-link and connected to the controller.
The fixtures respond to the DMX signal from the controller. (When you select the DMX address and save it, the controller will display the saved DMX address the next time.)

DMX Addressing

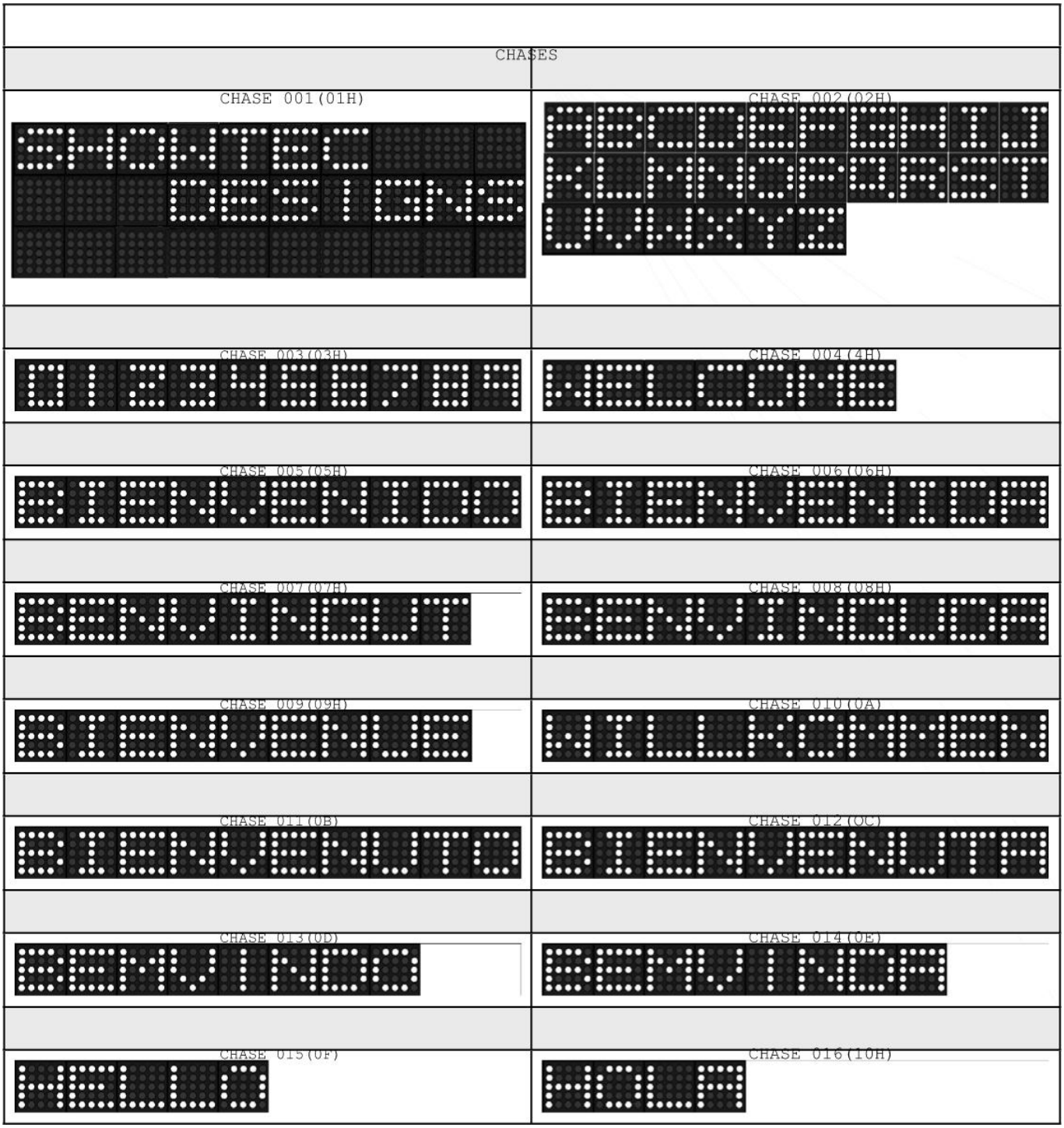
The control panel on the front side of the base allows you to assign the DMX fixture address, which is the first channel from which the Matrix Blinder will respond to the controller.
Please note when you use the controller, the unit has **29** channels.
When using multiple Matrix Blinders, make sure you set the DMX addresses right.
Therefore, the DMX address of the first Matrix Blinder should be **1(001)**; the DMX address of the second Matrix Blinder
should be **1+29=30 (030**); the DMX address of the third Matrix Blinder should be **30+29=59 (059)**, etc.
Please, be sure that you don't have any overlapping channels in order to control each Matrix Blinder correctly.
If two or more Matrix Blinders are addressed similarly, they will work similarly.
For address settings, please refer to the instructions under "Addressing' (menu A001)

Controlling:

After having addressed all Matrix Blinder fixtures, you may now start operating these via your lighting controller.
Note: After switching on, the Matrix Blinder will automatically detect whether DMX 512 data is received or not. If there is no data received at the DMX-input, the "**LED** " on the control panel will not flash.
The problem may be:
- The XLR cable from the controller is not connected with the input of the Matrix Blinder.
- The controller is switched off or defective, the cable or connector is detective, or the signal wires are swapped in the input connector.

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.

Menu Overview



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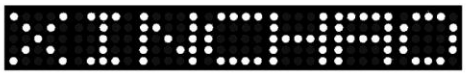	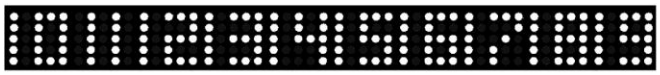
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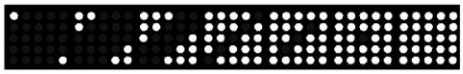	
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	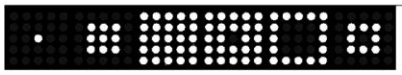
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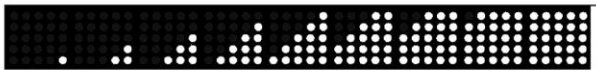	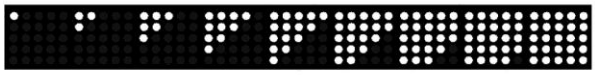
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	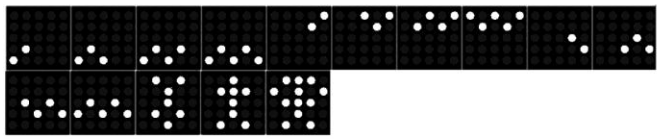
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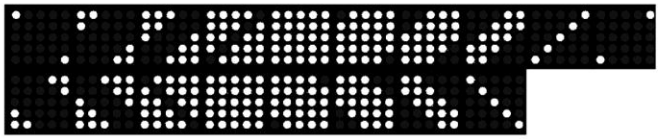
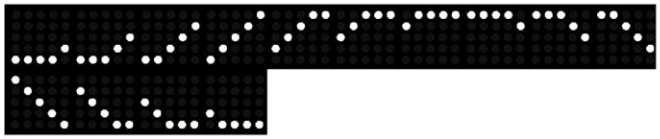
	
CHASE 136(88H)	CHASE 137(89H)
CHASE 138(8A)	CHASE 021(15H)
CHASE 022(16H)	CHASE 023(17H)

CHASES (continued)

CHASE 024(18H)

CHASE 025(19H)

CHASE 026(1A)

CHASE 027(1B)

CHASE 028(1C)

CHASE 029(1D)

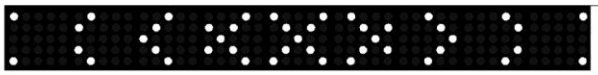
CHASE 030(1E)

CHASE 031(1F)

CHASE 032(20H)

CHASE 033(21H)

CHASE 139(8B)



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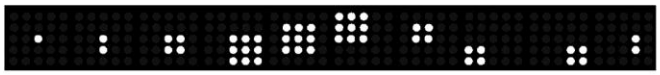

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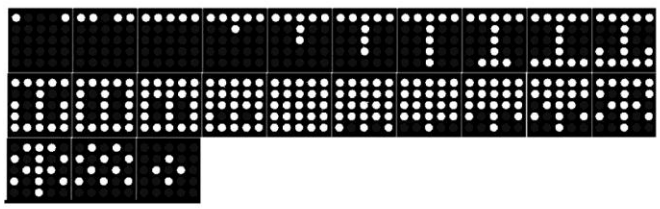
CHASE 142(8E)



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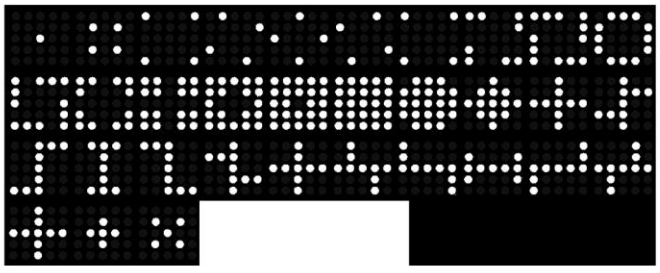
CHASE 034(22H)

CHASE 144(90H)



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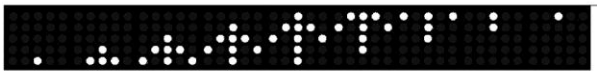
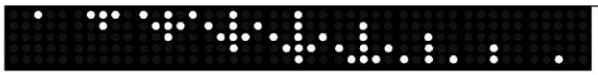
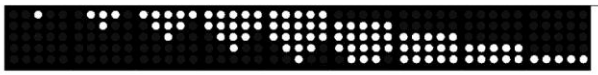
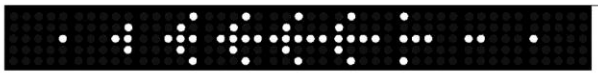
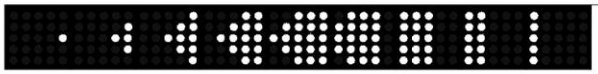
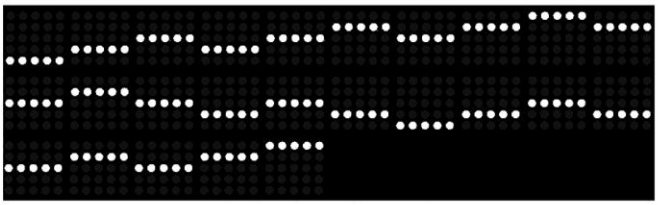
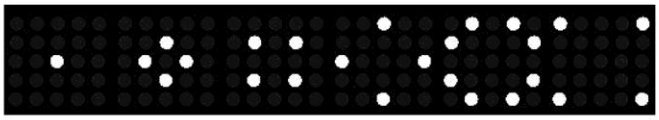
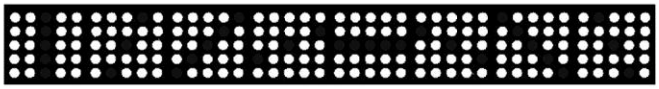
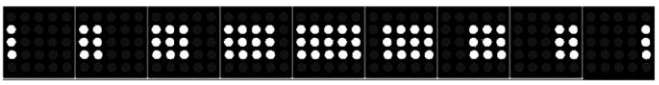
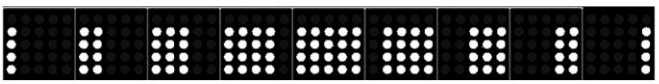
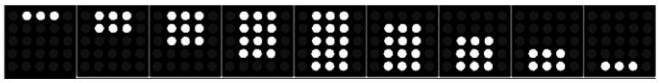
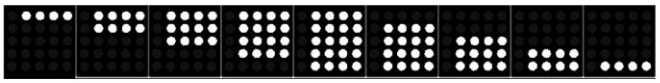
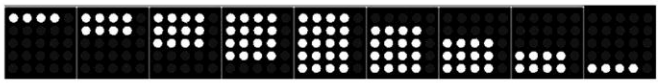
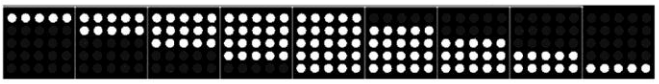
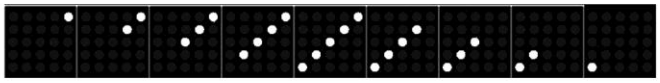
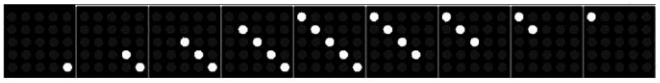
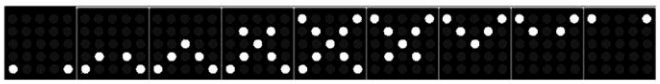
CHASE 227(E3)	CHASE 145(91H)
	
CHASE 146(92H)	CHASE 147(93H)
	
CHASE 148(94H)	CHASE 149(95H)
CHASE 150(96H)	CHASE 151(97H)
	
CHASE 152(98H)	CHASE 153(99H)
CHASE 154(9A)	CHASE 155(9B)
	
CHASE 156(9C)	CHASE 157(9D)
	
CHASE 158(9E)	CHASE 228(E4)

CHASES (continued)	
CHASE 159(9F)	CHASE 160(A0)
CHASE 161(A1)	CHASE 039(27H)
	
CHASE 162(A2)	CHASE 040(28H)
CHASE 163(A3)	CHASE 164(A4)
CHASE 165(A5)	CHASE 220(DC)
	
CHASE 166(A6)	CHASE 167(A7)
CHASE 168(A8)	CHASE 169(A9)
	
CHASE 041(29H)	CHASE 170(AA)

CHASES (continued)	
CHASE 171(AB)	CHASE 172(AC)
CHASE 173(AD)	CHASE 174(AE)
CHASE 175(AF)	CHASE 176(B0)
	
CHASE 177(B1)	CHASE 178(B2)
	
CHASE 229(E5)	CHASE 179(B3)
CHASE 180(B4)	CHASE 181(B5)
CHASE 182(B6)	CHASE 183(B7)
	
CHASE 184(B8)	CHASE 230(E6)
	
CHASE 185(B9)	CHASE 186(BA)
CHASE 187(BB)	CHASE 188(BC)
	
CHASE 189(BD)	CHASE 190(BE)
	

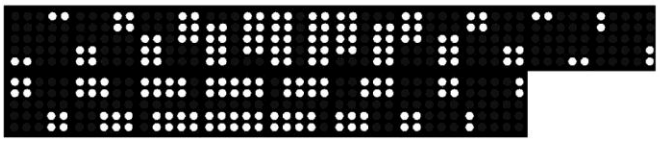
CHASES (continued)

CHASE 191(BF)

CHASE 192(C0)

CHASE 193(C1)

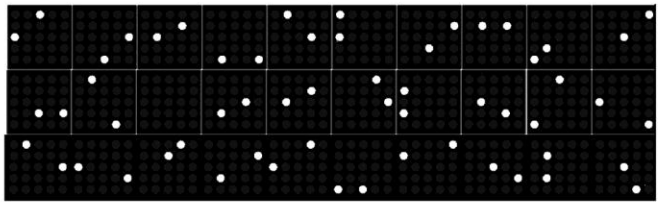
CHASE 194(C2)



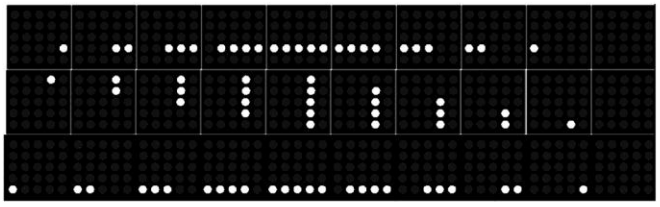
CHASE 195(C3)

CHASE 196(C4)

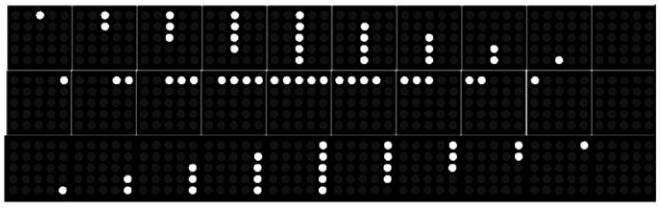
CHASE 197(C5)



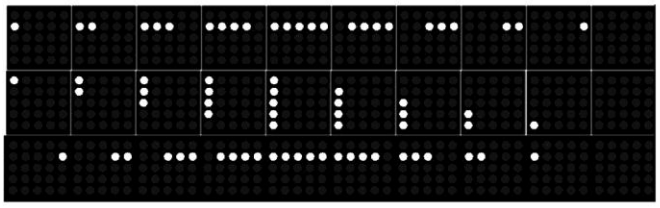
CHASE 198(C6)



CHASE 199(C7)



CHASE 200(C8)



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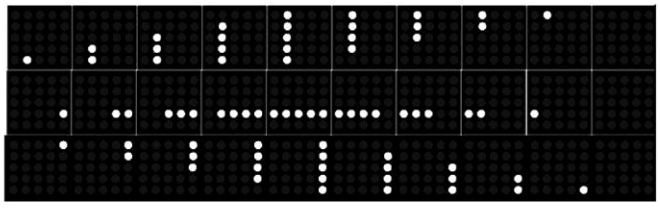
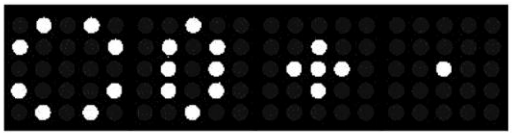
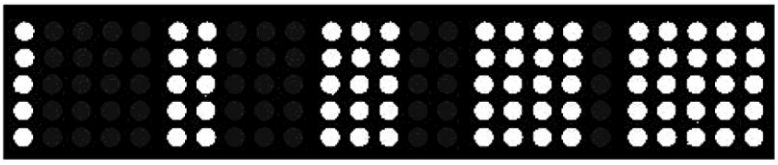
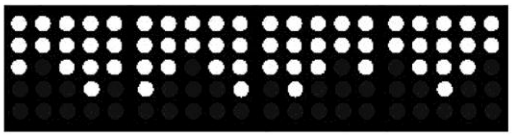
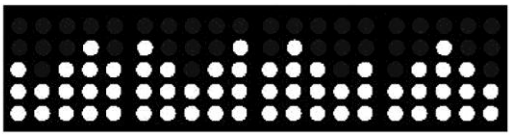
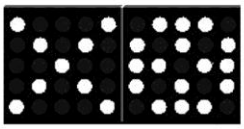
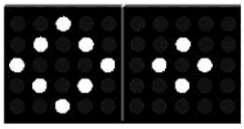
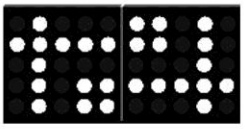
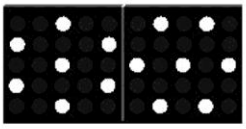
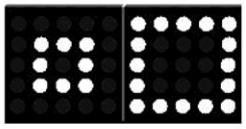
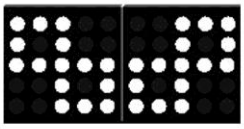
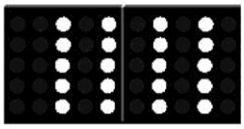
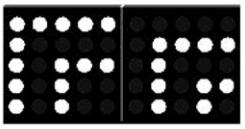
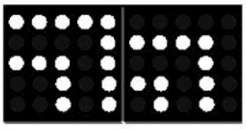
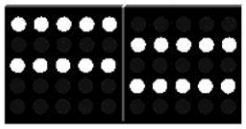
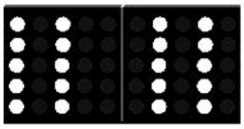
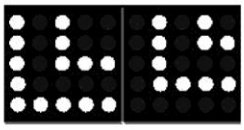
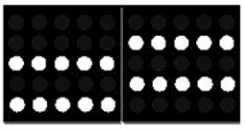
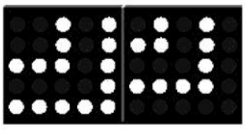


CHASE 202(CA)

CHASE 203(CB)

CHASE 204(CC)

CHASES (continued)				
CHASE 205 (CD)		CHASE 42(2A)		
				
CHASE 206 (CE)		CHASE 207 (CF)		CHASE 208(D0)
				
CHASE 209	CHASE 210	CHASE 211	CHASE43 (2B)	CHASE221(DD)
				
CHASE 212(D4)	CHASE213	CHASE 214	CHASE 215	CHASE 216
				
CHASE 217	CHASE 218	CHASE 219		
				

Control Panel Functions

For synchronous operation of multiple fixtures the fixtures must all be connected on a data-link.
Note: Disconnect the fixtures from the DMX controller before operating, otherwise data collisions can occur and the fixtures will not work properly!
It's necessary to insert the XLR termination plug (with 120 Ohm) into the input of the first fixture and into the output of the last fixture in the data-link, in order to ensure proper transmission on the data link.

DMX Addressing

With this menu you can set the DMX address.
1) Press Mode and then press the Up button, the display shows the actual DMX address.
2) The display is now blinking. You can choose 512 different DMX addresses.
Use the Up / Down buttons to select the required DMX address from 000 – 511.
3) Press and hold down the Mode button for 5 seconds to store your address.

Mode Menu (4CH, 9CH, 25CH and 29 CH)

With this menu you can set your desired operating mode.
1) Press Mode twice, the display shows the actual operating mode. The display is now blinking.
2) You can choose 4 different operating DMX modes:
4 CH Basic Mode
9 CH Zone Mode
25 CH Matrix Mode
29 CH Advanced Mode
3) Use the Up / Down buttons to select the required operating mode.
4) Press and hold down the Mode button for 5 seconds to store operating mode.

DMX Protocol 4 Channels (BASIC)

Channel 1 – Dimmer intensity

0-255	From black to brightest

Channel 2 – Static Macros

0-255	From black to brightest

Channel 3 – Dynamic Macros

0-255	From black to brightest

Channel 4 –Speed (CH3 must be open ⚠)

0-127	From slow to fast
128-255	From fast to slow, reverse movement of the characters

DMX Protocol 9 Channels (Zone 1-5)

Channel 1 – Dimmer intensity

0-255	From black to brightest

Channel 2 – Static Macros

0-255	From black to brightest

Channel 3 – Dynamic Macros

0-255	From black to brightest

Channel 4 –Speed (CH3 must be open ⚠)

0-127	From slow to fast
128-255	From fast to slow, reverse movement of the characters

Channel 5 – Dimmer intensity Zone 1

0-255	From black to brightest

Channel 6 – Dimmer intensity Zone 2

0-255	From black to brightest

Channel 7 – Dimmer intensity Zone 3

0-255	From black to brightest

Channel 8 – Dimmer intensity Zone 4

0-255	From black to brightest

Channel 9 – Dimmer intensity Zone 5

0-255	From black to brightest

Protocol 25 Channels (Matrix Mode 1-25)

Channel 1 – Dimmer intensity Lamp 1

0-255	From black to brightest

Channel 2 – Dimmer intensity Lamp 2

0-255	From black to brightest

Channel 3 – Dimmer intensity Lamp 3

0-255	From black to brightest

Channel 4 – Dimmer intensity Lamp 4

0-255	From black to brightest

Channel 5 – Dimmer intensity Lamp 5

0-255	From black to brightest

Channel 6 – Dimmer intensity Lamp 6

0-255	From black to brightest

Channel 7 – Dimmer intensity Lamp 7

0-255	From black to brightest

Channel 8 – Dimmer intensity Lamp 8

0-255	From black to brightest

Channel 9 – Dimmer intensity Lamp 9

0-255	From black to brightest

Channel 10 – Dimmer intensity Lamp 10

0-255	From black to brightest

Channel 11 – Dimmer intensity Lamp 11

0-255	From black to brightest

Channel 12 – Dimmer intensity Lamp 12

0-255	From black to brightest

Channel 13 – Dimmer intensity Lamp 13

0-255	From black to brightest

Channel 14 – Dimmer intensity Lamp 14

0-255	From black to brightest

Channel 15 – Dimmer intensity Lamp 15

0-255	From black to brightest

Channel 16 – Dimmer intensity Lamp 16

0-255	From black to brightest

Channel 17 – Dimmer intensity Lamp 17

0-255	From black to brightest

Channel 18 – Dimmer intensity Lamp 18

0-255	From black to brightest

Channel 19 – Dimmer intensity Lamp 19

0-255	From black to brightest

Channel 20 – Dimmer intensity Lamp 20

0-255	From black to brightest

Channel 21 – Dimmer intensity Lamp 21

0-255	From black to brightest

Channel 22 – Dimmer intensity Lamp 22

0-255	From black to brightest

Channel 23 – Dimmer intensity Lamp 23

0-255	From black to brightest

Channel 24 – Dimmer intensity Lamp 24

0-255	From black to brightest

Channel 25 – Dimmer intensity Lamp 25

0-255	From black to brightest

Protocol 29 Channels (Matrix Mode 1-25)

Channel 1 – Dimmer intensity

0-255	From black to brightest

Channel 2 – Static Macros

0-255	From black to brightest

Channel 3 – Dynamic Macros

0-255	From black to brightest

Channel 4 –Speed (CH3 must be open ⚠)

0-127	From slow to fast
128-255	From fast to slow, reverse movement of the characters

Channel 5 – Dimmer intensity Lamp 1

0-255	From black to brightest

Channel 6 – Dimmer intensity Lamp 2

0-255	From black to brightest

Channel 7 – Dimmer intensity Lamp 3

0-255	From black to brightest

Channel 8 – Dimmer intensity Lamp 4

0-255	From black to brightest

Channel 9 – Dimmer intensity Lamp 5

0-255	From black to brightest

Channel 10 – Dimmer intensity Lamp 6

0-255	From black to brightest

Channel 11 – Dimmer intensity Lamp 7

0-255	From black to brightest

Channel 12 – Dimmer intensity Lamp 8

0-255	From black to brightest

Channel 13 – Dimmer intensity Lamp 9

0-255	From black to brightest

Channel 14 – Dimmer intensity Lamp 10

0-255	From black to brightest

Channel 15 – Dimmer intensity Lamp 11

0-255	From black to brightest

Channel 16 – Dimmer intensity Lamp 12

0-255	From black to brightest

Channel 17 – Dimmer intensity Lamp 13

0-255	From black to brightest

Channel 18 – Dimmer intensity Lamp 14

0-255	From black to brightest

Channel 19 – Dimmer intensity Lamp 15

0-255	From black to brightest

Channel 20 – Dimmer intensity Lamp 16

0-255	From black to brightest

Channel 21 – Dimmer intensity Lamp 17

0-255	From black to brightest

Channel 22 – Dimmer intensity Lamp 18

0-255	From black to brightest

Channel 23 – Dimmer intensity Lamp 19

0-255	From black to brightest

Channel 24 – Dimmer intensity Lamp 20

0-255	From black to brightest

Channel 25 – Dimmer intensity Lamp 21

0-255	From black to brightest

Channel 26 – Dimmer intensity Lamp 22

0-255	From black to brightest

Channel 27 – Dimmer intensity Lamp 23

0-255	From black to brightest

Channel 28 – Dimmer intensity Lamp 24

0-255	From black to brightest

Channel 29 – Dimmer intensity Lamp 25

0-255	From black to brightest

Maintenance

The operator has to make sure that safety-relating and machine-technical installations are to be inspected by an expert after every year in the course of an acceptance test.
The operator has to make sure that safety-relating and machine-technical installations are to be inspected by a skilled person once a year.

The following points have to be considered during the inspection:

1. All screws used for installing the device or parts of the device have to be tightly connected and must not be corroded.
2. There may not be any deformations on housings, fixations and installation spots.
3. Mechanically moving parts like axles, eyes and others may not show any traces of wearing.
4. The electric power supply cables must not show any damages or material fatigue.

The Showtec Matrix Blinder requires almost no maintenance. However, you should keep the unit clean. Otherwise, the fixture's light-output will be significantly reduced. Disconnect the mains power supply, and then wipe the cover with a damp cloth. Do not immerse in liquid. Wipe lens clean with glass cleaner and a soft cloth. Do not use alcohol or solvents.
The front lens will require weekly cleaning, as smoke-fluid tends to build up residues, reducing the light-output very quickly. The cooling-fans should be cleaned monthly with a soft brush.
Please clean internal components once a year with a light brush and vacuum cleaner.
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.

Changing the Lamp

1. Disconnect mains power supply. Loosen the 2 screws on the front of the housing where the lamp is damaged/broken.
2. Gently remove the small metal front plate.
3. Follow directions for installing a new lamp, page 7.

Replacing a Fuse

Power surges, short-circuit or inappropriate electrical power supply may cause a fuse to burn out. If the fuse burns out, the product will not function whatsoever. If this happens, follow the directions below to do so.

1. Unplug the unit from electric power source.
2. Insert a flat-head screwdriver into a slot in the fuse cover. Turn the screwdriver to the left, at the same time gently push a bit (Turn and Push). The fuse will come out.
3. Remove the used fuse. If brown or unclear, it is burned out.
4. Insert the replacement fuse into the holder where the old fuse was. Reinsert the fuse cover. Be sure to use a fuse of the same type and specification. See the product specification label for details.

Troubleshooting

No Light

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.
If the light effect does not operate properly, refer servicing to a technician.
Response: Suspect three potential problem areas: the power supply, the lamp, the fuse.

1. Power supply. Check that the unit is plugged into an appropriate power supply.
2. The lamp. Replace the old lamp with a new one with the same specifications. See page 7 for replacing lamps.
3. The fuse. Replace the fuse. See page 25 for replacing the fuse.

No Response to DMX

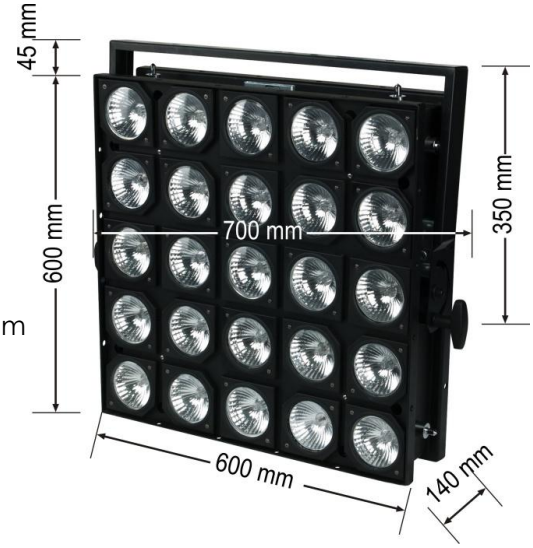
Response: Suspect the DMX cable or connectors, a controller malfunction, a light effect DMX card malfunction.

1. Check the DMX cable: Unplug the unit; change the DMX cable; then reconnect to electrical power. Try your DMX control again.
2. Check the DMX LED on the back of the Matrix. When it is not blinking, the Matrix is not receiving a DMX signal.
3. Check if the XLR pin connection is OK. A couple of DMX controllers have a switch to change pin 2 and pin 3. Normally Pin 2 should be Signal -, Pin 3 should be Signal +.
Press this switch on your controller and now Pin 2 is Signal + and Pin 3 is Signal -.
4. Determine whether the controller or light effect is at fault. Does the controller operate properly with other DMX products ? If not, take the controller in for repair. If so, take the DMX cable and the light effect to a qualified technician.

See next page for more problem solving.

Problem	Probable cause(s)	Remedy
One or more fixtures are completely dead.	No power to the fixture	· Check that power is switched on and cables are plugged in.
	Primary fuse blown.	· Replace fuse.
	The flat cable inside the Matrix maybe loose, due to wobbly transportation	· Check if all cables are properly connected, by gently pressing them to the PCB boards.
Fixtures reset correctly, but all respond erratically or not at all to the controller.	The controller is not connected.	· Connect controller.
	3-pin XLR Out of the controller does not match XLR Out of the first fixture on the link (i.e. signal is reversed).	· Install a phase reversing cable between the controller and the first fixture on the link.
Fixtures reset correctly, but some respond erratically or not at all to the controller.	Poor data quality	· Check data quality. If much lower than 100 percent, the problem may be a bad data link connection, poor quality or broken cables, missing termination plug, or a defective fixture disturbing the link.
	Bad data link connection	· Inspect connections and cables. Correct poor connections. Repair or replace damaged cables.
	Data link not terminated with 120 Ohm termination plug.	· Insert termination plug in output jack of the last fixture on the link.
	Incorrect addressing of the fixtures.	· Check address setting.
	One of the fixtures is defective and disturbs data transmission on the link.	· Bypass one fixture at a time until normal operation is regained: unplug both connectors and connect them directly together. · Have the defective fixture serviced by a qualified technician.
	3-pin XLR Out on the fixtures does not match (pins 2 and 3 reversed).	· Install a phase-reversing cable between the fixtures or swap pin 2 and 3 in the fixture, that behaves erratically.
No light	The power supply settings do not match local AC voltage and frequency.	· Disconnect fixture. Check settings and correct if necessary.
	Lamp missing or blown	· Disconnect fixture and replace lamp.
Lamp cuts out intermittently.	Fixture is too hot.	· Allow fixture to cool. · Clean fan. · Make sure air vents at control panel and front lens are not blocked. · Turn up the air conditioning.
	The power supply settings do not match local AC voltage and frequency.	· Disconnect fixture. Check settings and correct if necessary.

Product Specification



Model: Showtec Matrix Blinder
Voltage: 240V-50Hz (CE)
Extraordinary and multifunctional Audience blinder.
4 different DMX modes: 4 CH Basic Mode
9 CH Zone Mode
25 CH Matrix Mode
29 CH Advanced Mode
Easy to control the Matrix by its built-in macros.
For easy connection equipped with a fast-lock locking system
Neutrik Powercon input
3-pin and 5-pin XLR Input and Output connectors
Digital LED display.
Power input: AC220-240V, 50Hz~60Hz
25x Osram Par 30 lamp (80120 included !!)
Lamp Angle: 30°
Total Power Consumption: 1900W
Fuse: 10A
Max. ambient temperature t_a: 40°C; Max. housing temperature t_B: 80°C
Cooling: 2 axial fans
Dimensions: 600 x 600 x 140 mm
Weight: 17,92 kg

Optional Flightcase for 4 Matrix Blinders (ordercode D7592)
Dimensions: 910 x 770 x 870 mm (LxWxH)
Weight: 49 kg

Operation and Programming
Signal pin OUT: pin 1 earth, pin 2 (-), pin 3 (+)
Set Up and Addressing: LED control panel
DMX Channels: 4, 9, 25 or 29
Signal input 3-pin + 5-pin XLR male
Signal output 3-pin + 5-pin XLR female

Minimum distance:
Minimum distance from flammable surfaces: 0.5m
Minimum distance to lighted object: 1.3m

Lamp
Allowed lamp models*:
Osram Par 30 E27 Spot 75W (2000 hr, Beam angle: 10°) ordercode 80120

*: Versions for other lamps may be produced. Please check the specification label on your product.

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

CE

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