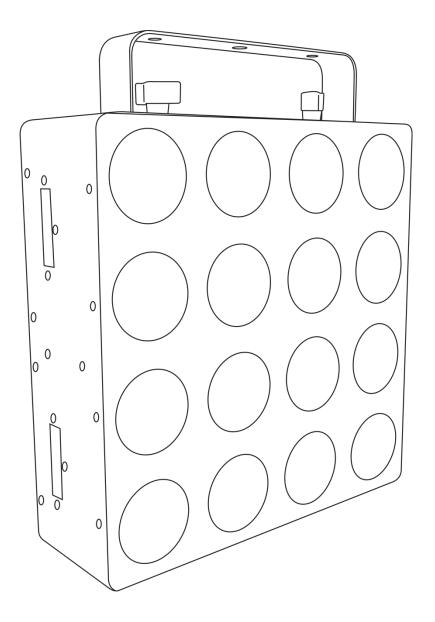


# MANUAL





# Pixel Square 16 COB V1

Ordercode: 41267

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## Warning



For your own safety, please read this user manual carefully before your initial start-up!

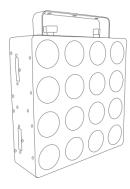


## **Unpacking Instructions**

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 Pixel Square 16 COB
- 1 mounting bracket
- 2 adjustment screws
- IEC power cable 1,5 m
- User manual



## LED Expected Lifespan

LEDs gradually decline in brightness over time. HEAT is the dominant factor that leads to the acceleration of this decline. Packaged in clusters, LEDs exhibit higher operating temperatures than in ideal or singular optimum conditions. For this reason, when all color LEDs are used at their fullest intensity, life of the LEDs is significantly reduced. If improving the lifespan is of higher priority, place care in providing for lower operational temperatures. This may include climatic-environmental and the reduction of overall projection intensity.



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 the 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 contained 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 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 lift the fixture holding it by the projector-head, as the mechanics may be damaged. Always hold the fixture by the transport handles.
- Never place any material over the lens.
- Never look directly into the light source.
- Never leave any cables lying around.
- 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 will reduce the device'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 the device indoors, avoid contact with water or other liquids.
- Only operate the fixture after having checked if 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 keep the case closed while operating.
- Always allow a free air space of at least 50 cm around the unit for ventilation.
- Always disconnect power from the mains, when device is not used or before cleaning! Only handle the power cord holding it 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 the lens is obviously damaged, it has to be replaced.
- If device was 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 the 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. The device must be installed beyond the reach of children. Never leave the unit running unattended.
- Never attempt to bypass the thermostatic switch or fuses.
- For replacement use fuses of same type and rating only.
- The user is responsible for correct positioning and operating of the Pixel. The manufacturer will not accept liability for damages caused by the misuse or incorrect installation of this device.
- This device falls under protection class I. Therefore it is essential to connect the yellow/green conductor to earth.
- 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 lightsource!!! (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 bigger than 1 meter.
- The maximum ambient temperature  $t_a = 40^{\circ}$ C must never be exceeded.
- The relative humidity must not exceed 50 % with an ambient temperature of 40° C.
- 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, 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.

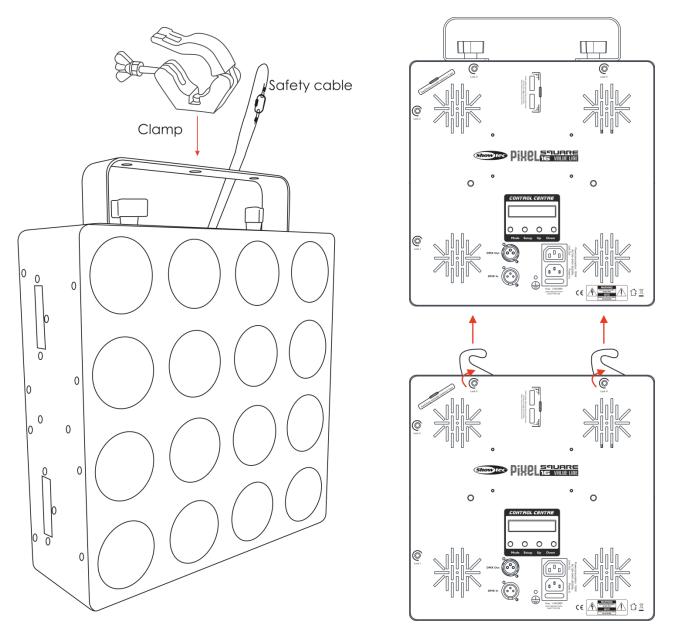
Do not attempt the installation yourself !

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

## Procedure:

- If the projector is lowered from the ceiling or high joists, professional trussing systems have to be used.
- Use a clamp to mount the projector, with the mounting bracket, to the trussing system.
- The projector 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, de-rigging or servicing the projector, always make sure, that the area below the installation site is secured and that there are not any unauthorized people around.





The Pixel Square can be placed on a flat stage floor or mounted to any kind of truss with a clamp, or attached to each other by means of the retractable, built-in hooks.

Improper installation can cause serious injuries to people and/or damage of property !

## Connection with the mains

Connect the device to the mains with the power plug. Always check if the right color cable is connected to the right place.

International	EU Cable	UK Cable	US Cable	Pin
L	BROWN	RED	YELLOW/COPPER	PHASE
Ν	BLUE	BLACK	SILVER	NEUTRAL
$\oplus$	YELLOW/GREEN	GREEN	GREEN	PROTECTIVE GROUND

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

Improper installation can cause serious injuries to people and/or damage of property!



# 🛕 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 <u>aftersales@highlite.nl</u> 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:

01) Your name

- 02) Your address
- 03) Your phone number
- 04) 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 Showtec Pixel Square 16 COB is a LED fixture with high output and great effects.

- Input voltage: 100-240V, 60/50 Hz
- Power consumption: 170W
- Light source: 16 x 9W COB RGB LED
- Beam Angle: 55°
- LCD display for easy setup
- Control protocol: DMX-512
- DMX channels: 2, 3, 5, 12, 24, 48 channels
- Color mixing: RGB
- Color range: 16,7 million additive colors
- Control modes: Static Colors, Built-in programs, Auto, Sound-controlled, DMX-512, Master/Slave
- Metal & Flame-retardant plastic housing
- Dimmer: 0-100%
- Strobe: 0-20Hz
- IEC power connector IN/OUT & 3-pin XLR IN/OUT
- Fuse: F1,5A/250V
- Dimensions: 340 x 105 x 400 mm (LxWxH)
- Weight: 6,7 kg

## Frontside

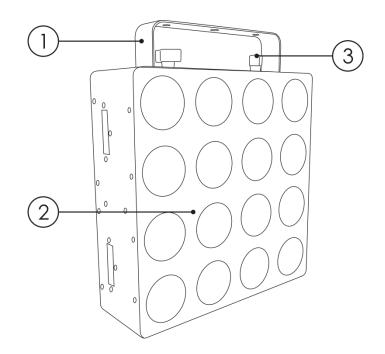
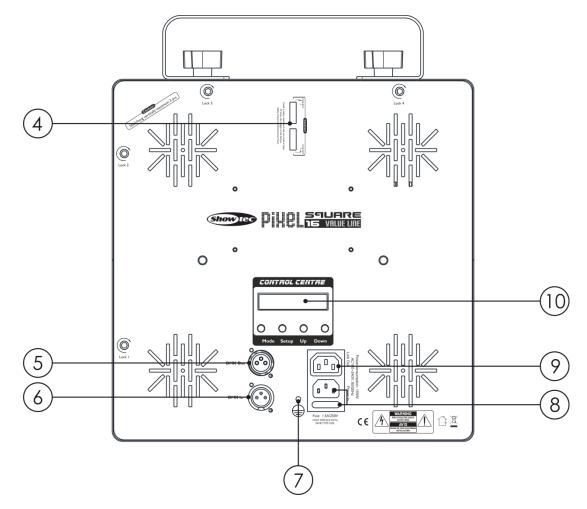


Fig. 01

- 01) Mounting bracket with inclination screw
- 02) 16 x 9W COB RGB LED
- 03) Adjustment screw



## Backside



- 04) Safety eye
- 05) 3-pin DMX signal connector OUT
- 06) 3-pin DMX signal connector IN
- 07) Ground/earth connection
- 08) IEC power connector 100-240V IN + Fuse F1,5A/250V
- 09) IEC power connector 100-240V OUT
- 10) LCD display + menu buttons

## Installation

Remove all packing materials from the Pixel Square 16 COB . Check that all foam and plastic padding is removed. Connect all cables.

Do not supply power before the whole system is set up and connected properly. Always disconnect from electric mains power supply before cleaning or servicing. Damages caused by non-observance are not subject to warranty.

## Set Up and Operation

Follow the directions below, as they pertain to your preferred operation mode. Before plugging the unit in, always make sure that the power supply matches the product specification voltage. Do not attempt to operate a 120V specification product on 230V power, or vice versa.

Fig. 02

## **Control Modes**

There are 6 modes:

Auto mode Built-in programs Static colors Sound-controlled Master/Slave DMX-512 (2CH, 3CH, 5CH, 12CH, 24CH, 48CH)

#### One Pixel Square (Auto mode, Built-in programs and Static colors)

- 01) Fasten the effect light onto firm trussing. Leave at least 0,5 meter on all sides for air circulation.
- 02) Always use a safety cable (ordercode 70140 / 70141).
- 03) Plug the end of the electric mains power cord into a proper electric power supply socket.
- 04) When the Pixel Square is not connected with a DMX cable, it functions as a stand-alone device.
- 05) Please see page 13 for more information about Auto mode, Built-in programs and Static colors.

#### One Pixel Square (Sound-controlled)

- 01) Fasten the effect light onto firm trussing. Leave at least 0,5 meter on all sides for air circulation.
- 02) Always use a safety cable (ordercode 70140 / 70141).
- 03) Plug the end of the electric mains power cord into a proper electric power supply socket.
- 04) When the Pixel Square is not connected with a DMX cable, it functions as a stand-alone device.
- 05) Please see page 14 for more information about the Sound-controlled mode.

#### Multiple Pixel Squares (Master/Slave Mode)

- 01) Fasten the effect light onto firm trussing. Leave at least 0,5 meter on all sides for air circulation.
- 02) Always use a safety cable (ordercode 70140 / 70141).
- 03) Plug the end of the electric mains power cord into a proper electric power supply socket.
- 04) Use a 3-pin XLR cable to connect the Pixel Squares.

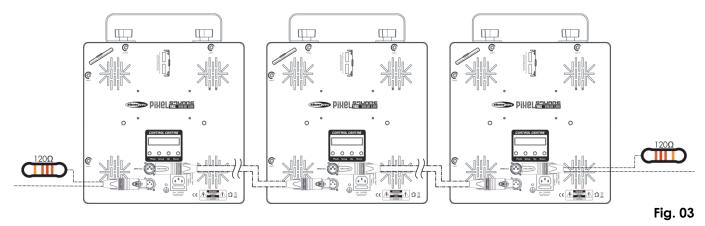
The pins:



01) Earth 02) Signal (-) 03) Signal (+)

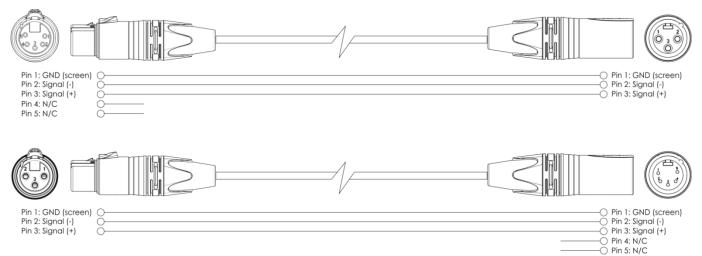
05) Link the units as shown in Fig. 03, connect a DMX signal cable from the first unit's DMX "out" socket to the second unit's "in" socket. Repeat this process to link the second, third, and fourth units. You can use the same functions on the master device as described on pages 13-14 (Auto, Built-in programs, Static colors or Sound-controlled). This means that you can set your desired operation mode on the master device and all slave devices will react the same as the master device.

#### Multiple Pixel Squares Master/Slave Set Up



#### Multiple Pixel Squares (DMX Control)

- 01) Fasten the effect light onto firm trussing. Leave at least 1 meter on all sides for air circulation.
- 02) Always use a safety cable (ordercode 70140 / 70141).
- 03) Plug the end of the electric mains power cord into a proper electric power supply socket.
- 04) Use a 3-pin XLR cable to connect the Pixel Square and other devices.



- 05) Link the units as shown in Fig. 04, 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.
- 06) Supply electric power: Plug electric mains power cords into each unit's IEC 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 Pixel Squares DMX Set Up

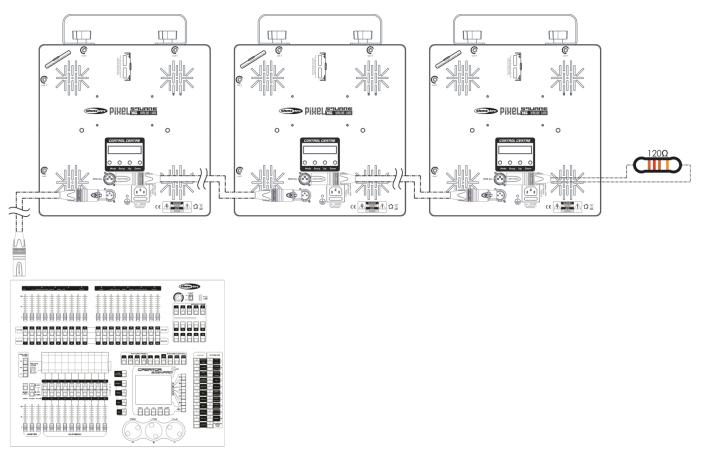


Fig. 04

Show [G

#### **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 of 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 a 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.



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

#### **Data Cabling**

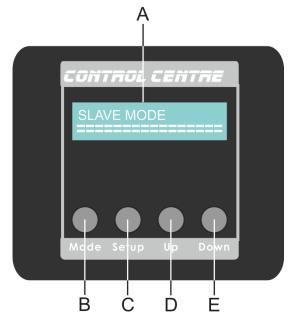
To link fixtures together, you must obtain data cables. You can purchase DAP Audio certified DMX cables directly from a dealer/distributor or construct your own cable. If you choose to create your own cable, please use data-grade cables that can carry a high quality signal and are less prone to electromagnetic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

#### **DAP Audio DMX Data Cables**

- DAP Audio Basic microphone cable for allround use. bal. XLR/M 3-pin > XLR/F 3-pin.
   Ordercode FL01150 (1,5 m), FL013 (3 m), FL016 (6 m), FL0110 (10 m), FL0115 (15 m), FL0120 (20 m).
- DAP Audio X-type data cable XLR/M 3-pin > XLR/F 3-pin. Ordercode FLX0175 (0,75 m), FLX01150 (1,5 m), FLX013 (3 m), FLX016 (6 m), FLX0110 (10 m).
- DAP Audio cable for the demanding user with exceptional audio-qualities and connector made by Neutrik®. **Ordercode** FL71150 (1,5 m), FL713 (3 m), FL716 (6 m), FL7110 (10 m).
- DAP Audio cable for the demanding user with exceptional audio-qualities and connector made by Neutrik®. **Ordercode** FL7275 (0,75 m), FL72150 (1,5 m), FL723 (3 m), FL726 (6 m), FL7210 (10 m).
- DAP Audio 110 Ohm cable with digital signal transmission. Ordercode FL0975 (0,75 m), FL09150 (1,5 m), FL093 (3 m), FL096 (6 m), FL0910 (10 m), FL0915 (15 m), FL0920 (20 m).



## **Control Panel**



- A) LCD display
- B) MODE button
- C) SETUP button
- D) UP button
- E) DOWN button

## 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 Pixel Square will respond to the controller.

Please note when you use the controller, the unit has **48** channels.

When using multiple Pixel Square, make sure you set the DMX addresses right.

Therefore, the DMX address of the first Pixel Square should be **1(001)**; the DMX address of the second Pixel Square should be **1+48=49 (049)**; the DMX address of the third Pixel Square should be **49+48=97 (097)**, etc. Please, make sure that you do not have any overlapping channels in order to control each Pixel Square correctly. If two or more Pixel Squares are addressed similarly, they will work similarly.

## Controlling:

After having addressed all Pixel Square fixtures, you may now start operating these via your lighting controller.

**Note:** After switching on, the Pixel Square 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 Pixel Square.
- 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 is necessary to insert an XLR termination plug (with 120 Ohm) in the last fixture in order to ensure proper transmission on the DMX data link.



When no button is pressed for 20 seconds, the display will turn off. To light up the display, you have to press the MODE, SETUP, UP or DOWN button. Once you have pressed the button, the display will light up.



Fig. 05

#### **Main Menu Options**

STATIC COLOR R25 <u>5</u> G255 B255	Static colors
RUN PROGRAM:01           SP:080         FS:000	Built-in programs
AUTO times:001 SP:080 FS:000	Auto mode
SOUND TRIGGER sensitivity:2 <u>0</u>	Sound-controlled mode
DMX address:001 channels:0 <u>2</u> CHs	DMX-512 mode
SLAVE MODE	Master/Slave mode

#### 1. Static colors

With this menu you can set the device's static colors.

- 01) While in the main menu, press the **MODE** button until the display shows
- 02) Repeatedly press the **SETUP** button to switch between the colors (RED, GREEN, BLUE). Observe the selection bar change its location.
- 03) Once you have chosen the desired color, press the **UP/DOWN** buttons to increase/decrease the color brightness. The adjustment range is between 0-255, from OFF to full ON.
- 04) You can combine RED, GREEN and BLUE to create an infinite range of colors (0-255).

#### 2. Built-in programs

With this menu, you can set the device's built-in programs.

- 01) While in the main menu, press the **MODE** button until the display shows **SP:000**
- 02) Repeatedly press the **SETUP** button to switch between 3 options. Observe the selection bar change its location:
  - Built-in program number (RUN PROGRAM): 25 programs
  - Program speed (SP): 1-100, from slow to fast
  - Strobe frequency (FS): 0-100, from OFF to highest frequency
- 03) Press the UP/DOWN buttons to increase/decrease the values.

#### 3. Auto mode

With this menu, you can set the device's Auto mode. The device will play all the built-in programs in a sequence, for the desired amount of times.

- 01) While in the main menu, press the **MODE** button until the display shows
- 02) Repeatedly press the **SETUP** button to switch between 3 options. Observe the selection bar change its location:
  - Auto mode repetition number (AUTO times): up to 100 repetitions
  - Auto mode speed (SP): 1-100, from slow to fast
  - Strobe frequency (FS): 0-100, from OFF to highest frequency

03) Press the UP/DOWN buttons to increase/decrease the values



#### 4. Sound-controlled mode

With this menu, you can set the device's sound-controlled mode. The device will react to the beat of the background music.

- 01) While in the main menu, press the **MODE** button until the display shows
- 02) Press the **UP/DOWN** buttons to increase/decrease the device's sound sensitivity. The adjustment range is between 0-31, from OFF to highest sound sensitivity.

## 5. DMX-512 mode

With this menu, you can adjust the device's DMX settings.

- 01) While in the main menu, press the **MODE** button until the display shows
- 02) Repeatedly press the **SETUP** button to switch between 2 options. Observe the selection bar change its location:
  - DMX starting address: 001-512
  - Current channel mode: 2, 3, 5, 12, 24, 48 channels
- 03) Press the UP/DOWN buttons to increase/decrease the values.

## 6. Master/Slave mode

With this menu, you can set the device as a slave.

- 04) While in the main menu, press the **MODE** button until the display shows
- 05) The device is now operating in slave mode and it will react the same as the master device.

## **DMX Channels**

#### 2 channels

#### Channel 1 – Control modes

Channel I –	Control modes
0	Not functional
1-7	Red
8-15	Red+Green
16-23	Green
24-31	Green+Blue
32-39	Blue
40-47	Red+Blue
48-55	Red+Green+Blue
56-63	Program 1
64-71	Program 2
72-79	Program 3
80-87	Program 4
88-95	Program 5
96-103	Program 6
104-111	Program 7
112-119	Program 8
120-127	Program 9
128-135	Program 10
136-143	Program 11
144-151	Program 12
152-159	Program 13
160-167	Program 14
168-175	Program 15
176-183	Program 16
184-191	Program 17
192-199	Program 18
200-207	Program 19
208-215	Program 20









224-231	Program 21	
	Program 22	
232-239	Program 23	
240-247	Program 24	
248-255	Sound-controlled mode	
	Program speed CH1 must be set between 56-247	
0-255	Program speed adjustment, from slow to fast	
	Sound sensitivity 🛕 CH1 must be set between 248-255 🛕	
0-255	Sound sensitivity, from OFF to highest sensitivity	
3 channels		
Channel 1 –		
0-255	Gradual adjustment Red, from dark to brightest	
Channel 2 –		
0-255	Gradual adjustment Green, from dark to brightest	
Channel 3 –		
0-255	Gradual adjustment Blue, from dark to brightest	
<b>--</b>	Red A Dimmer must be open A Gradual adjustment Red, from dark to brightest	
·····	Green A Dimmer must be open A	
0-255 C		
Channel 3 –	Blue A Dimmer must be open A	

0-255 Dimmer intensity, from OFF to full ON



Channel 5	Strobe 🛕 Dimmer must be open 🛕	
0-255	Strobe frequency, from OFF to highest frequency	

#### 12 channels

#### Channel 1 – Red 1

0-255	Gradual adjus	tment Red.	from dark to	o briahtest
0 200	0.			e .e

#### Channel 2 – Green 1

0-255 Gradual adjustment Green, from dark to brightest

#### Channel 3 – Blue 1

	··· <b>·</b>		 
0-255	0.	ustment Blue,	brightest

#### Channel 4 – Red 2

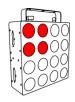
0-255	ustment Red, from dark to brightest

#### Channel 5 – Green 2

0-255 Gradual adjustment Green, from dark to brightest

Channel 6 – Blue 2

0-255 Gradual adjustment Blue, from dark to brightest













#### Channel 7 – Red 3

0-255 Gradual adjustment Red, from dark to brightest

## Channel 8 – Green 3

0-255 Gradual adjustment Green, from dark to brightest

#### Channel 9 – Blue 3

0-255	Gradual adjustment Blue, from dark to brightest

#### Channel 10 – Red 4

0-255 Gradual adjustment Red, from dark to brightest

#### Channel 11 – Green 4

0-255 Gradual adjustment Green, from dark to brightest

#### Channel 12 – Blue 4

0-255 Gradual adjustment Blue, from dark to brightest















#### 24 channels

Channel	1 – Red 1
0-255	Gradual adjustment Red, from dark to brightest

Channel 2 – Green 1

0-255	Gradual ad	justment Green,	from dark to	brightest

Channel 3 – Blue 1

0-255	Gradual adj	ustment Blue,	from dark to	o brightest

Channel 4 – Red 2

|--|

Channel 5 – Green 2

0-255 Gradual adjustment Green, from dark to brightest	

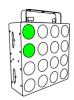
#### Channel 6 – Blue 2

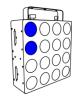
0-255	Gradual adjustment Blue, from dark to brightest

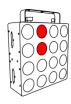


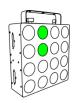


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## Channel 22 – Red 8

0-255 Gradual adjustment Red, from dark to brightest

## Channel 23 – Green 8

0-255 Gradual adjustment Green, from dark to brightest

#### Channel 24 – Blue 8

0-255 Gradual adjustment Blue, from dark to brightest

## 48 channels

Channel 1	I – Red 1
0-255	Gradual adjustment Red, from dark to brightest

#### Channel 2 – Green 1

0-255	Gradual adjustment Green, from dark to brightest

## Channel 3 – Blue 1

0-255	Gradual adjustment Blue, from dark to brightest

## Channel 4 – Red 2

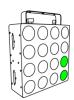
0-255	Gradual	adjustment Re	d, from	dark to	brightest	











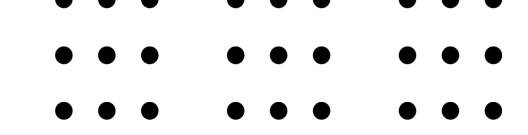


## Channel 5 – Green 2

0-255 Gradual adjustment Green, from dark to brightest

Channel 6 – Blue 2

0-255 Gradual adjustment Blue, from dark to brightest



#### Channel 46 – Red 16

0-255 Gradual adjustment Red, from dark to brightest

Channel 47 – Green 16

0-255 Gradual adjustment Green, from dark to brightest

#### Channel 48 – Blue 16

0-255 Gradual adjustment Blue, from dark to brightest















## Maintenance

The Showtec Pixel Square 16 COB 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. Wipe the front glass panel clean with glass cleaner and a soft cloth. Do not use alcohol or solvents. The front glass panel will require weekly cleaning, as smoke-fluid tends to build up residues, reducing the light-output very quickly. Do not immerse in liquid.

Keep connections clean. Disconnect electric power, and then wipe the DMX connections with a damp cloth. Make sure connections are thoroughly dry before linking equipment or supplying electric power.

The operator has to make sure that safety-related 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-related 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:

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

## **Replacing the 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.

- 01) Unplug the unit from electric power source.
- 02) Insert a screwdriver into the slot in the fuse cover. Gently pry up the fuse cover. The fuse will come out.
- 03) Remove the used fuse. If brown or unclear, it is burned out.
- 04) 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**

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.

## No Light

If the light effect does not operate properly, refer servicing to a technician.

- Suspect three potential problem areas as: the power supply, the LEDs, the fuse.
- 01) Power supply. Check if the unit is plugged into an appropriate power supply.
- 02) The LEDs. Return the Pixel Square to your Showtec dealer.
- 03) The fuse. Replace the fuse. See page 21 for replacing the fuse.
- 04) If all of the above appears to be O.K., plug the unit in again.
- 05) If you are unable to determine the cause of the problem, do not open the Pixel Square, as this may damage the unit and the warranty will become void.
- 06) Return the device to your Showtec dealer.

## No Response to DMX

- Suspect the DMX cable or connectors, a controller malfunction, a light effect DMX card malfunction.
- 01) Check the DMX setting. Make sure that DMX addresses are correct.
- 02) Check the DMX cable: Unplug the unit; change the DMX cable; then reconnect to electrical power. Try your DMX control again.
- 03) 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.

Problem	Probable cause(s)	Solution
One or more fixtures do not	No power to the fixture	<ul> <li>Check if power is switched on and cables are plugged in</li> </ul>
function at all	Primary fuse blown	Replace fuse
Fixtures reset	The controller is not connected.	Connect controller.
correctly, but all respond erratically or not at all to the 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)	<ul> <li>Install a phase reversing cable between the controller and the first fixture on the link</li> </ul>
	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
Fixtures reset	Bad data link connection	<ul> <li>Inspect connections and cables. Correct poor connections. Repair or replace damaged cables</li> </ul>
correctly, but some respond erratically or not	Data link not terminated with 120 Ohm termination plug	<ul> <li>Insert termination plug in output jack of the last fixture on the link</li> </ul>
at all to the controller	One of the fixtures is defective and disturbs data transmission on the link	<ul> <li>Check address setting</li> <li>Bypass one fixture at a time until normal operation is restored: unplug both connectors and connect them directly together.</li> <li>Have the defective fixture serviced by a qualified technician</li> </ul>
	3-pin XLR Out on the fixtures does not match (pins 2 and 3 reversed)	<ul> <li>Install a phase-reversing cable between the fixtures or swap pin 2 and 3 in the fixture that behaves erratically</li> </ul>
No light or lamp cuts out	Fixture is too hot	<ul> <li>Allow the fixture to cool down</li> <li>Clean the fan</li> <li>Make sure air vents in control panel and the front lens are not blocked</li> <li>Turn up the air conditioning</li> </ul>
intermittently	LEDs damaged	Disconnect the fixture and return it to your dealer
	The power supply settings do not match local AC voltage and frequency	Disconnect fixture. Check settings     and correct if necessary

# **Product Specifications**

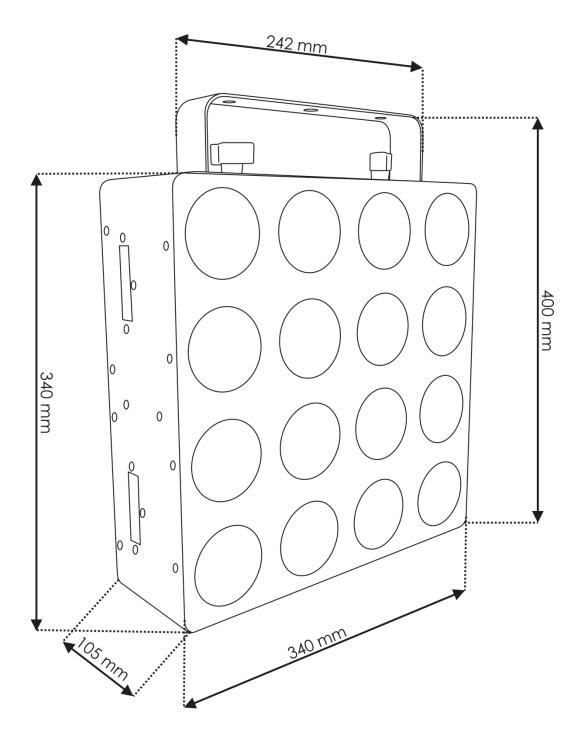
Model:	Showtec Pixel Square 16 COB
Input Voltage:	100-240 VAC, 60/50Hz
Power consumption:	170W (full output)
DMX linking:	30pcs
Fuse:	F1,5A/250V
Dimensions:	340 x 105 x 400 mm (LxWxH)
Weight:	6,7 kg
Operating and Programming:	
Signal pin OUT:	Pin 1 (earth), pin 2 (-), pin 3 (+)
DMX Mode:	2, 3, 5, 12, 24, 48 channels
Signal input:	3-pin XLR IN
Signal output:	3-pin XLR OUT
Electro-mechanical effects:	
Light source:	16 x 9W COB RGB LED
Beam angle:	55°
Dimmer:	0-100%
Strobe:	0-20Hz
Color mixing:	RGB
Color range:	16,7 million additive colors
Housing:	Metal & Flame retardant plastic
IP rating:	IP20
DMX control:	via standard DMX-controller
Onboard:	LCD display
Control:	Static Colors, Built-in programs, Auto, Sound-controlled,
	DMX-512, Master/Slave
Connections:	Dedicated IEC to Schuko & Data connector
Max. ambient temperature $t_a$ :	40°C
Max. housing temperature t <sub>B</sub> :	80°C
Minimum distance:	
Minimum distance from flammable surfaces:	0,5 m
Minimum distance to lighted object:	lm

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

CE

Website: <u>www.Showtec.info</u> Email: <u>service@highlite.nl</u>

# Dimensions





Pixel Square 16 COB
Notos
Notes

Ordercode: 41267





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