

# MANUAL





# Table of contents

| Warning                                 | 2  |
|---|----|
| Unpacking Instructions                  |    |
| Safety Instructions                     |    |
| Operating Determinations                |    |
| Rigging                                 |    |
| Connection with the mains               |    |
| Return Procedure                        |    |
| Claims                                  |    |
|   |    |
| Description of the device               |    |
| Overview                                |    |
| Optional accessories                    |    |
| Installation                            | 10 |
| Testing                                 | 13 |
| Set Up and Operation                    |    |
| Setup 1                                 |    |
| Setup 2                                 |    |
| Disconnection                           |    |
| Maintenance                             | 16 |
| Troubleshooting                         |    |
| No blue LED Indicator                   |    |
| No Response to DMX from your controller |    |
| Product Specification                   | 17 |
| Dimensions                              |    |



## Warning



#### CAUTION! READ THIS MANUAL!

Do not attempt to operate the device without professional knowledge! The device may potentially cause severe injuries and damage!



CAUTION! Keep this manual together with the FX Shot! Refer to this manual, whenever in doubt!



#### **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 FX Shot with Neutrik power cable (1,5 m)
- 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 authorized
- follow the instructions of this manual
- We also **insist** that **all new users** (operators, installers, maintenance workers and cleaners) receive a training course during which they become **thoroughly** familiarized with this user manual.



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



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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 and, on regular basis, make sure that they remain clearly visible and legible.
- Never place any material over the cannon tube.
- Never use anything to cover the ground contact.
- Never use the device during thunderstorms, unplug the device immediately.
- Never look directly into the cannon tube.
- Never leave any cables lying around.
- Never replace parts by yourself.
- Do not open the device and do not modify the device.
- Do not insert objects into air vents.
- Do not expose the device to any source of vibration.
- Do not insert objects into the cannon tube.
- Do not switch the device on and off in short intervals, as this would reduce the device's life.
- Do not touch the FX Shot while working or if it is connected to the mains power. Even if the FX Shot is not in operation, the electric cannons can still be filled and cause harm.
- Do not remove or disable the safety devices.
- Do not shake the device. Avoid brute force when installing or operating the device. The FX Shot reacts very sensitive to movement.
- All required safety equipment must be in good condition and must be working properly.
- Use the device ONLY if there ARE NOT ANY people, animals or other objects in the direction of the output within the output range. The shooting direction is the direction in which the output pipe on the FX Shot is pointed.
- Only use the device indoors, 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 use the FX Shot according to the instructions in this manual.
- Only operate the device after having familiarized with its functions.
- Avoid flames and do not put close to flammable liquids or gases.
- 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 or before cleaning! Only handle the power cord by the plug. Never pull out the plug by tugging the power cord.
- Always keep the workplace clean and provide adequate ambient lighting.
- 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 all the required safety devices are in good condition and function properly.
- Make sure that the power cord is never crimped or damaged. Check the device and the power cord from time to time.
- If text and/or icons are missing, damaged or illegible on the FX Shot, they should be replaced.
- If the cannon tube is obviously damaged, it needs to be replaced, so that its functions are not impaired.
- If the 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. Device must be installed out of the reach of children and unauthorized persons. 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.
- Provide sufficient lighting of the surroundings, when operating the FX Shot.
- The FX Shot may only be used if there are no persons, animals or other objects in the direct "line of fire" of the electric cannon within the output distance. The shooting direction is the direction, in which the electric cannon of the FX Shot is pointing. The output distance is dependent on the content and length of the electric cannons.
- The user is responsible for correct positioning and operating of the FX Shot. The manufacturer will not accept liability for unsafe situations, accidents, damages caused by:
  - The misuse or incorrect installation of this device.
  - Ignoring warnings or instructions as shown in this manual.
  - Using the FX Shot for purposes or conditions other than specified in this manual.
  - Changes to the FX Shot. This includes the use of other than original spare parts.
  - Inadequate maintenance.
  - The unauthorized removal of safety covers and / or guards.
  - The improper use of the FX Shot.
- 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!

Do not perform any repairments on your own! If in doubt, always contact service@highlite.com!



#### **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 maximum ambient temperature ta = 35°C must never be exceeded.
- Do not expose this device to relative humidity degree higher than 75%.
- Do not expose this device to any source of vibration.
- Operate the device in a reasonably stable temperature of between 0 and 35°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.
- If any unauthorized alterations or repairments are performed on the device, the warranty becomes void.
- Any operation different to the ones described in this manual may lead to dangers like frostbite, short-circuit, burns, electric shock, crash etc.



#### 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 FX Shot is lowered from the ceiling or high joists, professional trussing systems have to be used.
- Use a clamp to mount the FX Shot, with the mounting bracket, to the trussing system.
- The FX Shot 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 FX Shot, always make sure, that the area below the installation place is blocked and staying in the area is forbidden.



We presume that you, your employees and others who come into contact with the FX Shot are familiar with how the machine must be dealt with. This includes the correct use, maintenance and repair of the FX Shot as described in this user manual. The employees should be familiar with the use of the device through training and/or experience.



#### CAUTION!

Use the device only in accordance with the instructions in the manual! If in doubt, always contact service@highlite.com!

Showtec excludes liability for unsafe situations, accidents and damage that are the result of:

- Disregard for the warnings or regulations as set out on the FX Shot or in this manual.
- Use for other purposes or under other circumstances than those set out in this documentation.
- Alterations to the FX Shot. This also includes the use of replacement parts other than the original ones.
- Insufficient maintenance.
- Unauthorised removal of safety caps and/or safeguards.
- Incompetent operation of the machine.

Showtec is not liable for any consequential loss in the event of an FX Shot breakdown.

# This user manual has been drawn up with the utmost care. Showtec cannot be held responsible for any mistakes made in this publication or for any consequences thereof.

#### 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 | PHASE             |
| Ν             | BLUE         | BLACK    | SILVER        | NEUTRAL           |
| Ð             | YELLOW/GREEN | GREEN    | GREEN         | PROTECTIVE GROUND |

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

Improper installation can cause serious damage to people and 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.com</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

- Designed to fire prefilled single-use electric cannons, length 50cm or 80cm
- Specifically designed for stage and truss installations
- The FX Shot can be used with electric confetti cannons and electric streamer cannons
- Confetti or streamers in various colors, even Fluor, UV and metallic colors are an option
- The cannons contain a pressurized nitrogen cartridge which launches confetti up to 12 meters and streamers even 20 meters wide
- Suited for 50cm and 80cm shooters
- Plug-and-play
- Power supply: 230V
- Peak power: 100W
- Indoor use
- Operation: 230V on/off or DMX controlled by using a Relay Pack (50752) see page 12
- FX Shot will be activated by a 230V power source and can therefore be operated by a 230V power switch like the Showtec DJ-Switch (50363) see page 15
- Fuse: Circuit protection
- Dimensions: 150 x 145 x 166 mm (LxWxH)
- Weight: 1,7 kg without cannon

#### **Optional Accessories**

60907 FX Shot base plate for 1, 2 or 4 60909 FX Shot Cannon clamp with certified safety cable 70332 Twenty Clamp SWL20 kg, TÜV 28 mm

lacksquare These accessories are essential when using the FX shot safely. lacksquare

#### Overview



- 01) Cannon screw
- 02) Inclination screw
- 03) Cannon tube
- 04) Cannon ignition connector
- 05) LED indicator
- 06) Neutrik Powercon connector 230 V IN (Blue)
- 07) Neutrik Powercon connector 230 V OUT (Gray)

Fig. 01



## **Optional accessories**



60909 - Cannon clamp with safety cable



70332 - Twenty Clamp SWL 20 kg, TÜV 28 mm



60907 – Base Plate for 1, 2 or 4 FX Shots



The FX Shot only works with approved electric confetti and streamer cannons. The FX Shot is not suitable for other than the 50 and 80mm cannons shown below.





The following types of electric cannons can be used:

| Type Cannon | Contents         | Cannon Length | Output |
|-------------|------------------|---------------|--------|
|             | CONFETTI (150g)  | 50cm          | 8m.    |
|             | STREAMERS (150g) | 50cm          | 12m.   |
|             | CONFETTI (300g)  | 80cm          | 12m.   |
|             | STREAMERS (300g) | 80cm          | 20m.   |



## Installation

Remove all packing materials from the FX Shot. Check if 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.



CAUTION! Read all the warnings and safety instructions before installation! Knowledge of safety instructions is CRUCIAL for a safe use!



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A In order to carry out a **proper** and **safe** installation, act according to the following steps:

#### Step 1

01) Place the FX Shot on a flat, stable surface and secure it. It is possible to install 1, 2, or 4 FX Shots on the base plate.





02) If the FX Shot is mounted onto a truss system, install 2 certified truss clamps (**70332**) at the bottom of the FX Shot.



- 03) Place the FX Shot in the desired position on the truss system and tighten the clamps securely.
- 04) Always use a safety cable to secure the FX Shot to the truss system.
- 05) You can link multiple FX Shots together via Neutrik Power OUT Neutrik Power IN.

10

You can connect link multiple shooters together via a Powercon connection.



Powercable Neutrik Powercon M/F (90536) Length: 1,5 m Powercable Neutrik Powercon M/F (90537) Length: 3 m Powercable Neutrik Powercon M/F (90546) Length: 6 m Powercable Neutrik Powercon M/F (90547) Length: 10 m



Powercable Blue/White Pro Power Connector M/F (90810) Length: 0,5 m Powercable Blue/White Pro Power Connector M/F (90811) Length: 0,75 m Powercable Blue/White Pro Power Connector M/F (90812) Length: 1,5 m Powercable Blue/White Pro Power Connector M/F (90813) Length: 3 m Powercable Blue/White Pro Power Connector M/F (90814) Length: 6 m Powercable Blue/White Pro Power Connector M/F (90815) Length: 10 m

06) Place an electric cannon in the cannon holder.



As a result of the pressure, which is released during the shooting of confetti, the electric cannon can come loose from the FX Shot.



Always use a Cannon Clamp (60909) to secure the electric cannon to the FX Shot. Also use a Cannon Clamp (70332) when attaching the FX Shot onto a truss system.



07) Fix the electric cannon to the pivot clamp by turning the fixation screw on the side of the holder.



Turn the screws snugly. Never turn the rotary clamp tighter than necessary. Otherwise, this may cause damages to the pressure pattern in the electric cannon.



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08) Once the electric cannon is placed inside the FX Shot, it can be set to the correct shooting direction. Turn the inclination screw on the side of the FX Shot to position the holder in the right direction.



A Never shoot directly at people, animals or objects. Also refer to this manual for the correct shooting distance of mutiple cannons.



09) If you want to operate multiple shooters via DMX, use a Relay Pack to operate the FX Shot.



10) If you want to operate one shooter via DMX, use a Single MKII (50396) to operate the FX Shot.





Make sure you always have an eye on the FX Shot, when you are operating the Relay Pack or Single MKII.





## Testing

When testing, make sure that no electric cannons are connected via the ignition plug to the FX Shot.

- 01) Test the operation of the FX Shot by connecting the Neutrik power cable to the mains power supply. Once the blue LED above the FX Shot lights up, you know that the FX Shot is properly connected.
- 02) For DMX operation also check if the blue LED lights up when activating your specific DMX setup or DJ switch setup work.



#### Make sure that after testing, you disengage the switchpack. The blue LED must be off.



03) Carefully plug the electric cannon ignition connector into the input on top of the FX Shot. This connector has a recess, so that the plug can only be plugged into the socket one way.



ONLY connect the ignition plug when the blue LED is OFF !!!

Be careful: Always look before plugging the connector into the socket. If the blue LED is on, immediately stop. Disconnect the FX Shot from the mains power supply and check your setup. If the blue LED is lit, then the cannon can shoot off its confetti, upon receiving electric power.





## 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. Always disconnect from electric mains power supply before cleaning or servicing. Damages caused by non-observance are not subject to warranty.



The FX Shot only works with approved electric confetti and streamer cannons. The FX Shot is not suitable for other than the 50 and 80mm cannons shown below.

All pre-filled cannons are destined to be used only once !!!

Metallic products have a slightly heavier weight and will therefore achieve greater output.

The electric cannons contain pressure holders so the confetti / streamers blows the confetti away with a lot of pressure. Always keep a free shooting range.

The FX Shot may only be operated by adult and competent persons.

The FX Shot may only be operated when all components are completely and correctly installed / connected.

Use caution when operating the FX Shot: When the FX Shot is connected to the mains power supply, the connected electric cannon will shoot.

Make sure you only shoot the FX Shot when no persons, animals or objects are in the path of the cannon.









50335 Showmaster 24 Or use a 50317 SB-16





## Setup 2



#### Disconnection

- 01) Disconnect the FX Shot from the power, make sure it is no longer connected to a voltage source.
- 02) Remove the Neutrik power cable.
- 03) Remove the cannon from the FX Shot.





## Maintenance

The Showtec FX Shot requires almost no maintenance. However, you should keep the unit clean. Otherwise, the fixture's performance will be significantly reduced. Disconnect the mains power supply and then wipe the cover with a damp cloth. Do not use alcohol or solvents. Do not immerse in liquid. Keep connections clean. Disconnect electric power, then wipe the connections with a damp cloth. Make sure that the connections are thoroughly dry before supplying electric power.

The operator has to make sure that safety-related and machine-technical installations are to be inspected by an expert on regular basis 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.

## Troubleshooting

#### No blue LED Indicator

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.

Suspect two potential problem areas: the power supply or the Neutrik power cable.

- 01) Power supply. Check that the unit is plugged into an appropriate power supply.
- 02) Check that the Neutrik power cable is properly connected and that the cable is not defective.
- 03) If all of the above appears to be O.K., plug the unit in again.
- 04) If you are unable to determine the cause of the problem, do not open the FX Shot, as this may damage the unit and the warranty will become void.
- 05) Follow the steps below. If that doesn't work return the device to your Showtec dealer.

#### A cannon does not fire

First turn off the power to the FX Shot and then walk towards the FX Shot.

Make sure the connector is properly connected to the cannon. If the blue LED indicator is lit and the cannon does not fire, switch the cannon for another one and see if it does fire.

#### The FX Shot does not work even after checking the troubleshooting

If you are not sure about the operation of the FX Shot or other matters related to the FX Shot always contact your dealer.

#### No Response to DMX from your controller

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.



## **Product Specification**

| Model:   |                    | Showtec FX Shot                                  |  |  |
|--|--------------------|--|--|--|
| Input voltage:   |                    | Power supply: 240V / 50-60 Hz                    |  |  |
| Peak power:  | 100W               | 100W   |  |  |
| Fuse:  | Circuit pro        | Circuit protection                               |  |  |
| Dimensions:  | 150 x 145          | 150 x 145 x 166 mm (LxWxH)                       |  |  |
| Weight:  | 1,7 kg with        | 1,7 kg without cannon                            |  |  |
| Operation  |                    |  |  |  |
| Input + Output:  | Neutrik po         | Neutrik power connector                          |  |  |
| Electro-mechanical effects   |                    |  |  |  |
| • Designed to fire prefilled :   | single use electr  | ic cannons, which are available in 50cm and 80cm |  |  |
| Specifically designed for stage and truss installations  |                    |  |  |  |
| • The FX Shot can be used both with electric confetti cannons as with electric streamer cannons                                  |                    |  |  |  |
| Confetti or streamers in vo  | arious colors. Eve | en Fluor, UV and metallic colors are an option   |  |  |
| • The cannons contain a pressurized nitrogen cartridge which launches confetti up to 12 meters and streamers even 20 meters wide |                    |  |  |  |
| • Suited for 50cm and 80cr   | n shooters         |  |  |  |
| Indoor use   |                    |  |  |  |
| Max. ambient temperature $t_{a}$ :   |                    | 30 °C  |  |  |
| Max. air humidity:   |                    | 75 %   |  |  |
| Minimum distance:  |                    |  |  |  |
| Minimum distance from other  | surfaces:          | 0,5 m  |  |  |

Optional Accessories <u>60907</u> FX Shot base plate for 1, 2 or 4 <u>60909</u> FX Shot Cannon clamp with certified safety cable <u>70332</u> Twenty Clamp SWL20 kg, TÜV 28 mm

These accessories are essential when using the FX shot safely.



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

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

# Dimensions



Ordercode: 60906





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