

# EQUINOX

## Spark Stream

### User Manual



Order code: EQLED351

### WARNING - FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY BEFORE YOUR INITIAL START-UP!

- Before your initial start-up, please make sure that there is no damage caused during transportation.
- Should there be any damage, consult your dealer and do not use the equipment.
- To maintain the equipment in good working condition and to ensure safe operation, it is necessary for the user to follow the safety instructions and warning notes written in this manual.
- Please note that damages caused by user modifications to this equipment are not subject to warranty.



**IMPORTANT:** The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorised modification to the equipment.

- Never let the power cable come into contact with other cables. Handle the power cable and all mains voltage connections with particular caution!
- Never remove warning or informative labels from the unit.
- Do not open the equipment and do not modify the unit.
- Do not switch the equipment on and off in short intervals, as this will reduce the system's life.
- Spark Stream granules should be kept away from moisture and stored in a dry sealed environment.
- Do not expose to flammable sources, liquids or gases.
- Do not mix granules with other effects fluids or powders.
- Do not ingest Spark Stream granules.
- Keep Spark Stream Granules away from heat, hot surfaces, sparks, open flames and other ignition sources during storage.
- In the event of a fire, only use sand to extinguish.
- Do not block the air intake/outlet or the spark outlet when operating as this will cause damage to the unit.
- This unit produces a dust like fallout.
- Do not look into the spark outlet.
- Always disconnect the power from the mains when equipment is not in use or before cleaning! Only handle the power-cable by the plug. Never pull out the plug by pulling the power-cable.
- Make sure that the available mains supply voltage is between 220~240V AC, 50Hz.
- Make sure that the power cable is never crimped or damaged. Check the equipment and the power cable periodically.
- If the equipment is dropped or damaged, disconnect the mains power supply immediately and have a qualified engineer inspect the equipment before operating again.
- If the equipment has been exposed to drastic temperature fluctuation (e.g. after transportation), do not connect power or switch it on immediately. The arising condensation might damage the equipment. Leave the equipment switched off until it has reached room temperature.
- If your product fails to function correctly, stop use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Prolight dealer for service.
- Only use fuses of same type and rating.
- Repairs, servicing and power connection must only be carried out by a qualified technician. **THIS UNIT CONTAINS NO USER SERVICEABLE PARTS.**
- This fixture is for professional use only - it is not designed for or suitable for household use. The product must be installed by a qualified technician in accordance with local territory regulations. The safety of the installation is the responsibility of the installer. The fixture presents risks of severe injury or death due to fire hazards, electric shock and falls.
- **WARRANTY:** One year from date of purchase.

### OPERATING DETERMINATIONS

If this equipment is operated in any other way, than those described in this manual, the product may suffer damage and the warranty becomes void. Incorrect operation may lead to danger e.g: short-circuit, burns and electric shocks etc.

Do not endanger your own safety and the safety of others!

Incorrect installation or use can cause serious damage to people and/or property.

Before filling the unit power the unit down and disconnect the mains.

Only use Equinox Spark Stream Granules. Other granules/powders may cause clogging and void the guarantee.

Always make sure there is sufficient granules in the hopper and the hopper lid is installed correctly before operating.

Operate the unit only after you have familiarised yourself with its functions. Do not permit operation by persons not qualified for operating the unit and always empty the hopper and use the original packaging if the unit is to be transported.

## **WARNING - FOR YOUR OWN SAFETY, PLEASE READ THIS SAFETY ADVICE CAREFULLY BEFORE YOUR INITIAL START-UP!**

We recommend reading the below information and familiarising yourself with the procedures to ensure correct and safe operation of the Equinox Spark Stream.

- After opening the Equinox Spark Stream Granules Pouch the granules should be stored in an air tight storage container in temperatures between 10° and 50°.
- The Spark Stream should be installed on a flat solid surface with nothing blocking the underside air vent.
- Check and clear the cooling system for dust and debris regularly to prevent build-up and blockages.
- If the Spark Stream is being used in cold/humid conditions care **MUST** be taken to ensure condensation doesn't form in the outlet pipe. Please heat the unit for a minimum of 20 minutes before use to ensure all condensation can evaporate. During this process **NO** granules should be in the hopper and the hopper cap should be removed.
- **DO NOT** put Equinox Spark Stream Granules into the hopper until the Spark Stream has heated to its full temperature to prevent the granules/hopper coming in contact with moisture.
- Care **MUST** be taken when moving the Spark Stream Granules between hot/cold conditions where the granules could come into contact with moisture. If the granules come into contact with moisture they can gather together which could cause the machine to release large clumps of granules which could harm persons/damage furnishings.
- **ONLY** Equinox Spark Stream Granules should be used. Other granules being used with the Spark Stream will void the warranty.
- Once the Spark Stream has finished being used, power down the unit and empty the unused granules into a dry, air tight storage container. The unit should then be powered back on and run until all the remaining granules have exited the unit to leave a granule free machine.
- Both Spark Stream units and granules **MUST** be stored in dry conditions. Silica gel sachets are recommended to absorb any moisture in flight cases or granule storage containers.
- Please allow the Spark Stream to cool sufficiently or in any case a minimum of 30 minutes before transportation/storage.
- Once the Spark Stream has cooled, check the aperture for any remaining granules that may have gathered or stuck to the outlet pipe. If there are granules lodged in the outlet pipe, use a soft wire brush to dislodge these. Once granules have been dislodged, rotate the unit so the outlet pipe is facing the ground to let the dislodged granules fall out ensuring no granules are left in the machine.
- Equinox Spark Stream Granules should **NOT** be left in the hopper after the unit has been used or when it is being transported.

### Spark Stream

The Spark Stream is a unique type of special effects machine that projects cool sparks. The system contains no explosive content making it perfect for any indoor or outdoor event from fashion shows and concerts to corporate events. The unit operates at much cooler temperatures than traditional pyrotechnics by heating specially formulated granules and projecting them into the air. The sparks produced are non-flammable and non-hazardous.

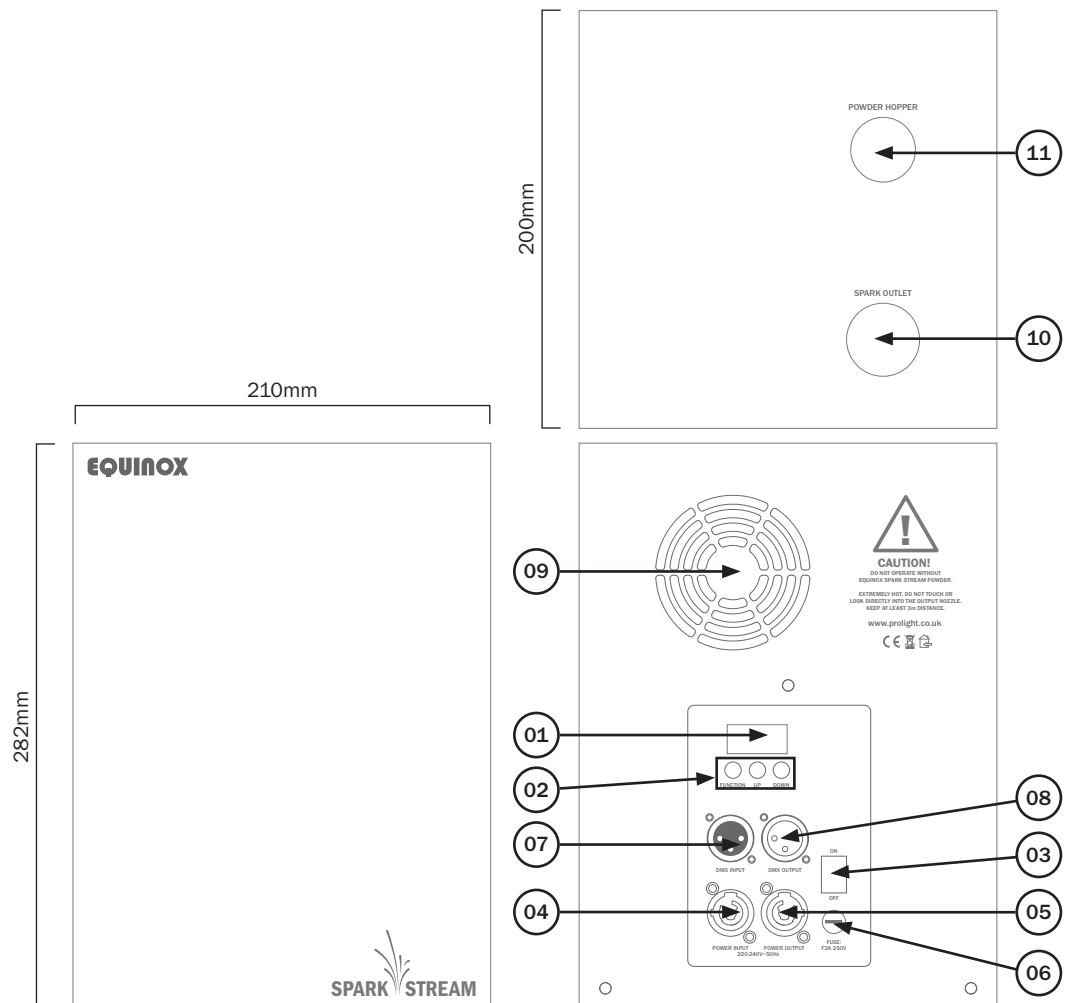
- Non-pyrotechnic fountain display
- Virtually no smell and very little smoke
- Output time: up to 5 1/2 minutes from 1 powder pouch
- Output height: up to 3m
- Warm-up time: approx. 8 minutes
- Hopper capacity: 120g
- DMX channels: 1
- Manual (via wireless remote) and DMX modes
- 3 push button menu with LED display
- PowerCON input/output
- 5-Pin XLR input/output
- Wireless remote control included

Specifications	
Power consumption	500W
Power supply	220~240V, 50Hz
Fuse	F5A 250V
Dimensions	282 x 210 x 200mm
Weight	8.3kg
Order code	EQLED351



- 01 - LED display
- 02 - Function buttons
- 03 - Power on/off switch
- 04 - PowerCON input
- 05 - PowerCON output
- 06 - Fuse F5A 250V
- 07 - 5-pin DMX input
- 08 - 5-pin DMX output
- 09 - Cooling fan
- 10 - Spark outlet
- 11 - Powder hopper

In the box: **1 x fixture,**  
**1 x power cable,**  
**1 x wireless remote,**  
**& 1 x user manual**



### Installation:

This unit is constructed for a free standing vertical installation. Install the unit on a level surface with the sparks output in a vertical, upwards direction.



Always disconnect from the mains supply before filling the powder hopper.

Only use Equinox Spark Stream Granules (Order code: EQLED351A).

Install the unit in a well-ventilated area.

There **MUST** be a minimum distance between the falling sparks and the audience of at least 3m.

Only install the spark machine on fire resistant and scratch resistant surfaces. Certain surfaces such as carpets, soft furnishings or delicate surfaces may not be suitable. If there is any uncertainty about the suitability of the surface this machine should not be used.

	<b>DANGER OF FIRE!</b> When installing the unit, make sure there is no highly flammable material (decoration articles etc) within a minimum distance of 3m	
---	---	---

	<b>DANGER TO LIFE!</b> Disconnect from the mains before starting maintenance	
--	---	--

### Cleaning and maintenance:

We recommend a frequent cleaning of the unit. Please use a soft lint-free and moistened cloth.

Never use alcohol or solvents! During operation the Spark Stream unit does produce a small amount of dust from the granules that generate the sparks. This dust can easily be swept or blown away and does not cause any harm to hard surfaces or human skin.

It is recommended that the sparks outlet is cleaned after each use to prevent build-up of granules.

To do this make sure the fixture is powered off, disconnected from the mains supply and left to cool for a minimum of an hour. Now remove any granules from the hopper. Once the hopper is empty use a nylon pipe cleaning brush to clean the inside of the outlet pipe. If any granule deposits remain in the bottom of the pipe turn the unit upside down to allow them to fall out.

There are no serviceable parts inside this unit except for the fuse.

Maintenance and service operations are only to be carried out by authorized dealers.

### Replacing the fuse:

Only replace the fuse with a fuse of same type and rating.

Before replacing the fuse, disconnect from the mains, see the following for procedure:

**Step 1: Open the fuse holder on the rear panel with a suitable screwdriver.**

**Step 2: Remove the old fuse from the fuse holder.**

**Step 3: Install the new fuse in the fuse holder.**

**Step 4: Replace the fuse holder in the housing.**

Should you need any spare parts, only use genuine parts.

Should you have any further questions, please contact your dealer.

### **Air Inlet:**

The unit has 1 main air vent on the underside of the unit that is used to keep the machine cool during operation. Do not cover the unit with anything that may restrict this. To maintain a clear air flow into the unit, ensure the feet aren't removed and the unit is positioned on a flat surface. Clear any residual dust that may have built up near the inlet regularly.

### **Preheating:**

The unit has a preheat function on startup. The unit takes approximately 8 minutes to reach the required temperature to operate.

### **Granules:**

The unit and the granules must be kept dry at all times to ensure safe and successful use. Any unused granules should be stored in a sealed bag where they cannot be exposed to any moisture. Any granules that do come into contact with water should be disposed of immediately and must not be used.

### **Flammable materials:**

Whilst the unit and the effect are extremely safe, please do not place any flammable materials within 3m distance of the unit. Please also ensure that the units are not covered with anything that may impact the flow of sparks during operation.

### **Transport:**

During transport all units should be stored in a flight case or other suitable container with sufficient padding to ensure no damage occurs during transit.



### Operation:

Connect the sparks stream to a suitable mains outlet using the PowerCON cable and switch the power switch to the on position.

After the unit has been powered up the spark machine will take 8 minutes to heat up to operating temperature. Whilst heating the LED display will chase 4 red dots, once heated the 4 red dots on the display will stop chasing and stay illuminated.

To set the DMX address press the **“FUNCTION”** button until *ADD 1* is displayed. Now use the **“UP”** and **“DOWN”** buttons to select between *ADD 1 ~ AS 12*.

To begin operation via DMX connect the fixture to a suitable DMX controller via the 5-pin DMX input on the rear of the unit.

### 1 channel mode:

Channel	Value	Function
CH1	000-063	No function
	064-127	Low output
	128-195	Medium output
	196-255	High output

Pressing the **“FUNCTION”** button allows for the temperature to be displayed.

To begin operation via the wireless remote press one of the 4 buttons on the wireless remote control (see below).

Care should be taken to ensure that the granules hopper is not allowed to run empty. Running the machine empty can damage the unit and void the warranty.

Isolate from the mains supply before refilling the granules hopper.

### **Wireless Remote Control:**

Ensure the handheld remote is fitted with a good quality battery (A23 12V Alkaline). Press the correct button as per the list below to select the required mode of operation.

Button A – Stop output

Button B – Low continuous output *8.8.8.8*

Button C – Medium continuous output *8.8.8.8*

Button D – High continuous output *8.8.8.8*

(*8.8.8.8* - Example of what the display will show)

### Output height:

Button	Output	Height
B	Low output	2.0m
C	Medium output	2.5m
D	High output	3.0m



Wireless remote control

### How safe is the machine?

The Spark Stream has been built to eliminate the fire risks that come with normal pyrotechnics. No large safety or exclusion zones are required as the heated granules cool instantly when they come in contact with the air and are safe to touch. All of the materials are completely non-hazardous.

### How does it work?

The effect is simply created by heating the titanium alloy granules which are then blown from the spark outlet opening on the top of the unit to create a fountain of sparks. The height and intensity of the sparks can be adjusted via the wireless remote or a DMX controller using a 5-pin DMX cable. Each unit requires just 1 DMX channel for operation so it can easily be combined with any other lighting or sound effects which are being controlled from your DMX desk.

### Where can I use the Spark Stream?

The effect has been designed for indoor use as it is extremely safe and does not present a fire risk, meaning that it can be safely used in practically any venue. The unit can be used outdoors, however it must be kept completely dry. If any moisture or rain gets into the unit the powder will begin to clog and the internal mechanisms may become damaged.

### Is there any fallout/residue?

During operation the Spark Stream unit does produce a small amount of dust from the granules that generate the sparks. This dust can easily be swept or blown away. Certain surfaces such as carpets, soft furnishings or delicate surfaces may not be suitable. If there is any uncertainty about the suitability of the surface this machine should not be used.

### How quick is setup and installation?

Multiple units can be set up extremely quickly and linked via DMX and up to 4 via power input/outputs. Once the powder has been poured into the machine and the unit is powered on, a heating sequence needs to be enabled to bring the element inside the unit up to the required temperature, this takes 8 minutes. Once the element has reached the required temperature the units are ready for use.

## Optional accessories

### Granules:

- Spark Stream Granules Pouch (120g)
- Non-pyrotechnic Titanium Alloy Granules
- Virtually no smell and very little smoke
- Output time: up to 5 1/2 minutes from 1 powder pouch
- Output height: up to 3m

Please contact your local retailer to purchase these accessories.











### ***Correct Disposal of this Product (Waste Electrical & Electronic Equipment)***

**(Applicable in the European Union and other European countries  
with separate collection systems)**

This marking shown on the product or its literature, indicates that it should not be disposed of with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.



# EQUINOX