novopro

TriLighter 3

I N S T R U C T I O N   M A N U A L

Manual version 1.0

**This user manual will help you operate this product safely and quickly,
so please spend a few minutes to read through the enclosed information.**

Due to continuous product development, please check for the
latest version of this product manual at:

www.novopro.co.uk

Thank you for purchasing this Novopro product.
To optimise it's performance, please read these instructions carefully to familiarise yourself with the basic operations of the unit. Please retain them for future reference. This unit has been tested at the factory before being shipped to you. To prevent or reduce the risk of electrical shock or fire, do not expose the unit to rain or moisture. To prevent a fire hazard, do not expose the unit to any naked flame sources. Unplug this apparatus during lightning storms or if it is unlikely to be used for long periods of time. When installing the unit, please ensure you leave enough space around the unit for ventilation. Slots and openings in the unit are provided for ventilation to ensure reliable operation of the product and to protect it from overheating. To prevent fire hazard, the openings should never be blocked or covered.

The unit is powered by the mains, always handle the power cable by the plug. Never pull out the plug by pulling on the cable. Never touch the power cable when your hands are wet as this could cause an electric shock. Do not tie a knot in the cable. The power cable should be placed such that it is not likely to be stepped on. A damaged power cable can cause a fire or give you an electrical shock. Check the power cable periodically, if you ever find that it is damaged, replace it before using the unit again. The voltage of the available power supply differs according to country or region. Be sure that the power supply voltage of the area where this unit is to be used meets the requirements of the unit.

The lightning flash symbol inside a triangle is to alert the user to the presence of high voltage within the unit's enclosure that may be of sufficient power to constitute a risk of electrical shock to persons. Caution: to prevent the risk of electric shock, do not attempt to open the unit. No user-serviceable parts inside. Refer all servicing to qualified service personnel. The exclamation mark inside a triangle is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying the appliance.

Select the installation location of your unit carefully. Avoid placing it in direct sunlight or locations subject to vibration and excessive dust. Do not use the unit where there are extremes in temperature (do not exceed 40ºC).

Manufacturer EC Declaration of Conformity

In compliance with the following requirements:
RoHS Directive (2011/65/EU) and **WEEE Directive (2012/19/EU) and (2002/96/EU).**
At the end of the products working life, please ensure that the unit is taken to a recycling plant for environmentally friendly disposal - IT MUST NOT be disposed of with general household waste.
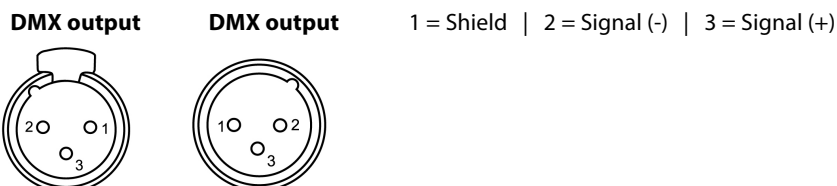
Overhead rigging
Important - the installation must be carried out by qualified service personal only. Improper installation can result in serious injuries and /or damage to property. Overhead rigging requires extensive experience. Working load limits should be respected, certified installation materials should be used and the installed unit should be inspected regularly for safety.
- Make sure the area below the installation place is free from unwanted persons during rigging, de-rigging and servicing.
- Locate the unit in a well ventilated spot, far away from any flammable materials and/or liquids. The fixture must be fixed **at least 50cm** from surrounding walls
- The device should be installed out of reach of people and outside of areas where persons may walk by or be seated.
- A safety cable must be used when rigging the product overhead.
- Before rigging, please ensure that the installation area can hold minimum point load of 10 times the device`s weight.
- The device should be well fixed; a free swinging mounting is dangerous.
- Do not cover any ventilation opening as this may result in overheating

DMX512 connection
If you are using a standard DMX controller, you can connect the DMX output of the controller directly to the DMX input of the first unit in a DMX chain. If you wish to connect a DMX controller with other XLR outputs you will need to use adapter cables.

DMX output   **DMX output**   1 = Shield | 2 = Signal (-) | 3 = Signal (+)

Connect the DMX output of the first unit in a DMX chain with the DMX input of the next unit in the chain. Always connect the output of one unit with the input of the next unit until all units are connected.

Unpacking and safety Please unpack your new product carefully. Your new product should reach you in perfect condition. Please check that no damage has occurred during transit. If any damage is found, do not operate your unit, **please contact the retailer you purchased it from immediately.**

Packing list: lighting unit / IEC mains lead / instruction manual / remote control.

Rechargeable battery
The unit's battery life depends on the operating mode and on the ambient temperature. Low temperatures will reduce the run time considerably. **Before using the unit for the first time, completely charge the battery for up to 5 hours.**
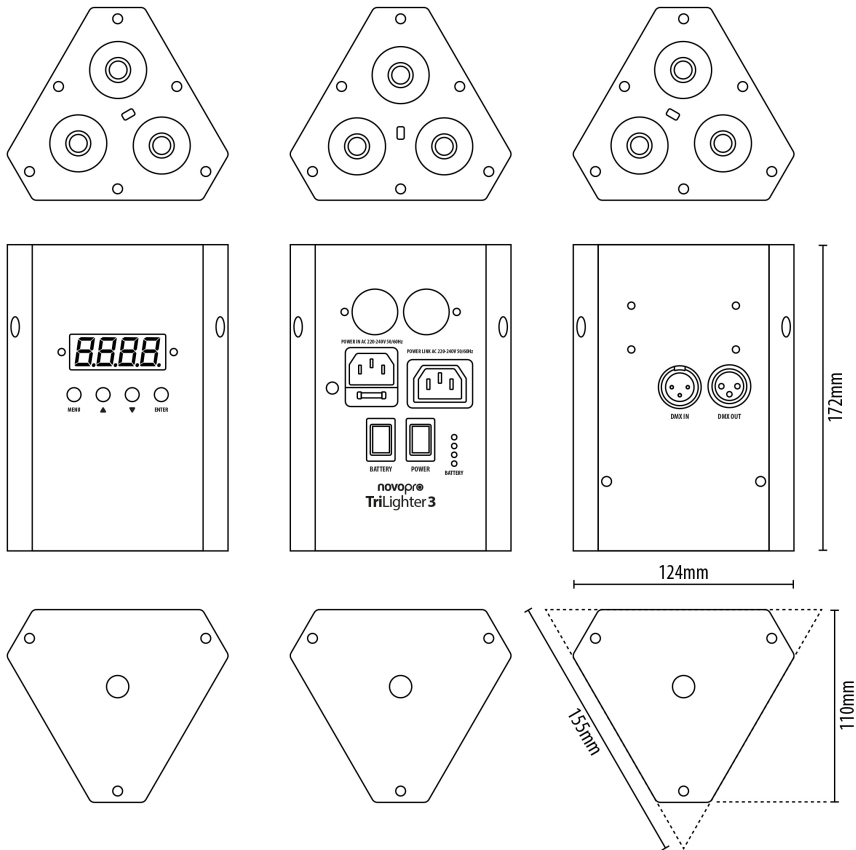
Important note on transporting lithium ion batteries
The contained lithium-ion battery is subject to Dangerous Goods legislation requirements. The user can transport the battery by road without further requirements. When being transported by third parties (e.g.: air transport or forwarding agency), special requirements on packaging and labelling must be observed. For preparation of the item being shipped, you are required to consult an expert on transporting hazardous material. Dispatch battery only when the housing is undamaged. Tape or mask off open contacts and pack up the battery in such a manner that it cannot move around in the packaging. Always observe national regulations concerning transporting of the unit and battery.
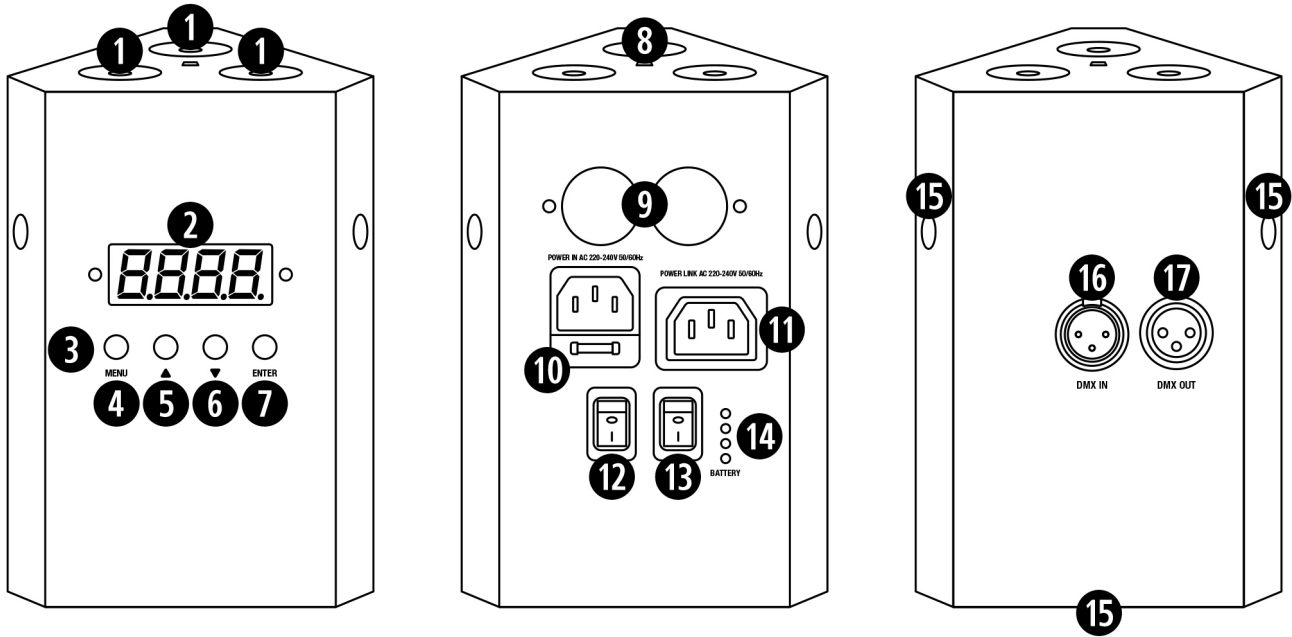

Battery specifications	
Battery type	Lithium ion
Number of cells	6
Energy content	4000mA
Charge time (from empty)	4-5 hours
Battery weight	275g

Rechargeable batteries are hazardous waste and at the end of their life, need to be disposed of appropriately. When disposing of the unit, the battery should to be removed first. Take the battery to a local recycling plant for a disposal which is not harmful to the environment. Do not dispose of rechargeable batteries/batteries into household waste.

Never leave any batteries lying around when there is the danger that they could be swallowed by children or domestic animals. Immediately consult a doctor if batteries are swallowed. Leaking or damaged batteries can cause irritations when getting into contact with the skin so use appropriate protective gloves. Make sure that the batteries cannot be short-circuited or thrown into a fire as there is a danger of explosion.

Unit features and functions

1. LEDs
2. Control display screen
3. Internal built-in microphone
4. Menu button
5. UP button
6. DOWN button
7. Enter button

8. IR remote control sensor
9. Safety chain anchor point
10. IEC mains input
11. IEC power link output
12. Battery ON/OFF button
13. Power ON/OFF button
14. Battery level indicators

15. Threaded mounting points
16. DMX input
17. DMX output

Feature description

Number	Feature	Function
1	**LEDs**	3 x 4w high power 4-in-1 RGBW LEDs
2	**Display**	LED display to view the operating mode of the unit
3	**Built-in microphone**	Used for Sound-to-Light operation
4	**Menu button**	Opens Menu display
5	**UP button**	Increases values on menu display
6	**DOWN button**	Decreases values on menu display
7	**ENTER button**	Confirms selection or moves control onto next section
8	**IR remote control sensor**	Sensor for the remote control – do not cover
9	**Safety chain anchor point**	Connect safety to chain here for rigging
10	**IEC power Input**	Connects to mains outlet to supply power to the unit and charge the battery
11	**IEC power link output**	Power output for linking up to 20 units using only one mains input
12	**Battery ON/OFF button**	Button for turning the battery on or off
13	**Power ON/OFF button**	Button for turning the unit on or off
14	**Battery level indicators**	LED indicators for showing the level of battery charge
15	**Threaded mounting points**	Mounting points on each of the three corners and on the base for rigging
16	**DMX input**	3 pin XLR connector for DMX512 input communication
17	**DMX output**	3 pin XLR connector for DMX512 output communication

Before using the unit for the first time, completely charge the battery for up to 5 hours.

Function setting
Using the four function buttons on the side of the unit you can set the operating mode of the unit. Press the **Menu** button to display the different functions (see table below for a description of the functions). Use the **Up** or **Down** arrow buttons to make your selection. When you have chosen your desired function, press the **Enter** button to confirm the change or move on to the next menu section.

Operating modes

AUTO mode (AuTo)
Cycles through the built-in effects. Speed and strobe rate can be set in SHOW mode. Press the **Menu** button repeatedly until the display shows **AuTo**, then press the **Enter** button to confirm your selection.

SHOW mode (Shou)
Built-in effects mode. There are six different shows available. You can adjust the effect speed and strobe rate for each of the shows.
Press the **Menu** button repeatedly until the display shows **Shou**, then press the **Enter** button to confirm your selection. Then press the **UP** or **DOWN** buttons to choose your show (01 – 06). Once chosen, press the **Enter** button to adjust the speed of the effect, the display will show **SPXX** (XX is the speed - from 00 to 99). Use the **UP** or **DOWN** buttons to choose your speed. Press the **Enter** button again to confirm your selection and set the strobe rate. The display will show **StXX** (XX is the strobe rate - from 00 to 99). Use the **UP** or **DOWN** buttons to choose your strobe rate. Press the **Enter** button again to confirm your selection.

Menu display	Show description
Sh01	RGBW single colour gradual change
Sh02	Multicolour gradual change
Sh03	Colour changing effect show 1
Sh04	Colour changing effect show 2
Sh05	RGBW single colour jump change
Sh06	Multicolour jump change

SOUND mode (Soud)
Sound-to-Light mode. This mode allows the unit to strobe in time to any available loud audio/music via the built-in microphone. Press the **Menu** button until the display shows **Soud**, then press the **Enter** button to confirm. The display should now show **SenX** (X is the amount of microphone sensitivity from 0-9). Use the **UP** or **DOWN** buttons to choose your amount of mic sensitivity (the higher the number, the more sensitive the microphone). Press the **Enter** button again to confirm your selection.

COLOUR mode (Colr)
Manual colour selection mode. Press the **Menu** button repeatedly until the display shows **Colr**, then press the **Enter** button to confirm your selection.

First of all you will need to adjust the amount of red in your chosen colour. After pressing the **Enter** button the display will show **rXXX** (XXX is the amount of **red** from 0-255), press the **Enter** button again to edit the amount of red. Use the **UP** or **DOWN** buttons to adjust the red level. After setting the amount of red you require, press the **Enter** button to confirm.

Next press the **UP** button, the display should now show **gXXX** (XXX is the amount of **green** from 0-255), use the **UP** or **DOWN** buttons to adjust the green level. After setting the amount of green you require, press the **Enter** button to confirm.

Next press the **UP** button, the display should now show **bXXX** (XXX is the amount of **blue** from 0-255), use the **UP** or **DOWN** buttons to adjust the blue level. After setting the amount of blue you require, press the **Enter** button to confirm.

Next press the **UP** button, the display should now show **uXXX** (XXX is the amount of **white** from 0-255), use the **UP** or **DOWN** buttons to adjust the blue level. After setting the amount of blue you require, press the **Enter** button to confirm.

The next section in colour mode is a collection of preset commonly used colours. When in Colour mode (**Colr**), press the **UP** or **DOWN** buttons until the display shows **CCXX** (XX is the preset colour from 1-20), then press the **Enter** button to edit your selection. Next use the **UP** or **DOWN** buttons to choose one of the preset colours from 1-20, then press the **Enter** button to confirm.

The last section in colour mode is manual strobe adjustment. When in Colour mode (**Colr**), press the **UP** or **DOWN** buttons until the display shows **StXX** (XX is the strobe rate from 0-99), then press the **Enter** button to edit your selection. If you do not wish the unit to strobe at all, set the strobe rate to **St00**. If you wish to have a fast strobing effect, set the strobe rate to a higher number, for example **St75**. When you are happy with the speed of the strobe, press the **Enter** button to confirm.

MASTER/SLAVE mode (SLAu)
You can link multiple units so that they run together using the programing of the first unit in the chain. The first unit is called the MASTER and all other units are known as SLAVES.

To work in Master/Slave mode you need to connect multiple units in a Master/Slave chain using 3 pin DMX cables:
1. Connect the DMX output of the Master unit to the DMX input of the first Slave unit.
2. Next connect another DMX cable from the first Slave unit DMX output to the second Slave unit DMX input.
3. Continue in this fashion until all units are connected.
4. Finally set ALL Slave units to Slave mode.
To set the units to Slave mode, press the **Menu** button until the display shows **SLAu**, then press the **Enter** button to confirm.

DMX mode (dnH)
DMX512 control mode. When controlling the unit (or units) with an external DMX controller, each one must be set with a specific DMX address. You can choose to set all units with the same DMX address or you can set every unit with its own DMX address. If all units are set with the same DMX address all units will be synchronised and operate in the same way. If you set each unit with a different DMX address, they will receive the DMX signal from their own DMX address. You will now be able to control each unit individually.

The DMX address that you set for each unit is determined by the number of channels. This unit can be operated in either 4 channel, 6 channel or 8 channel DMX mode, so (for example) if you wish to operate in 8 channel mode you should set the starting address of the first unit to 1, the second unit must then be set to 9 (1+8), the third to 17 (9+8), the fourth to 25 (17+8), and so on.

To set the DMX channel mode you wish to use, simply press the **Menu** button repeatedly until the display shows **dnH** (DMX), then press the **Enter** button to confirm your selection, then press the **Enter** button again, the display will then show the current DMX channel mode (**CH 4** or **CH 6** or **CH 8**). Use the **UP** or **DOWN** buttons to choose one and then press the **Enter** button to confirm. Each of the three DMX modes (4, 6 and 8 channel) has its own set of functions. These are listed in the tables below:

4 channel DMX mode

DMX channel	Function	Value
CH1	Red adjustment	0-255
CH2	Green adjustment	0-255
CH3	Blue adjustment	0-255
CH4	White adjustment	0-255

6 channel DMX mode

DMX channel	Function	Value
CH1	Dimmer	0-255
CH2	Strobe	0-255
CH3	Red adjustment	0-255
CH4	Green adjustment	0-255
CH5	Blue adjustment	0-255
CH6	White adjustment	0-255

8 channel DMX mode

CH1	CH2	CH3		CH4		CH5	CH6	CH7	CH8
Dimmer	**Strobe**	**Program**		**Speed**		**Red**	**Green**	**Blue**	**White**
Value	**Value**	**Function**	**Value**	**Function**	**Value**	**Value**	**Value**	**Value**	**Value**
0-255	0-255 Slow > Fast	CH4-CH8	0	No function		0-255	0-255	0-255	0-255
		Program 1	1-35	0-14	Colour 01	No function	No function	No function	No function
				15-29	Colour 02				
				30-44	Colour 03				
				45-59	Colour 04				
				60-74	Colour 05				
				75-89	Colour 06				
				90-104	Colour 07				
				105-119	Colour 08				
				120-134	Colour 09				
				135-149	Colour 10				
				150-164	Colour 11				
				165-179	Colour 12				
				180-194	Colour 13				
				195-209	Colour 14				
				210-224	Colour 15				
				225-239	Colour 16				
				240-254	Colour 17				
				255	Colour 18				
		Program 2	36-71	0-255	Slow > Fast				
		Program 3	72-107						
		Program 4	108-143						
		Program 5	144-179						
		Program 6	180-215						
		Program 7	216-251						
		Sound	252-255	No function					

Remote control mode (Set)

To use the supplied remote control with the unit, first of all you need to set the unit to respond to the remote. Press the **Menu** button until the display shows **Set**, then press the **Enter** key. The display should now show **reno** (remote), press the **Enter** button once, the display should now show **on**, use the **UP** or **DOWN** buttons to swap between remote **on** or **OFF**. When you have made your choice, press the **Enter** button.

BLACK OUT button - turns the light ON/OFF
AUTO button - press to enter SHOW mode (Sh01 > Sh06). Use the "+" or "-" buttons to select your chosen show.
SOUND button - press to enter SOUND mode.
STROBE button - when the unit is in SHOW mode, press this button to enter the strobe setting mode. Use the "+" or "-" buttons to set the strobe rate (St00 > St99).
SPEED button - when the unit is in SHOW mode, press this button to enter the speed setting mode. Use the "+" or "-" buttons to set the current speed (SP01 > SP99).
SENSITIVITY button - press this button to enter the microphone sensitivity setting mode. Use the "+" or "-" buttons to set the mic sensitivity (Sen0 > Sen9).

Note: when entering values, you can also use the numeric buttons on the remote control. For example, to set the speed to SP75, press the SPEED button followed by the "7" button and the "5" button and lastly the "%" button. Ensure that the numeric keys used are actually within the range of available values, e.g. if you are setting the strobe rate and you try and set the rate above St99, it will not work.

MANUAL button - press to enter the static colour mode (red, green, blue or white).
FADE button - press to enter the colour fading SHOW (Sh03).
R button - press to set the red luminance value (r000 > r255) using the "+" or "-" buttons.
G button - press to set the green luminance value (g000 > g255) using the "+" or "-" buttons.
B button - press to set the blue luminance value (b000 > b255) using the "+" or "-" buttons.
A button - amber.
UV button - mix colour.
W button - press to set the white luminance value (w000 > w255) using the "+" or "-" buttons.

Note: all number buttons (0 > 9) can also be used to set numeric values (see previous note above).
0 - set the unit to white | **1** - set the unit to red | **2** - sets the unit to amber | **3** - sets the unit to yellow | **4** - sets the unit to green
5 - set the unit to indigo | **6** - set the unit to blue | **7** - set the unit to purple | **8** - set the unit to dark red | **9** - set the unit to light yellow

Troubleshooting the remote control

The remote control comes supplied with a CR2025 battery. To ensure that the battery isn't discharged during transport, the factory inserts a small piece of transparent plastic between the battery and the contacts. This small plastic sheet must be removed before the remote control will operate. When changing the battery, note the polarity of the battery being removed, the new battery must be facing the same way up as the old battery. With the remote face down (buttons facing the floor) the plus ("+") side of the battery should be facing upwards (i.e. towards the ceiling). If the remote control doesn't appear to work, first check that the unit is set to respond to the remote by following the instructions at the top of this section. If the remote still doesn't work, replace the battery with a new CR2025 battery. Always ensure that there is an uninterrupted line of site between the remote and the unit's IR remote control sensor (on the top of the unit).

Product specification

Mains power / rated power	AC220~240V, 50/60Hz / 20w
Power linking	Link up to 20 units
Battery / charging time	4000mA lithium ion battery / charge up to 5 hours for full charge
Fuse	1A
Control modes	4 / 6 / 8 channel DMX512 / Auto / Sound-to-Light / Master/Slave / Remote control
Beam angle	35°
Light source	3 x 4w high power 4-in-1 RGBW LEDs
Operating temperature	Up to 40°C
DMX512 connections	3 pins XLR male/female
Dimensions (WxDxH)	124 x 110 x 172mm
NETT weight	1.13Kg

Due to continuous product development, specifications and appearance are subject to change.