

MiniLED850



Supply voltage	240ac via transformer 3 pin plug
Input voltage	12v DC via removable jack plug
Hard wire power supply available	Yes
LED	4x 3w LED (RGBW)
Dimensions	190 x 115 x 80mm
Weight	895g
Power consumption	27 watts
Twinkle wheel	Yes
Dimming bitrate	8 bit
Colour wheel	No, colour is through RGBW mixing
Optical port internal diameter	20mm
Fibre capacity	930 x 0.75 mm (as 2x 465)
Cooling fan	None
Heat radiation	Very warm to touch
Warranty	18 months
Country of manufacture	China
Manufacturer accreditation	ISO 9001
Starscape stock item	Yes
Code	MiniLED850
Maintenance	Vacuum ventilation openings if necessary
Location	Dry well ventilated space

Light Source Settings

There are four different control systems for the MiniLED 850; Standalone mode, Wireless Remote Controlled, DMX controlled and Master/Slave controlled.

Standalone Mode

In standalone mode the DIP switches are used to select the desired program as shown in the table below.

Master / Slave control, Stand-Alone and Wireless Remote Control Preset Programmes

Program	DIP Switch status – ON (1) / OFF (0)										Effect
	10	9	8	7	6	5	4	3	2	1	
00	1	0	0	0	0	0	0	0	0	0	No Light
01	1	0	0	0	0	0	0	0	0	1	White
02	1	0	0	0	0	0	0	0	1	0	Blue
03	1	0	0	0	0	0	0	0	1	1	Purple
04	1	0	0	0	0	0	0	1	0	0	Red
05	1	0	0	0	0	0	0	1	0	1	Yellow
06	1	0	0	0	0	0	0	1	1	0	Green
07	1	0	0	0	0	0	0	1	1	1	Sky-Blue
08	1	0	0	0	0	0	1	0	0	0	W, B, P, R, Y, G, Sky-B Skip (4 sec)
09	1	0	0	0	0	0	1	0	0	1	B, P, R, Y, G, Sky-B skip (4 sec)
10	1	0	0	0	0	0	1	0	1	0	W, b, p, r, y, g, Sky-B Fade (6 sec)
11	1	0	0	0	0	0	1	0	1	1	B, P, R, Y, G, Sky- B Fade (6 sec)
12	1	0	0	0	0	0	1	1	0	0	White, Twinkle (0.5 rpm)
13	1	0	0	0	0	0	1	1	0	1	White, Twinkle (1.0 rpm)
14	1	0	0	0	0	0	1	1	1	0	White, Twinkle (2.0 rpm)
15	1	0	0	0	0	0	1	1	1	1	Blue, Twinkle (0.5 rpm)
16	1	0	0	0	0	1	0	0	0	0	Blue, Twinkle (1.0 rpm)
17	1	0	0	0	0	1	0	0	0	1	Blue, Twinkle (2.0 rpm)
18	1	0	0	0	0	1	0	0	1	0	White, Blue fade (6 sec), Twinkle (0.5 rpm)
19	1	0	0	0	0	1	0	0	1	1	White, Blue fade (6 sec), Twinkle (1.0 rpm)
20	1	0	0	0	0	1	0	1	0	0	White, Blue fade (6 sec), Twinkle (2.0 rpm)
21	1	0	0	0	0	1	0	1	0	1	7 colour skip (4 sec) Twinkle (1.0 rpm)
22	1	0	0	0	0	1	0	1	1	0	7 colour skip (4 sec) Twinkle (2.0 rpm)
23	1	0	0	0	0	1	0	1	1	1	6 colour skip (4 sec) Twinkle (1.0 rpm)
24	1	0	0	0	0	1	1	0	0	0	6 colour skip (4 sec) Twinkle (2.0 rpm)
25	1	0	0	0	0	1	1	0	0	1	7 colour fade (6 sec) Twinkle (1.0 rpm)
26	1	0	0	0	0	1	1	0	1	0	7 colour fade (6 sec) Twinkle (2.0 rpm)
27	1	0	0	0	0	1	1	0	1	1	6 colour fade (6 sec) Twinkle (1.0 rpm)
28	1	0	0	0	0	1	1	1	0	0	6 colour fade (6 sec) Twinkle (2.0 rpm)

Wireless Remote Control

Remote control is enabled by setting DIP switches 9 & 10 to ON (down) and 1-8 to OFF (up).

To select a program;

1. Press "PRO" or "DIM" button to select program or dimming mode.
2. Press the required button(s) on the remote for the desired program or level of brightness. The light source will flash with each press.
3. Press "ENT" to store the required settings.

As the remote keypad only contains 6 numerical buttons, any program higher than 6 must be selected by pressing a sequence of buttons that totals the number of the required program, e.g. for program 18 press button 6 three times, then press enter. The arrow buttons may be used to cycle through the programs.

If the light source appears to selecting the wrong program, ensure the command sequence was terminated with "ENT". The sequence should be as follows:

"PRO" → program number → "ENT"

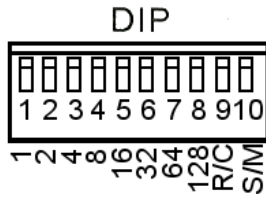


DMX Signal Control

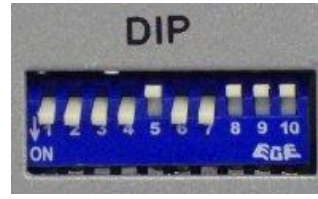
While in this mode the light source(s) are assigned a DMX address (to a maximum of address 255) and await external input from a DMX control board.

1. Address setting.

Set the DIP switches at 9 & 10 to OFF, switches 1-8 control the DMX address.



Notation of DIP switches



Example of DIP settings for DMX address 111

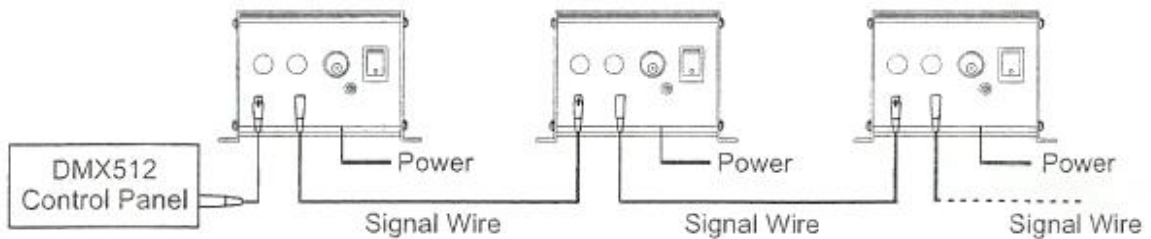
2. Channels (see table below for expanded details of 255 values)

The DMX channels and their function are

- Ch.1: Red
- Ch.2: Green
- Ch.3: Blue
- Ch.4: White
- Ch.5: Speed of colour change
- Ch.6: Dimmer & Strobe
- Ch.7: Twinkle speed

3. DMX Connection between the light sources

To connect multiple light sources via DMX simply chain the light sources together with DMX cables, ensuring that the DMX OUT from first light source is connected to the DMX IN of the second and so on. The DMX board input enters via the DMX IN port of the first light source.



Channel	Value	Effect
1: Red	0-255	OFF to 100% intensity
2: Green	0-255	OFF to 100% intensity
3: Blue	0-255	OFF to 100% intensity
4: White	0-255	OFF to 100% intensity
5: Speed	0-255	alters speed of colour shift when using Ch.1-4, fastest to slowest
6: Dimmer and Strobe	0-127	0 to 100% brightness
	128-255	OFF to 100% intensity
7: Twinkle Wheel	0-31	No Twinkle
	32-255	Rotate Twinkle Wheel; Slowest to Fastest

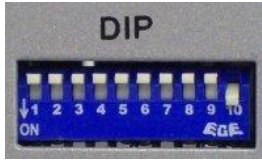
Master / Slave Mode

While in this mode one light source is designated the Master and all others are designated Slaves. The slave light sources will copy the program that the master is currently running.

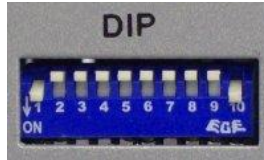
1. Setting Master/Slave

MASTER: To designate a light source as Master, set DIP 10 to ON and 9 to OFF. DIPs 1-8 are used for program selection as normal. If the master is to be controlled by the remote unit, set DIP 9 ON and 1-8 OFF. Wireless programs are listed on page 2 of this manual.

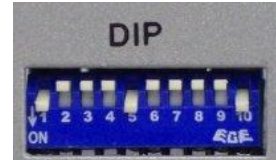
Example DIP settings for MASTER light source



MASTER set, no program

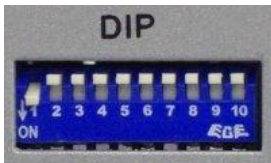


MASTER set, PROGRAM 1



MASTER set, PROGRAM 18

SLAVE: To designate a light source as a slave set DIP 1 to ON and 2-10 to OFF (DMX address to 001 (see above **Address Setting**))



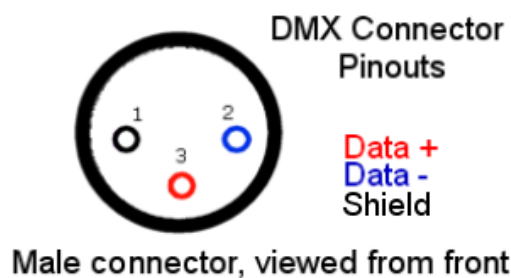
DIP settings for SLAVE / DMX address 001

2. DMX Connection between the light sources

Connect the master and slaves by chaining the light sources together with DMX cables, ensuring that the DMX OUT from master is connected to the DMX IN of the first slave and then connect the slaves together via their DMX OUT/IN in the same way. A long run of light sources may require a DMX terminator plug.

DMX wiring

120 ohm impedance DMX cable **MUST** be used for signal connection. **DO NOT** use Cat5 or mic/line level audio cable. When assembling a DMX XLR connector, the following wiring setup should be followed:



Installation and maintenance

The MiniLED series of light sources rely on convection to keep cool so follow these guidelines when installing the lightsource in a dry well ventilated space

- 1) Mount horizontally.
- 2) Ensure a free flow of air around the source.
- 3) Do not cover ventilation slots.

Maintenance: Inspect yearly and vacuum ventilation slots. In dusty environments inspect more regularly.