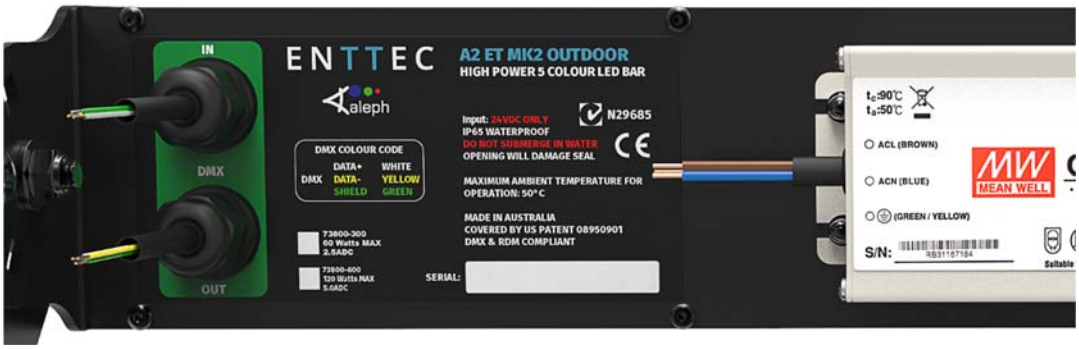
ALEPH2 ET Mk2

IP65 OUTDOOR 5 COLOUR HIGH POWER LED LIGHT BAR

300mm and 600mm

In and out DMX cables (1000mm each), AC input cable (300mm), field installable DC plug allows removal of AC to DC power supply for remote position and extension of the cable. 73800-300 has remote only PSU option.



(Above) In and out DMX cables and AC input cable.

(Above) Field installable plug for DC input, this allows for a longer cable to be installed to the DC input of the luminaire.

Features

- Strong aluminium chassis with small profile
- DMX512A Controllable and RDM Configurable
- Fixture footprint up to 12 DMX channels, dependant on configuration
- Snapshots: 64 fully user recordable slots, 50 different pre-loaded stand-alone colours
- 16-bit or Smart 8-bit LED dimming
- Strobe Mode with controllable frequency from DMX
- Easy addressing and configuration interface
- 180° Adjustable mounting bracket
- Changeable diffuser using holder accessory (sold separately)

Environment

Environmental conditions will affect the life of this product, be aware of the following environmental elements that may reduce lifespan. If concerned we can customise the product to ensure optimal operational life for harsh environments.

- Animal faeces
- Heavy air pollution
- Chlorinated environments (swimming pools, theme parks, water features)
- Coastal (salt spray)
- Extreme temperatures (<-30°C or >+50°C)

Cleaning

Cleaning can extend the service life of the luminaire

- General cleaning using water and detergent, avoid aggressive cleaners. Rinse well with water.
- Optics can be cleaned with a glass, acrylic or IPA cleaner with a soft cloth.
- This product has been IP65 rated do not exceed the following when using a pressure cleaner: 30 kPa at a distance of 3 meters.

Safety

- Do not look directly into the LEDs, doing so may damage your eyes.
- Check that the local power outlet matches the required voltage (120 → 240V AC)
- Make all the connections before you connect the mains power.
- Do not remove the cover under any condition. There are no user serviceable parts inside.
- Never operate this unit when its cover is removed.
- Never plug this unit in to a dimmer rack.
- Installation in a small enclosed/semi enclosed space may cause overheating and damage to the product.
- Do not attempt to operate this unit, if it becomes damaged.
- Always mount this unit in a safe and stable manner.
- Power-supply cords should be routed carefully.
- The unit should be situated away from heat sources

DMX Address Menu

The DMX start address is the most important parameter to be defined when setting up your lights. By default the fitting will be set to 001.

The addressing will depend on the current selected personality. For example if the light is set to RGBAW mode (5 channels), the DMX address range will be 001 – 508.

Personality Menu

The ALEPH2 ET Mk2 has six different personalities or operational modes, which can either be selected remotely from any standard RDM controller tool or locally using the control panel. The light behaves differently in each mode, since the DMX channel distribution changes according to the desired working personality. Set the desired personality before patching your lights in any lighting desk or control system.

1 – 8BIT RGBAW MODE (5 Channel)

This basic mode will turn the ET into a 5-channel light, allowing to drive each available colour as an independent dimmer. Each DMX channel uses 8-Bit resolution where 000 is OFF, 255 is Full intensity, as described in the following chart.

1st Channel	2nd Channel	3rd Channel	4th Channel	5th Channel
RED GROUP	GREEN GROUP	BLUE GROUP	AMBER GROUP	WHITE GROUPS

2 – 8BIT RGBW MODE (4 Channel)

As some lighting control systems do not support RGBAW lights, we have implemented a RGBW mode so the fitting can be used with any controller. Each DMX channel uses 8-Bit resolution where 000 is OFF, 255 is Full intensity, as described in the following chart.

1st Channel	2nd Channel	3rd Channel	4th Channel
RED GROUP	GREEN GROUP	BLUE GROUP	WHITE GROUPS

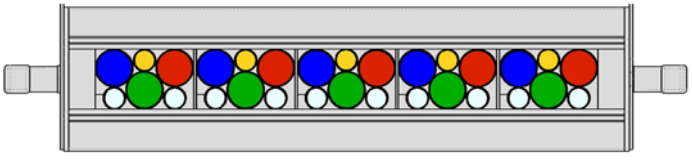
3 – 8BIT (6CHANNEL) MODE

This basic mode will allow you to drive each colour using 8-Bit resolution, setting the values from one of the 6 DMX channels where 000 is OFF, 255 is Full intensity, as described in the following chart.

1st Channel	2nd Channel	3rd Channel	4th Channel	5th Channel	6th Channel
RED GROUP	GREEN GROUP	BLUE GROUP	AMBER GROUP	WHITES GROUP1	WHITES GROUP2

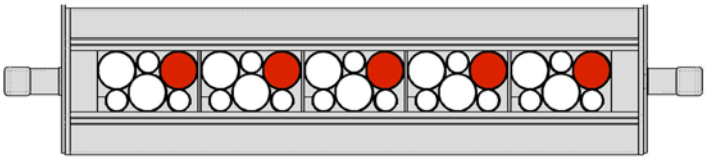
Example 1: to turn all the channels to full intensity, set all the channels to 255 value:

1st Channel	2nd Channel	3rd Channel	4th Channel	5th Channel	6th Channel
255	255	255	255	255	255



Example 2: to turn only the red group colour to full intensity, set the first channel to 255 value:

1st Channel	2nd Channel	3rd Channel	4th Channel	5th Channel	6th Channel
255	000	000	000	000	000



The smart dimming in this personality follows an “s” curve resulting in a smooth LED output all along the 8 bits range.

4 - 16BIT (12 CHANNEL) MODE

This mode will allow you to drive each colour using 16 bits resolution; setting the values from one of the 12 DMX channels from 000 to 255 where the first channel of each group will be (HIGH) and the following channel the (LOW) one, as described in the following chart.

1st Channel	2nd Channel	3rd Channel	4th Channel	5th Channel	6th Channel
RED GROUP (HIGH)	RED GROUP (LOW)	GREEN GROUP (HIGH)	GREEN GROUP (LOW)	BLUE GROUP (HIGH)	BLUE GROUP (LOW)
7th Channel	8th Channel	9th Channel	10th Channel	11th Channel	12th Channel
AMBER (HIGH)	AMBER (LOW)	WHITES (HIGH)	WHITES (LOW)	WHITES (HIGH)	WHITES (LOW)

This personality gives the user full control on the output dimming, so any colour combination can be generated.

5 - EXTENDED (9 CHANNEL) MODE

This extended mode offers a wide variety of output effects, turning the ALEPH2 ET Mk2 into a very versatile unit, using 9 DMX channels, as described in the following chart.

1st Channel	2nd Channel	3rd Channel	4th Channel	5th Channel
RED GROUP	GREEN GROUP	BLUE GROUP	AMBER GROUP	WHITE GROUPS
6th Channel	7th Channel	8th Channel	9th Channel	
STROBE DURATION	STROBE FREQUENCY	MASTER DIMMER	TRUE CCT MODE	

COLOUR GROUP INTENSITY (CH1-CH5) operate as described in the RGBAW personality plus they can be modified or affected by the strobe function or master dimmer channel, as described further in this section. Although these 6 channels have no effect when the true CCT mode is activated (9th channel > 010)

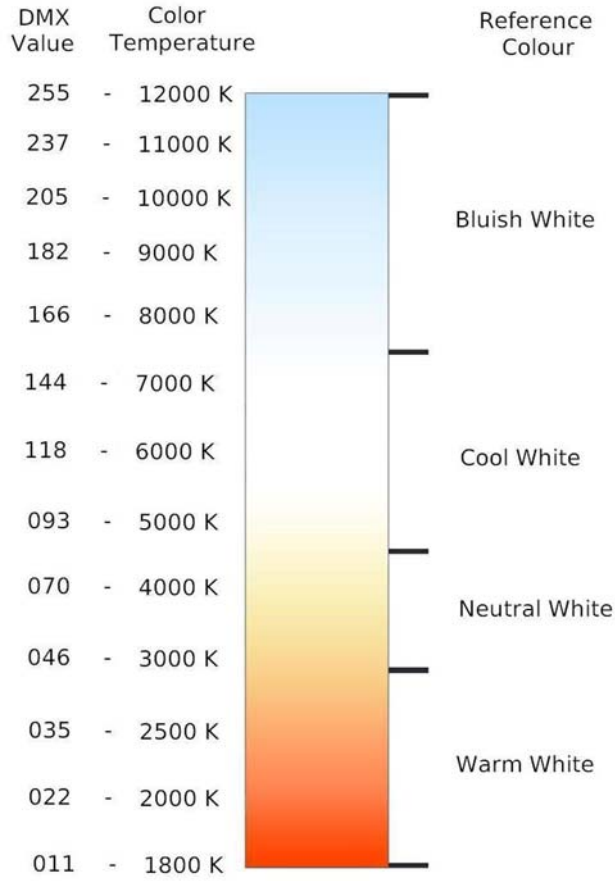
STROBE DURATION (CH6) this channel works in conjunction with the strobe frequency from CH7. It will only take any effect if the channel 7th > 10.

It defines the duration of the ON state and linearly increases the time from 2.5 milliseconds when 000 to 650 milliseconds when 255.

NOTE: Strobe duration time must be lower than Strobe frequency for flashing. If duration time is equal or greater than frequency, the light will be continuously ON.

STROBE FREQUENCY (CH7) will turn the ALEPH2 ET Mk2 bar into a versatile multi-colour strobe with user adjustable frequency. The strobe feature can be activated by setting the channel to a value between 011 and 255. In the same range, the strobe frequency can be adjusted by varying the channel value, with 011 the lowest frequency (about 0.3 flashes per second) and 255 the highest one (25 flashes per second).

The strobe channel can be used in conjunction with all the other channels, so you can change the current output colour or the master intensity whilst strobing at the selected frequency, all at the same time.



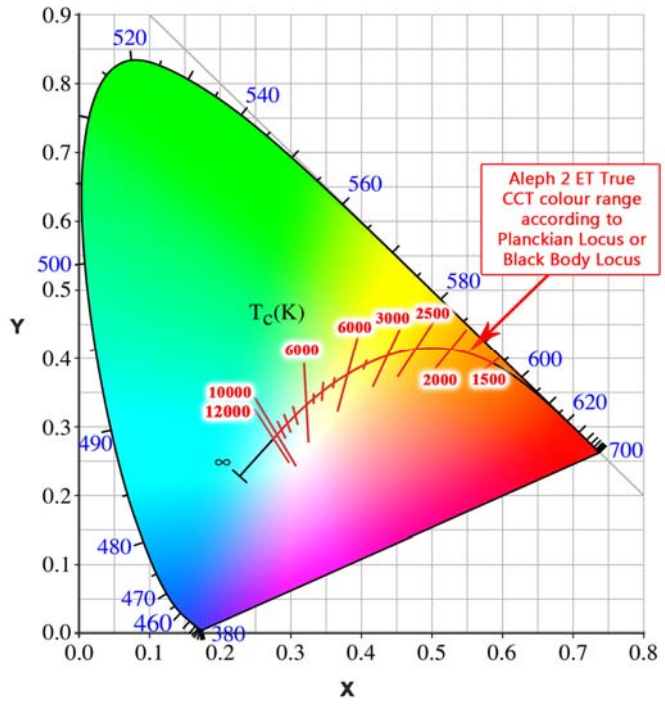
MASTER DIMMER (CH8) drives the general intensity, multiplying with all other current output channels, with 000 the lowest intensity 0% (light will be OFF, regardless of other channel values) and 255 the highest, allowing 100% whatever other channels are demanding.

TRUE CCT MODE (CH9) will turn the ALEPH2 ET Mk2 bar into a true colour temperature adjustable fitting, simulating a tungsten light behaviour.

The white colour feature can be activated by setting the channel to a value greater than 010. CH9=011 will produce the warmest white and 255 the coolest one. Values between 000-010 will stop the true CCT feature.

The true CCT mode channel can be used in conjunction with strobe and master dimmer features, so you can strobe and/or dim the current white output set by this channel.

The ALEPH2 ET Mk2 has been laboratory calibrated to closely follow the black body Locus curve. With 8 bits resolution allowing the light to travel from TRUE warm to cool whites (12000K to 1800K) keeping a high CRI for natural colours.



6 – 8BIT 1CHANNEL MODE

This mode turns the Aleph 2 ET Mk2 into a single colour, single channel dimmer.

The output colour is not any specific kind of white and this mode is not tuned up to produce balanced output. It is only meant to produce as much light as possible using only one control channel.

This mode is often used to control custom built Aleph2 lights where only white LEDs are populated instead of coloured LEDs.

Presets Menu

The Aleph2 ET Mk2 has 64 available slots where the user can record custom colours from DMX. These can later be activated from the menu. Presets turn the ET into a stand-alone fitting, where 64 different colours can easily be triggered on-site, without the need of DMX.

It is also possible to record user personalised presets on any of the 64 memory slots, overwriting the default ones.

RECORDING CUSTOM PRESETS:

To record your own colours, please scroll to the desired slot (from 01 to 64), feed the desired data through the DMX port until you are happy with the look. Then press the SET key to overwrite the preset.

Pre-Set	Factory Default Colour
01	All channels OFF (Default on Start-Up)
02	Red
03	Green
04	Blue
05	Amber
06	Cool White
07	RGB Yellow
08	RGB Purple
09	RGB Cyan
10	2000K White
11	2500K White
12	2700K White
13	3000K White
14	4000K White
15	5000K White
16	6000K White
17	6500K White
18	Bubble Gum
19	Carmine
20	Pink
21	Pink1
22	Pastel Violet
23	Dark Violet
24	Lavender
25	Lavender Blue

Pre-Set	Factory Default Colour
26	Cool Grey
27	Ciel
28	Sky Blue
29	Turquoise
30	Aquamarine
31	Clover
32	Mint
33	Dark Pastel Green
34	Pistachio
35	Lawn Green
36	Lime
37	Pear
38	Apple Green
39	Lemon
40	Corn
41	Golden Yellow
42	Pumpkin
43	Carrot Orange
44	Khaki
45	Ochre
46	Salmon
47	Coral
48	Coquelicot
49	High luminance Cool White
50	High luminance Natural White

IMPORTANT NOTES:

When the light is powered on, it will automatically take preset 01 as the default power on value, if the Lamp On Mode setting is ON. This feature is handy for the user to set up the desired colour combination for the fitting to start every time it is powered up.

Note that the strobe feature is not a supported preset.

Any incoming DMX data will override the presets, so ensure that there is no DMX data coming in before navigating this menu intending to playback the different colours.

Running the Factory Defaults RDM command will restore all the presets to the original values and user recorded presets will not be recoverable.

Lamp On Mode Menu

This setting instructs the ET about what to do after a power up sequence.

If DMX or OFF settings are chosen, the ET will stay off and will wait for DMX instructions.

When Lamp On Mode = ON the ET will power up and then output whatever drop has been recorded in slot 01 of the presets. Please notice that any incoming DMX will override this preset, as DMX takes the highest precedence.

PWM Frequency Menu

The PWM driving frequency can be adjusted. This might have an impact on the way some cameras respond to the light emitted by the A2 ET Mk2.

Factory Defaults Menu

Running the Factory default sequence will reset all the user configurable parameters, including DMX address, presets, Personality, Lamp On mode, Etc.

Temperature Menu

This menu shows the current fixture temperature in degrees Celsius.

LED and CPU operating temperatures can be monitored with RDM.

Firmware Version

Indicates the current firmware version installed in the fitting. Please check ENTTEC website for latest firmware version.

Firmware Update

Updating the firmware of the ALEPH2 ET Mk2 requires an ENTTEC USB Pro or a Pro Mk2 USB interface plugged in to a PC USB port. Connect the USB PRO to the ET through a standard 5 pin DMX cable.

Please download and install the RDM Controller App from www.enttec.com website, connect the widget to the unit, power it up and run the application.

To make sure the process has been successful, check the firmware version has changed by looking at the “Software Version ID” RDM field.

RDM Capabilities

The ALEPH2 ET Mk2 supports RDM features and any RDM Controller can be used to configure it using RDM. The “ENTTEC RDM Controller” free App can be downloaded from ENTTEC website and be used in combination with a DMX USB PRO or a PRO MK2 widget.

The supported RDM parameters are:

Read only fields

- Device Info
- Software Version ID
- Supported Parameters
- Parameters Description
- DMX Personality Description
- Sensor Value (temperature x 2)
- Sensor Definition
- Boot Software Version
- Manufacturing Label
- Device Label
- Status Messages

User configurable fields

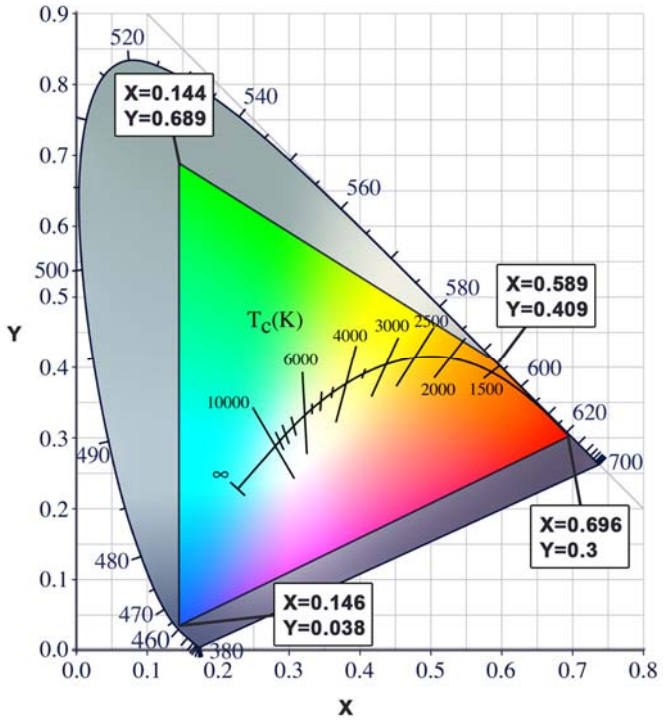
- Identify Device
- DMX Start Address
- PID_8001: Master faders
- DMX Personality
- Factory Defaults
- Lamp On Mode
- Reset Device
- Capture Preset
- Preset Playback

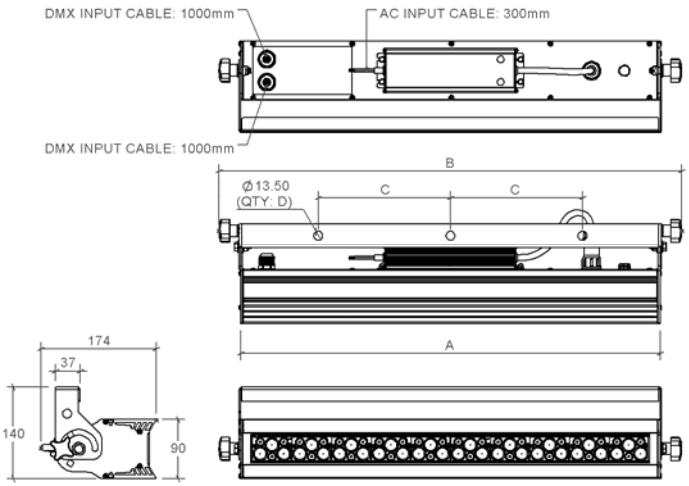
Specifications

Item	ET MK2 300	ET MK2 600
Input voltage	110 – 240V AC	
Input Frequency	50/60Hz	
Maximum Power Consumption (Watts)	60	120
Maximum Output (Lumens)	2500	5000
Lumen/Watt	41.6	
CREE XP-E Led Quantity	30	60
Colours	Red, Green, Blue, Amber, Cool White x2	
Diffuser	Clear Acrylic	
Beam Angle	25°/40°/60°	
Control Input	DMX512 & RDM E1.20	
Smart Dimming	16 bit dimming mapped to 8 bit S curve	
Weight (Kg)	4.5	5.8
Weight (Pounds)	9.9	12.8
Thermal Management	Passive	
Ambient Temperature	-30°C ~ +50°C	
Surface Operating Temperature	75°C at steady state (full intensity output and Ta=45°C)	
Smart Thermal Management	Light output smoothly dims if components become over heated	
Ingress Protection	IP65	
Data Input	DMX cable 1000mm	
Data Output	DMX cable 1000mm	

Due to continuous improvements and innovations of all ENTTEC products, specifications and features are subject to change without notice.

Colour Gamut





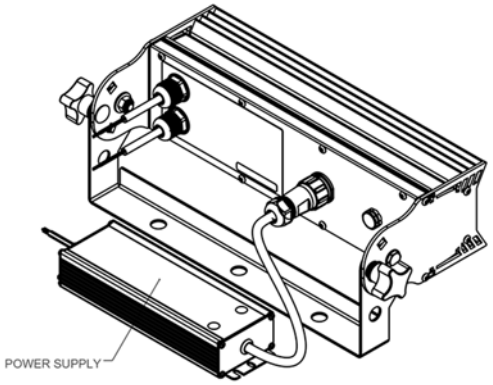
Ordering Information

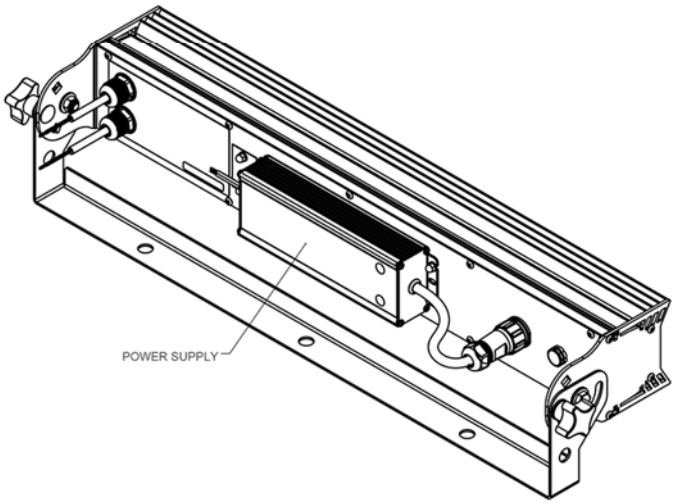
Item	Part Number
A2 ET MK2 300 (25°)	73800-300-25
A2 ET MK2 300 (40°)	73800-300-40
A2 ET MK2 300 (60°)	73800-300-60
A2 ET MK2 600 (25°)	73800-600-25
A2 ET MK2 600 (40°)	73800-600-40
A2 ET MK2 600 (60°)	73800-600-60

Dimensions

Item	A	B	C	D
ET MK2 300	340mm	400mm	100mm	3
ET MK2 600	640mm	700mm	200mm	3

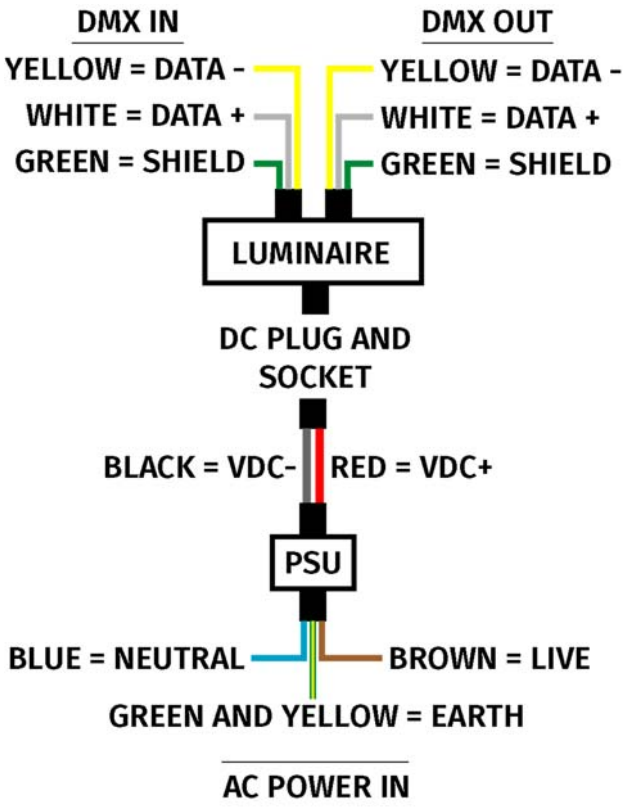
MODEL BELOW: 73800-300
(REMOTE POWER SUPPLY)



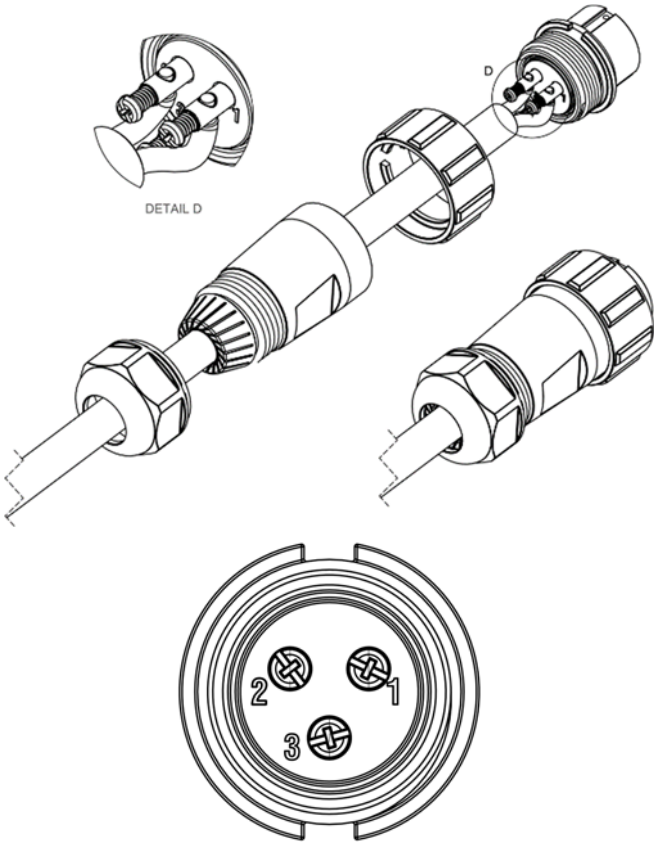


MODEL ABOVE: 73800-600
(POWER SUPPLY MOUNTED OR REMOTE)

Wiring Diagrams



DC Connector
DC to LED luminaire connector. Enables customisable field installation. Allows installer to position the power supply further away by extending the connection length. (requires a junction box, not supplied by ENTTEC)



1: RED (V+)

2: BLACK (V-)

3: NONE

Product Registration

Please register your ENTTEC product to get latest software updates and to validate your warranty. To register, please visit **enttec.com/register**

Email: sales@enttec.com
Website: www.enttec.com