

# KAM

INSTRUCTION MANUAL

## Powercan60W

High power multicolour LED stage lighting

M A N U A L   V E R S I O N   1 . 0  
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For the latest instruction manual updates and information on the entire Kam range visit:

[www.kam.co.uk](http://www.kam.co.uk)

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If this product is ever no longer functional please take it to a recycling plant for environmentally friendly disposal.

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

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**Thank you for purchasing this Kam product, we are sure that it will serve you for many years to come.**

To optimise its 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 cord periodically, if you ever find that it is damaged, replace it before using the unit again. Contact your retailer for a replacement.

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 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. Please read and pay attention to all laser safety warning sticker labels on the unit.**

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 (below 41°F / 5°C or exceeding 95°F / 35°C).

**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. If there is any damage to the mains cable do not use the device. Always disconnect the unit from the mains supply when carrying out any cleaning of the unit.

**Manufacturer declarations**



In compliance with the following requirements: **RoHS Directive (2002/95/EU)** and **WEEE Directive (2002/96/EU)**. If this product is ever no longer functional please take it to a recycling plant for environmentally friendly disposal.

**CE declaration of conformity**

R&TTE Directive (1999/5/EU), EMC Directive (2004/108/EU), Low Voltage Directive (2006/95/EU).

The declarations are available on application from [certification@lambapl.com](mailto:certification@lambapl.com)

Before putting the devices into operation, please observe the respective country-specific regulations.

**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 required extensive experience. Working load limits should be respected, certified installation materials should be used, 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.
- Before rigging make sure 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

Before first time use, the unit should be inspected for safety. Inspection the unit regularly every year.

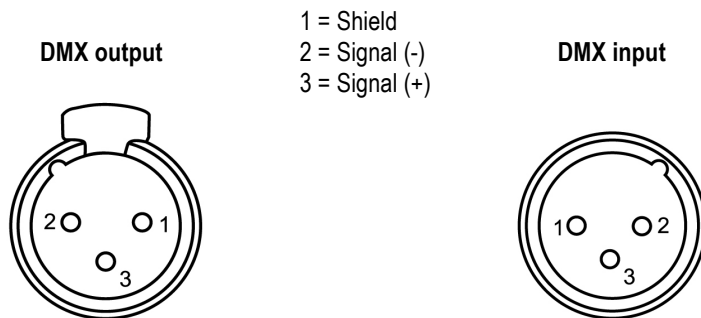
### AC power

The unit is supplied with a power plug appropriate to its voltage. Should any other connections be required they must be carried out with the following configuration:

Cable (EU)	Cable (US)	Pin	International
Brown	Black	Live	L
Light blue	White	Neutral	N
Yellow/green	Green	Earth	

### DMX-512 connection

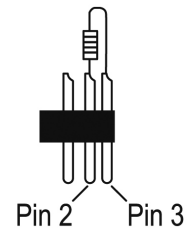
If you are using a standard DMX controller, you can connect the DMX output of the controller directly to the DMX input of the first unit in a DMX chain. If you wish to connect a DMX controller with other XLR outputs you will need to use adapter cables.



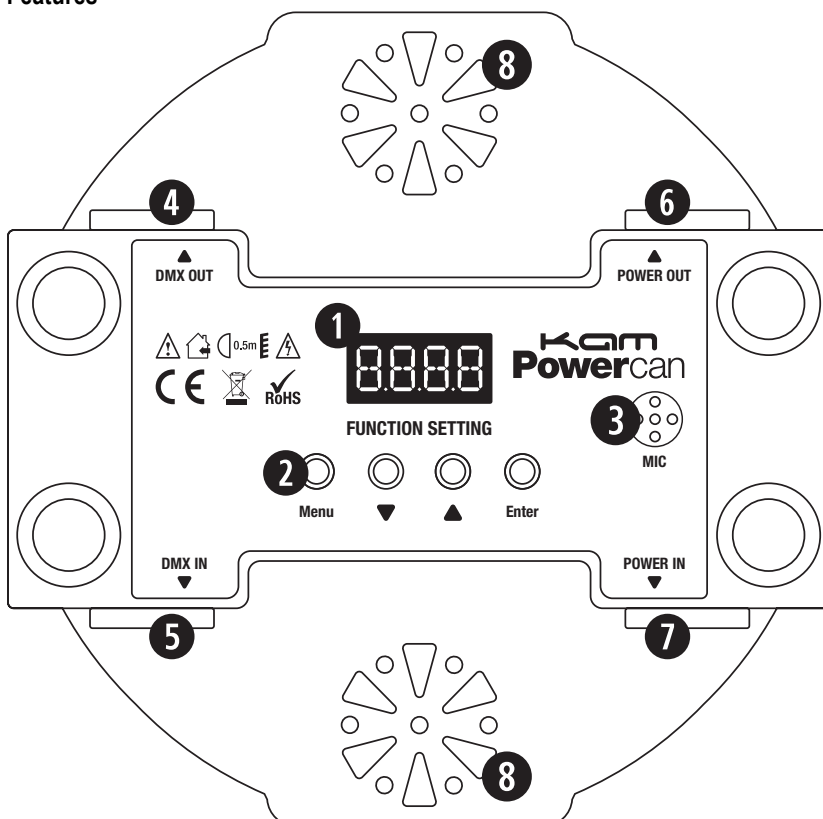
Connect the DMX output of the first unit in a DMX chain with the DMX input of the next unit in the chain. Always connect the the output of one unit with the input of the next unit until all units are connected.

If you use a controller with 5 pin DMX connection you will need to use a 5 pin to 3 pin adapter.

**Caution** at the unit, the DMX cable has to be terminated with a terminator. Solder a 120 Ohm resistor between Signal (-) and Signal (+) into a 3-pin XLR connector and plug this into the DMX output of the last unit in the chain.



### Features



Number	Feature	Function
1	Function setting LED	Displays the current operating mode.
2	Function buttons	Menu buttons to control the operating mode of the laser.
3	Microphone	Mic for Sound-to-Light operation.
4	DMX output	3 pin XLR connector for DMX512 output communication.
5	DMX input	3 pin XLR connector for DMX512 input communication.
6	Power supply output	Mains supply output for linking power to other units.
7	Power supply input	Attach the mains cable here. Built-in fuse.
8	Cooling vents	Do not cover.

### Function setting

Using the four function buttons on the rear of the unit you can set the operating mode of the Powercan. 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 mode, press the **Enter** button to confirm the change.

Menu display	Function
<b>Addr</b>	DMX address setting. This is changed using the <b>Up</b> or <b>Down</b> arrow buttons (1-512).
<b>CHNd</b>	6CH - press the <b>Enter</b> button to choose 6 channel DMX operation.
	10CH - press the <b>Enter</b> button to choose 10 channel DMX operation.
<b>NAnu</b>	rEd - press the <b>Enter</b> button / 0-255 red dimmer.
	GrEE - press the <b>Enter</b> button / 0-255 green dimmer.
	bLUE - press the <b>Enter</b> button / 0-255 blue dimmer.
	UhtE - press the <b>Enter</b> button / 0-255 white dimmer.
	YELL - press the <b>Enter</b> button / 0-255 amber dimmer.
	UV - press the <b>Enter</b> button / 0-255 ultra violet dimmer.
<b>SHOU</b>	SH1 - SH7. Built-in shows.
<b>COLO</b>	CO1 - CO32. Manual colour selection.
<b>SPEE</b>	Auto speed setting from 01-99.
<b>Auto</b>	Auto mode.
<b>Soun</b>	Sound-to-Light mode. Press the <b>Enter</b> button to choose the sensitivity of the microphone (S01-S10).
<b>Temp</b>	The LED output power will reduce when the unit's temperature increases towards 50°C.
<b>Ve1.0</b>	Software version Ve1.0

### DMX address setting

When controlling the unit (or units) with a 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, you cannot control each unit separately.

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 must be determined by the number of channels. This unit has 6 or 10 channels, therefore if you choose the 6 channel mode, you should set the starting address of the first unit to 1, the second unit must then be set to 7 (6+1), the third unit must be set to 13 (7+6) and so on. If you choose the 10 channel mode, you should set the starting address of the first unit to 1, the second unit must then be set to 11 (10+1), the third unit must be set to 21 (11+10) and so on.

## DMX operation

DMX channel		Value	Function
6 channel	10 channel		
-	CH1	0-255	Dimmer
CH1	CH2	0-255	Red dimmer
CH2	CH3	0-255	Green dimmer
CH3	CH4	0-255	Blue dimmer
CH4	CH5	0-255	White dimmer
CH5	CH6	0-255	Amber dimmer
CH6	CH7	0-255	UV dimmer
-	CH8	0-255	Strobe
-	CH9	0-10	Disabled
-		11-240	Single effect built-in program in Auto mode
-		241-250	Built-in program in Sound-to-Light mode
-		251-255	Mixed effect built-in programs in Auto mode
-	CH10	0-255	Auto speed

## Product specification

<b>Mains input</b>	AC100~240V, 50/60Hz
<b>Control modes</b>	DMX512 Auto Sound-to-Light Master/Slave
<b>Beam angle</b>	25°
<b>Light source</b>	5 x 12w RGBWAU 6-in-1 LEDs Red, green, blue, white, amber and ultra violet
<b>Rated power</b>	65w
<b>Protection rating</b>	IP20
<b>Operating temperature</b>	10~40°
<b>DMX512 connections</b>	3 pins XLR male/female
<b>DMX512 channels</b>	6/10
<b>Dimensions (WxDxH)</b>	214.4 x 100.3 x 211.68mm (inc bracket)
<b>Nett weight</b>	0.8Kg