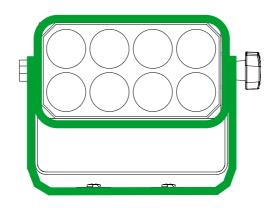


User Manual

Satellite Mk II





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SAFETY FIRST



WARNING!

Read the safety precautions in this section before installing , powering, operating or servicing the Satellite Mk II

The following symbols are used to identify important safety information in this manual:



Warning! Safety hazard. Risk of severe injury or death



Warning! LED light emission. Risk of eye injury



Warning! Hazardous voltage. Risk of lethal or severe electric shock



Warning! Fire hazard

! Read this manual before installing, powering or servicing the fixture, follow the safety precautions listed below and observe all warnings in this manual. If you have questions about how to operate the fixture safely, please contact I-Pix.



Warning! **Class 2M LED product.** Do not look into the beam from a distance of less than 40 cm (16 inches). Do not stare into the beam for extended periods at a short distance. Do not view the beam directly with optical instruments.



This product is for professional use only. It is not for household use. This product presents risks of severe injury or death due to fire hazards, electric shock and falls.



PROTECTION FROM ELECTRIC SHOCK

Shut down power to the entire installation at the building's main power distribution board and lock out power (by removing the fuse for example) before carrying out any installation or maintenance work.

Disconnect the fixture from AC power before removing or installing any cover or part and when not in use.

Disconnect the fixture from AC power before removing or changing the fuse.

Always ground (earth) the fixture electrically.

Use only a source of AC power that complies with local building and electrical codes and has both overload and ground-fault (earth-fault) protection.

Connect this fixture to AC power either using the supplied power cable or via 3- conductor cable that is rated minimum 20 amp, hard usage. Suitable cable types include ST, SJT, STW, SEO, SEOW and STO.

The voltage and frequency at the power outlet are the same as the voltage and frequency applied to the power inlet. Only connect devices to the power outlet that accept this voltage & frequency.

Before using the fixture, check that all power distribution equipment and cables are in perfect condition and rated for the current requirements of all connected devices.

Do not use the fixture if the power cable or power plug are in any way damaged, defective or wet, or if they show signs of overheating.



PROTECTION FROM FIRE

Do not attempt to bypass thermostatic switches or fuses. Replace defective fuses with ones of the specified type and rating only.

Provide a minimum clearance of 0.1 m (4 in.) around fans and air vents.

Do not modify the fixture

Apart from I-PIX accessories do not stick filters, masks or other materials directly onto the light.



PROTECTION FROM INJURY

Do not hang fixtures from each other. Use two OMEGA clamps per fixture when rigging horizontally.

When suspending the fixture, ensure that the structure and all hardware used can hold at least 10 times the weight of all devices suspended from them.

Use two secondary attachments (such as a safety cable) to secure each fixture. Secondary attachments must be able to hold at least 10 times the weight of all devices suspended from them and must be installed as described in this manual.

Check that all external covers and rigging hardware are securely fastened.

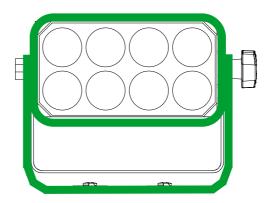
Block access below the work area and work from a stable platform whenever installing, servicing or moving the fixture.



The LED emission presents a hazard to eyesight at a distance of 4 - 40 cm (1.6 - 16 inches) when the eye is exposed to the beam for longer than 0.25 seconds.

Do not look at LEDs from a distance of less than 40 cm (1 ft. 4 in.) without suitable protective eye wear.

Do not look at LEDs with magnifiers or similar optical instruments that may concentrate the light output.



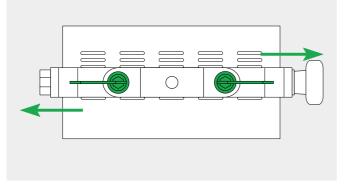


Satellite Mk II

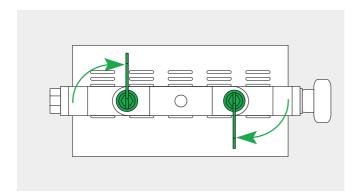
The Satellite was the first i-Pix product designed and produced after the company's launch in 2006, and soon became a best seller and a firm favourite in all sectors of the entertainment industry. Ideal for stage and theatrical applications where space is a premium, the handy sized Satellite 'brick' can be concealed nooks and crannies of all descriptions, in stage sets, under risers, in trussing, etc.

Hugely dynamic, it is equally as great for washing large areas as it is for tightly focussed tasks like truss toning.

To rig a Satellite Mk II use the OMEGA bracket supplied with the lamp. This would have your clamp of choice bolted on to it. The OMEGA bracket is attached to the outer yoke using the camlocs.

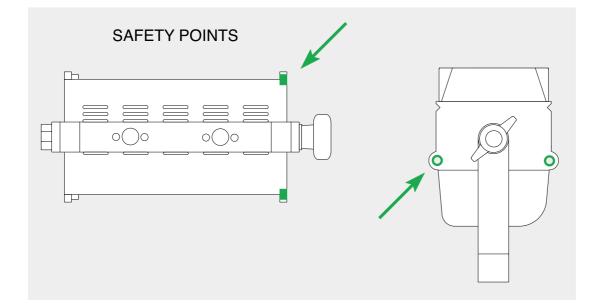


First place the camloc pins in the receptacles with the levers facing out, then to secure the brackets give the levers a quarter turn clock wise.



Make absolutely sure the OMEGA bracket is securely attached BEFORE rigging the light.

ALWAYS secure the lamp to the truss, pipe e.t.c. with a safety bond attached through one of the safety points shown.



SET UP

1. Select appropriate dimmer curve

The Satellite Mk II offers a choice of two dimmer curves.

1 LINEAR - the output increases directly with dmx input.

2 ENHANCED - the first 10% of the output is controlled over the first 50% of the DMX input.

First press the button under the MORE legend.

Then press the PROFILE button.

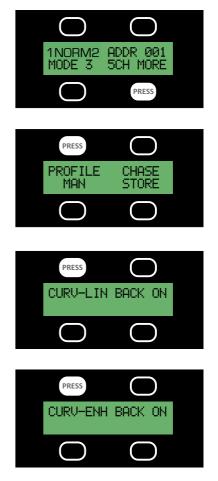
Then select the appropriate dimmer curve. linear LIN.

Or enhanced ENH.

2 Disable or enable user interface backlight

Whilst in PROFILE you may choose to switch off the user interface backlight. When you press the button above BACK ON the legend will change to BACK OF and the backlight will go out 5 seconds after the interface is last used, though the backlight will come back on whenever any button is pressed.

When you press the button above BACK OF the legend will change to BACK ON and the backlight will remain lit constantly.



BACK ON shows the current status of the backlight





3 Select appropriate operating mode

The BB2 gives you a choice of ten operating modes. These modes will enable you to set up the lamp in the most appropriate way for the many different jobs the lamp will be used for. The nuts and bolts of the modes are described in detail in pages 12 to 15.

To select a mode

Keep the button below the MODE legend depressed go through the modes, just before the one you desire stop, then press once.

4 Select appropriate DMX address

First press the button above the ADDR legend.

Then change the address using the 100s,10s & 1s buttons.





PRESS



5 inverting the cells

Should you wish to change the running order of the cells so that instead of running.



they run



Press the button above 1NORM2

1NORM2 shows the current orientation of the cells.



THIS IS AN EXTREMELY USEFUL FUNCTION IF SOMEONE HAS RIGGED THE LAMP THE WRONG WAY ROUND!

To return them to



press the button above 2INVRT1



6 locking off the interface

When you are satisfied that you have set up all the lamp's parameters to your liking it is possible to lock off the interface so that you dont inadvertently change anything when focusing etc.

To lock off the interface depress the MORE and ADDR buttons simultaneously and the MORE will change to LOCK.



To unlock the interface depress the LOCK and ADDR buttons simultaneously and the LOCK will change to MORE.



7 locking off the interface

When you are satisfied that you have set up all the lamp's parameters to your liking it is possible to lock off the interface so that you dont inadvertently change anything when focusing etc.

To lock off the interface depress the MORE and ADDR buttons simultaneously and the MORE will change to LOCK.

To unlock the interface depress the LOCK and ADDR buttons simultaneously and the LOCK will change to MORE.





1NORM2 ADDR 002 MODE 1 3CH MORE

MODE

PRESS

PRESS

The Satellite Mk II has 10 different operating modes to suit different uses, programming styles and dmx configurations

MODE 1 - 4 channels 8 bit

The most simple, ideal for fast programming or limited dmx line space and as a node on a media server.Both cells are treated as one with the 4 channels red, green, blue and white affecting the whole lamp.

ch1 - red both cells

- ch2 green both cells
- ch3 blue both cells
- ch4 white both cells

MODE 2 - 8 channels 16 bit

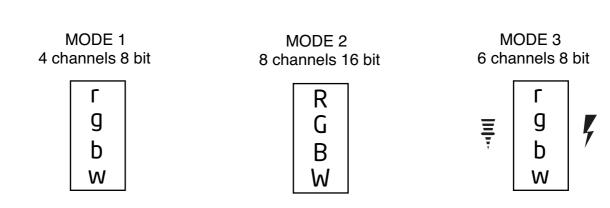
Ideal for fast programming or limited dmx line space and as a node on a media server with greater resolution over the colours.Both cells are treated as one with the 8 channels red, green, blue and white affecting the whole lamp.

- ch1 red high byte both cells
- ch2 red low byte both cells
- ch3 green high byte both cells
- ch4 green low byte both cells
- ch5 blue high byte both cells
- ch6 blue low byte both cells
- ch7 white high byte both cells
- ch8 white low byte both cells

MODE 3 - 6 channels 8 bit

Ideal for fast programming or limited dmx line space with overall dimming and strobe control..Both cells are treated as one with the 6 channels dim, strobe, red, green, blue and white affecting the whole lamp.

- ch1 master intensity both cells
- ch2 strobe both cells
- ch3 red both cells
- ch4 green both cells
- ch5 blue both cells
- ch6 white both cells



MODE 4 - 11 channels 16 bit

Ideal for fast programming or limited dmx line space with overall dimming and strobe control.and greater resolution in control over the colours Both cells are treated as one with the 11 channels dim, strobe, red, green, blue and white affecting the whole lamp.

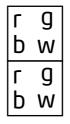
ch1 - master intensity high byte both cells

- ch2 master intensity low byte both cells
- ch3 strobe both cells
- ch4 red high byte both cells
- ch5 red low byte both cells
- ch6 green high byte both cells
- ch7 green low byte both cells
- ch8 blue high byte both cells
- ch9 blue low byte both cells
- ch10 white high byte both cells
- ch11 white low byte both cells

MODE 5 - 8 channels 8 bit

Ideal for use with media servers where dmx line space may be a consideration. Each cell may be individually colored with its own red, green, blue and white channels. (most useful when each cell is patched individually - 4ch)

ch1 - red cell 1ch5 - red cell 2ch2 - green cell 1ch6 - green cell 2



R	G
В	W
R	G
В	W

MODE 7 - 10 channels 8 bit

Colour control over each individual cell with a master intensity and strobe having overall control over both cells

- ch1 master intensity both cells ch2 - strobe both cells
- ch3 red cell 1
- ch4 green cell 1
- ch5 blue cell 1
- ch6 white cell 1

ch7 - red cell 2 ch8 - green cell 2 ch9 - blue cell 2 ch10 - white cell 2

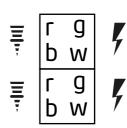
MODE 8 - 19 channels 16 bit

High resolution colour control over each individual cell with a strobe and high resolution master intensity having overall control over both cells.

- ch1 master intensity high byte both cells
- ch2 master intensity low byte both cells
- ch3 strobe both cells
- ch4 red high byte both cell 1
- ch5 red low byte both cell 1
- ch6 green high byte both cell 1
- ch7 green low byte both cell 1
- ch8 blue high byte both cell 1

- ch12 red high byte both cell 2
- ch13 red low byte both cell 2
- ch14 green high byte both cell 2
- ch15 green low byte both cell 2
- ch16 blue high byte both cell 2
- ch17 blue low byte both cell 2
- ch18 white high byte both cell 2
- ch19 white low byte both cell 2

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7

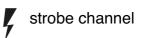
MODES A GRAPHICAL OVERVIEW



master intensity 8 bit



master intensity 16 bit



Stand alone functions

The Satellite Mk II is able to run in a stand alone mode without any need of data from a lighting desk. The light is capable of out putting up to 20 programmable memories and 1 chase that steps through these memories.

"The light must be in MODE 3 (6ch) for all the stand alone functions to work"

Storing a DMX Input as a Memory

However if you have access to a lighting desk a quick and easy way to create multiple or complex memories is to give the light the desired colour information using a lighting desk or similar DMX generating device and use the STORE function.

1 Connect the light to the desk in the usual way making sure the address is correct and the lamp is in MODE 3.

2 Create the desired colour on the lighting desk.

3 Press the button underneath the MORE legend once.

4 Press the button underneath the STORE legend once.

5 You should then assign this memory a number using the UP, DOWN buttons.

6 When you are happy this memory has been numbered correctly press the STORE button wait 3 seconds and the display will return to the main menu.









Creating a memory

- 1 press the button underneath the MORE legend once.
- 2 press the button underneath the MAN (manual) legend once.
- 3 press the button underneath the PROG MEM (program memory) legend once.

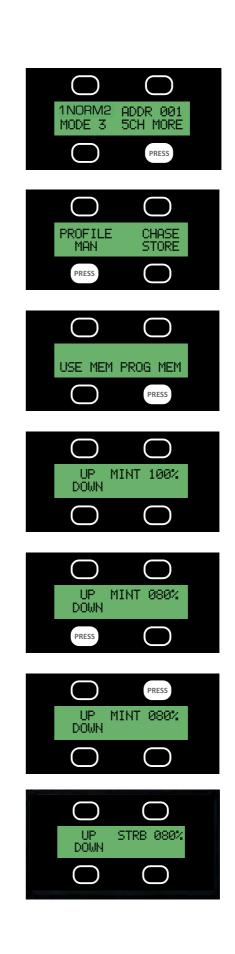
You are now presented with the first variable of your memory which is the Master Intensity (MINT). The default value for the MINT is 100% - intensity full.

If you wish to alter this value use the buttons above and below the UP & DOWN legends until you have the desired % value.

4 When happy with the MINT value press the button above MINT once.

Next you are presented with STRB (strobe) the second variable of your memory which has a default value of 0% - no strobe.

In the same way if you wish to alter this value use the UP & DOWN buttons to give you the desired % value.



5 When happy with the STRB value press the button above STRB once.

Now you are presented with the first colour RED (default 0%).

In the same way if you wish to alter this value use the UP, DOWN buttons to give you the desired %. If you require 100% press the DOWN button.

6 When happy with the RED value press the button above RED once.

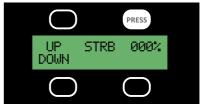
Next you are presented with the second colour GREEN (default 0%) In the same way if you wish to alter this value use the UP, DOWN buttons to give you the desired % If you require 100% press the DOWN button.

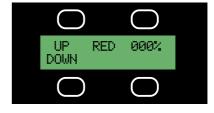
7 When happy with the GREEN value press the button above GREEN once.

Next you are presented with the third colour BLUE (default 0%).

In the same way if you wish to alter this value use the UP, DOWN buttons to give you the desired %. If you require 100% press the DOWN button.

8 When happy with the BLUE value press the button above BLUE once.





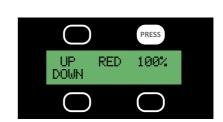
RED

100%

UP

DOWN

PRESS







Finally you are presented with the fourth colour WHITE (default 0%)

In the same way if you wish to alter this value use the UP,DOWN buttons to give you the desired %. If you require 100% press the DOWN button.

9 When happy with the WHITE value press the button above WHITE once.

> Now you are given the opportunity to store your memory If you are satisfied with all the values you have inputted.

If however you think you may have made a mistake or you have just changed your mind then you can return to the start of the memory by pressing MEM button and repeating the above process.

If you are happy with you memory you should then assign it a number using the UP, DOWN buttons.

10 When happy with your memory number press STORE.





MEM 01

PRESS

MEM 01

STORE

STORE

UP

DÖWN

UP

DOWN





To Recall A Memory

1 Press the button underneath the MORE legend once then.

2 Press the button underneath the MAN (manual) legend once then.

3 Press the button underneath the USE MEM (use memory) legend.

Now you will be offered the first memory MEM 01. This will come on automatically.

4 To select any other memory simply use the UP, DOWN buttons until you find the memory you want.

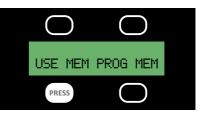
The memories will come on as you select them.

" IF YOU WISH YOUR MEMORY TO COME ON AS SOON AS YOU GIVE THE LAMP POWER YOU WILL NEED TO PROGRAMME IT AS A TWO STEP CHASE WITH BOTH MEMORIES HAVING THE SAME VALUE"

To return to the main menu press the DMX MODE button













Programming a Chase

1 Ensure you have programmed all the memories that will go to make up the steps of your chase.

2 Press the button underneath the MORE legend once..

3 Press the button above the CHASE legend once.

Now the WAIT TIME will appear this is the first variable of the chase to be set. The WAIT TIME is the time period between cross fades that the colour is held constant for.

Select the appropriate time (in seconds) using the UP, DOWN buttons.

4 When you are happy with the WAIT TIME press the button above WAIT TIME once.

Now the XFADE TIME (cross fade time) will appear this is the second variable of the chase to be set. The XFADE TIME is the length of time the light takes to change from one colour to another.

Select the appropriate time (in seconds) using the UP, DOWN buttons.

5 Once you are happy with the XFADE TIME press the button above XFADE TIME once.

















Now CHASE STRT (chase start) will appear along with the option MEM 1. This will be the first step of your chase.

Choose which memory you would like to be the first step of your chase using the UP, DOWN buttons.

6 Once you are happy with the memory that will be your first step press the button above CHASE STRT.

Now CHASE END will appear along with the option MEM 1. This will be the last step of your chase. The chase will run through all the memories numbered between the first and last step.

Choose which memory you would like to be the last step of your chase using the UP, DOWN buttons.

7 Once you are happy with the memory that will be your last step press the button above CHASE END once.

Now you will be offered the option USE CHASE, if you wish to simply press yes.

The Interface will now say CHASE RUNNING. When you wish to end or change the chase press MENU.

If you leave a chase running when the light is powered down the chase will resume as soon as the light is powered back up again.

! If the chase does not run try rerecording the first step again













Satellite Mk II Technical Data

Dimensions

Length	271mm
Width	129mm
Hight	239mm

Weight 4.5kg

Mechanical design & materials

Body	aluminium and steel with aluminium heatsink
Yoke	folded steel
Finish	Electro static powder coated black satin

Rigging

Styleomega bracket with 2 1/4 turn camloc fastenersConventional mount12mm bolt hole

Connections

powercon
powercon
speakon
5 pin xlr
5 pin xlr

Electrical

Total power draw	83 watts red, green, blue and white @ full
Input	90 - 265 volts 50/60Hz
Power	0.35 amps @ 240 volts
Fuse	2 amps slow blow

Data

Dmx USITT DMX512-A

Control RGBW additive colour mixing

Dmx channels	4 channels minimum 22 channels maximum
User interface	weatherproof backlit lcd display with 4 membrane switches

Stand alone

up to 20 internal memories. 1 chase built from these memories, 2 to 255 seconds wait and crossfade times.

Modes

	8 bit	standard resolution	
1 3 5 7 9		1 x RGBW over 2 cells 1 x RGBW over 2 cells with an overall master and strobe 2 x RGBW 2 x RGBW with an overall master and strobe 2 x RGBW each with an overall master and strobe	4 chs 6 chs 8 chs 10 chs 12 chs
	16 bit	high resolution (recommended)	
2 4 6 8 10		1 x RGBW over 2 cells 1 x RGBW over 2 cells with an overall master and strobe 2 x RGBW 2 x RGBW with an overall master and strobe 2 x RGBW each with an overall master and strobe	8 chs 11 chs 16 chs 19 chs 22 chs

note 16 bit for every channel bar strobe which runs as 8 bit

For more detailed channel allocation information please refer to pages 11 to 14

Light engine

Source	customised RGBW light engine
Red	623 nm
Green	525 nm
Blue	460 nm
White	5100°K
Total luminous flux	3176 lm
Optics	8 x 10° optics
Lens Caps	30° x 30° 40° x 40° 60° x 10°

Thermal characteristics

Force air cooled via low airflow / low noise fans

Operating temperature

Minimum -20°C Maximum +46°C

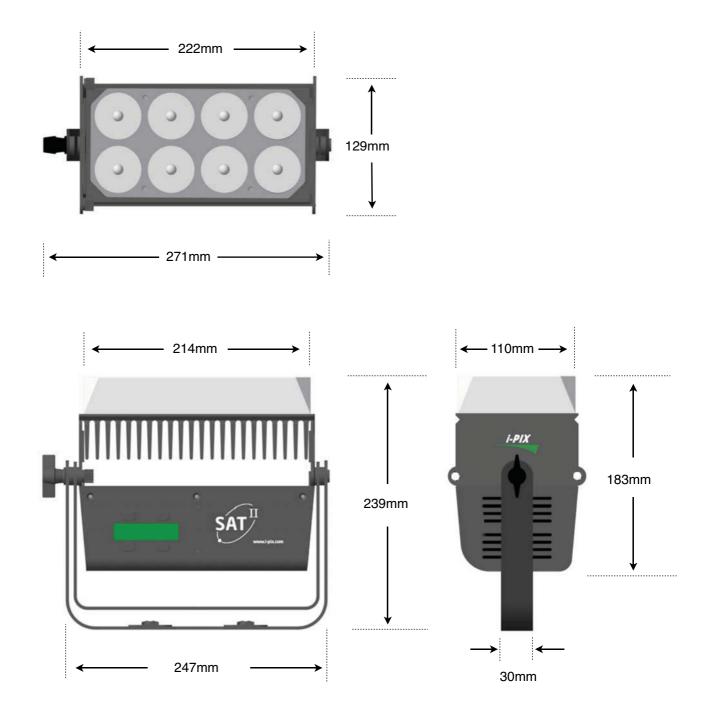
Weather protection

Humidity max 20% - 90% RH non - condensing

Approvals & Compliance

BS EN 55103-1 Harmonics BS EN 55103-2 Immunity BS EN 61000-3-2 Emissions USA / Canada ELT pending Lead and mercury free return to manufacturer for recycling

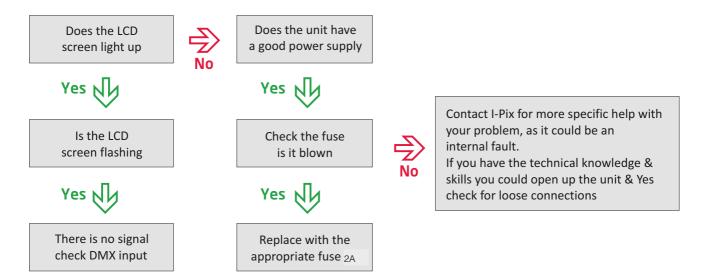
Satellite Mk II Dimensions



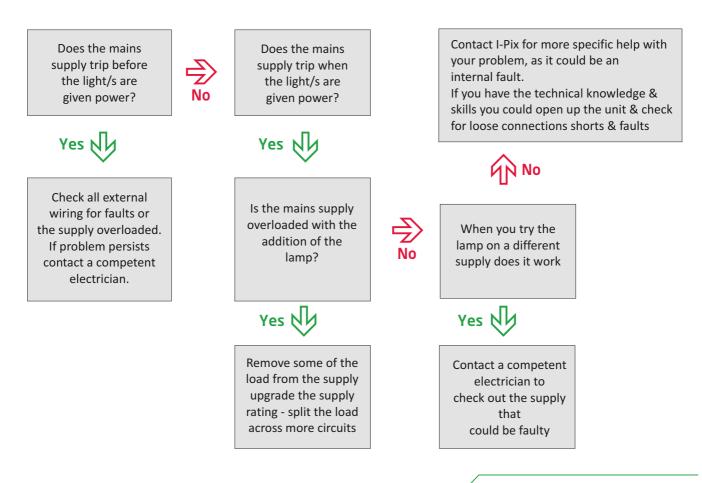
TROUBLE SHOOTING

DISCLAIMER: Please note that the information contained in this trouble-shooting guide is generalized in nature & cannot account for all possibilities. Any proposed remedies for specific situations should not be considered as absolute or all encompassing. Please seek professional assistance if there is any doubt as to the efficacy of a remedy or of the exact nature of any encountered problem. I-pix provides the information contained herein only as a guide.

No response from the light



Mains supply keeps tripping out blowing fuses:



TROUBLE SHOOTING

The fuse on a unit repeatedly blows

- Are you fitting right rating/type of fuse into unit?
- Contact I-pix for more specific help with your problem, there may be an internal fault in the unit.
- If you have the technical knowledge/skills you could look inside the unit and check the internal wiring for a lose connections/shorts and also the power supply is working with a 15v output when there is no load connected to it.

Dmx trouble shooting

The obvious

- It is good practice to connect data line and terminate before switching on device.
- Is the dmx line fitted to a buffer and data is being received
- Is the dmx data line fitted with a line termination?
- Does the unit's dmx mode set-up match the personality/ profile for the console provided?
- Note: the LCD screen flashes intermittently when no data is present

QUICK RESET

An easy way of returning the light to its default settings.

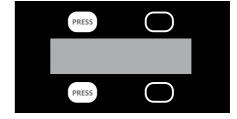
Before the light is given any power hold down both both buttons on the left hand side of the interface.

Keep the buttons held down as you give the light power.

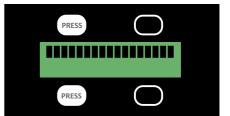
When you see screen with the black boxes let go of the buttons and the next screen will appear. If you do not let go it will stay locked until you let go.

Then the light will return to MODE 10 ADDR 001

This is a fast way of readdressing a light, that will save you a few button presses







I-Pix Satellite Mk II Comply with RoHS Restrictions

I-Pix Satellite Mk II s are compliant with all of the criteria proposed by the European RoHS directive 2002/95/EC for hazardous material content in electronic and electrical equipment as listed in Annex 1A and 1B of the WEEE Directive.

In addition to containing no mercury the LED light engines have the following environmental advantages over traditional light sources:

- High energy efficiency
- Long lifetime
- Fully dim-able
- Very low IR and UV radiation

For attachment of electrical connections I-Pix use lead free solder

Warranty Statement

I-Pix (seller) extends warranty on all the electronics in the Satellite Mk II produced by the Seller for two (2) years from original date of shipment, that the goods sold hereunder are new and free from substantive defects in workmanship and materials. This warranty extends only to the buyer and not to indirect purchasers and users. Sellers liability under the foregoing warranty is limited to replacement of goods or repair of defects or refund of the purchase price at the sellers sole option. The above warranty does not apply to defects resulting from improper or inadequate maintenance, unauthorised modification, improper use or operation outside of sellers specifications for the product, abuse, neglect or accident. THE ABOVE WARRANTY IS EXCLUSIVE AND NO OTHER WARRANTY, WETHER WRITTEN OR ORAL, IS EXPRESSED OR IMPLIED. I-PIX SPECIFICALLY DISCLAIMS THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE - I - PIX Dec 01 2011

Warranty Statement

I-Pix (seller) extends warranty on all the L.E.D.s in the Satellite Mk II produced by the Seller for one (1) year from original date of shipment, that the goods sold hereunder are new and free from substantive defects in workmanship and materials. This warranty extends only to the buyer and not to indirect purchasers and users. Sellers liability under the foregoing warranty is limited to replacement of goods or repair of defects or refund of the purchase price at the sellers sole option. The above warranty does not apply to defects resulting from improper or inadequate maintenance, unauthorised modification, improper use or operation outside of sellers specifications for the product, abuse, neglect or accident. THE ABOVE WARRANTY IS EXCLUSIVE AND NO OTHER WARRANTY, WETHER WRITTEN OR ORAL, IS EXPRESSED OR IMPLIED. I-PIX SPECIFICALLY DISCLAIMS THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE - I - PIX Dec 01 2011







SERVICE CONTACT DETAILS

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