

PixelEight

User Manual

Pixel RANGE

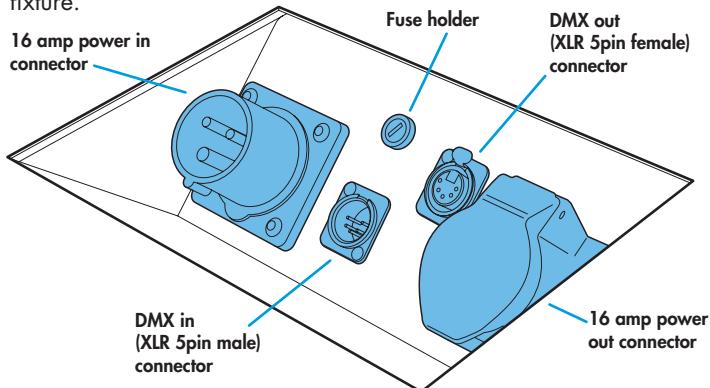
General set up

- 1 Mount the fixture in the required position using the supplied yoke or optional brackets (when multiple fixtures are joined).

Important

- When the fixture is suspended off ground, always use a safety wire rated to a minimum of 80kg (176lbs) around the yoke.
- Do not position the fixture close to fog machines. The fog oil mist will be drawn in by the cooling fan and will short-out important components. The warranty will be void for all fixtures returned in such a condition.

- 2 Connect the power in and DMX in connectors at the rear of the fixture.



- 3 Where multiple fixtures are to be daisy-chained, connect power out and DMX cables at the rear of the fixture.

Important

- When daisy-chaining fixtures, do not exceed a total load of 3kW in a single daisy chain (subject to supply and cabling restrictions). Each PixelEight fixture has a maximum power requirement of 200 watts.

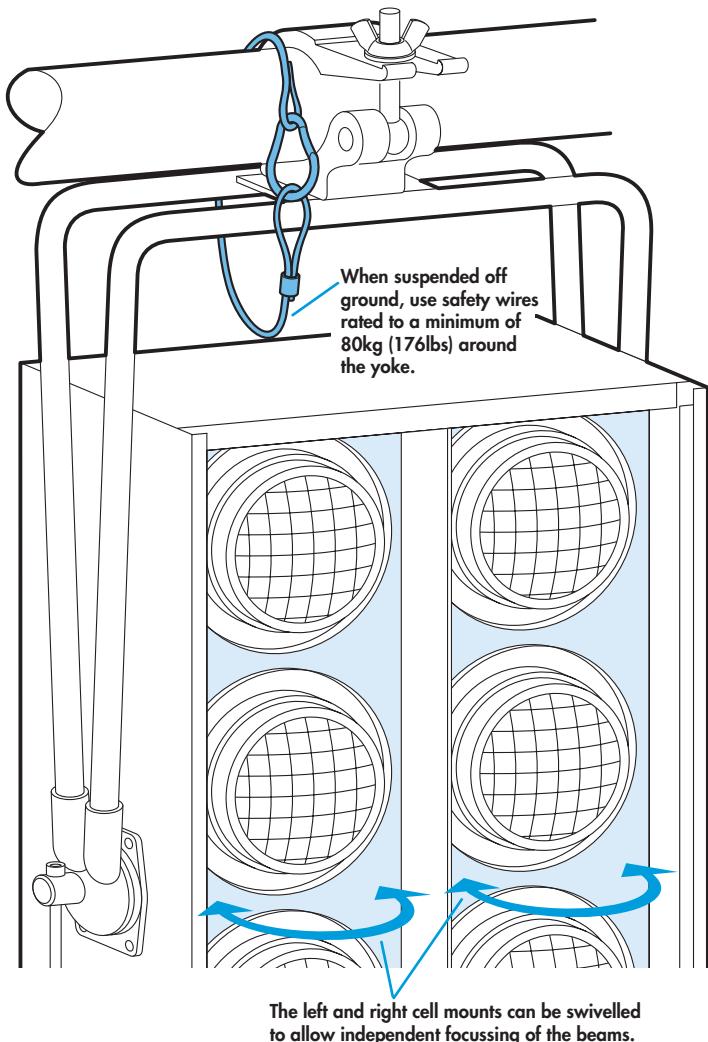
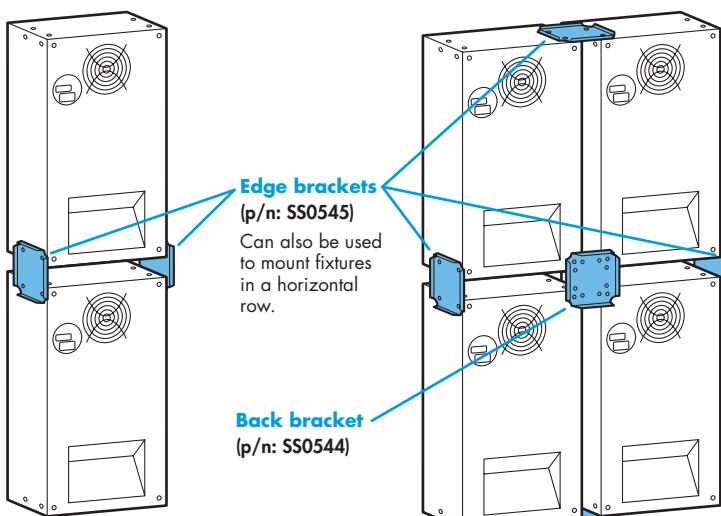
- 4 When all fixtures are connected, apply power.

- 5 Use the control panel to access the internal menu and choose the appropriate operation mode and related settings (see over).

- To optionally clear all previous settings: On the control panel, press the middle two buttons (◀ and ▶) while the DMX address is displayed (e.g. R001, R002, etc). The four digit display will show FACT then SET to indicate that the fixture has been returned to its default condition.

Joining multiple fixtures

Optional brackets are available to allow PixelEight fixtures to be combined in a variety of ways:



Operation modes

The PixelEight provides a range of operation modes. These are selected using the MODE section of the control menu:

DMX Allows RGB control of all cells via DMX input. Using the RES (resolution) option you can determine the number of DMX channels required, from 24 channels down to just 3 (the number of cells addressed by each channel are adjusted accordingly). Internal chase effects are not available within this mode. An optional master intensity requires a further DMX channel when enabled.

MANU Provides RGB colour mixing independently of any external control. Use the internal control menu (MANU section) to select the required colour values.

EF M Allows the display of the dual internal chase effects, independently of any external control. Use the internal control menu (EF M section) to select the required chase effects, speeds and cross fades.

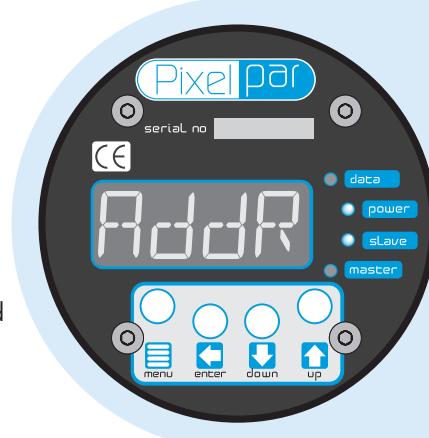
24+E Provides control of RGB mixing of all 8 cells individually and selection of the dual internal chase effects via DMX input. Requires 31 DMX channels in total.

3+E Provides control of RGB mixing of all 8 cells collectively and selection of the dual internal chase effects via DMX input. Requires 10 DMX channels in total.

PixelEight personalities are available for a variety of controllers. Please see www.pixelrange.co.uk for details.

General notes

- Ensure that only one DMX device in the chain is set as master (e.g. the lighting desk). The fixture is usually set to slave mode 
- The fixture is shipped with the DMX address set to **00 1**.
- If the fixture is used as a master, DMX transmission will only occur when the DMX address is displayed (e.g. **000 1**, **0002**, etc.).
- The four digit display can be set to fade out after 60 seconds, press  to resume. To alter this mode: **PERS > DISP**.



Using the control menu

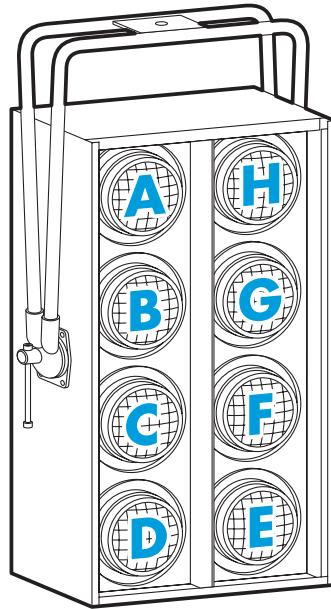
- When not in the menu, the four digit display shows the current DMX address e.g. **000 1**
- Press  to enter the menu. The four digit display will show **Addr**.
- Use  and  to move between menu options (or to change a value within an option).
- Press  to enter an option (or to fix a changed value within an option and return to the previous option level). *Note: If you do not press  to fix a value, operation will revert to the previously set mode at the next power on.*
- Press  to exit from a menu option (and eventually exit the menu completely).

Chase effects

This section describes each of the 31 internal chase effects that are selectable either via the control menu (**PERS > E1/E2 > EFEC**) or using DMX values sent from an external source. To use the internal effects, set the **Mode** option either to **E1** or **E2** (to control effects via the menu) or **3+E** or **24+E** (to control effects externally via DMX).

DMX Efec Chase effect description

value	value	Chase effect description
0-7	00	Off
8-15	01	Rainbow chase down
16-23	02	Rainbow chase up
24-31	03	White single cell chase down
32-39	04	White single cell chase up
40-47	05	White single cell chase scatter
48-55	06	50/50 duty cycle strobe white
56-63	07	50/50 duty cycle strobe red
64-71	08	50/50 duty cycle strobe blue
72-79	09	50/50 duty cycle strobe yellow
80-87	10	50/50 duty cycle strobe green
88-95	11	Pulse strobe white
96-103	12	Pulse strobe blue
104-111	13	Pulse strobe rainbow
112-119	14	Pulse strobe red/green/blue
120-127	15	Primary/secondary chase
128-135	16	Rainbow chase
136-143	17	Yellow/blue chase
144-151	18	Red/green/blue wipe
152-159	19	Yellow/blue alternate cell chase
160-167	20	Red/blue cell chase - left/right split
168-175	21	Rainbow chase down
176-183	22	Red wipe - left/right split
184-191	23	Green wipe - left/right split
192-199	24	Blue wipe - left/right split
200-207	25	Static orange
208-215	26	Static yellow
216-223	27	Static light blue
224-231	28	Static purple
232-239	29	Static red
240-247	30	Static green
248-255	31	Static blue



DMX channel and cell layouts

This section shows the different ways, when using **dmx** mode, that the 8 cells can be mapped to varying numbers of DMX channels using the **PERS > RES** option.

The first channel of the fixture occurs at the DMX address selected using **Addr** and successive channels for the fixture follow from there.

Mode **24+E** uses the same RGB mapping as the **24CH** layout and mode **3+E** uses the same RGB mapping as the **3CH** layout, however, the master intensity channels for these modes are different. The **24+E** and **3+E** modes also use additional channels for control of internal chase effects (see the section below).

PERS > RES = 24CH			PERS > RES = 12CH			PERS > RES = 6xCH			PERS > RES = 6LCH			PERS > RES = 3CH			
Cells	R	G	B	Cells	R	G	B	Cells	R	G	B	Cells	R	G	B
A	1	2	3	A	1	2	3	A	1	2	3	A	1	2	3
B	4	5	6	E	4	5	6	B	4	5	6	B	4	5	6
C	7	8	9	C	7	8	9	C	7	8	9	C	7	8	9
D	10	11	12	D	10	11	12	D	10	11	12	D	10	11	12
E	13	14	15	E	13	14	15	E	13	14	15	E	13	14	15
F	16	17	18	F	16	17	18	F	16	17	18	F	16	17	18
G	19	20	21	G	19	20	21	G	19	20	21	G	19	20	21
H	22	23	24	H	22	23	24	H	22	23	24	H	22	23	24
Master intensity*			25	Master intensity*			13	Master intensity*			7	Master intensity*			

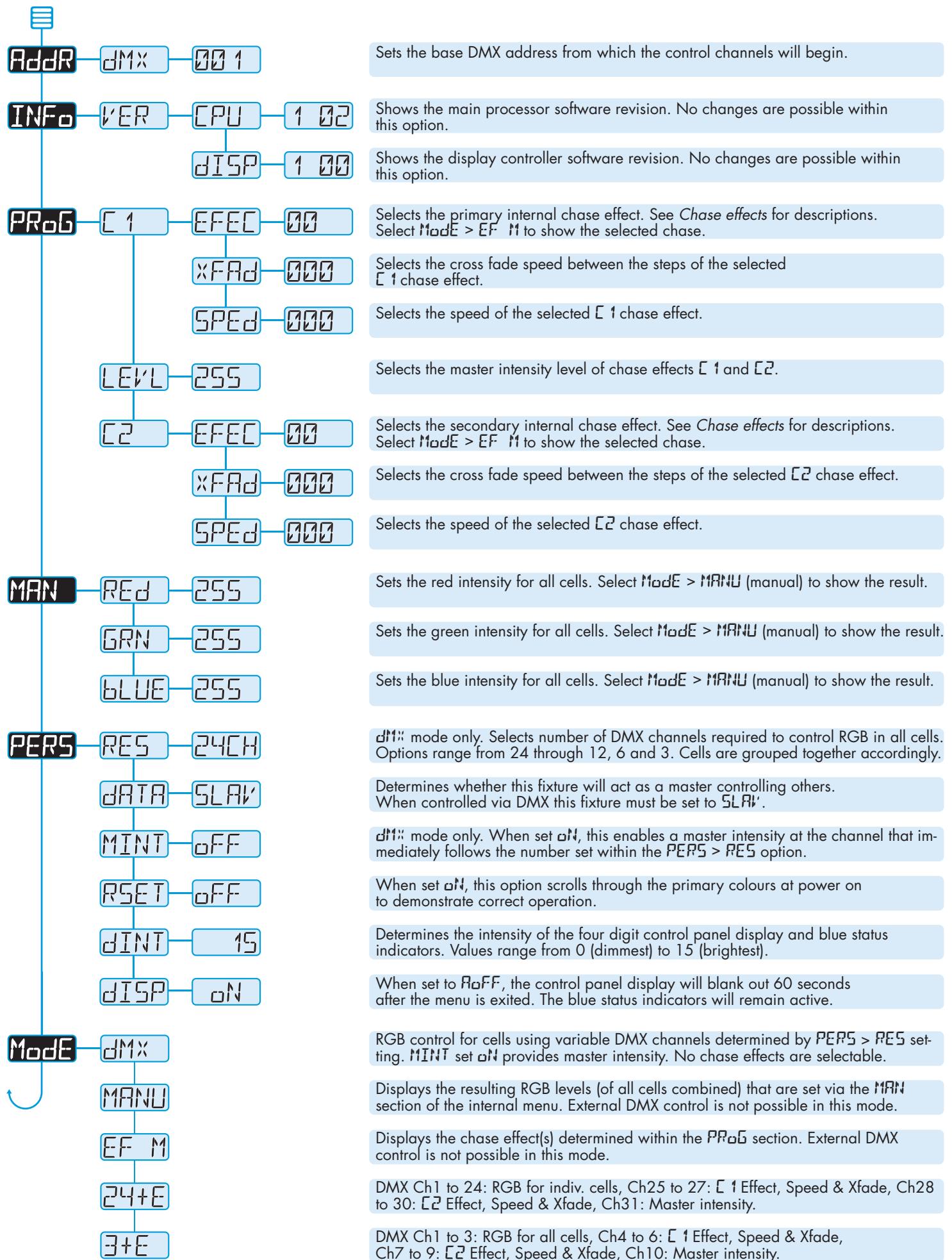
(* Mode **dmx** only, when **PERS > MINT** is set to **01**)

Chase effects and master intensity channel layouts

The table below shows how the chase effects and master intensity controls are mapped to DMX channels for the **24+E** and **3+E** modes. Mode **dmx** does not use chase effects. The first channel of the fixture occurs at the DMX address selected using **Addr** and successive channels for the fixture follow from there.

Control	24+E	3+E
E1 Effect	Ch25	Ch4
E1 Speed	Ch26	Ch5
E1 Xfade	Ch27	Ch6
E2 Effect	Ch28	Ch7
E2 Speed	Ch29	Ch8
E2 Xfade	Ch30	Ch9
Master intensity	Ch31	Ch10

Control menu contents



Troubleshooting

Fixture remains at blackout when illumination expected

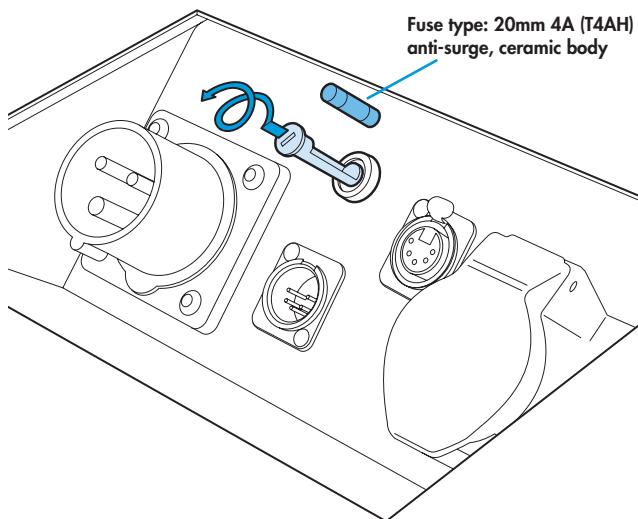
- The **power** indicator should be lit - if not, check the input power and fuse (see below).
- If live DMX is connected, the **data** indicator should be lit - if not, check the DMX cable and the desk output.
- Check that the selected **ModE** matches the desk personality being used.
- The master intensity channel for the current mode may be set at zero. For **dmx** mode, check the setting of **PERS > MINT**.
- Ensure that only one DMX device in the chain is set as master (usually the lighting desk).
- Standalone chase effects: Effects programmed using **PRoG > C1** and **C2** but the fixture is not in **ModE > EF M** mode. Check also that **PRoG > LEV'L** is not set at zero.
- Standalone RGB mixing: Colour values set within **MAN** section but the fixture is not in **ModE > MANU** mode.

Unexpected cell illumination occurring

- When using **dmx** mode: Check the setting of **PERS > RES**. See the section "DMX channel and cell layouts" on page 2 for an explanation of the various resolution modes.

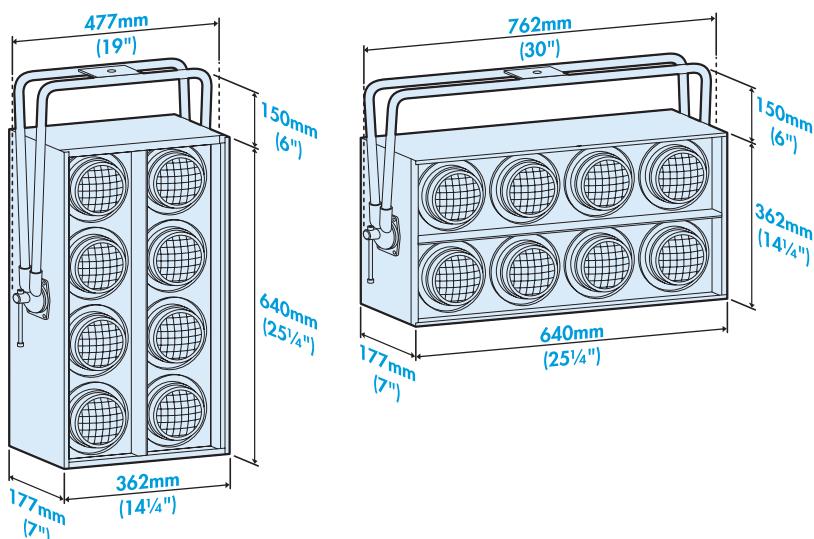
Fuse access

The single fuse is located next to the power and DMX connectors. Use a small flat blade screw driver to twist the fuse holder anticlockwise until the carrier can be extracted to reveal the fuse.



Specifications

Dimensions



Weight

Fixture alone:	13.5kg (30 lbs)
With yoke:	15.6kg (34 1/2 lbs)

Power

Input voltage:	100 to 250V AC, 50 to 60Hz autosensing	
Connectors:	16 amp CEE Form 2Pole+Earth (input & output)	
Power requirements:	@ 230V/50Hz	@ 120V/60Hz
Standby	10 watts	10 watts
Maximum (const.)	200 watts	200 watts
Start up (peak*)	128 amps	64 amps

* The peak value occurs only at first power up and lasts only for a period measured in microseconds. Adjustments may need to be made to supply circuit breakers when multiple fixtures are daisy-chained, causing them all to draw the peak simultaneously.

Approvals



Miscellaneous

Enclosure rating:	IP20 (not protected against moisture ingress)
Control input:	USITT DMX512 on XLR 5-pin male socket (input connector pin out given below)

