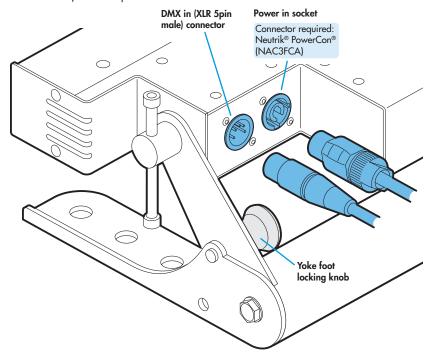
General set up

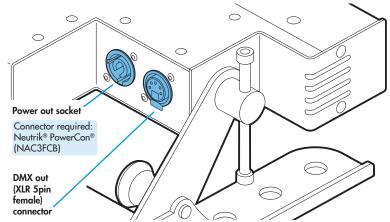
Mount the fixture in the required position. The integral yoke can act as a floor stand or hanger.

Important

- When suspended off ground, always use two independent fixing points. Also always use two safety wires rated to a minimum of 40kg (88lbs) SL6, 30Kg (66lbs) SL4 or 15Kg (33lbs) SL2 around the yoke.
- Where external control is to be used, connect a DMX lead (XLR 5-pin female) to the input socket at the rear of the fixture.



3 Where other fixtures are to be used in a control daisy-chain, connect a DMX lead (XLR 5-pin male) to the output socket at the rear of the fixture.



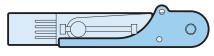
Connect power to the fixture using a Neutrik® PowerCon® connector. Insert the connector and twist it clockwise until it clicks into place.

Important

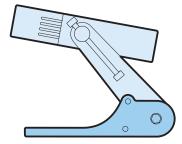
- If power daisy-chaining fixtures, do not exceed a total load of 3kW in a single daisy chain (subject to supply and cabling restrictions). Please see page 7 for maximum power requirements per fixture and also 'Start up (peak)' details.
- 5 Use the control panel to access the internal menu and choose the appropriate operation mode and related settings (see over).

Using the yoke

The PixelLine yoke has an adjustable foot at each end to allow it to function as an effective floor stand or be folded away to allow multiple units to be closely stacked.



Yoke folded flat



Yoke feet extended for use as a floor stand

Important

Please see the warning on page 7 regarding the stacking of PixelLine fixtures.

Operation modes

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

- Allows RGBW control via DMX input. Internal dМX chase effects are not available within this mode
- MANU Provides RGBW colour mixing independently of any external control. Use the internal control menu (MAN) section) to select the required colour values.
- Allows the display of the dual internal chase effects, independently of any external control. Use the internal control menu (PPa5 section) to select the required chase effects, speeds and cross fades.
- Provides control of individual emitter RGBW
- mixing and selection of the dual internal chase effects via DMX input. Requires 32 (PL6), 24
 - (PL4) or 12 (PL2) DMX channels.
 - H+E Provides control of RGBW mixing and selection of the dual internal chase effects via DMX input. Requires 11 DMX channels.
- Allows RGBW control via DMX input, using two 8bit channels per colour. Internal chase effects are not available within this mode.

PixelLine personalities are available for a variety of controllers. Please see www.pixelrange.com for details.

Factory reset (perform this prior to new use)

To clear previous settings: At the rear panel, press the middle two buttons () and) for two seconds while the current address and mode are being displayed. The four digit display will show FRET then SET to indicate that the fixture has been returned to its default condition. This is useful to remove any settings that might cause confusion in a new configuration (e.g. master intensity settings).

General notes

- Ensure that only one DMX device in the chain is set as master (e.g. the lighting desk). This fixture is usually set to slave mode.
- This fixture is shipped with the DMX address set to 001.
- The four digit display can be set to switch off when not in use. To restore, press . To alter this mode use: PERS > dISP.



Using the menu

- When not in the menu, the four digit display scrolls the current DMX address and mode. The display's right hand decimal point (data dot) is used to indicate status (see below).
- Use \bigcirc and \bigcirc 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 b 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 internal chase effects that are selectable either via the control menu (PR $_{\Box}$ 5 > L 1/L2 > EFEC) or using DMX values sent from an external source. To use the internal effects, set the MadE option either to EF M (for internal menu control) or 4+E, 5+E or 6 1+E (for external DMX control).

DMX value	EFEC valu	Chase effect description
0-3		Off
4-7	1	Rainbow forward chase (6 cell)
8-11	02	Rainbow reverse chase (6 cell)
12-15	88	Cool white forward chase (6 cell)
16-19	۵H	Cool white reverse chase (6)
20-23	85	Cool white outer/inner/outer chase
24-27	86	50/50 duty cycle cool white strobe
28-31	07	50/50 duty cycle red strobe
32-35	80	50/50 duty cycle purple strobe
36-39	88	50/50 duty cycle yellow strobe
40-43	10	50/50 duty cycle green strobe
44-47	1 1	Pulse white strobe
48-51	12	Pulse light blue strobe
52-55	13	Pulse rainbow strobe
56-59	14	Pulse red/green/blue strobe
60-63	15	Rainbow forward strobe (cells together)
64-67	15	Rainbow reverse strobe (cells together)
68-71	17	Yellow/blue strobe (cells together)
72-75	18	Horizontal split rainbow chase
76-79	19	6 cell yellow/blue chase
80-83	20	6 cell red/blue chase
84-87	21	3 cell red/yellow chase
88-91	22	3 cell RGB forward chase
92-95	23	3 cell rainbow forward chase
96-99	24	3 cell RGB reverse chase
100-103	25	Static salmon pink

124-127 31 Static cool white [These are not yet confirmed]

116-119 29 Static red

120-123 ∃☐ Static green

Static yellow

Static purple

Static light blue

104-107 25

108-111 27

112-115 28

Master/slave/data indication

The right hand decimal point (data dot) of the display is used to indicate the master/slave settings and also the presence of a DMX input signal, as shown below:



Data dot ON	Master mode
Data dot FLASHING	Slave mode (DMX data input present)
Data dot OFF	Slave mode (no DMX data present)

Notes:

- Ensure that only one DMX device in the chain is set as master (e.g. the desk).
- Use PERS > dRTR to change between master and slave modes.
- When set to master mode, the fixture will scroll MRSTER in place of a DMX address (when not within the menu).
- If the display has been set to auto off (dISP > RaFF), the data dot will remain active but at a lower brightness.

DMX links and termination

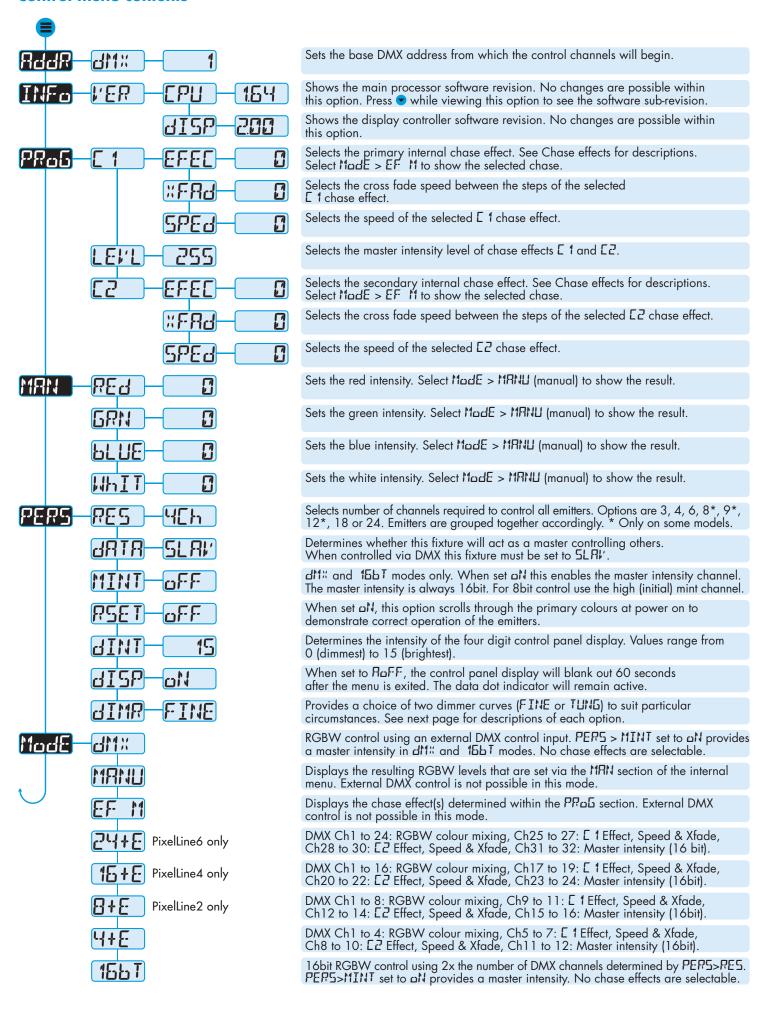
This section provides useful advice for gaining reliable operation from your DMX installation:

- Use good quality flexible twisted pair cable that has a nominal characteristic impedance of 120 ohms. Microphone cables have a lower impedance and a higher capacitance, which can lead to data errors.
- Use a daisychain arrangement to link fixtures together, so that the output of one fixture is connected to the input of the next.
- Connect no more than 32 devices to a single DMX run. If further fixtures are needed, then use a DMX booster to allow up to 32 more fixtures to be at-
- Never split a DMX cable to form two branches (a Y-split). If separate branches are required, use a powered DMX splitter.
- Ensure that the devices at each end of the daisychain are both terminated using a 120 ohm resistor (usually contained within a separate XLR connector that has no cable - the resistor forms a link between pins 2 and 3). Control desks are usually internally terminated.

It is possible to get away with breaking some of the above rules, particularly on smaller installations that have short cable runs and few fixtures. However, results can be unpredictable and problems will inevitably hit you at the very worst time: During your show.

Please see the 'Troubleshooting' section for useful fault finding tips.

Control menu contents



Channel layouts for remote effects modes

The table below shows how colour mixing, chase effects, master intensity and dimmer select controls are mapped to DMX channels for the 4+E, 5+E and 5 1+E modes. In all modes, the first channel of the fixture occurs at the DMX address selected using RddR and successive channels for the fixture follow from there.

Channe	1 4+E	B+E	15+E	24+E			
1	R (all cells)	R (cell A)	R (cell A)	R (cell A)			
2	G (all cells)	G (cell A)	G (cell A)	G (cell A)			
3	B (all cells)	B (cell A)	B (cell A)	B (cell A)			
4	W (all cells)	W (cell A)	W (cell A)	W (cell A)			
5	E 1 Effect	R (cell B)	R (cell B)	R (cell B)			
6	E 1 Speed	G (cell B)	G (cell B	G (cell B			
7	E 1 Xfade	B (cell B)	B (cell B)	B (cell B)			
8	E2 Effect	W (cell B)	W (cell B)	W (cell B)			
9	E2 Speed	E 1 Effect	R (cell C)	R (cell C)			
10	[2 Xfade	E 1 Speed	G (cell C)	G (cell C)			
11	Master int.(c)	E 1 Xfade	B (cell C)	B (cell C)			
12	Master int.(f)	E2 Effect	W (cell C)	W (cell C)			
13		E2 Speed	R (cell D)	R (cell D)			
14	All models	E2 Xfade	G (cell D)	G (cell D)			
15		Master int.(c)	B (cell D)	B (cell D)			
16		Master int.(f)	W (cell D)	W (cell D)			
1 <i>7</i>		D:II:O	E 1 Effect	R (cell E)			
18		PixelLine2 only	E 1 Speed	G (cell E)			
19		Only	E 1 Xfade	B (cell E)			
20			C2 Effect	W (cell E)			
21			E2 Speed	R (cell F)			
22			E2 Xfade	G (cell F)			
23			Master int.(c)	B (cell F)			
24			Master int.(f)	W (cell F)			
25			PixelLine4	E 1 Effect			
26			only	E 1 Speed			
27			,	E 1 Xfade			
28				E2 Effect			
29				E2 Speed			
30				E2 Xfade			
31				Master int.(c)			
32				Master int.(f)			
(c) =	Coarso or hig	h channol (4) -	Fino or	PixelLine6			
	(c) = Coarse or high channel, (f) = Fine or low channel. For 8-bit master intensity control,						

low channel. For 8-bit master intensity control, use the high (coarse) intensity channel.

Channel layouts for DMX mode on PixelLine2

When using dM mode, the manner in which LED emitters are assigned to DMX channels is directly determined by the PERS > RES option. The dM mode does not use chase effects. The first channel of the fixture occurs at the DMX address selected using RddR and successive channels for the fixture follow from there.

Channe	I amx	dMX	dМж	dМж
	(RES=3)	(RES=4)	(RES=6)	(RES=8)
1	R (all cells)	R (all cells)	R (cell A)	R (cell A)
2	G (all cells)	G (all cells)	G (cell A)	G (cell A)
3	B (all cells)	B (all cells)	B (cell A)	B (cell A)
4	Mast. int. (c)*	W (all cells)	R (cell A)	W (cell A)
5	Mast. Int. (f)*	Mast. int. (c)*	G (cell A)	R (cell B)
6		Mast. Int. (f)*	B (cell A)	G (cell B)
7			Mast. int. (c)*	B (cell B)
8			Mast. Int. (f)*	W (cell B)
9				Mast. int. (c)
10				Mast. Int. (f)*

^{*} The 16-bit master intensity channels are enabled only when the PERS > MINT option is set to aN. For 8-bit master intensity control, use the high (coarse) intensity channel.

PixelLine2 > cell B cell A PixelLine4 > cell C cell B cell A

cell D

cell C

cell B

cell E

PixelLine6 >

⁽c) = Coarse or high channel, **(f)** = Fine or low channel. For 8-bit master intensity control, use the high (coarse) intensity channel.

Channel layouts for DMX mode on PixelLine4

When using diff mode, the manner in which LED emitters are assigned to DMX channels is directly determined by the PERS > RES option. The diff mode does not use chase effects. The first channel of the fixture occurs at the DMX address selected using RddR and successive channels for the fixture follow from there.

Channel		d11∺	41 1%	₫ 11%	dMx	311 %
	(RES=3)	(RES=4)	(RES=6)	(PE5=8)	(PES=12)	(RES=16)
1	R (all cells)	R (all cells)	R (cells A+B)	R (cells A+B)	R (cell A)	R (cell A)
2	G (all cells)	G (all cells)	G (cells A+B)	G (cells A+B)	G (cell A)	G (cell A)
3	B (all cells)	B (all cells)	B (cells A+B)	B (cells A+B)	B (cell A)	B (cell A)
4 /	Mast. int. (c)*	W (all cells)	R (cell C+D)	W (cells A+B)	R (cell B)	W (cell A)
5 I	Mast. Int. (f)*	Mast. int. (c)*	G (cell C+D)	R (cells C+D)	G (cell B)	R (cell B)
6		Mast. Int. (f)*	B (cell C+D)	G (cells C+D)	B (cell B)	G (cell B)
7			Mast. int. (c)*	B (cells C+D)	R (cell C)	B (cell B)
8			Mast. Int. (f)*	W (cells C+D)	G (cell C)	W (cell B)
9				Mast. int. (c)*	B (cell C)	R (cell C)
10				Mast. Int. (f)*	R (cell D)	G (cell C)
11					G (cell D)	B (cell C)
12					B (cell D)	W (cell C)
13					Mast. int. (c)*	R (cell D)
14					Mast. Int. (f)*	G (cell D)
15						B (cell D)
16						W (cell D)
1 <i>7</i>						Mast. int. (c)*
18						Mast. Int. (f)*

^{*} The 16-bit master intensity channels are enabled only when the PER5 > MINT option is set to aN. For 8-bit master intensity control, use the high (coarse) intensity channel.

Channel layouts for DMX mode on PixelLine6

When using diff mode, the manner in which LED emitters are assigned to DMX channels is directly determined by the PERS > RES option. The diff mode does not use chase effects. The first channel of the fixture occurs at the DMX address selected using RddR and successive channels for the fixture follow from there.

Channe	d dM% (RES=3)	dh:: (RES=4)	dМ∺ (RES=6)	дМ× (RES=8)	ам; (RES=9)	ан: (RES=12)	аМ∺ (RES=18)	dМ: (RES=24)
1	R (all cells)	R (all cells)	R (cells A+B+C)	R (cells A+B+C)	R (cells A+B)	R (cells A+B)	R (cell A)	R (cell A)
2	G (all cells)	G (all cells)	G (cells A+B+C)	G (cells A+B+C)	G (cells A+B)	G (cells A+B)	G (cell A)	G (cell A)
3	B (all cells)	B (all cells)	B (cells A+B+C)	B (cells A+B+C)	B (cells A+B)	B (cells A+B)	B (cell A)	B (cell A)
4	Mast. int. (c)*	W (all cells)	R (cells D+E+F)	W (cells A+B+C)	R (cells C+D)	W (cells A+B)	R (cell B)	W (cell A)
5	Mast. Int. (f)*	Mast. int. (c)*	G (cells D+E+F)	R (cells D+E+F)	G (cells C+D)	R (cells C+D)	G (cell B)	R (cell B)
6		Mast. Int. (f)*	B (cells D+E+F)	G (cells D+E+F)	B (cells C+D)	C (cells C+D)	B (cell B)	G (cell B)
7			Mast. int. (c)*	B (cells D+E+F)	R (cells E+F)	B (cells C+D)	R (cell C)	B (cell B)
8			Mast. Int. (f)*	W (cells D+E+F)	G (cells E+F)	W (cells C+D)	G (cell C)	W (cell B)
9				Mast. int. (c)*	B (cells E+F)	R (cells E+F)	B (cell C)	R (cell C)
10				Mast. Int. (f)*	Mast. int. (c)*	G (cells E+F)	R (cell D)	G (cell C)
11					Mast. Int. (f)*	B (cells E+F)	G (cell D)	B (cell C)
12						W (cells E+F)	B (cell D)	W (cell C)
13						Mast. int. (c)*	R (cell E)	R (cell D)
14						Mast. Int. (f)*	G (cell E)	G (cell D)
15							B (cell E)	B (cell D)
16							R (cell F)	W (cell D)
1 <i>7</i>							G (cell F)	R (cell E)
18							B (cell F)	G (cell E)
19							Mast. int. (c)*	B (cell E)
20							Mast. Int. (f)*	W (cell E)
21								R (cell F)
22								G (cell F)
23								B (cell F)
24								W (cell F)
25								Mast. int. (c)*
26			DMV shannel lave	ute chacked on unite				Mast. Int. (f)*

⁽c) = Coarse or high channel, (f) = Fine or low channel. For 8-bit master intensity control, use the high (coarse) intensity channel.

Troubleshooting

- Display panel is blank: Press a control panel button, if the display still does not show, check the input power and fuse.
- No response during DMX control: Check whether a master intensity input is required. 4+E, 8+E, 15+E and, 24+E modes always require a master intensity input. 411% and 15bT have an optional master intensity, depending on the setting of PERS > MINT. If the MINT setting is aN then no output will occur until a level greater than zero is applied to the master intensity channel(s). See pages 4 and 5 for details.

Note: It is good practice to perform a factory reset before these fixtures are used on any new installation.

This will ensure that settings like the MINT option are set to off and do not create the potential for confusion. See page 1 for details of how to perform a factory reset.

- No response during DMX control: If live DMX is connected, the right hand decimal point on the display should flash - if not, check the DMX cable(s) and the desk output.
- Erratic operation during DMX control: Check that the final fixture within the DMX daisy chain is correctly terminated with a 120 ohm terminator plug.
- Erratic operation during DMX control: Check that the selected *1adE matches the personality being used on the control desk.
- Erratic operation during DMX control: Ensure that only one DMX device in the daisy chain is set as master.
- Rapid colour/intensity changes not occurring:
 Check whether the tungsten dimmer mode is selected (PERS > dIMR > TUNG). This would slow the reaction times of the emitters and could mean that rapid changes are blended into each other.
 Choose FINE for a faster reacting dimmer mode.
- Standalone chase effects not working: Check that a chase has been programmed using PRaG > E 1 and/or PRaG > E2 and also that MadE > EF M is selected. Check also that PRaG > LEVL is not set at zero.
- Standalone RGBW mixing not working: Check that one or more colour values have been set within MAN section and also that the MadE > MANU is selected.

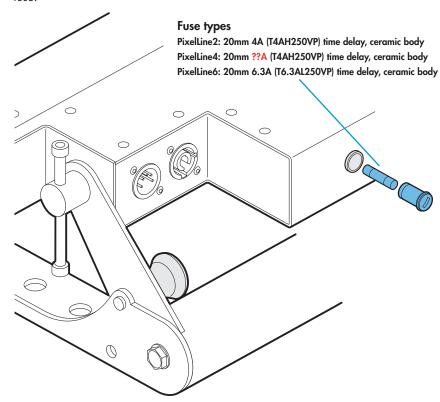
Firmware upgrades

Firmware upgrades are released from time to time in order to provide new operational features. The PixelLine has been designed to allow straightforward firmware upgrading via its DMX interface, a PixelU2D USB device and a computer.

Please contact PixelRange technical support for details.

Fuse access

The single fuse is located on the rear panel. Use a small flat blade screw driver to twist the fuse holder anti-clockwise until the carrier can be extracted to reveal the fuse



Using master mode to drive other units

This unit can control any number of other PixelRange fixtures via DMX links, without the need for a control desk.

- 1 Set this unit as **master** (PERS > dRTR > MRST) and ensure all others are set to **slave** (PERS > dRTR > SLRF). Connect all fixtures via DMX daisy-chain.
 - Note: Don't forget to terminate the devices at either end of the chain see the section 'DMX links and termination'.
- 2 Set each slave to MadE > dMX.
- 3 Set the master to either create chases or static colours:

Chases: Select MadE > EF M and then use PPaE > E 1 and E2 to create the required effects (see the 'Chase effects' table).

Static colours: Select MadE > MRNU and then use MRN > REd, GRN, bLUE and WhIT to mix the colour.

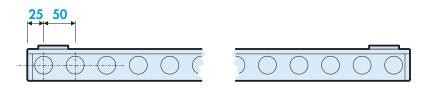
Note: The setting of PERS > RES determines how the DMX channels are output when mixing static colours: PERS > RES=4 (or 96 or 144) sends out separate red, green, blue and white levels in repeated 4 channel blocks: i.e. 1 to 4, 25 to 28, etc. The RES=1 setting links all DMX output channels so that all emitters can be controlled by a single setting (MRN > REd).

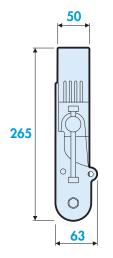
- 4 Set each slave DMX address (using 뭐리너무 > 네게;) as appropriate:
 - For static colour mixing you can either set all fixtures to DMX channel 1 or position them at the beginning of the four channel cells: ADD 1, ADD25, ADD49, ADD37 or A121. The outputs within each cell will be the same.
 - For chases, six separate cells are output in groups of 4 DMX channels to give RGBW values per cell. Set the address of each slave fixture according to which of the 6 cells you want them to appear within, or to begin with (for multi-cell fixtures): (ADD 1 for cell A, ADD 5 for cell B, ADD 6 for cell C, ADD 7 for cell D, ADD 7 for cell E or A 12 1 for cell F).

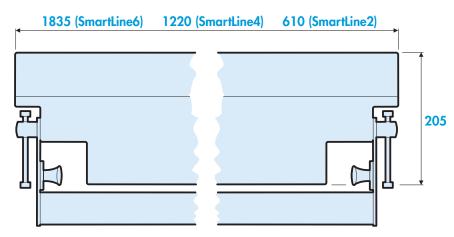
Master mode not fully checked on unit

Specifications

Dimensions







Dimensions not fully checked on units

Weight

Fixture and yoke: approx. 16kg (35.3 lbs) (PixelLine6) approx. 12kg (26.5 lbs) (PixelLine4) approx. 6kg (13.2 lbs) (PixelLine2)

Power

Input voltage: 100 to 240V AC, 47 to 63Hz autosensing

Earth leakage 0.39mA?

Connectors: Supplied with cable only: live, neutral & earth

Power requirements: @ 230V/50Hz @ 115V/60Hz

Standby 3 watts 3 watts

Maximum (const.) 330 watts 330 watts (PixelLine6)

Maximum (const.) 220 watts (PixelLine4)

Start up (peak*) ?? amps ?? amps

* The peak value occurs only at first power up and lasts only for a period measured in microseconds.

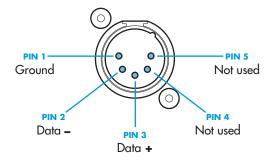
Approvals



Miscellaneous

Enclosure rating: IP20 (not protected against moisture ingress)

Control input: USITT DMX512 (input connector pin out below)



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Important

If closely stacking PixelLine units, it is important to reduce the output intensity to no more than 30% of the maximum, in order to prevent overheating.

The PixelLine units are equipped with heat sensors throughout their circuitry to ensure protection. The units will begin to reduce output automatically (in stages) once the internal temperature exceeds 60°C.



