### General set up

1. 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 a safety wire rated to a minimum of 11 kg (25 lbs) 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. 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.

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

#### Important
- When daisy-chaining fixtures, do not exceed a total load of 3 kW in a single daisy chain (subject to supply and cabling restrictions). Maximum power requirements per fixture: Micro Wash units - 66 watts. See also the ‘Start up (peak)’ note on page 4.

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

### Operation modes

The PixelLine Micro Wash fixture provides a range of operation modes. These are selected using the **MANU** section of the control menu:

- **dm**: Allows RGBA control via DMX input. Using the RES (resolution) option you can determine the number of DMX channels required: either 3 or 4 channels. In 3 channel mode, the red and amber channels are combined, whereas in 4 channel mode, the red and amber channels are controlled separately. Internal chase effects are not available within this mode.

- **MANU**: Provides RGBA colour mixing independently of any external control. Use the internal control menu (**MAN** section) to select the required colour values.

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

- **4+E**: Provides control of RGBA mixing and selection of the dual internal chase effects via DMX input. Requires 11 DMX channels.

PixelLine Micro fixture personalities are available for a variety of controllers. Please see [www.pixelrange.com](http://www.pixelrange.com) for details.

### Neutrik® PowerCon® (NAC3FCA) connector wiring

- **Neutral**
- **Live**
- **Earth**

**Note**
- To optionally clear all previous settings: At the rear panel, press the middle two buttons ( and ) while the DMX address is displayed (e.g. A001, A002, etc). The four digit display will show FACT then SET to indicate that the fixture has been returned to its default condition.
Menu operation

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 00 1.
- The four digit display can be set to switch off when not in use. To restore, press 4. To alter this mode use: PEPS > dISP.

Using the menu
- When not in the menu, the four digit display shows the current DMX address e.g. A001. Some of the display’s decimal points are used to indicate status (see below).
- Press MENU to enter the menu. The four digit display will show Addr.
- Use UP and DOWN to move between menu options (or to change a value within an option).
- Press MENU 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 MENU to fix a value, operation will revert to the previously set mode at the next power on.
- Press EXIT 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 (PEPS > E/E2 > EFEC) or using DMX values sent from an external source. To use the internal effects, set the Hade option either to EF (to control effects via the menu) or 44E (to control effects externally via DMX). See page 4 for details about controlling effects on other fixtures via DMX without using a control desk.

### DMX value | EFEC value | Chase effect description
--- | --- | ---
07  | 00  | Off
8.15 | 01  | Rainbow chase forward
16.23 | 02  | Rainbow chase reverse
24.31 | 03  | 10/90 duty cycle strobe white
32.39 | 04  | 10/90 duty cycle strobe white
40.47 | 05  | 10/90 duty cycle strobe white
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  | Rainbow chase
152.159 | 19  | Yellow/blue chase
160.167 | 20  | Red/blue chase
168.175 | 21  | Red/green chase
176.183 | 22  | 50/50 duty cycle fade red
184.191 | 23  | 50/50 duty cycle fade green
192.199 | 24  | 50/50 duty cycle fade blue
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

Note: The PEPS > PES option determines the number of channels required within dH:: mode. There is a 16BT option which does not operate, do not select this option.

Channel | dH:: (PES=3Ch) | dH:: (PES=4Ch) | 44E (Wash)
--- | --- | --- | ---
1  | Red | Red | Red
2  | Green | Green | Green
3  | Blue | Blue | Blue
4  | Master intensity* | Amber | Amber
5  | - | Master intensity* | £ 1 Effect
6  | - | - | £ 1 Speed
7  | - | - | £ 1 Xfade
8  | - | - | £ 2 Effect
9  | - | - | £ 2 Speed
10 | - | - | £ 2 Xfade
11 | - | - | Master int.

* Master intensity for dH:: mode is available only when the PEPS > HINIT option is set to H.

Display indications
Three of the display’s decimal points are used to indicate the master/slave settings and also the presence of a DMX input signal, as shown below:

- **Master mode**: On when the fixture is set within master mode. Use PEPS > dRTR to change.
- **Slave mode**: On when the fixture is set within slave mode. Use PEPS > dRTR to change.
- **DMX input**: Flashes when a valid DMX input signal is detected.

Note: 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.
## Menu contents

<table>
<thead>
<tr>
<th>Mode</th>
<th>dMX</th>
<th>MANU</th>
<th>EF M</th>
<th>4+E</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Addr</strong></td>
<td>dMX</td>
<td>001</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>INFO</strong></td>
<td>VER</td>
<td>CPU</td>
<td>101</td>
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<tr>
<td></td>
<td>DISP</td>
<td>200</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PRoG</strong></td>
<td>C1</td>
<td>EFEC</td>
<td>00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FXAd</td>
<td>000</td>
<td></td>
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<tr>
<td></td>
<td>SPEd</td>
<td>000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LEVEL</td>
<td>255</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>C2</td>
<td>EFEC</td>
<td>00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FXAd</td>
<td>000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SPEd</td>
<td>000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>MAN</strong></td>
<td>RED</td>
<td>255</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>AMbr</td>
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</tr>
<tr>
<td></td>
<td>BLUE</td>
<td>255</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>GRN</td>
<td>255</td>
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<tr>
<td><strong>PERS</strong></td>
<td>RES</td>
<td>4Ch</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>DATA</td>
<td>SLAV</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MINT</td>
<td>OFF</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>dINT</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>DISP</td>
<td>ON</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Sets the base DMX address from which the control channels will begin.
- Shows the main processor software revision. No changes are possible within this option.
- Shows the display controller software revision. No changes are possible within this option.
- Selects the primary internal chase effect. See Chase effects for descriptions. Select ModE > EF M to show the selected chase.
- Selects the cross fade speed between the steps of the selected C1 chase effect.
- Selects the speed of the selected C1 chase effect.
- Selects the master intensity level of chase effects C1 and C2.
- Selects the secondary internal chase effect. See Chase effects for descriptions. Select ModE > EF M to show the selected chase.
- Selects the cross fade speed between the steps of the selected C2 chase effect.
- Selects the speed of the selected C2 chase effect.
- Sets the red intensity. Select ModE > MANU (manual) to show the result.
- Sets the amber intensity. Select ModE > MANU (manual) to show the result.
- Sets the blue intensity. Select ModE > MANU (manual) to show the result.
- Sets the green intensity. Select ModE > MANU (manual) to show the result.
- (Affects DMX mode only) Determines how DMX channels are assigned to colours. Options are 3CH (red & amber combined), 4CH & 16bT (do not use).
- Determines whether this fixture will act as a master controlling others. When controlled by DMX input, this fixture must be set to SLAV.
- Affects DMX mode only. When set to N this enables the master intensity channel for DMX mode.
- Determines the intensity of the four digit control panel display. Values range from 0 (dimmest) to 15 (brightest).
- When set to RFF, the control panel display will blank out shortly after the menu is exited. The DMX signal indications will remain active.
- RGB control using three DMX channels. MINT set to ON provides a master intensity. No chase effects are selectable.
- Displays the resulting RGB levels that are set via the MAN section of the internal menu. External DMX control is not possible in this mode.
- Displays the chase effect(s) determined within the PRoG section. External DMX control is not possible in this mode.
- DMX Ch1 to 4: RGBA, Ch5 to 7: C1 Effect, Speed & XFade, Ch8 to 10: C2 Effect, Speed & XFade, Ch11: Master intensity.
Using master mode to drive other units
This unit can control any number of other Pixel Range fixtures via DMX links, without the need for a control desk.

1 Set this unit as master (PERS > dAtA > MAST) and ensure all others are set to slave (PERS > dAtA > SLAV). Connect all fixtures via DMX daisy-chain.

2 Set each slave to MADC > d111ii.

3 Set each slave DMX address (using ADDR > d111ii) according to the following:

18 cells are output in groups of 3 DMX channels to give RGB values per cell (54 channels in total). Set the address of each slave fixture according to which of the 18 cells you want them to appear within, or to begin with (for multi-cell fixtures): (A001 for cell 1, A004 for cell 2, ... A052 for cell 18). Set RGB slave fixtures to 3 channel mode (using PERS > RES > 3CH).

4 Set the master to MADC > EF M (the master unit’s DMX address is ignored). On the master, choose the required effects to display and send to the slave fixtures using PRoG > C1 and C2.

Troubleshooting
Fixture remains at blackout when illumination expected
- The display panel (or at least one of its decimal points) should be lit - if not, check the input power and fuse.
- If live DMX is connected, the right hand decimal point on the display should flash - if not, check the DMX cable and the desk output.
- Check that the selected MADC matches the desk personality being used.
- The master intensity channel for the current mode may be set at zero. For d111ii mode, check the setting of PERS > MINT.
- Ensure that only one DMX device is set as master.
- Standalone chase effects: Effects programmed using PRoG > C1 and C2 but the fixture is not in MADC > EF M mode. Check also that MADC > PRoG > LRI’L is not set at zero.
- Standalone RGB mixing: Colour values set within MAN section but the fixture is not in MADC > MANU mode.

Fuse access
The single fuse is located on the underside panel of the fixture.

To remove the fuse
Using a flatblade screwdriver, push down the fuse cap and then twist it anti-clockwise until it disengages from the holder.

Specifications
Dimensions

Weight
Fixture and yoke: 2.1Kg (4.6lbs)

Power
Input voltage: 90 to 264V AC, 47 to 63Hz autosensing
Earth leakage 0.12mA
Connectors: Neutrik® PowerCon® (see first page for details)
Power requirements:
Standby @ 230V/50Hz @ 115V/60Hz
Maximum (const.) 2 watts 66 watts
Start up (peak*) <40 amps <20 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
Enclosure rating: IP20 (not protected against moisture ingress)
Control input: USITT DMX512 (input connector pin out below)

Miscellaneous

Note: The dimensions shown above relate to the main fixture body. The yoke knob extends 10mm (3/8") beyond the stated width of the fixture.