

QuickStart

1. Start by enabling the Rainbow test pattern on each controller and use this to test that each LED fixture functions correctly while installing. The rainbow test pattern illuminates each output of the controller in a distinct colour, with a white block that chases in a continuous loop on each output or group. Using this test pattern, the order in which the LED fixtures have been connected to the controller outputs, as well as the physical orientation of the LED fixtures can be quickly determined. Note that LED should **Always** be used with an extension cable between it and the controller; not having one can cause faults.

The colour displayed on each output of the controller when set to Rainbow test is given in Table 1 below.

Output	OP 1	OP 2	OP 3	OP 4	OP 5	OP 6	OP 7	OP 8
Colour	Red	Green	Blue	Cyan	Magenta	Yellow	Amber	Pink

Table 1 Colour order of rainbow test pattern

- 2. With the controller still running the "Rainbow" test, set the following parameters in this order:
 - 2.1. **Pixel Direction** Adjusting this will invert what "start" and "end" are referred to on other parameters.
 - 2.2. **Pixel Count** Adjusting this will remove/turn off physical pixels from the "end" of the LED. This Inverts with a change to pixel direction
 - 2.3. **Pixel Offset** Adjusting this is not always required; however, if you have changed pixel count you may be required to use this to align the remaining pixels that are on. If you are required to adjust the LED to the other end of the strip, the following calculation can give you the offset number required. 300 pixel count = Pixel Offset.

By this point you should find that you have all the required LED switched on moving in the correct direction.

- 3. Decide if any of the LED requires **Grouping**. If there is no Grouping then skip this step. If any outputs require grouping, then assign a common group number to the required outputs and unique and consecutive slot numbers that determine the order of the group. It is very important that different groups on the same controller have different group numbers, and that each slot in a group is consecutive and unique. Not following this is the most common mistake in setting up groups.
- 4. Decide If any **Virtual Canvases** are required to align/time match the LED. If no virtual canvases are required skip this step.
 - 4.1. If you want to time match the LED calculate the size of your chosen Total Canvas. It is best to do this for the largest one you are trying to match the time of. Add up all the pixels from the group (if in a group) or output. This will give you the full canvas size that the total Pixels and virtual canvas will add up to for the other outputs. Then set the outputs you want to time match with enough virtual canvas to add up to the total canvas number you calculated. This can be added on the start or end or a combination of both if you are aligning it to the Total Canvas you calculated.
 - 4.2. To align LED using the Virtual Canvas calculate the number pixels before the real pixels and add them to the "Virt Canv Start" of the output or the first output of a group.

 Then calculate the number of pixels after the real pixels and add them to the "Virt Canv End" of the output or last output of the group.
- 5. If adjusting settings with a DMX signal present it is a good idea to re-start the controller once all settings have been adjusted and resend the data signal from the lighting console or restart the test pattern.

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Troubleshooting

Problem	Possible Cause	Solution
No Power to Unit	Blown Fuse Faulty Power Feed	 Check incoming fuse and change if required. Check power feed If overheated, disconnect from mains and allow to cool off.
LEDs connected to output flicker	Wrong pixel type Wrong Voltage	 Check settings menu that correct pixel type is selected Ensure there the feed cable to the LED is between 10M-30M Try using byte receiver Try stinging power to far end of LED
LEDs Connected to output do not work.	No power to unit Blown output fuse/fuse protection Wrong pixel type Wrong Voltage	 Change/reset output fuse Ensure there the feed cable to the LED is between 10M-30M Check settings menu that correct pixel type is selected Try using byte receiver Try stinging power to far end of LED Try on known working output to check if LED is broken
Colour order of LEDs does not match lighting console	Pixel type has different order to factory default	 Use Colour order setting in output to select correct colour
No control over layers 2 or 3	Wrong channel footprint	 Change channel footprint on box to match the console. Can be changed from either the output menu or during sequential patching.

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