FLUENCE

BIOENGINEERING

RAZR2-RAZR3-RAZR4
INSTALL GUIDE

OVERVIEW

The Fluence RAZR2, RAZR3 & RAZR4 solutions utilize a central power supply enclosure to drive a full array of fixtures. These fixtures daisy-chain together across a horizontal area, or can be paired with a T-harness for vertical stacking on racks or shelving. The power supply enclosure has a dimming port to control light intensity across the full array of fixtures from 0-100% (dimmer sold separately). For best results, please consult the table below for optimal mounting heights and PPFD levels before continuing with install.

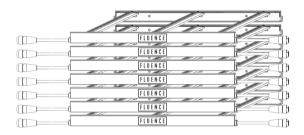
Product	Fixtures per Array	PPF Per Fixture	Recommended Mounting Height	PPFD at Recommended Mounting Height
RAZR2	10	140 μmol/s	12 inches	Avg. 125-160 μmol/m ² /s*
RAZR3	7	200 μmol/s	8 inches	Avg. 215-260 μmol/m ² /s*
RAZR4	5	280 μmol/s	5 inches	Avg. 310-375 μmol/m²/s*

^{*}PPFD averages vary based on deployment of RAZR fixtures. Higher PPFD is achieved when deployed horizontally with light-overlap.

PLEASE NOTE: Do NOT mix RAZR2, RAZR3 & RAZR4 fixtures together on the same power supply enclosure.

TO INSTALL RAZR2, RAZR3 AND/OR RAZR4 FIXTURES HORIZONTALLY YOU WILL NEED:

RAZR Fixtures



Power Supply Enclosure



Zip Ties

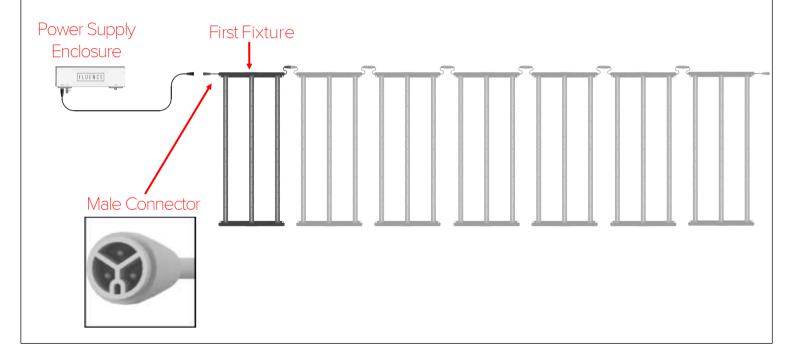


Two People



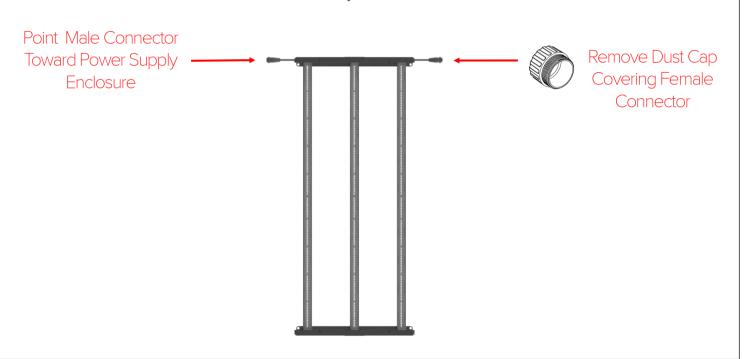
IMPORTANT!

Each fixture has a male and female DC cord extending from opposite sides of the frame. Ensure you arrange the first fixture in the series with the male connector facing toward the power supply enclosure.



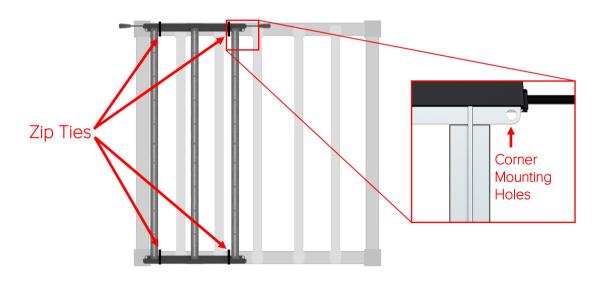
Prepare Fixtures for Mounting

Carefully unbox the RAZR fixtures and arrange them face down under the rack you wish to mount them on. Start by removing the dust cap from the female DC connector. The female connectors daisy-chain to the next fixture in the series.



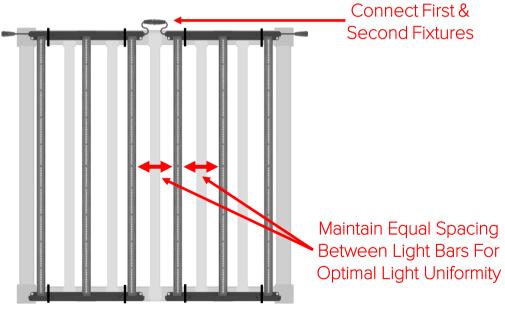
Install the 1st RAZR Fixture

With one person on each side of the rack, hold the first fixture flush to the underside of the rack. Use the provided zip ties to secure the fixture to the rack. Place zip ties on the inside of the outer bars to insure the fixture can't slip out. If zip ties do not work for your application, please use the mounting holes on each corner to bolt or screw the fixture into place.



Install the 2nd RAZR Fixture

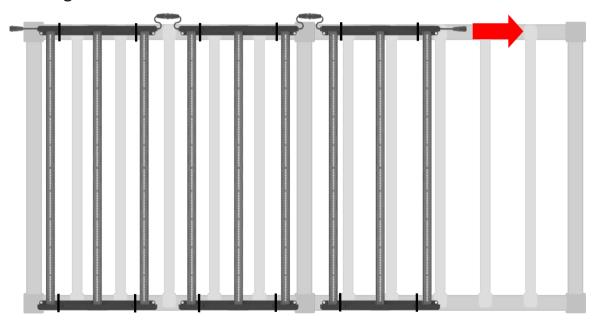
Remove the dust cap from the second fixture and position it next to the first so that the spacing between light-bars is uniform across the two fixtures. Zip tie the second fixture into place after spacing adjustments have been made, and then connect the two fixtures.





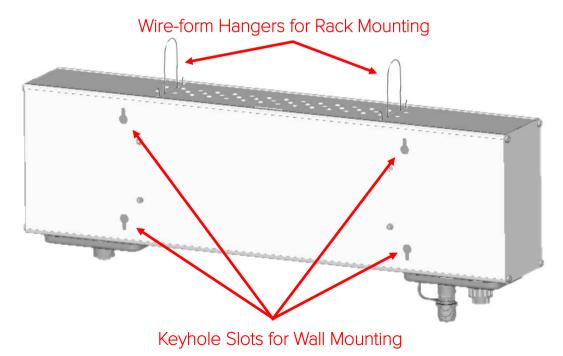
Connect the Remaining Fixtures

Repeat Step 3 for the remaining fixtures. One power supply enclosure can power up to 5 RAZR4 fixtures, 7 RAZR3 fixtures or 10 RAZR2 fixtures when daisy-chained in a series. Do NOT mix RAZR2, RAZR3 and RAZR4 modules together during installation.



Mount Power Supply Enclosure to Rack or Wall

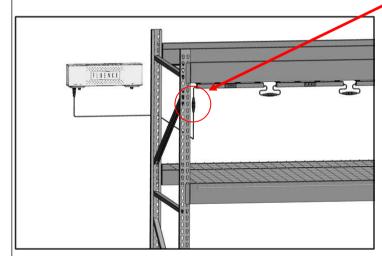
Use the included wire-form hangers to mount the power supply enclosure on the side or end of the rack, or use the keyhole slots with fasteners or dry-wall anchors to remotely mount on a nearby wall.



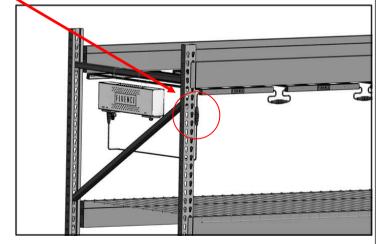
Connect Fixtures to the Power Supply Enclosure

After all fixtures have been installed, connect the provided DC cable extender to the male connector of the first fixture. Connect the other end of the DC cable extender to the power supply enclosure port marked "DC OUT".

Connect First Fixture to Power Supply Enclosure



Wall Mounted Power Supply Enclosure



Rack Mounted Power Supply Enclosure

Connect Power Supply Enclosure to AC Power

To power the array of fixtures, connect the power supply enclosure port marked "AC IN" to a nearby receptacle using the provided AC power cord. To avoid power surges that might damage your fixtures, always connect the power supply enclosure to the wall LAST. To dim the fixtures, connect a 0-10V dimmer (sold separately) to the "DIM" port located next to the "DC OUT" port. When not dimming the fixtures, the dimming port cap must remain attached or the fixtures will power off.

