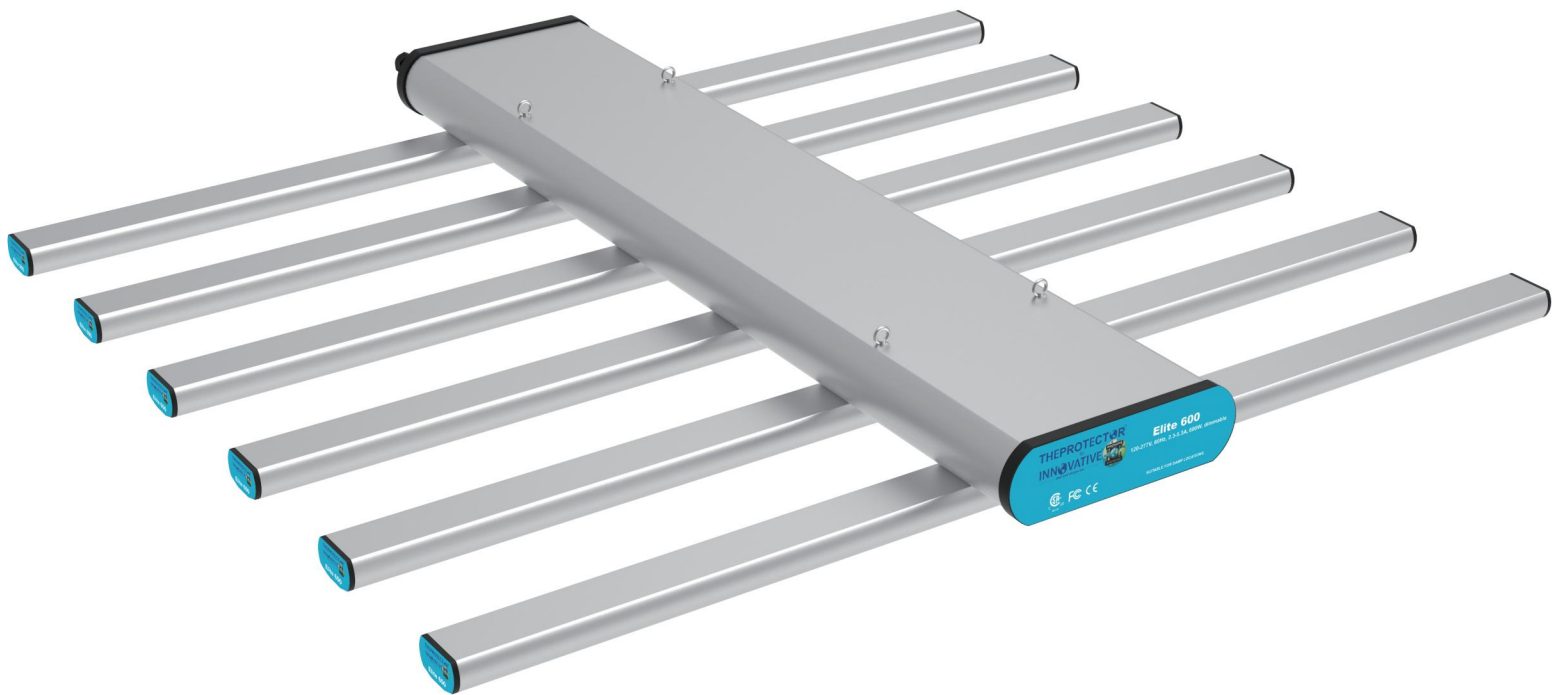


THE PROTECTOR®

by
INNOVATIVE
—tool and design inc.—



Elite 600 LED Growing Light



User Manual



Elite 645W LED Growing Light



Full Spectrum

- 380nm-780nm.
- Improve active ingredient contents

1650 $\mu\text{mol/s}^{-1}$

- Over 2.7 $\mu\text{mol/J}$ at 600w
- Saving more energy while produce more

Wet location / IP65

- Make planting easier.
- Easily sterilized.

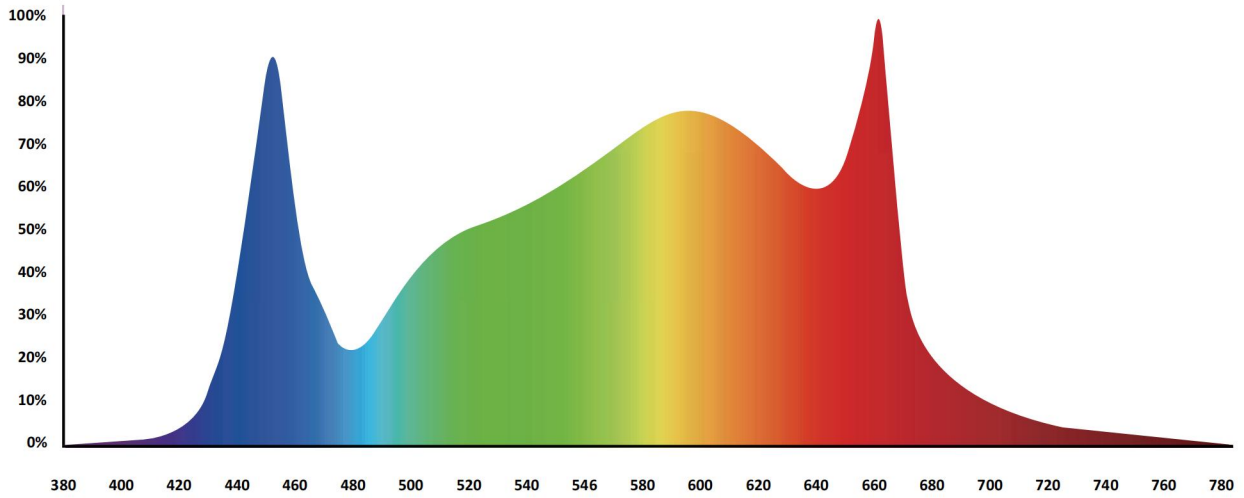
>97% light transmission

- With silicone conformal coating.

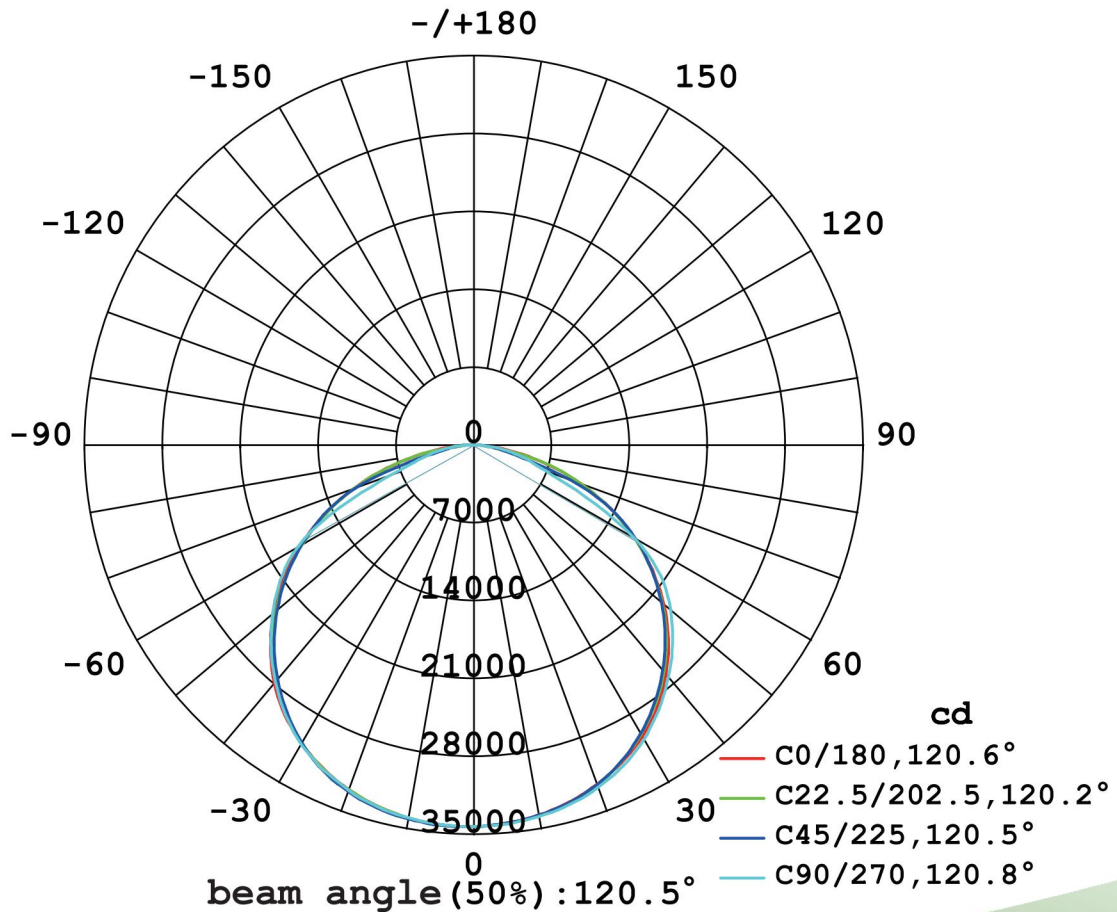
Suitable for GMP & GACP facility

- Sealed shut.
- No fans.

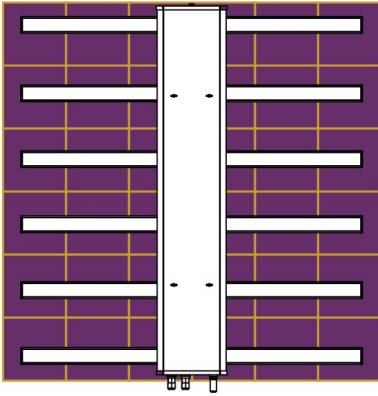
SPECTRUM



LUX DISTRIBUTION



PPFD MAP



Map Size: 1m x 1m

≥1000	800-1000	700-800	600-700	450-600	300-450	250-300
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1399	1443	1346	1346	1443	1399
1439	1554	1661	1661	1554	1439
1381	1559	1623	1623	1559	1381
1381	1559	1623	1623	1559	1381
1439	1554	1661	1661	1554	1439
1399	1443	1346	1346	1443	1399

PPFD MAP at 0.5ft

Clearance	0.5	ft
Qty	1	U
Average PPFD	1489	μmol/m ² /s
Max PPFD	1661	μmol/m ² /s
Min PPFD	1346	μmol/m ² /s
Min/Average	90.4	%
Watts	600	W

590	786	880	880	786	590
815	1041	1117	1117	1041	815
868	1113	1206	1206	1113	868
868	1113	1206	1206	1113	868
815	1041	1117	1117	1041	815
590	786	880	880	786	590

PPFD MAP at 1ft

Clearance	1	ft
Qty	1	U
Average PPFD	935	μmol/m ² /s
Max PPFD	1206	μmol/m ² /s
Min PPFD	590	μmol/m ² /s
Min/Average	63.1	%
Watts	600	W

425	530	600	600	530	425
590	750	880	880	750	590
685	885	950	950	885	685
685	885	950	950	885	685
590	750	880	880	750	590
425	530	600	600	530	425

PPFD MAP at 1.5ft

Clearance	1.5	ft
Qty	1	U
Average PPFD	699	$\mu\text{mol}/\text{m}^2/\text{s}$
Max PPFD	950	$\mu\text{mol}/\text{m}^2/\text{s}$
Min PPFD	425	$\mu\text{mol}/\text{m}^2/\text{s}$
Min/Average	60.8	%
Watts	600	W

486	508	550	550	508	486
518	641	699	699	641	518
539	659	749	749	659	539
539	659	749	749	659	539
518	641	699	699	641	518
486	508	550	550	508	486

PPFD MAP at 2.0ft

Clearance	2.0	ft
Qty	1	U
Average PPFD	594	$\mu\text{mol}/\text{m}^2/\text{s}$
Max PPFD	749	$\mu\text{mol}/\text{m}^2/\text{s}$
Min PPFD	486	$\mu\text{mol}/\text{m}^2/\text{s}$
Min/Average	81.8	%
Watts	600	W



Specifications

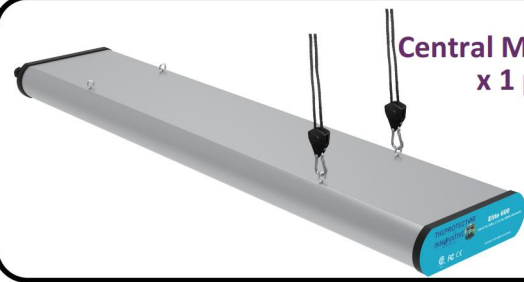
Type	Elite 600	
Amp Draw	2.7A	
Wattage	600W	
Power factor	>0.9	
PPF	1,650 $\mu\text{mol/s}$	
Efficacy	2.7 $\mu\text{mol/J}$	
BTU	2100 BTU/h	
Driver Brand	Moso	
Light source	Osram 660nm + Samsung 301b	
Dimming	Daisy Chain Digital signal(RS485): 0-100%; Analog signal (0-10Vdc): 35%-100%	
Material	6063 Aluminum	
Thermal Management	Passive Cooling	
Mounting Height	$\geq 6''$ (15.2cm) Above Plant Canopy	
Warranty	5 years	
Certifications	CE /RoHS standards	
IP rating	IP 65	
Ambient operating temperature	14 ° F ~ 104°F (-10°C ~ 40 °C)	
Lifespan	L90: >54,000 hrs	
Fixture Dimension Net Weight	L990 x W990 x H110mm xxx kg	
Packing Dimension Gross Weight		
Coverage area	Flower: 5' x 5'	Veg: 7' x 7'



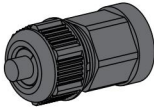
In the Box



LED Bars
x6 pce



Central Mast
x 1 pce



Waterproof Connector
x2 pce



Network Cable
x1 pce



Power Cable
x1 pce

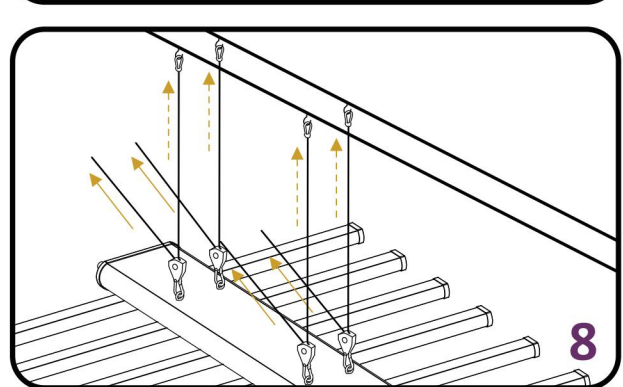
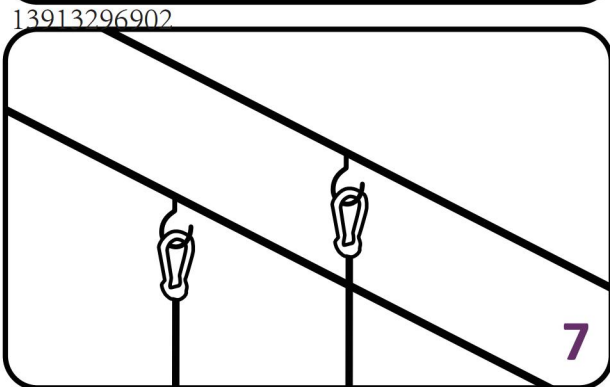
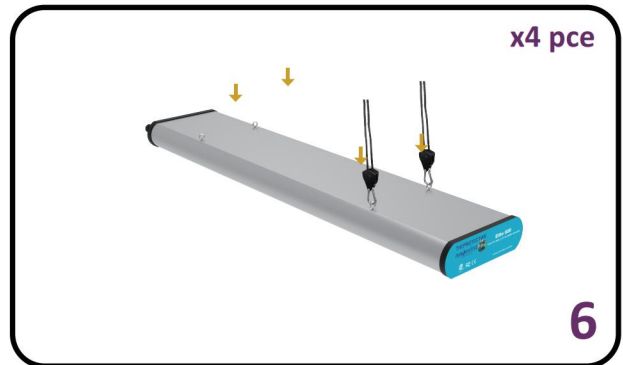
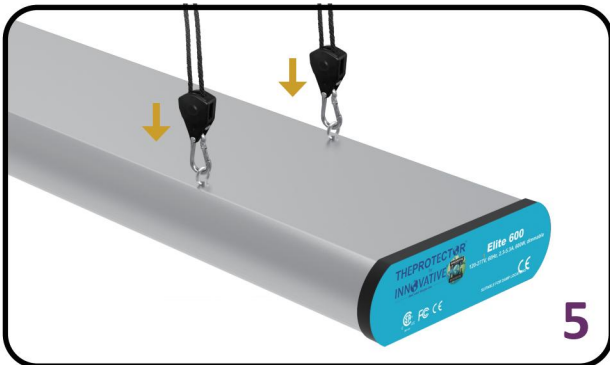
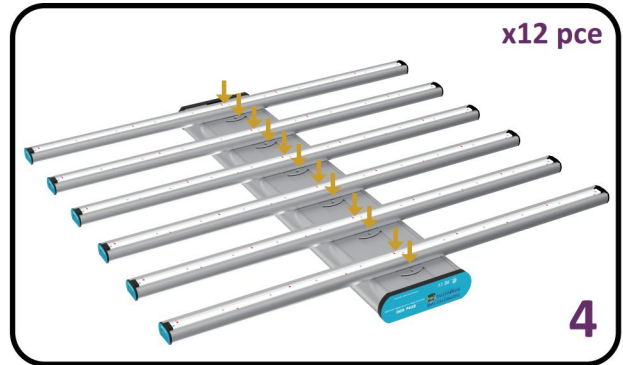
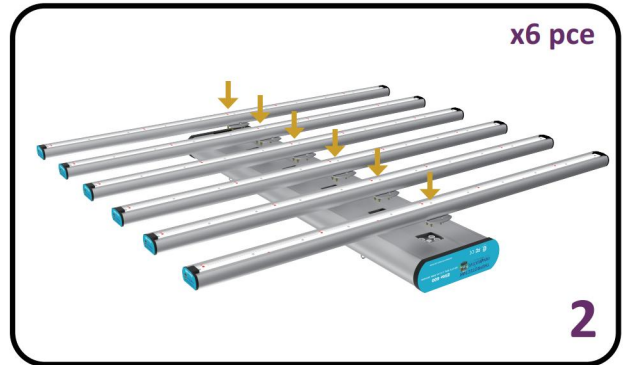


Rope Slings
x4 pce



Dummy Plug
x1 pce

Installation Instructions



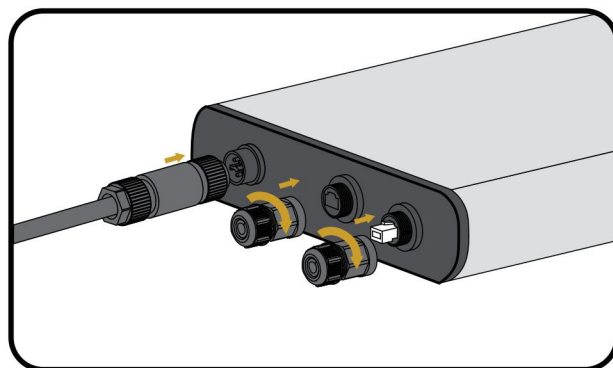
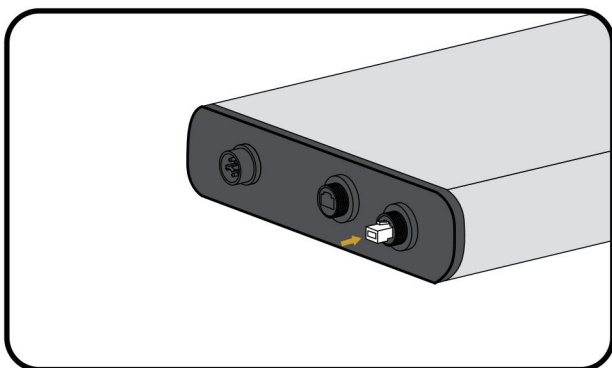
13913296902

When handling your Nova Fixture. The LED array should NOT come in contact with sharp objects. DO NOT touch diodes or apply direct force to the diodes as this can/will cause permanent damage.

Installation Precautions

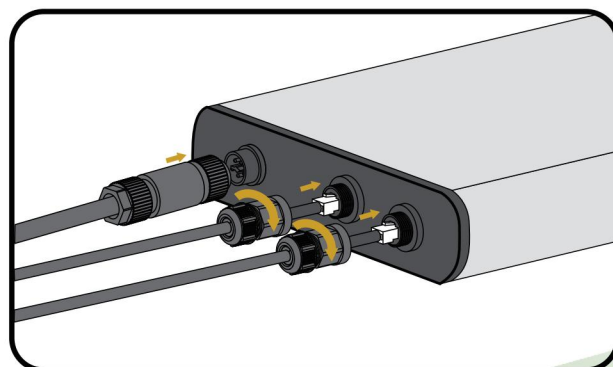
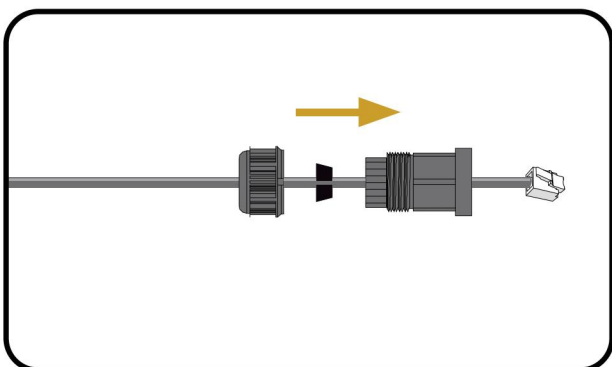
- *“THIS PRODUCT MUST BE INSTALLED BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED, IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE”.*
- *“KEEP THESE INSTALLATION INSTRUCTIONS”.*
- *For lighting equipment with cords or wiring harnesses, instructions shall include information to guide the installation such that cords:*
 - 1) *Are not concealed or extended through a wall, floor, ceiling, or other parts of the building structure,*
 - 2) *Are not located above a suspended ceiling or dropped ceiling,*
 - 3) *Are not permanently affixed to the building structure,*
 - 4) *Are routed so that they are not subject to strain and are protected from physical damage,*
 - 5) *Are visible over their entire length, and*
 - 6) *Are used within their rated ampacity as determined for the maximum temperature of the installed environment specified in the instructions.*

Non-controlled



- *Non-controlled fixtures simply operate at 100% when inserting the dummy plug into the IN terminal.*

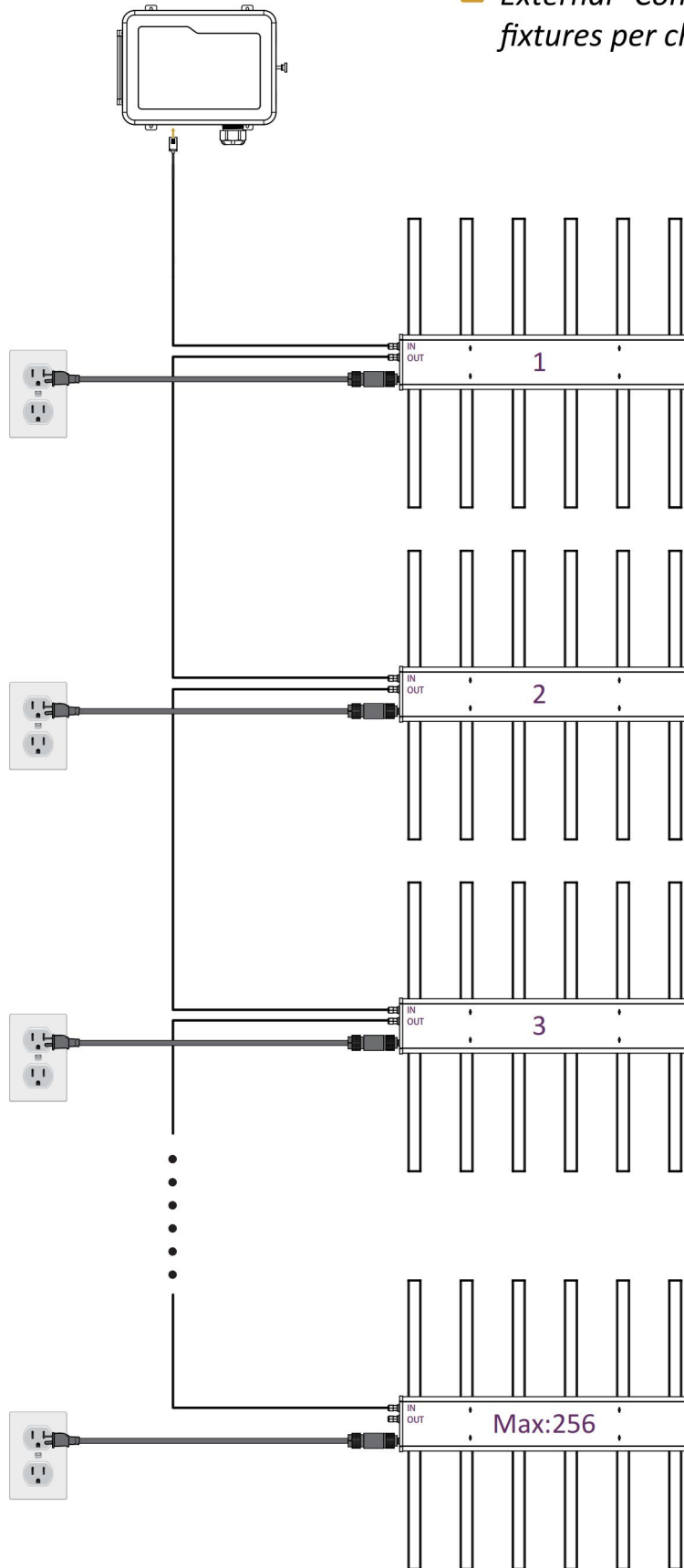
Dimmable



SUITABLE FOR DAMP LOCATIONS

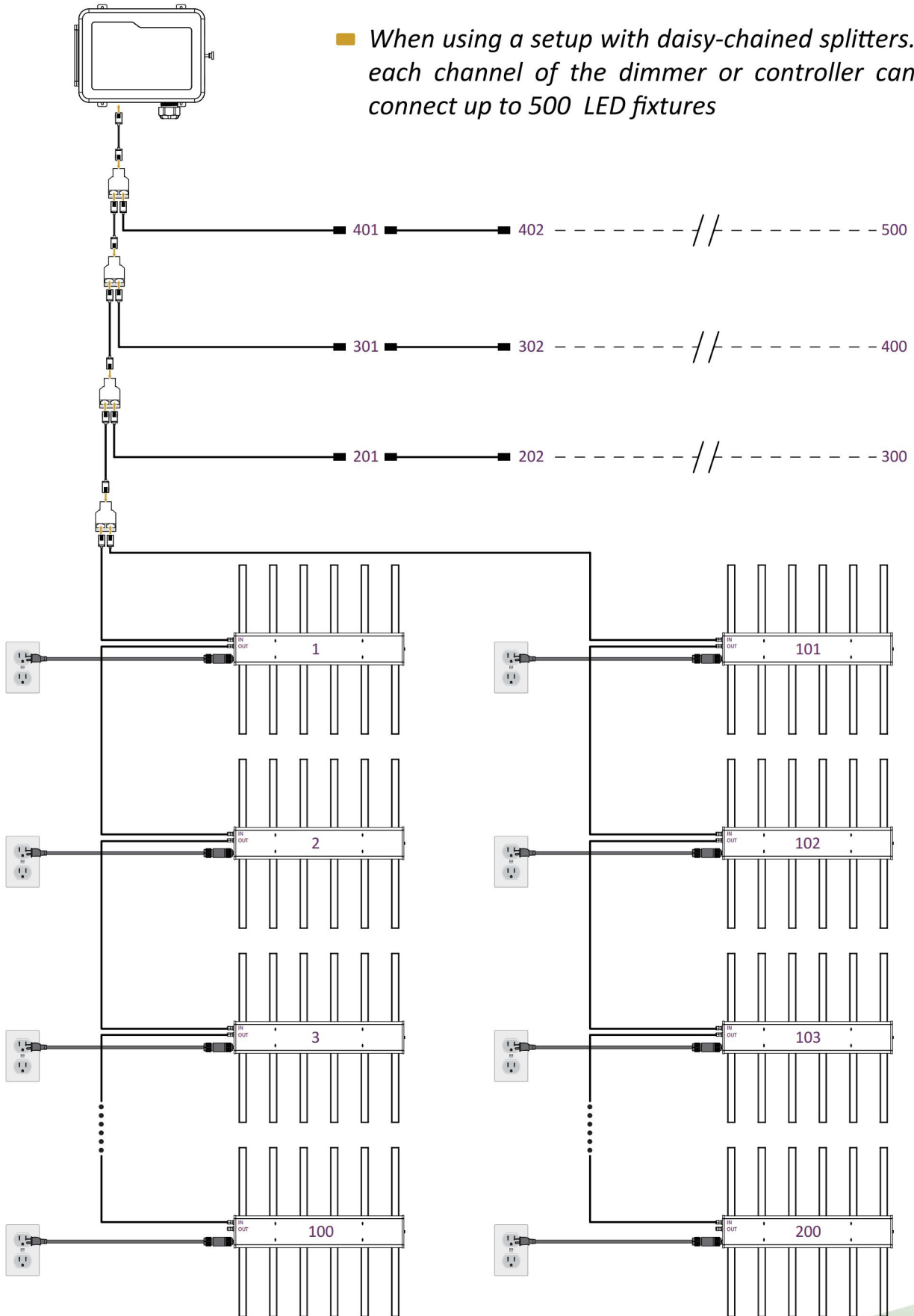
Digital signal

■ External Controllability with 256 fixtures per channel.

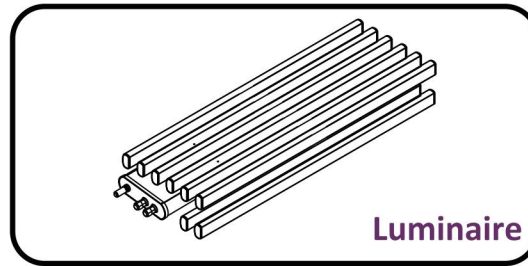


Analog signal

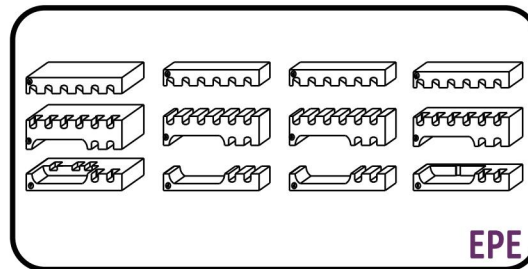
- When using a setup with daisy-chained splitters, each channel of the dimmer or controller can connect up to 500 LED fixtures



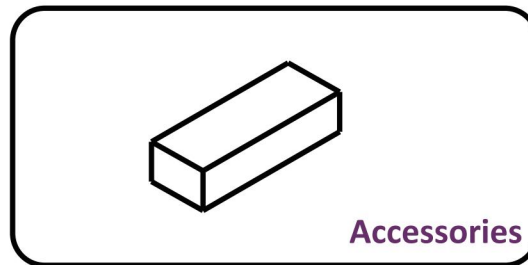
Package Diagram



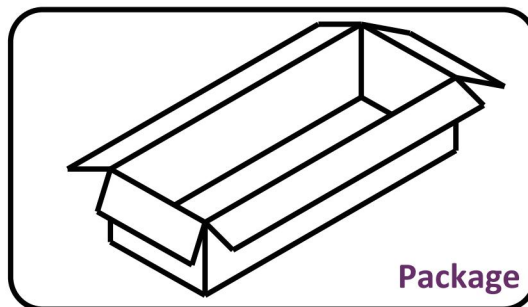
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