



Shenzhen Lite Science Electronics Co., Ltd.

Email: sales@litescienceec.com

Web: www.litescience.com

USER MANUAL

HELENOR SMART 670W



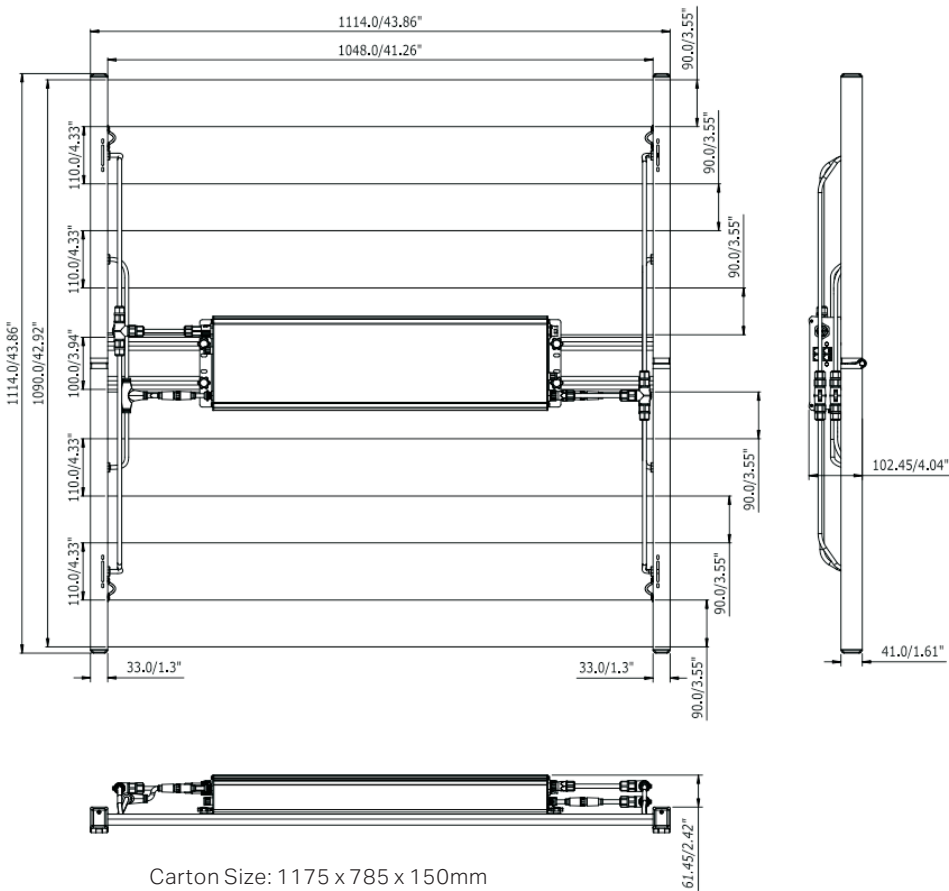
CHARACTERISTICS

- IP65 waterproof
- Adjustable Spectrum
- Knob dimming + RJ port dimming 0%~100%
- 4 separate channels that can be dimmed independently
- Fast installation
- 3 year warranty

TECHNICAL INFORMATION

Watt consumption	670W (400W+195W+45W+30W)
Input Voltage	AC 220-240V
Input current	3.3 A
Power factor	0.95
Spectrum	Adjustable Spectrum
PPF (μmol/s)	1,800 (μmol/s)
Efficacy (μmol/J)	3.03 (μmol/J) ; 2.69 (μmol/J)
Dimming	0-10V
Dimensions	1114 x 1114 x 103 mm
Protection against overvoltage	6 KV
Protection sign	IP 65
Guarantee	3 years
LED configuration	White 6500k & Deep red 660 nm & UVA 385nm & Far-Red 730nm
Power cord length	1.8 m
Max ambient temperature	35 ° C
Fixing height	>30 cm (above the canopy)
Control Channels	Channel 1: 400W (White 6500K) Channel 2: 195W (Deep Red 660nm) Channel 3: 45W (UVA 385nm) Channel 4: 30W (Far-Red 730nm)

DIMENSIONS & PACKAGE



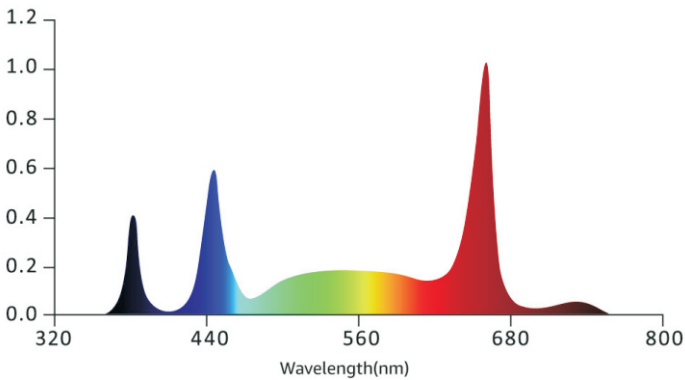
Carton Size: 1175 x 785 x 150mm

N.W. : 16.85 kgs

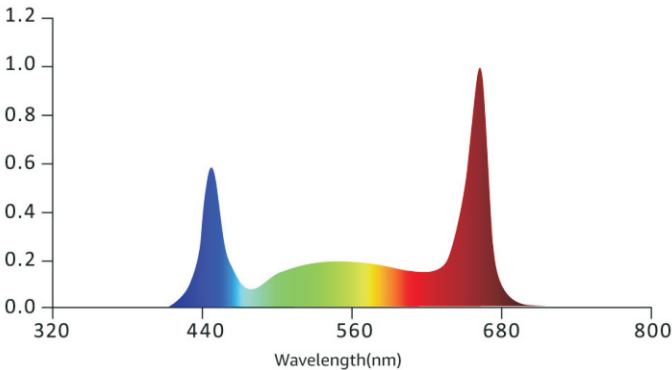
G.W.: 21.35 kgs

Qty./Ctn.: 1set

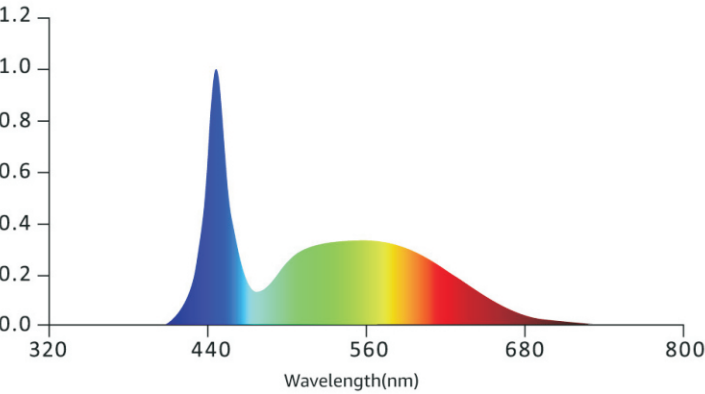
SPECTRUM EXAMPLES



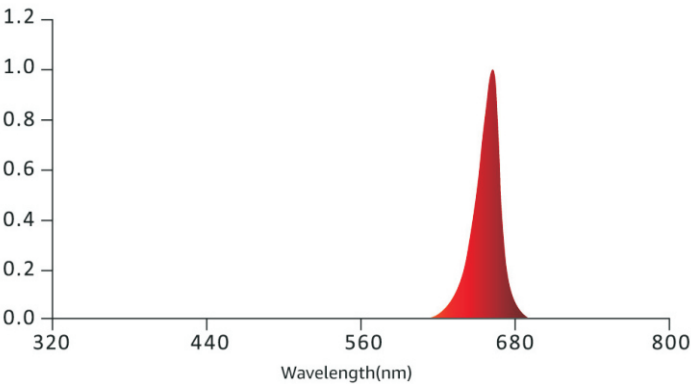
Chanel 1: 300W (White 6500K)	100% ON
Chanel 2: 150W (Deep Red 660nm)	100% ON
Chanel 3: 35W (UVA 385nm)	100% ON
Chanel 4: 25W (Far-Red 730nm)	100% ON



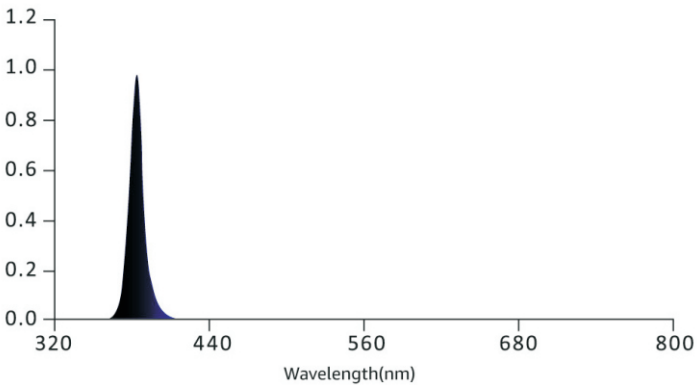
Chanel 1: 300W (White 6500K)	100% ON
Chanel 2: 150W (Deep Red 660nm)	100% ON
Chanel 3: 35W (UVA 385nm)	0% OFF
Chanel 4: 25W (Far-Red 730nm)	0% OFF



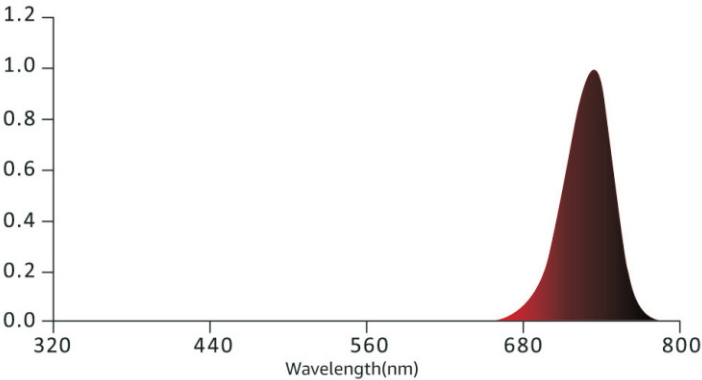
Chanel 1: 300W (White 6500K)	100% ON
Chanel 2: 150W (Deep Red 660nm)	0% OFF
Chanel 3: 35W (UVA 385nm)	0% OFF
Chanel 4: 25W (Far-Red 730nm)	0% OFF



Chanel 1: 300W (White 6500K)	0% OFF
Chanel 2: 150W (Deep Red 660nm)	100% ON
Chanel 3: 35W (UVA 385nm)	0% OFF
Chanel 4: 25W (Far-Red 730nm)	0% OFF



Chanel 1: 300W (White 6500K)	0% OFF
Chanel 2: 150W (Deep Red 660nm)	0% OFF
Chanel 3: 35W (UVA 385nm)	100% ON
Chanel 4: 25W (Far-Red 730nm)	0% OFF



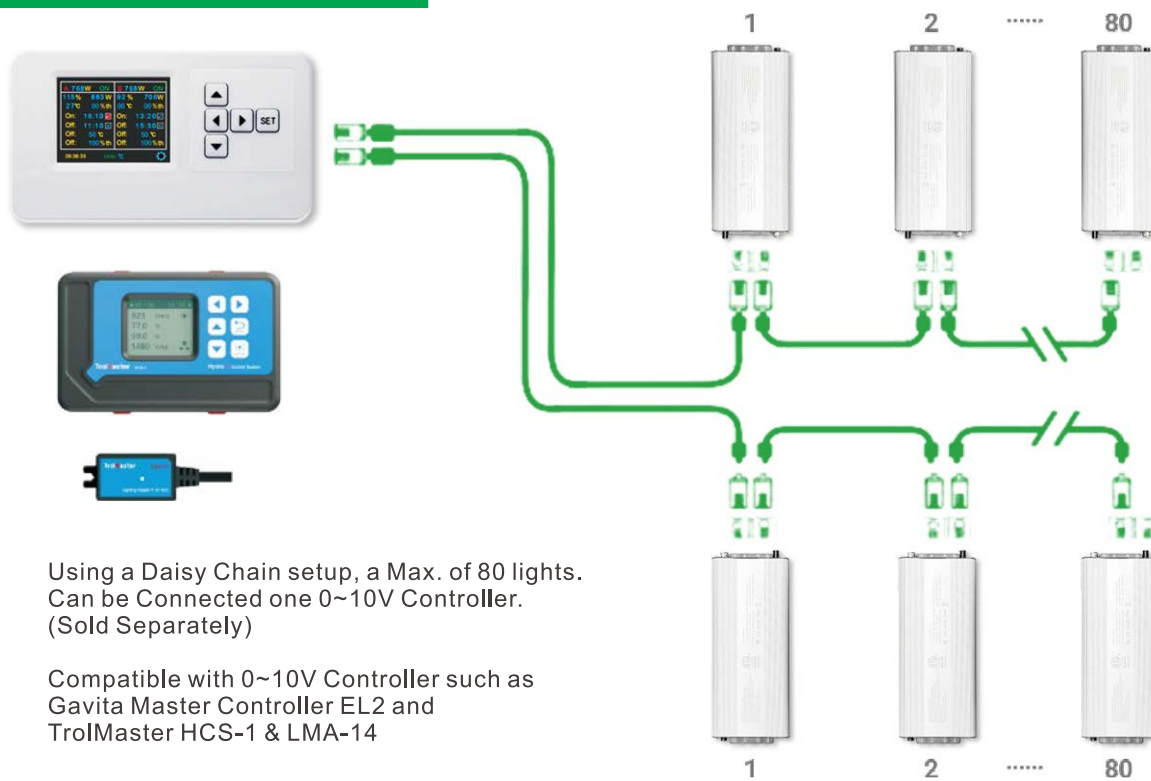
Chanel 1: 300W (White 6500K)	0% OFF
Chanel 2: 150W (Deep Red 660nm)	0% OFF
Chanel 3: 35W (UVA 385nm)	0% OFF
Chanel 4: 25W (Far-Red 730nm)	100% ON

LIGHT DISTRIBUTION

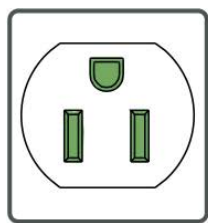
Measurements taken in a 1.2m x 1.2m culture chamber.

HELENOR SMART 670W Height: 12" (30.48cm) Average PPFD: 887μmol/m²/s 47.24" (120cm) 47.24" (120cm) <table><tr><td>383</td><td>515</td><td>561</td><td>559</td><td>552</td><td>513</td><td>399</td></tr><tr><td>646</td><td>948</td><td>1044</td><td>1045</td><td>1044</td><td>949</td><td>660</td></tr><tr><td>773</td><td>1181</td><td>1298</td><td>1304</td><td>1288</td><td>1181</td><td>786</td></tr><tr><td>802</td><td>1219</td><td>1352</td><td>1358</td><td>1345</td><td>1227</td><td>817</td></tr><tr><td>781</td><td>1166</td><td>1300</td><td>1313</td><td>1284</td><td>1184</td><td>804</td></tr><tr><td>656</td><td>938</td><td>1055</td><td>1071</td><td>1049</td><td>943</td><td>668</td></tr><tr><td>382</td><td>512</td><td>575</td><td>565</td><td>566</td><td>521</td><td>387</td></tr></table> Covering Area: 4'X4' (1.2m*1.2m) Remarks: Tested in 5' X 5' (1.5m*1.5m) grow tent.	383	515	561	559	552	513	399	646	948	1044	1045	1044	949	660	773	1181	1298	1304	1288	1181	786	802	1219	1352	1358	1345	1227	817	781	1166	1300	1313	1284	1184	804	656	938	1055	1071	1049	943	668	382	512	575	565	566	521	387	HELENOR SMART 670W Height: 18" (45.72cm) Average PPFD: 782 μmol/m²/s 47.24" (120cm) 47.24" (120cm) <table><tr><td>456</td><td>532</td><td>614</td><td>642</td><td>607</td><td>546</td><td>451</td></tr><tr><td>619</td><td>759</td><td>855</td><td>890</td><td>859</td><td>768</td><td>606</td></tr><tr><td>719</td><td>942</td><td>1038</td><td>1061</td><td>1052</td><td>953</td><td>720</td></tr><tr><td>753</td><td>983</td><td>1109</td><td>1129</td><td>1111</td><td>987</td><td>739</td></tr><tr><td>728</td><td>951</td><td>1053</td><td>1086</td><td>1051</td><td>966</td><td>727</td></tr><tr><td>612</td><td>758</td><td>864</td><td>912</td><td>867</td><td>768</td><td>593</td></tr><tr><td>452</td><td>530</td><td>621</td><td>661</td><td>608</td><td>545</td><td>452</td></tr></table> Covering Area: 4'X4' (1.2m*1.2m) Remarks: Tested in 5' X 5' (1.5m*1.5m) grow tent.	456	532	614	642	607	546	451	619	759	855	890	859	768	606	719	942	1038	1061	1052	953	720	753	983	1109	1129	1111	987	739	728	951	1053	1086	1051	966	727	612	758	864	912	867	768	593	452	530	621	661	608	545	452	HELENOR SMART 670W Height: 24" (60.96cm) Average PPFD: 705 μmol/m²/s 47.24" (120cm) 47.24" (120cm) <table><tr><td>489</td><td>561</td><td>593</td><td>612</td><td>614</td><td>578</td><td>495</td></tr><tr><td>584</td><td>691</td><td>760</td><td>781</td><td>782</td><td>702</td><td>605</td></tr><tr><td>653</td><td>779</td><td>872</td><td>894</td><td>881</td><td>795</td><td>671</td></tr><tr><td>678</td><td>818</td><td>913</td><td>940</td><td>918</td><td>833</td><td>679</td></tr><tr><td>659</td><td>787</td><td>869</td><td>902</td><td>878</td><td>793</td><td>672</td></tr><tr><td>585</td><td>687</td><td>762</td><td>784</td><td>758</td><td>693</td><td>590</td></tr><tr><td>486</td><td>561</td><td>611</td><td>630</td><td>607</td><td>572</td><td>484</td></tr></table> Covering Area: 4'X4' (1.2m*1.2m) Remarks: Tested in 5' X 5' (1.5m*1.5m) grow tent.	489	561	593	612	614	578	495	584	691	760	781	782	702	605	653	779	872	894	881	795	671	678	818	913	940	918	833	679	659	787	869	902	878	793	672	585	687	762	784	758	693	590	486	561	611	630	607	572	484
383	515	561	559	552	513	399																																																																																																																																															
646	948	1044	1045	1044	949	660																																																																																																																																															
773	1181	1298	1304	1288	1181	786																																																																																																																																															
802	1219	1352	1358	1345	1227	817																																																																																																																																															
781	1166	1300	1313	1284	1184	804																																																																																																																																															
656	938	1055	1071	1049	943	668																																																																																																																																															
382	512	575	565	566	521	387																																																																																																																																															
456	532	614	642	607	546	451																																																																																																																																															
619	759	855	890	859	768	606																																																																																																																																															
719	942	1038	1061	1052	953	720																																																																																																																																															
753	983	1109	1129	1111	987	739																																																																																																																																															
728	951	1053	1086	1051	966	727																																																																																																																																															
612	758	864	912	867	768	593																																																																																																																																															
452	530	621	661	608	545	452																																																																																																																																															
489	561	593	612	614	578	495																																																																																																																																															
584	691	760	781	782	702	605																																																																																																																																															
653	779	872	894	881	795	671																																																																																																																																															
678	818	913	940	918	833	679																																																																																																																																															
659	787	869	902	878	793	672																																																																																																																																															
585	687	762	784	758	693	590																																																																																																																																															
486	561	611	630	607	572	484																																																																																																																																															

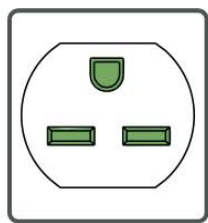
DIMMING FUNCTION AND RJ PORT



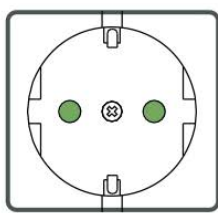
PLUG OPTIONS



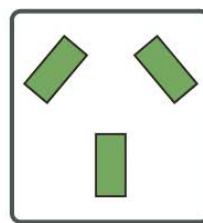
TYPE-US 120V



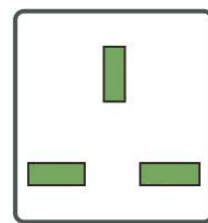
TYPE-US 240V



TYPE-EU 220V



TYPE-AU 240V

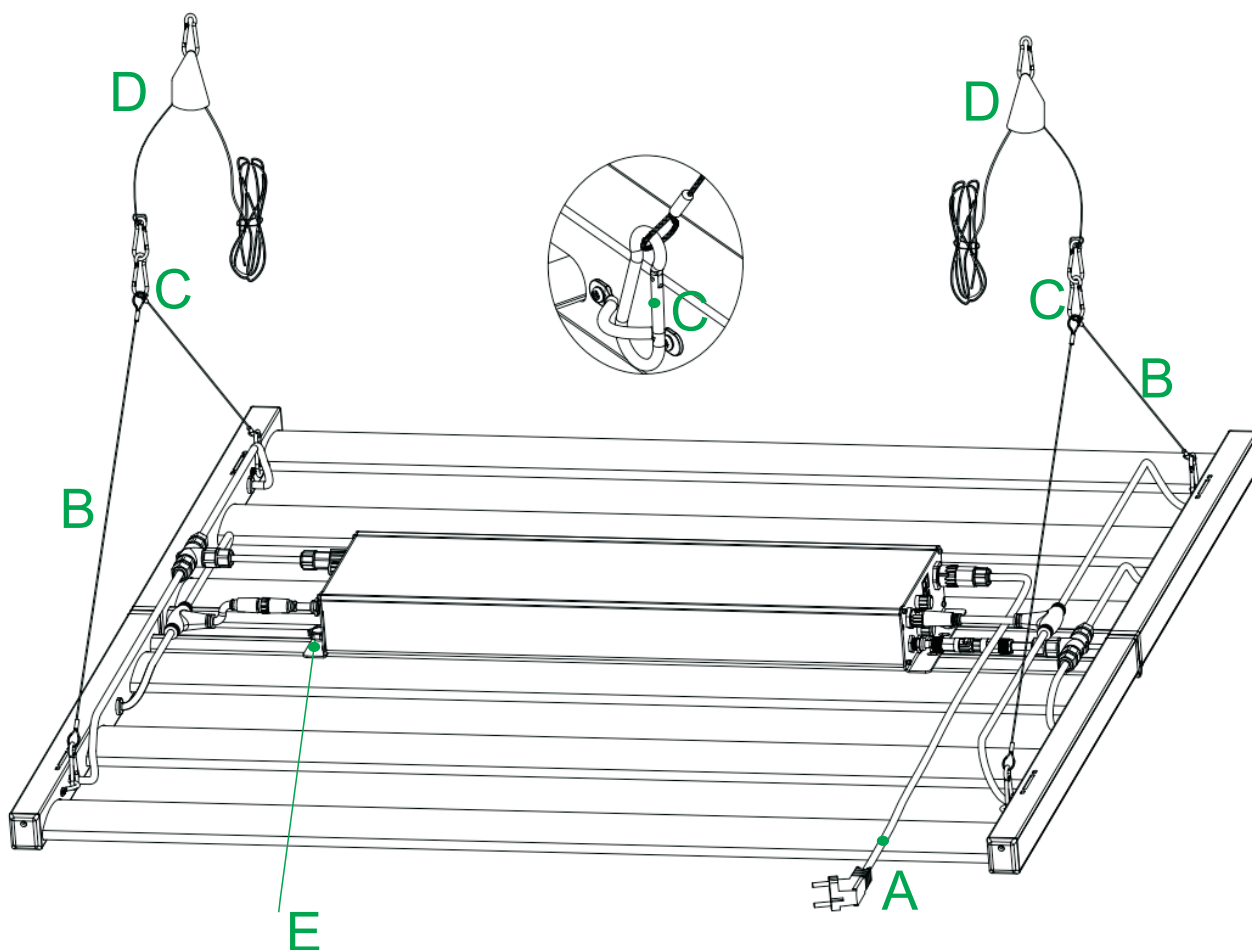


TYPE-UK 220V

ACCESSORIES CONTENTS

Accessories included:

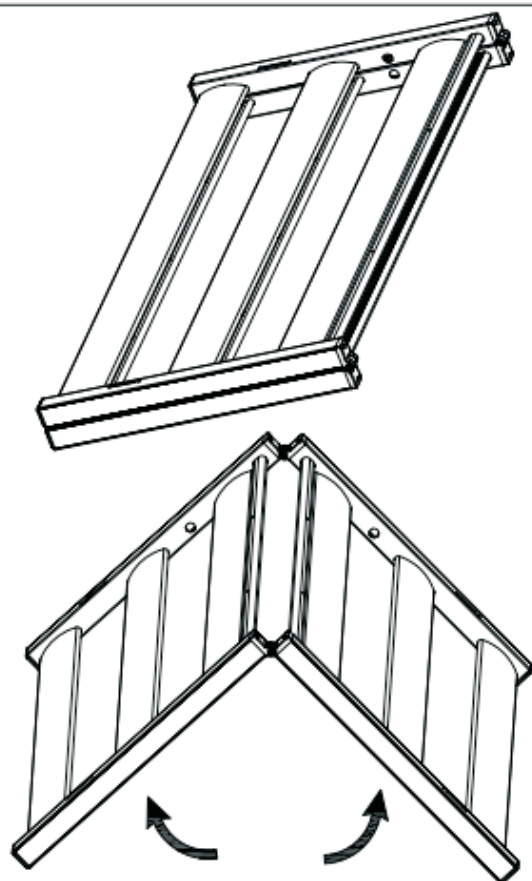
- A: AC Power Cord and 240Vac Plug (1 unit)
- B: 17.72" (45cm) Stainless Steel Ropes (4 pcs)
- C: Carabiner Hooks (6 pcs)
- D: Adjustable Ratchet Hangers (2 units)
- E: Knob Screws (6 pcs)



SAFETY WARNINGS

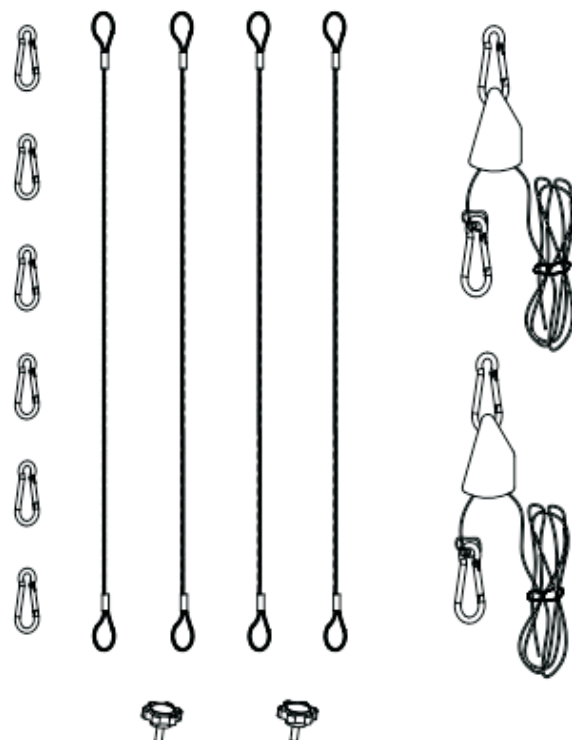
- Warning!** The installer is responsible for correct and safe installation.
- Warning!** Do not connect or disconnect the fixture with the driver box while under load.
- Warning!** Mount the system to something that can hold the weight of the LED fixture.
- Warning!** Do not touch the leds to avoid damage.
- Warning!** Switch off the mains power before installation.

1



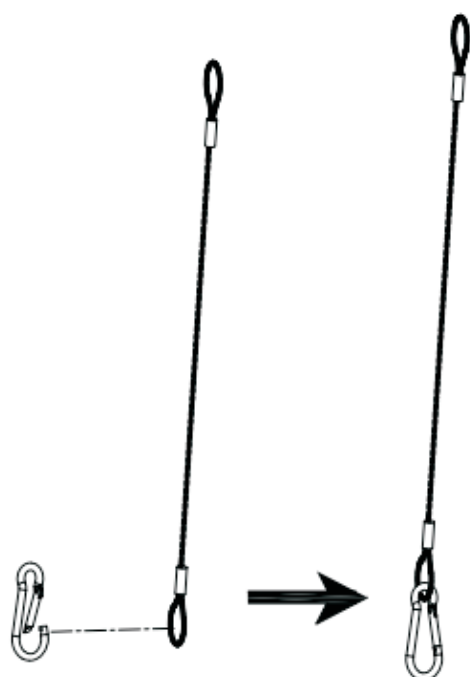
Unfold the LED fixture.

2



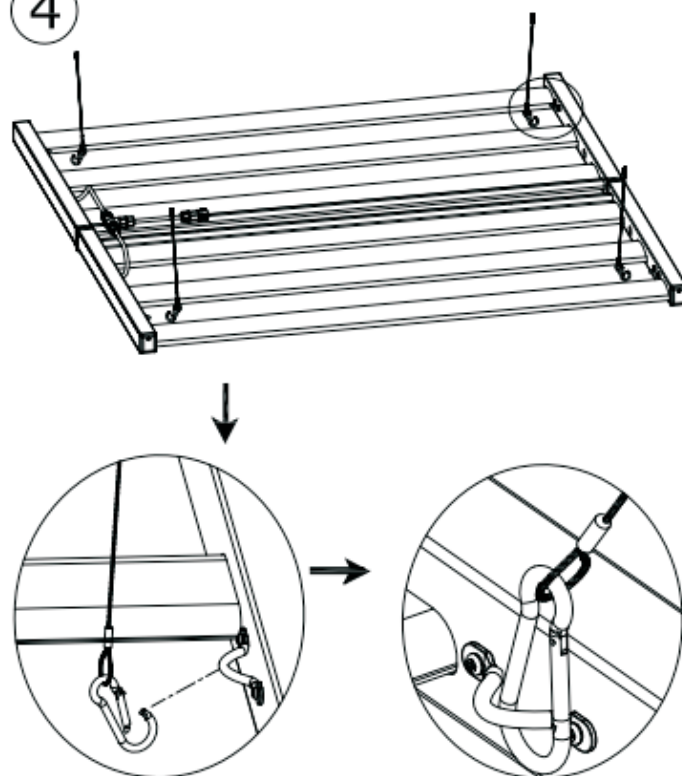
Take out the accessories from bags.

3

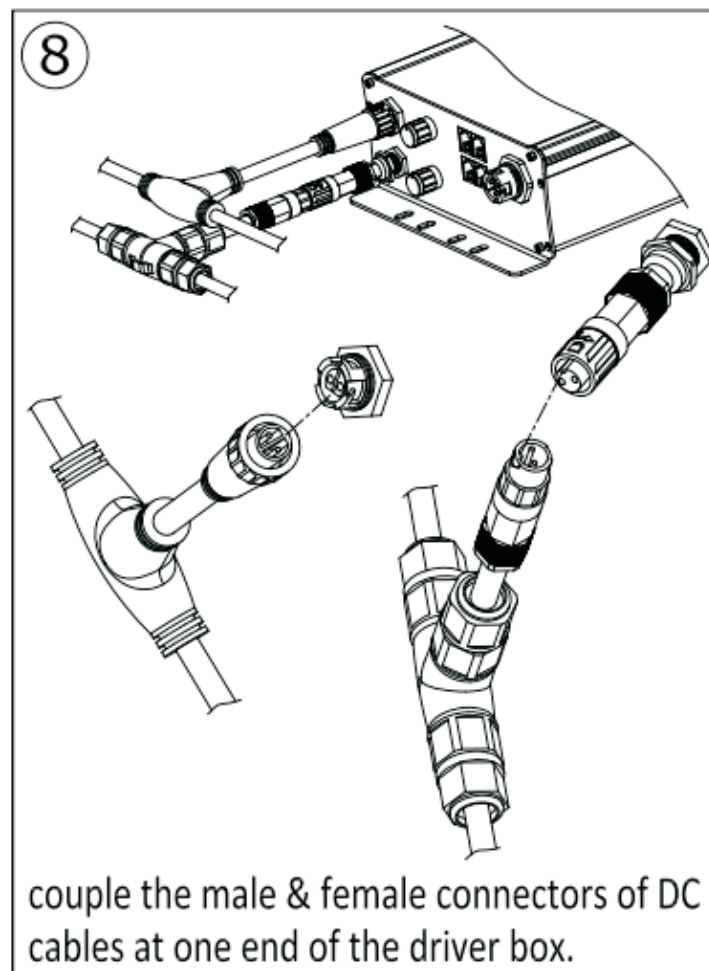
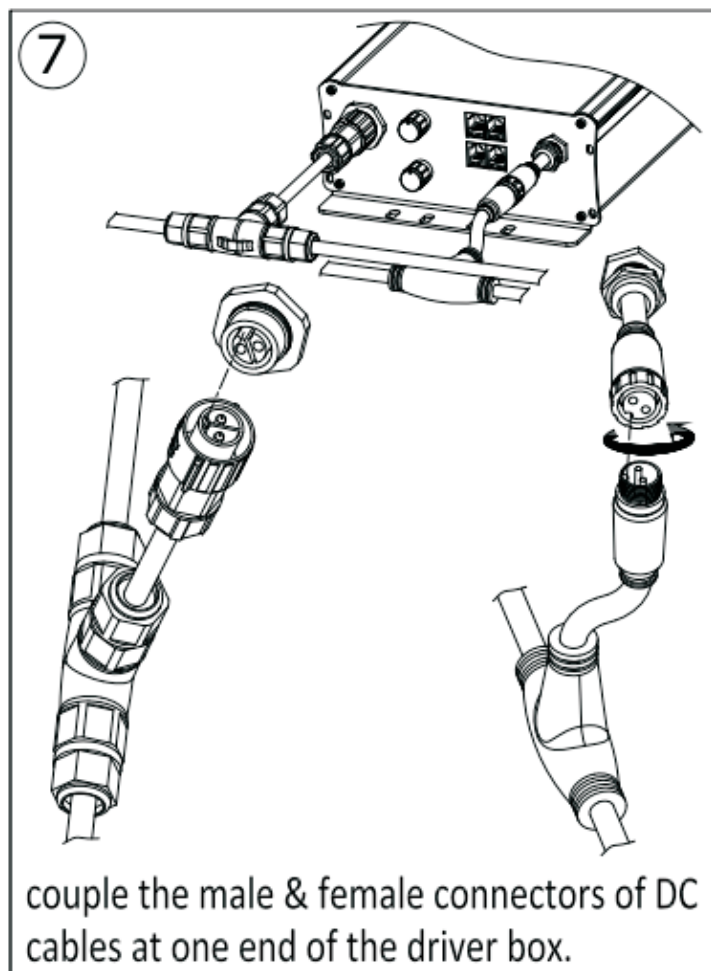
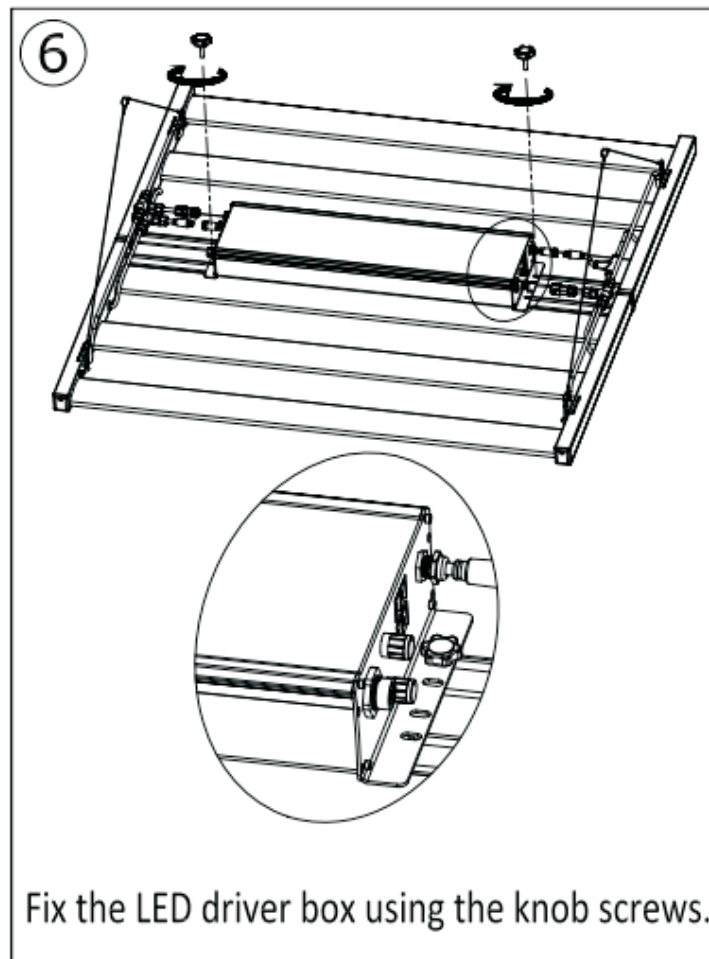
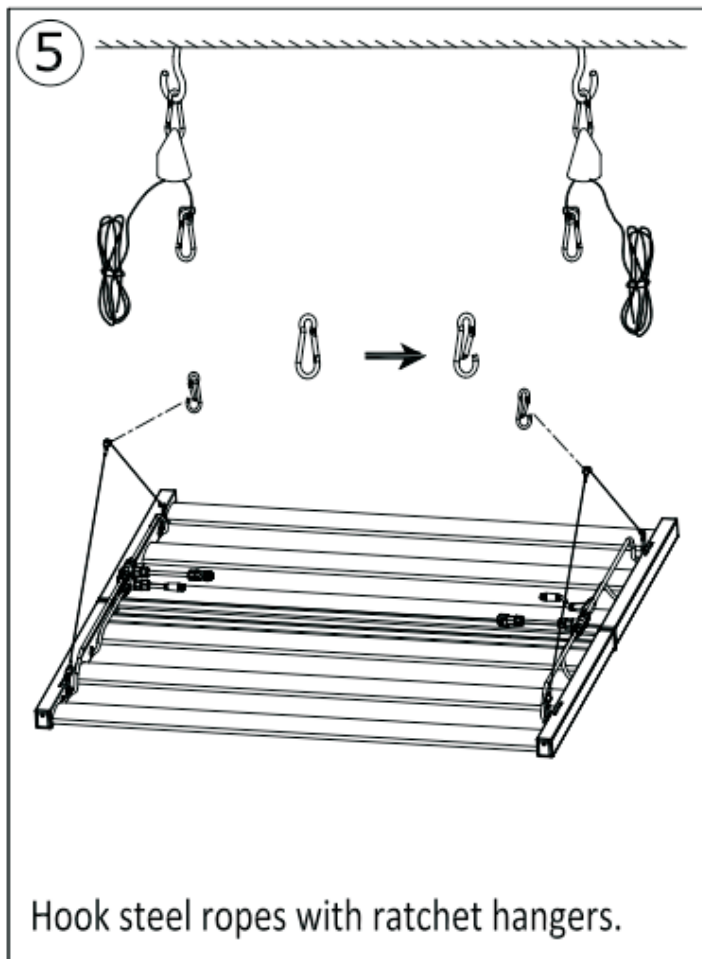


Connect carabiner hooks with steel ropes.

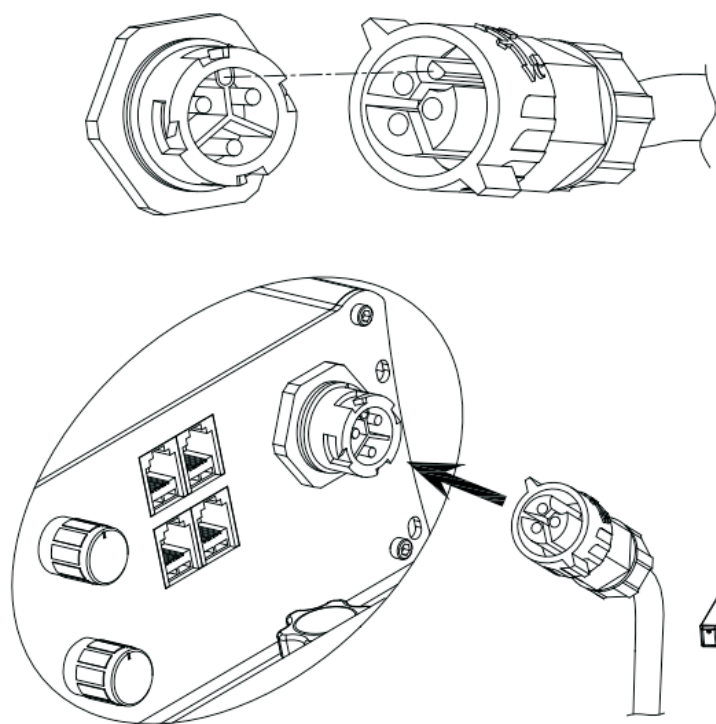
4



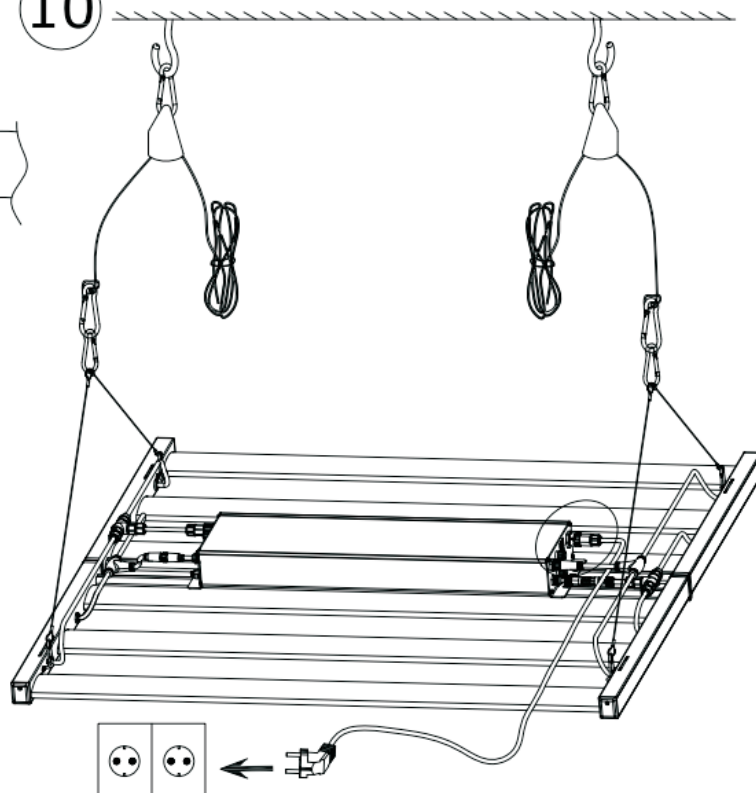
Connect carabiner hooks with handles on fixture rails.



9



10



Follow the correct direction to connect the AC power cord with driver box.

Push the AC power plug into wall outlet.