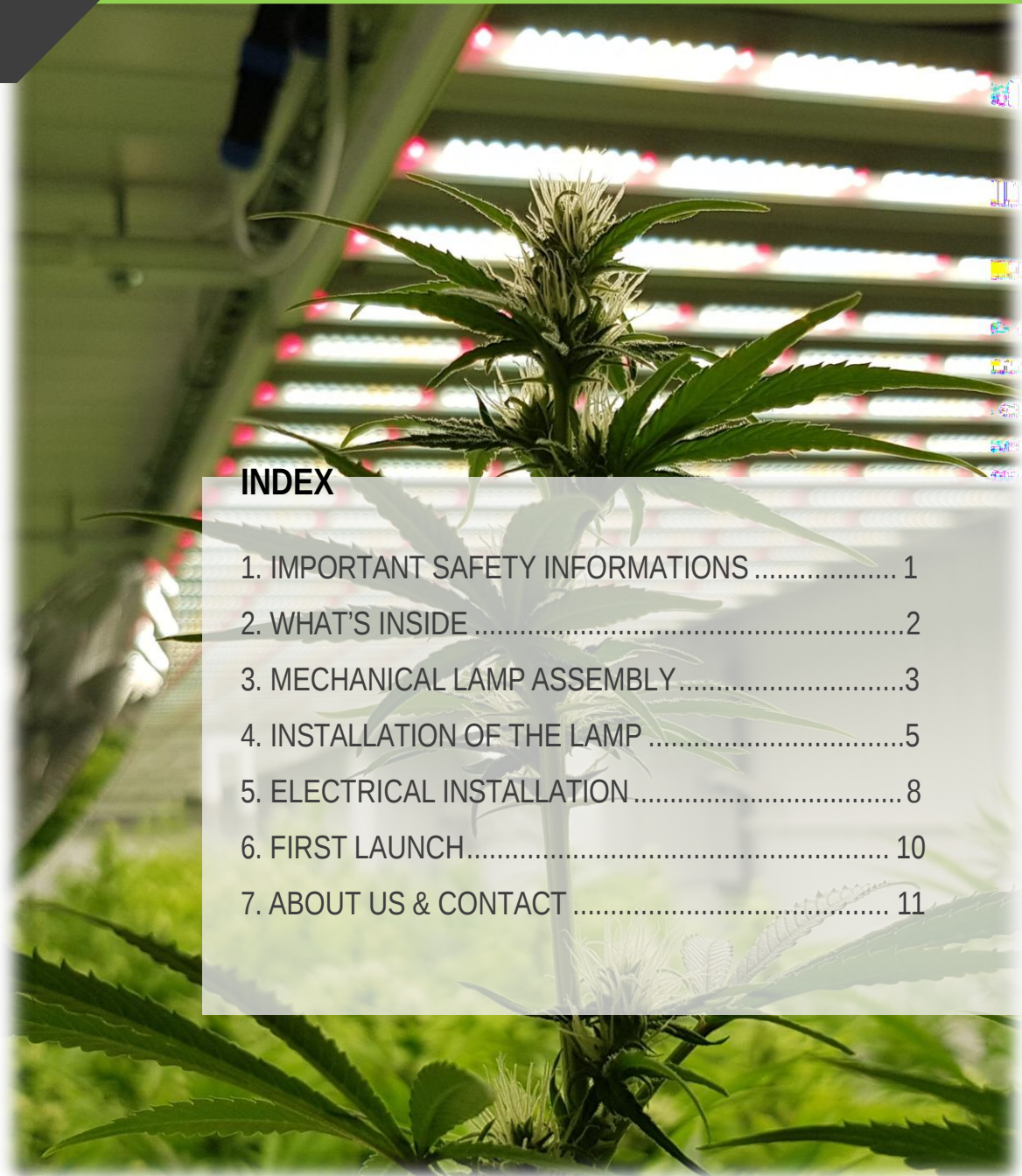


## PLANTALUX XX640W GROW LED LAMP SYSTEM



### Assembly instruction



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## 1. IMPORTANT SAFETY INFORMATIONS

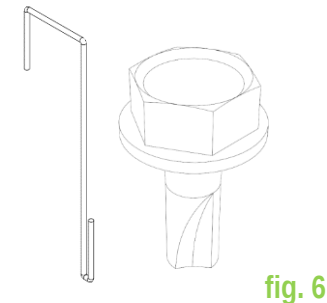
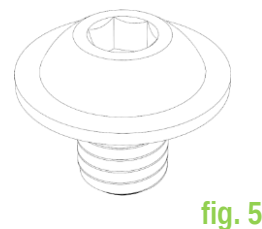
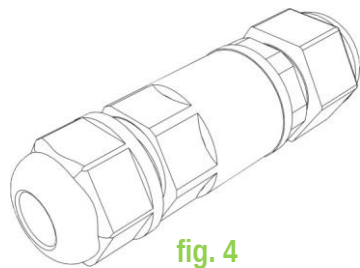
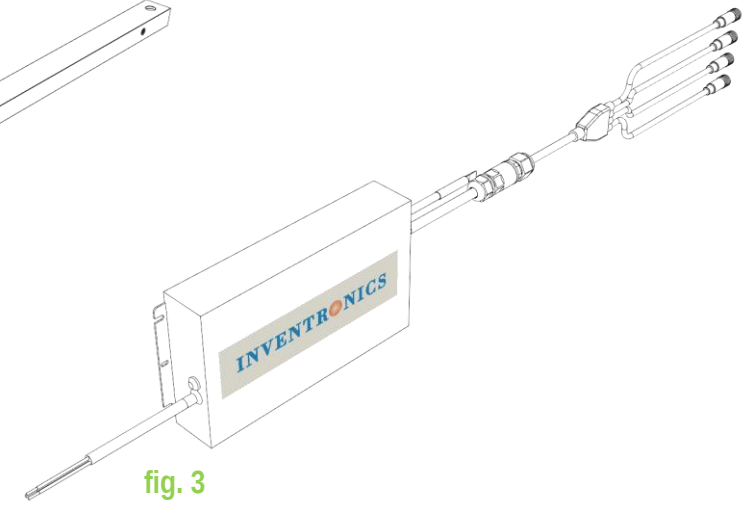
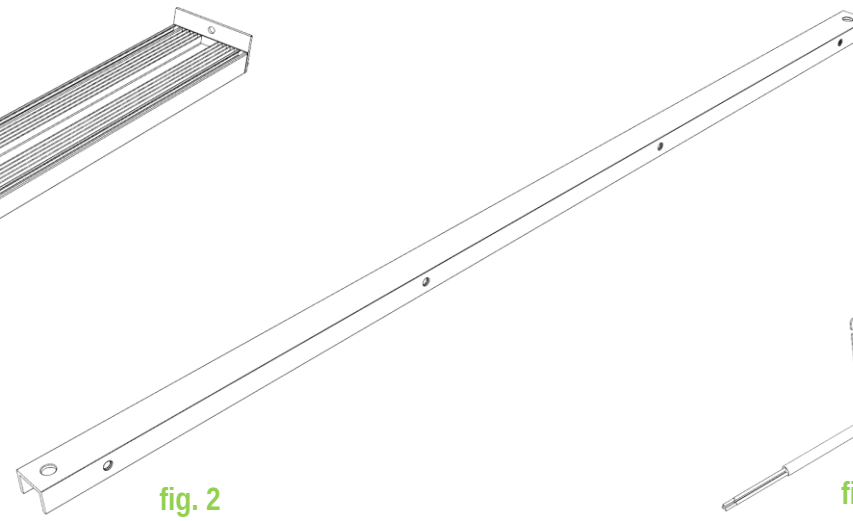
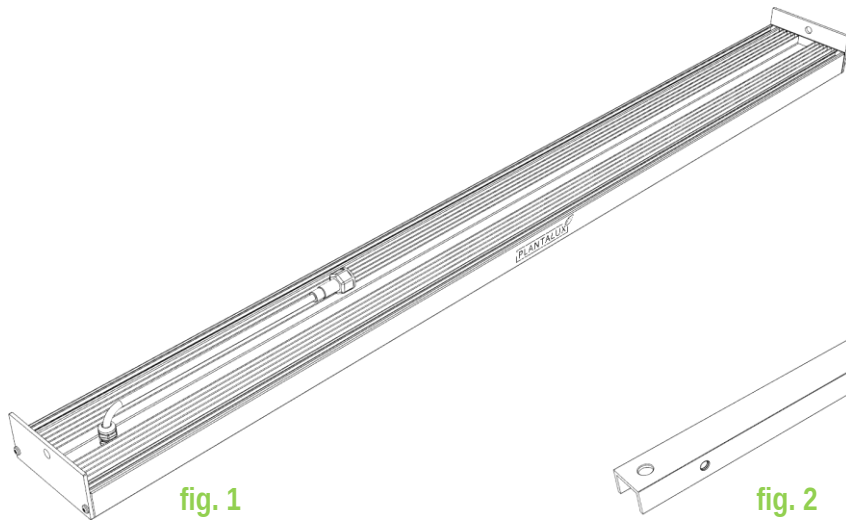
- ⇒ Please read this manual before installation or operating of any our product.
- ⇒ Two people are required to install the lamp.
- ⇒ Check that the lamp and power supply are properly attached.
- ⇒ Connect the system to appropriate AC power source.
- ⇒ Protect power cables from being damaged. Double check the voltage and rating before connecting the system.
- ⇒ Connect system ONLY to electrical outlet with grounding, otherwise using the system may be dangerous.
- ⇒ Before cleaning, rearranging or adjusting fixtures disconnect them from mains!
- ⇒ After successful installation and configuration retain manual in the safe place.
- ⇒ In case of replacing power cord use only equal or greater current rating.
- ⇒ Keep the fixtures clean, any dirt on heat sink may lower the cooling performance.
- ⇒ Before power on, make sure that all DC cables have connection with XX LED MODULE. Otherwise XX LED MODULE or POWER SUPPLY may get damaged.



## 2. WHAT'S INSIDE

Complete PLANTALUX XX Lamp consist of:

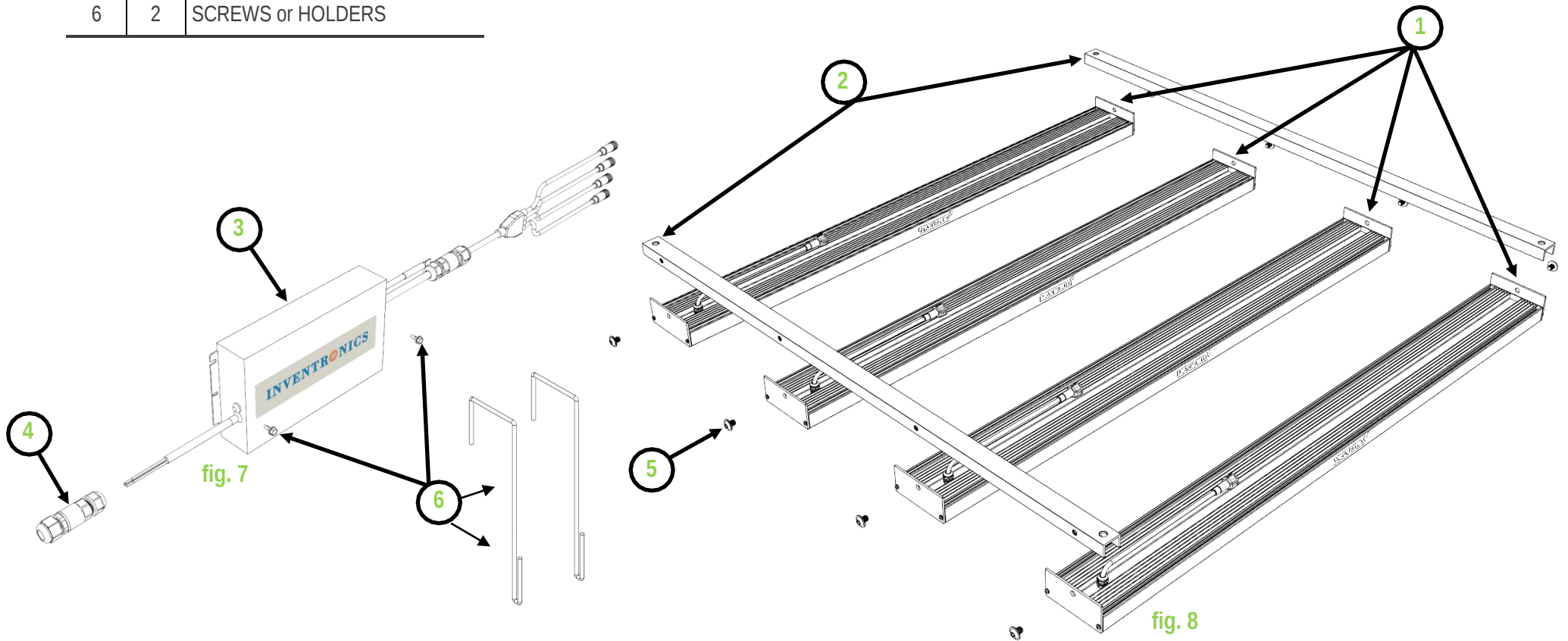
- ⇒ XX LED MODULE (fig. 1),
- ⇒ XX U-PROFILE (fig. 2), used to connect 4 pieces of XX LED MODULES,
- ⇒ POWER SUPPLY (fig. 3), with divider for connect XX LED MODULE, POWER SUPPLY is dedicated to drive 4 pieces of XX LED MODULES,
- ⇒ ELECTRIC CONNECTOR (fig. 4), used to connect AC input of POWER SUPPLY to AC powerline,
- ⇒ M8 Bolts (fig. 5), used for fix XX LED MODULES with XX U-PROFILES,
- ⇒ Screws or holders (fig. 6), used to fix POWER SUPPLY to surface.



### 3. MECHANICAL LAMP ASSEMBLY

Below listed in table parts are required for XX LAMP assembly:

Item	Qty	Part Name
1	4	XX LED MODULES
2	2	XX U-PROFILES
3	1	POWER SUPPLY
4	1	ELECTRIC CONNECTOR
5	8	M8 BOLTS
6	2	SCREWS or HOLDERS



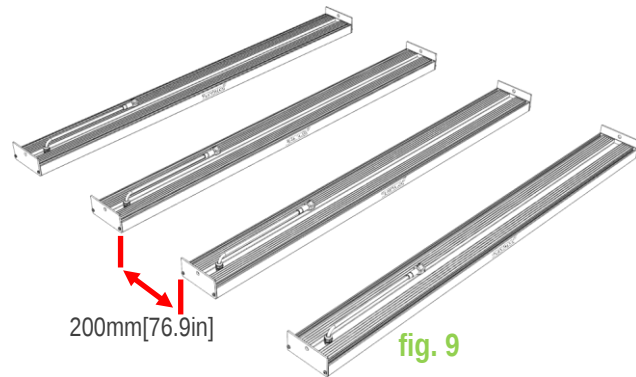
For this step you need:

- ⇒ 4 pieces of XX LED MODULES,
- ⇒ 2 pieces of XX U-PROFILES,
- ⇒ 8 pieces of M8 BOLTS.

Assembly XX LAMP according to steps below:

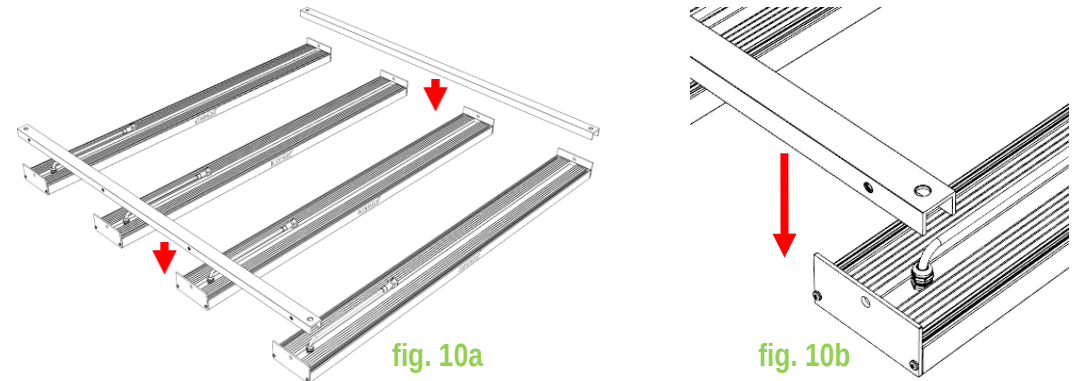
**STEP 1 (fig. 9)**

Put 4 pieces of XX LED MODULES on flat surface at distance about 200mm [7.9in].



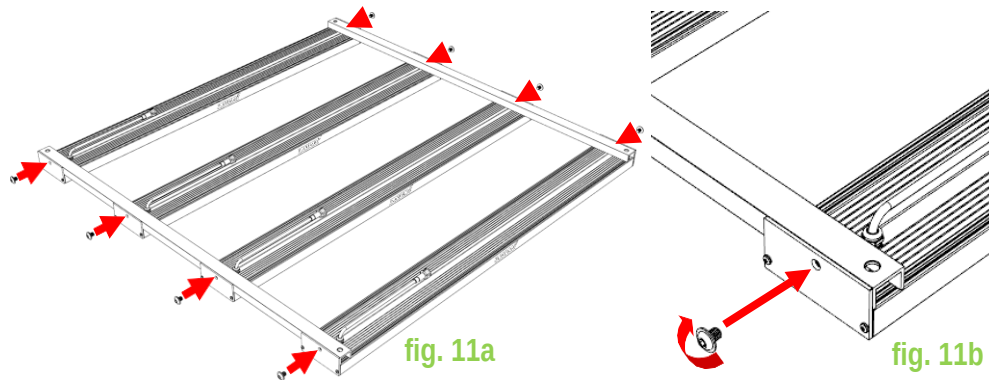
**STEP 2 (fig. 10a, 10b)**

Put on 2 pieces of XX U-PROFILES on XX LED MODULES.



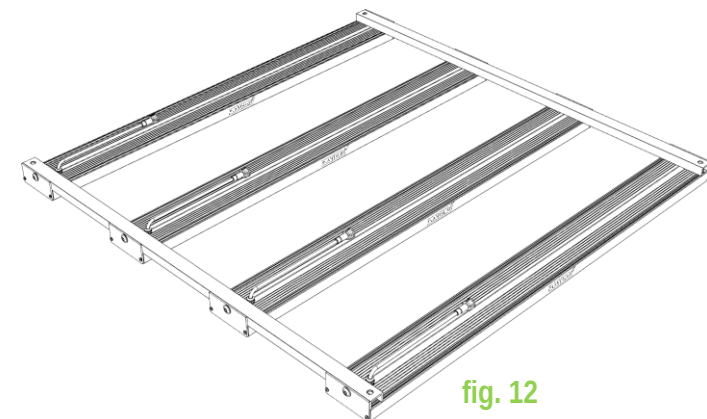
**STEP 3 (fig. 11a, 11b)**

Take 8 pieces of M8 BOLT and tighten XX LED MODULES with XX U-PROFILES, using 6mm inbus wrench.



**STEP 4 (fig.12)**

XX LAMP has been assembled. Check that bolts are well tightened.



## 4 . INSTALLATION OF THE LAMP

### Installation XX LAMP on object.

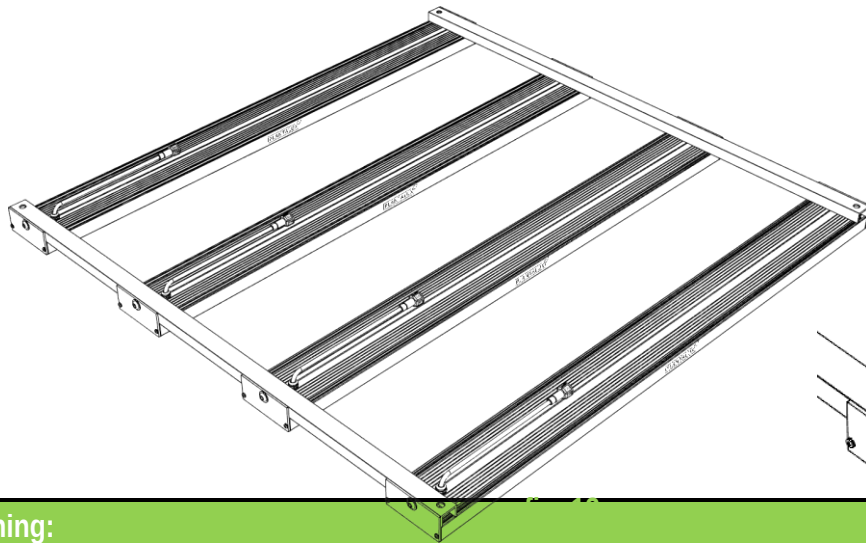
For this step you will need:

- ⇒ 1 pieces of assembled XX LAMP,
- ⇒ 4 pieces of mounting items (chain with carabineers or steel cables)

Install XX LAMP on object according to steps below:

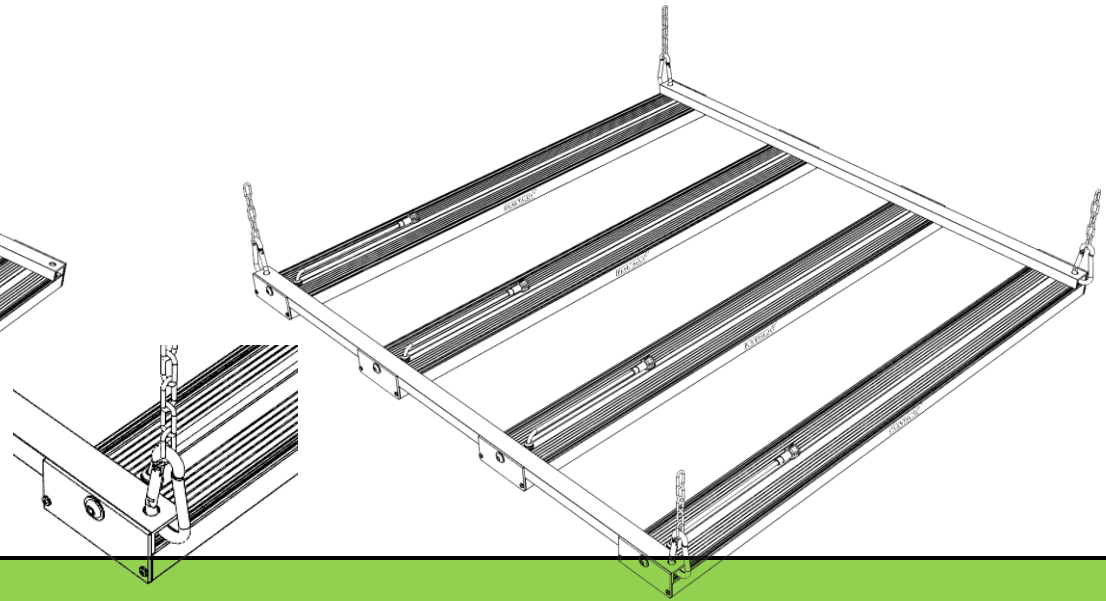
#### STEP 1 (fig.13)

Two person required for this step. Lift XX LAMP on installation place.



#### STEP 2 (fig.14a, 14b)

Fix XX LAMP on place using chain with carabineers or steel cables. There is mounting holes of each corner of the lamp.



#### Warning:

- ⇒ Ensure to left at least 60mm of free space above heat sink of lamp for air circulation. Lamp can reach high temperature after few hours of constant work.
- ⇒ Do not install XX LAMP near sources of moisture. XX LAMP has IP66 protection.
- ⇒ XX LAMP weighs about 11.8kg [26.0lb] and must be installed on securely attached installation to prevent it from falling.

## Installation POWER SUPPLY on object with SCREWS

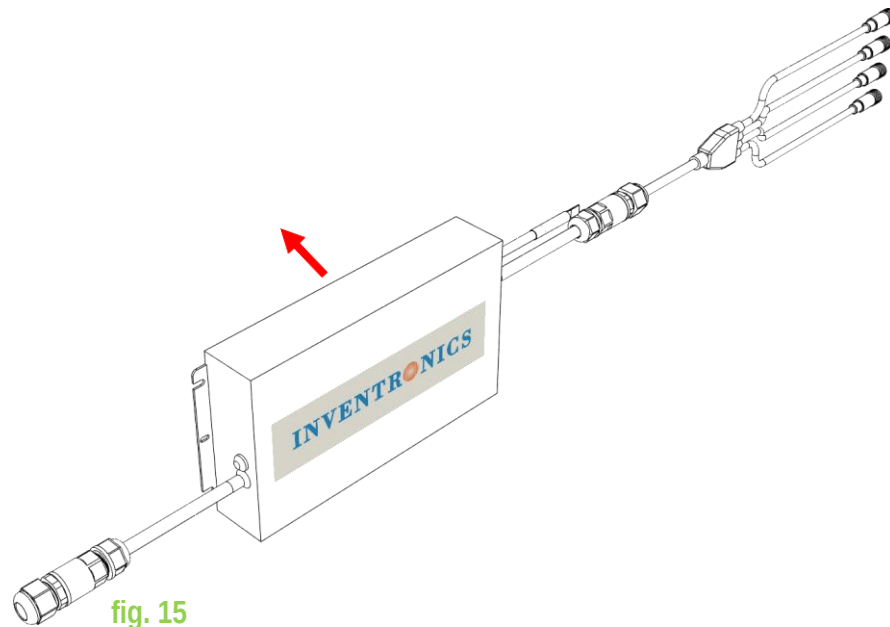
For this step you will need:

- ⇒ 1 piece of POWER SUPPLY,
- ⇒ 2 pieces of screw.

Install XX POWER SUPPLY on object according to steps below:

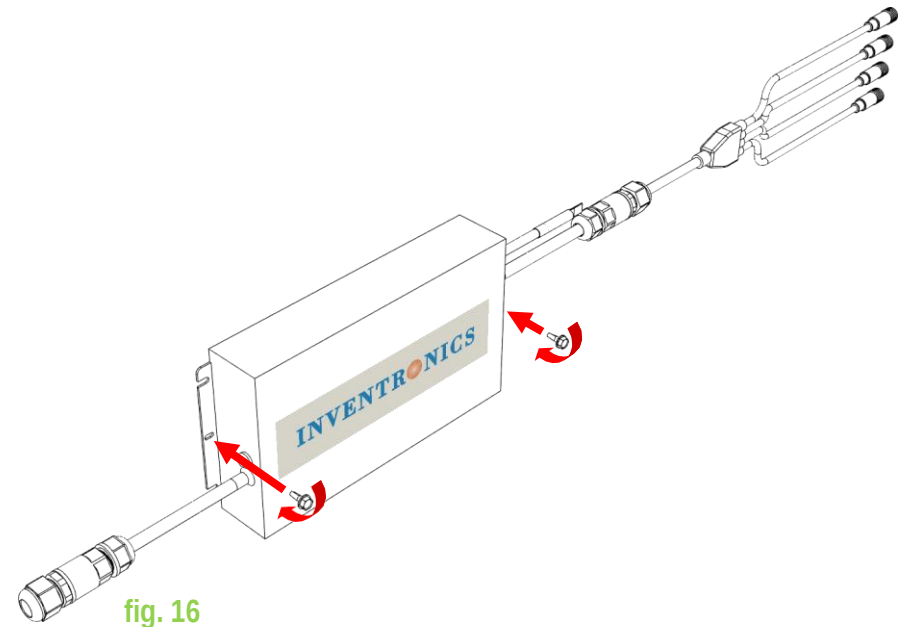
### STEP 1 (fig. 15)

Bring XX POWER SUPPLY on prepared flat surface. Make sure the DC cable of XX LAMP goes to DC cable of XX POWER SUPPLY



### STEP 2 (fig. 16)

Fix POWER SUPPLY using self drilling screws included in the kit, using 8mm hexagonal wrench. **Ensure it was placed securely.**



### Warning:

- ⇒ Do not mount XX POWER SUPPLY near heat source and heat sensitive items. XX POWER SUPPLY can reach high temperature when its running.
- ⇒ Do not install power supply near sources of moisture. POWER SUPPLY has IP67 water protection.
- ⇒ XX POWER SUPPLY weighs about 3.6kg [8.0lb] and must be installed on securely attached greenhouse beam to prevent it from falling.

## 5 . INSTALLATION OF THE LAMP ON THE BUILDING

### Installation PLANTALUX Power Supply Holders on Power Supply.

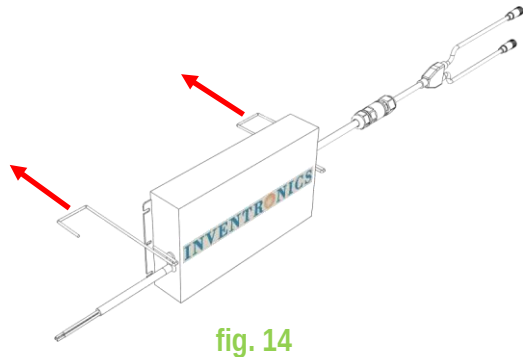
For this step you will need:

- ⇒ 2 pieces of PLANTALUX FX Power Supply Holders,
- ⇒ 1 piece of Power Supply.

Insert PLANTALUX FX Power Supply Holders into mounting holes of Power Supply according to steps below:

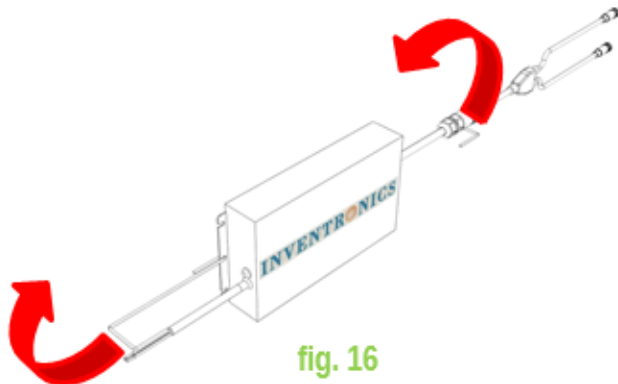
#### STEP 1 (fig. 14)

Put in PLANTALUX FX Power Supply Holders into Power Supply mounting holes.



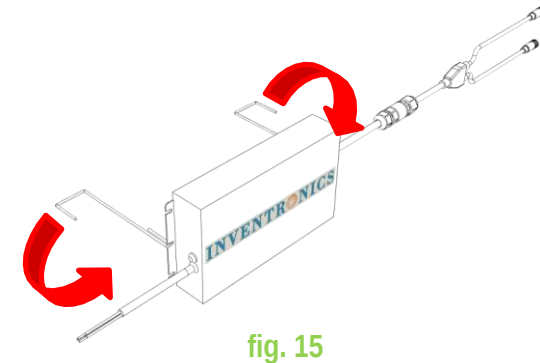
#### STEP 3 (fig. 16)

Rotate PLANTALUX FX Power Supply Holders upwards Power Supply.



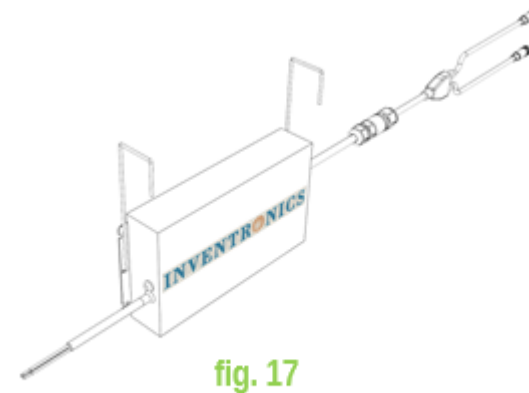
#### STEP 2 (fig. 15)

Rotate PLANTALUX FX Power Supply Holders out of the Power Supply.



#### STEP 4 (fig. 17)

Power supply is ready for installation on greenhouse beam.





### PLANTALUX FX Lamp Set

Figure below (**fig. 17**) shows mechanically assembled lamp on the object. Before start electrical installation make cable management of DC Cables of XX LAMP, DC Cable, AC Cable and Dimming Cable of XX POWER SUPPLY, by attach it to object construction. **Ensure cable don't touch heatsink of XX Lamp.**

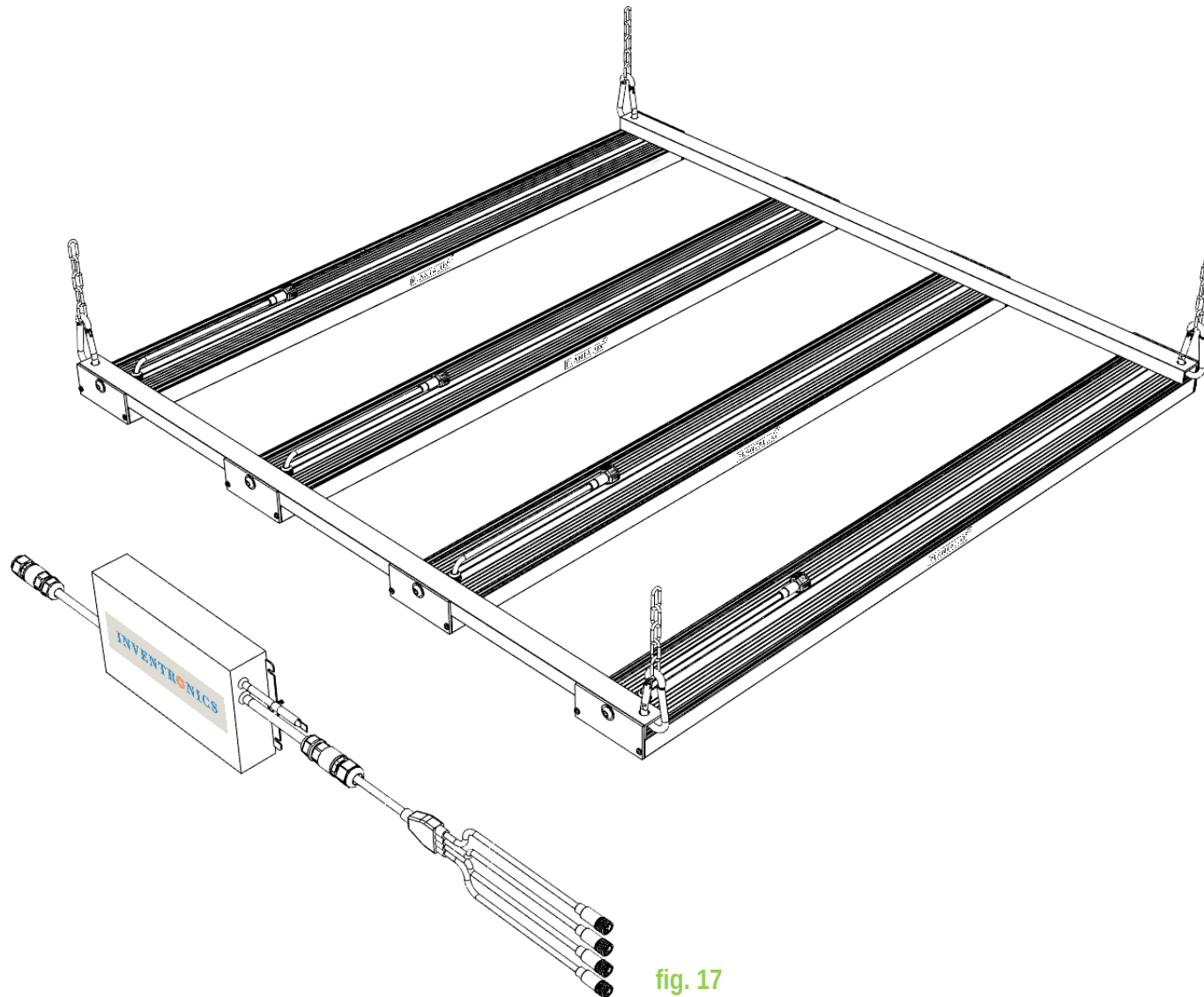


fig. 17

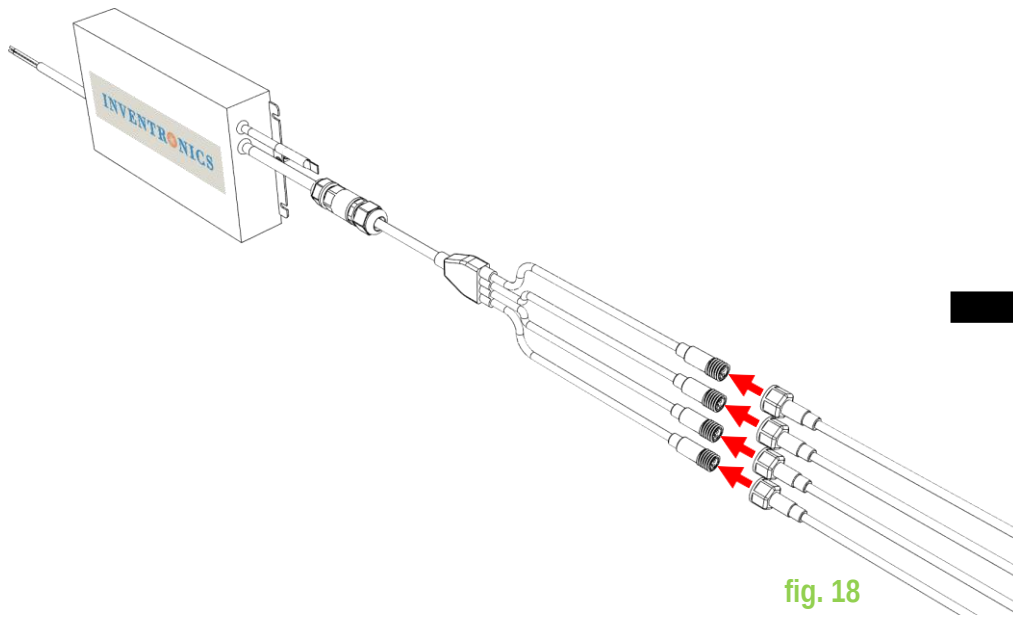
## ELECTRICAL INSTALLATION

## DC Connection

Connect XX LED MODULE to the XX POWER SUPPLY according to steps below:

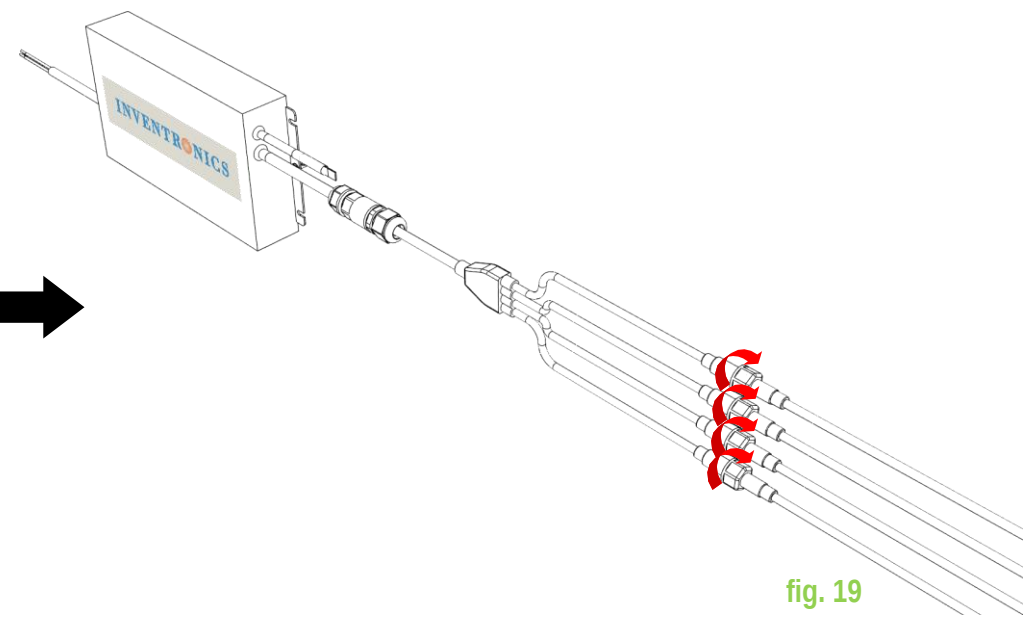
## STEP 1 (fig. 18)

Connect four DC cables (from each XX LED MODULE) to the XX POWER SUPPLY.



## STEP 2 (fig. 19)

Twist the nut to prevent the lamp from accidentally disconnecting and ensure right IP rating.



## Warning:

- ⇒ Before power on, make sure that all DC cables have connection with XX LED MODULE. Otherwise XX LED MODULE or POWER SUPPLY may get damaged
- ⇒ Make sure nuts are tightened securely, incorrect tightening can reduce water and dust resistant

### AC and Drive connection

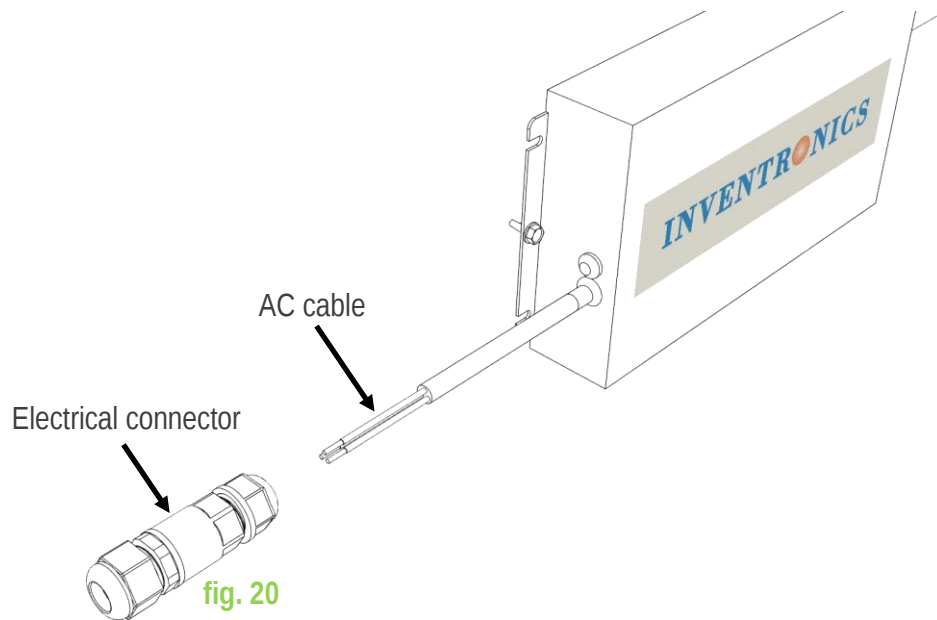
On the figure below (fig. 20) are found drawing of electrical wire. Cable must be connected to the AC installation according to the scheme:

- ⇒ **BROWN — LIVE**
- ⇒ **BLUE — NEUTRAL**
- ⇒ **YELLOW-GREEN — GROUND**

POWER SUPPLY must be connected to AC 100-240V 50/60Hz.

The cross-section of used wires must be proper for maximum power of lamp.

Hermetic connectors should be use for the AC connection (minimum IP 66).



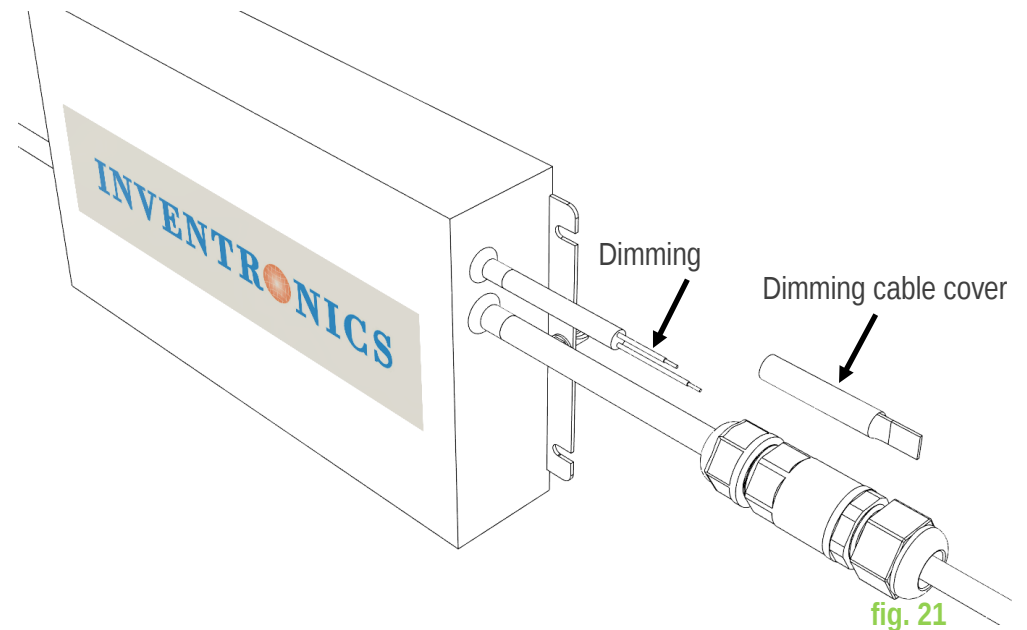
Optional, it is possible to connect a control system for adjusting light intensity of lamp. To connect drive wire you need take off dimming cable cover and connect wires according to the scheme (fig. 21) :

- ⇒ **PURPLE—DIM+**
- ⇒ **GREY—DIM-**

Dimming Signal suitable for used POWER SUPPLY is 10V PWM.

Hermetic connectors should be use for the drive connection (minimum IP 66).

If the drive wire is not used, protect it from moisture and dust.



#### Warning:

- ⇒ **Connections must be made by qualified personel.**
- ⇒ **Connections of AC Cable and Drive Cable must to have proper protection level, minimum IP66.**

## 6. FIRST LAUNCH

- ⇒ First launch must be made by qualified personnel.
- ⇒ Before starting the lamps for the first time, make sure that the electrical connections are properly connected.
- ⇒ Electrical connections must be made by qualified personnel.
- ⇒ Ensure that optical elements of fixture are clean after the installation.
- ⇒ After switching on the lamp, check that all the LEDs are working properly.
- ⇒ If control system was connected, check dimming.



## 7. ABOUT US AND CONTACT

We are Plantalux – a family-owned company located in Lubelskie voivodeship (Eastern Poland) that deals with advanced technology of enhancing plant growth in greenhouse production. From the very beginning we have been forming this company together: Jacek Lachowski (father, on the left), Rafał Lachowski (the eldest son, in the middle) and Jakub Lachowski (the youngest son, on the right).

Each Plantalux product is a fruit of Jacek's over 30 years' experience as an engineer and Jakub and Rafał's innovative approach. We have been in lighting industry for over 7 years, during which

we have established close connections with research and development institutions, universities and international electric components providers. Due to that we deliver state of the art lighting that meet all international standards and fulfill all customers needs.



**Jakub Lachowski**

Executive Officer

tel. 730 730 478

email: [jakub.lachowski@plantalux.pl](mailto:jakub.lachowski@plantalux.pl)



**Rafał Lachowski**

Business Development Manager

tel. 533 916 289

email: [rafal.lachowski@plantalux.pl](mailto:rafal.lachowski@plantalux.pl)



**Ewelina Padziak**

Account Manager

tel. 500 099 661

email: [ewelina.padziak@plantalux.pl](mailto:ewelina.padziak@plantalux.pl)



@Plantalux



@plantaluxleds



@Plantalux Sp. z o.o.



@plantalux

**PLANTALUX Sp. z o.o.**

Konopnica 162

21-030 Konopnica

Poland

VAT: PL.9462661551

KRS: 0000628224

REGON: 364944526

email: [info@plantalux.pl](mailto:info@plantalux.pl)

[www.plantalux.pl](http://www.plantalux.pl)