

# ***USER MANUAL***

## **PILOT SERIES**

BL-10 Pilot



BL-10 R Pilot



BL-10 RO Pilot



BRL-1 Pilot Battery



Pilot Line



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# 1. General description

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Pilot Series is created to satisfy the need of illuminating spaces where people must displace without having a lot of light.

Use of leds makes this product highly energy-efficient.

PILOT SERIES is composed of the following products:

- BL-10 Pilot
- BL-10R Pilot
- BL-10 RO Pilot
- BRL-1 Pilot Battery
- BL-2 Pilot Line and BL-3 Pilot Line
- WL-2 Pilot Line and WL-3 Pilot Line

All of them incorporate high bright leds. For this reason, they are used as service lighting in theatres or show rooms.

BRL-1 Pilot Battery, which completes this series, is specially designed for actors and actresses to displace on the stage without being seen by the audience.

Power Supply Pilot Line 12W and 50W are also included in this family.

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## Characteristics

- High bright leds.
- 230V 50Hz single-phase power supply. (BRL-1 Pilot Battery is a one-led portable device that needs to be recharged in a single-phase 230-volt 50-hertz power supply. Pilot Line must be supplied with direct current by means of at least one Power Supply Pilot Line which must be connected to single-phase 230-volt 50-hertz power supply).
- BL-10, BL-10 R and Power Supply Pilot Line include holes for PG11 which are drilled on the rear side to hang on a wall. BL-10 RO incorporates a support to be mounted on a wall. Each Pilot Line can be mounted thanks to its 2 clamps.
- BRL-1 Pilot Battery let you select led colour between red and blue. It has a long battery life before having to be recharged. Recharge process is very quick.
- Pilot Line elements can be connected among them for creating long linear lighting stretches.

Product references are:

<i>BL-10 Pilot</i>	26000070
<i>BL-10 R Pilot</i>	26000072
<i>BL-10 RO Pilot</i>	26000073
<i>BRL-1 Pilot Battery</i>	26000074
<i>BL-2 Pilot Line // BL-3 Pilot Line</i>	26000092 // 26000093
<i>WL-2 Pilot Line // WL-3 Pilot Line</i>	26000094 // 26000095
<i>Power Supply Pilot Line 12W // 50W</i>	26000098 // 26000099

# Technical data

Technical and photometric data of the Pilot Series elements are described below:

<i>Power supply</i>	Single-phase 230V 50Hz
<i>Number of leds</i>	10 blue (BL-10, BL-10 R y BL-10 RO) 2 blue and red (BRL-1 Pilot Battery) 4 blue (BL-2 y BL-3 Pilot Line) 4 white (WL-2 y WL-3 Pilot Line)
<i>Protection</i>	PTC resistor
<i>Weight</i>	0,3 Kg (BL-10 y BL-10 R) 0,25 Kg. (BL-10 RO) 0,4 Kg. (BRL-1 Pilot Battery) 1,25 Kg. (BL-2 y WL-2 Pilot Line) 1,6 Kg. (BL-3 y WL-3 Pilot Line) 0,45 Kg. (Power Supply 12W Pilot Line) 0,6 Kg. (Power Supply 50W Pilot Line)

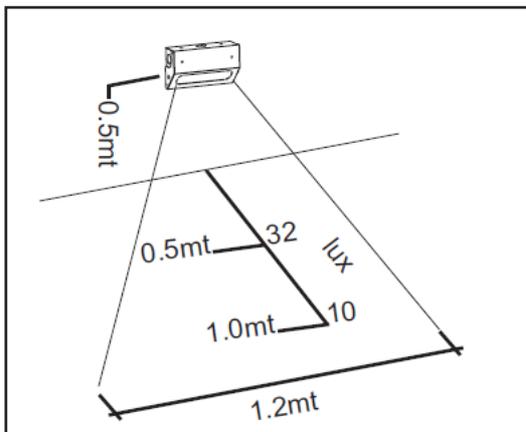


Fig. 1: BL-10 Pilot

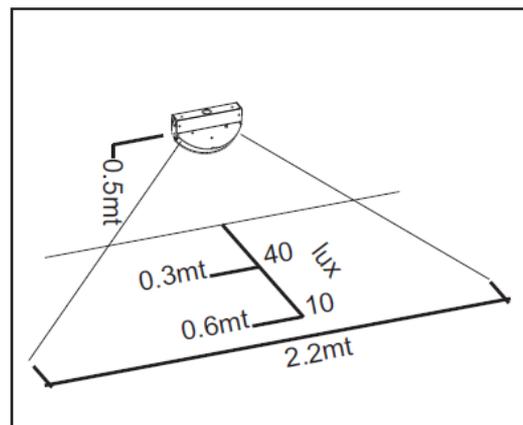


Fig.2: BL-10 R Pilot

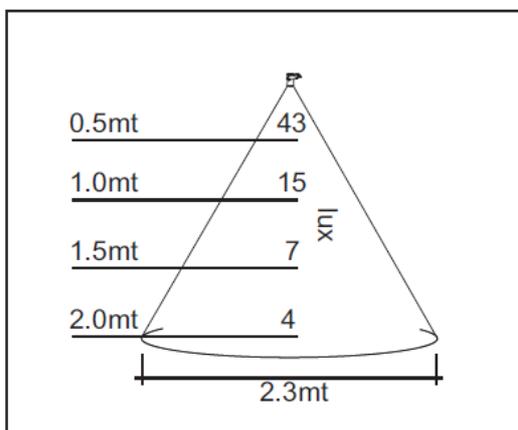


Fig. 3: BL-10 RO Pilot

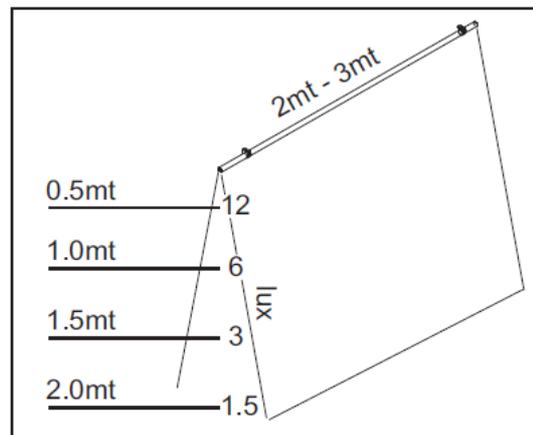
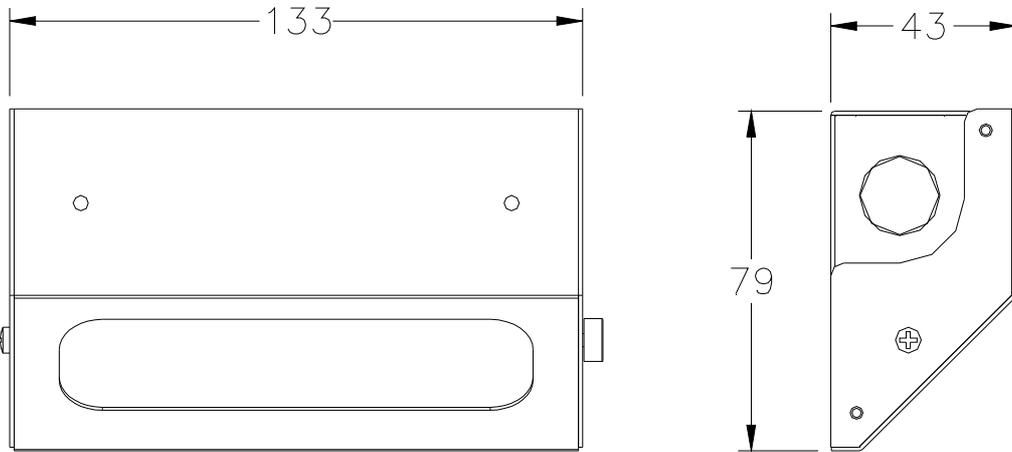


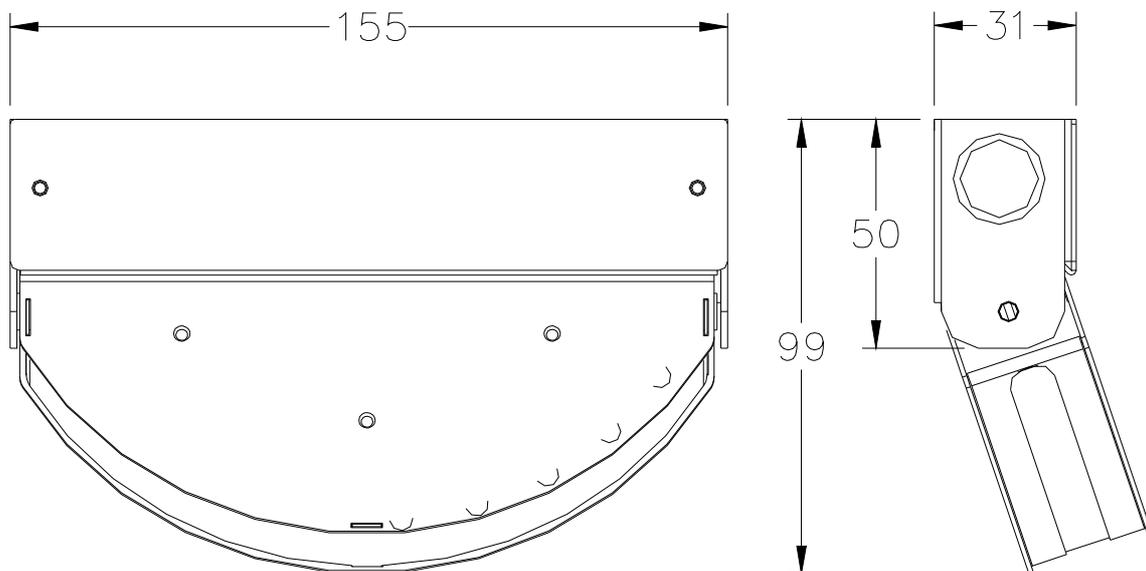
Fig. 4: Pilot Line

## 2. Dimensions

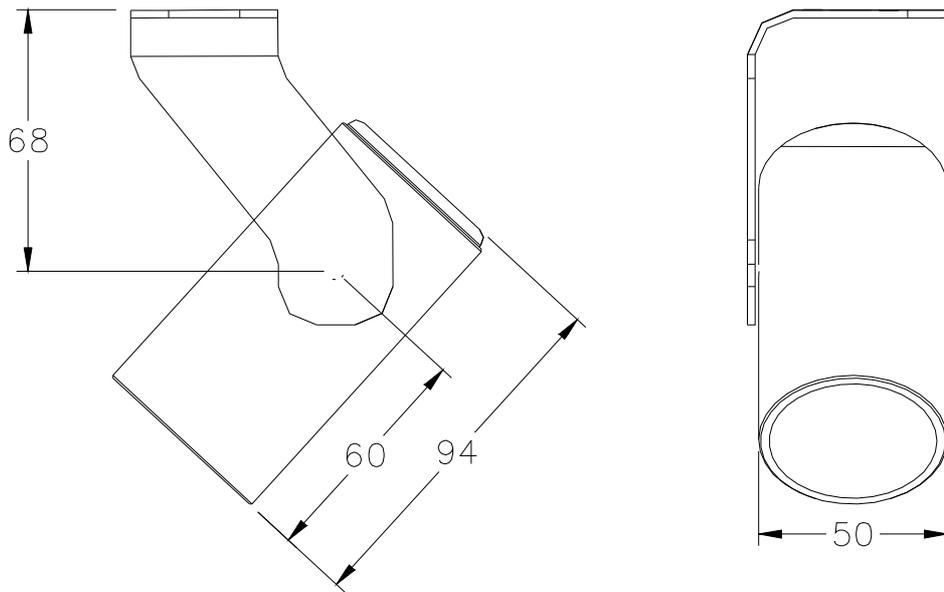
Dimensions are in mm.



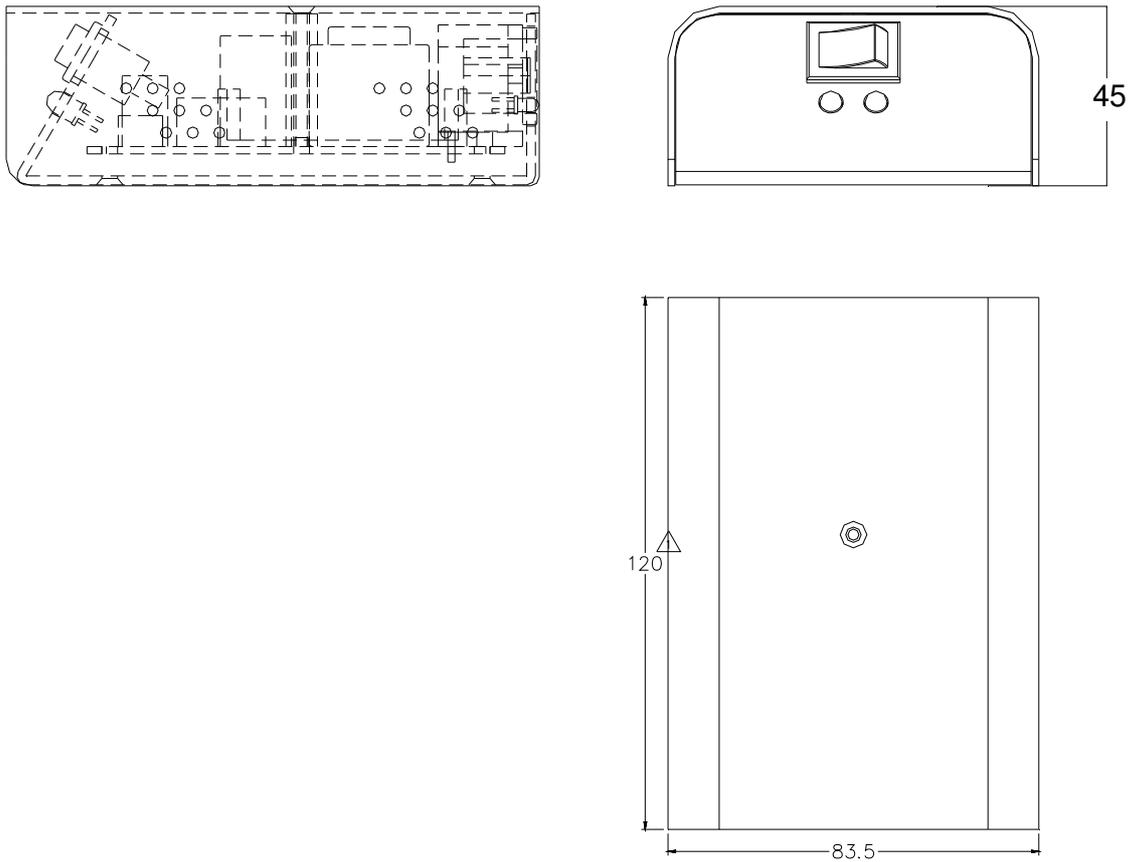
*Fig. 5: BL-10 Pilot*



*Fig. 6: BL-10 R Pilot*



*Fig. 7: BL-10 RO Pilot*



*Fig. 8: BRL-1 Pilot Battery*

Finally, Pilot Line models (BL-2, BL-3, WL-2 and WL-3) are 2-meter and 3-meter lighting, respectively, and their diameter is 30 mm in width. Moreover, these products require one or more than one power supply, depending on your needs, which is rectangular in shape and is 280x50x58 mm per unit.

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### 3. Installation

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For supplying each unit, you must connect the power supply cable to a schuko socket of single-phase 230-volt 50-hertz power supply with ground.

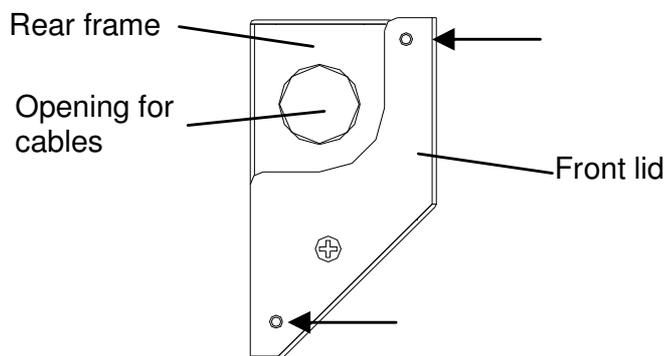
Usually, Pilot Series product installation is carried out connecting each unit to a power supply line (in parallel) for controlling the start and stop of all the devices together through a switch, which in some cases is integrated into an ARQ System that belongs to Fresnel S.A. product range (for more information visit [www.strong.es](http://www.strong.es)).

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#### BL-10 Pilot

Follow the next steps to connect this product:

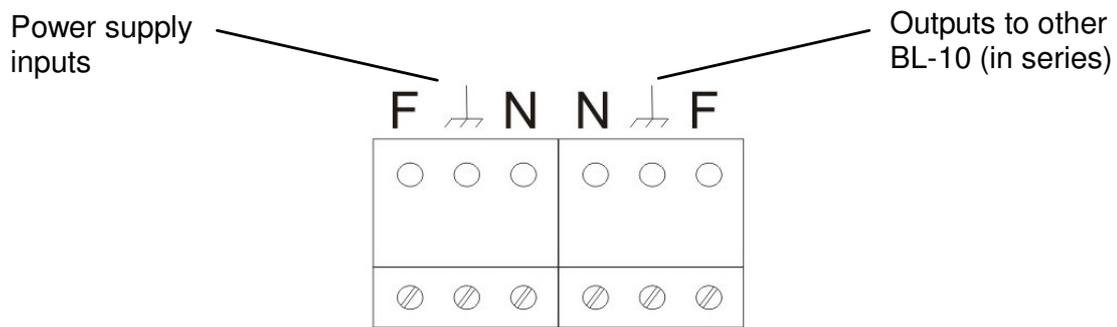
1. Unscrew the 4 screws (2 in each side of the unit) which are indicated in figure 9 and get the front lid off.



*Fig.9*

2. Insert the input power supply cables through the opening for cables which is indicated in figure 9.

3. Connect each power supply cable to its respective input: phase (F), ground or neutral (N).



*Fig.10*

4. If you want to connect some BL-10 in series, output cables to the next unit must be connected (see figure 10), if not, outputs can be left without connections.
5. If some units are connected in series, then, you must insert the output cables to another BL-10 through the opposite opening for cables indicated in figure 9 and restart these steps with the other unit.
6. Eventually, place the front lid on its initial position and screw the 4 bolts which are shown in figure 9.

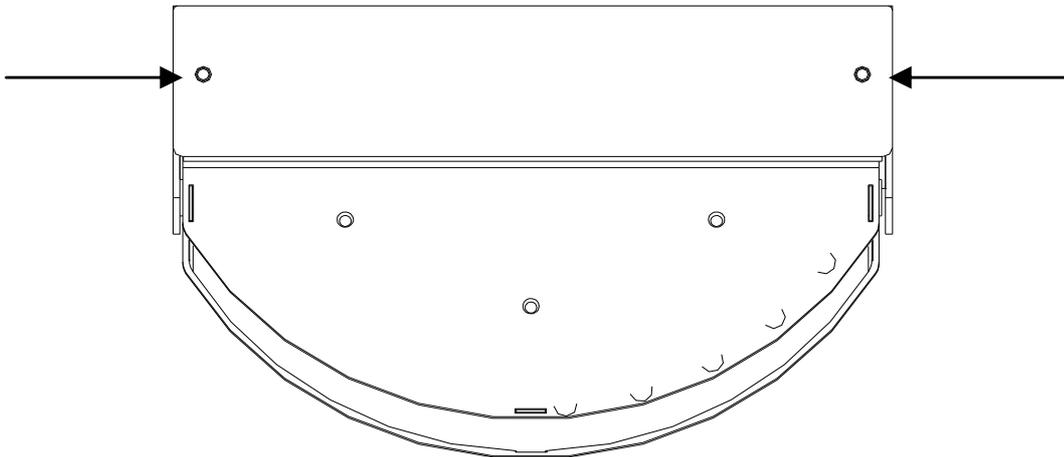
If you want to mount this unit on a wall, between steps 1 and 2, mark and drill the 2 holes that are bored in the rear frame and then you will be able to fasten to the wall. You must be sure that the surface where is mounted can support it.

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## BL-10 R Pilot

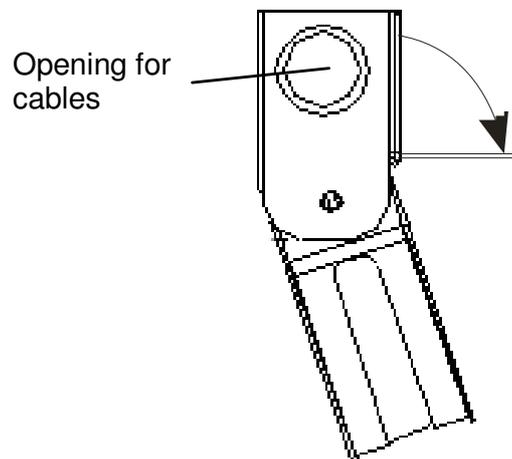
Follow these steps to install BL-10 R Pilot:

1. Unscrew the 2 bolts that are placed in the upper front lid as shown in figure 11.



*Fig. 11*

2. Open this lid until being perpendicular to its support, see figure 12.



*Fig. 12*

3. Insert input power supply cables through the opening indicated in figure 12.
4. Make cable connections in the terminal strip.

5. In case of connecting some BL-10 R units in series, make the appropriate connections and insert the output cables through the opposite opening indicated in figure 12. Then repeat these steps with the next unit.
6. Screw the bolts indicated in figure 11.

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## BL-10 RO Pilot

BL-10 RO units are provided with a power supply cable without connector. For this reason, there are two possibilities: to install a schuko connector for connecting the unit directly to the wall socket, or to connect the unit to an installation with a common power supply line.

In both cases, be sure about connecting each cable to each respective phase, neutral and ground; and do not left any bared wire.

Use the support incorporated, which has two holes, to fasten this device to the wall. You must be sure that the surface where is mounted can support it.

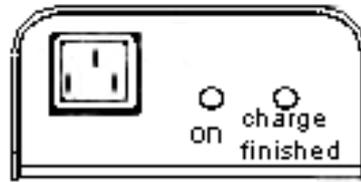
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## BRL-1 Pilot Battery

This one-led portable device must be plugged in a 230-volt 50-hertz single-phase wall socket to recharge the internal battery. Once recharged, it can be used without being connected.

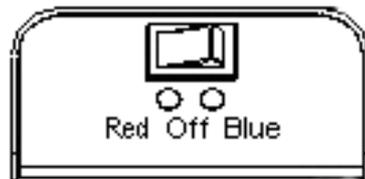
To start with recharge process, you must connect the cable which was supplied with the unit. One end of the cable must be plugged to the rear side of the BRL-1 Pilot Battery and the other end must be directly connected to the wall socket.

When it is connected, a red “on” indicative led, placed in the rear side, is switched on. When the battery is fully charged, the green “charge finished” indicative led switch on and you can disconnect the unit. (See figure 13).



*Fig. 13*

There are 3 different states of working which can be changed by a 3-position switch placed in the front side.



*Fig. 14*

- Pushing to the left will activate red led.
- Pushing to the right will activate blue led.
- In central position the unit will remain stopped.

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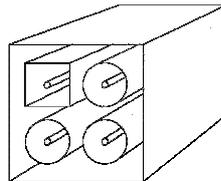
## BL-2, BL-3, WL-2 and WL-3 Pilot Line and Power Supply 12W or 50W Pilot Line

At least one Power Supply Pilot Line (no matter the version, either 12W or 50W) is necessary to make Pilot Line units work.

Pilot Line lighting bars must be connected to a Power Supply, which is plugged in 230-volt 50-hertz single-phase wall socket.

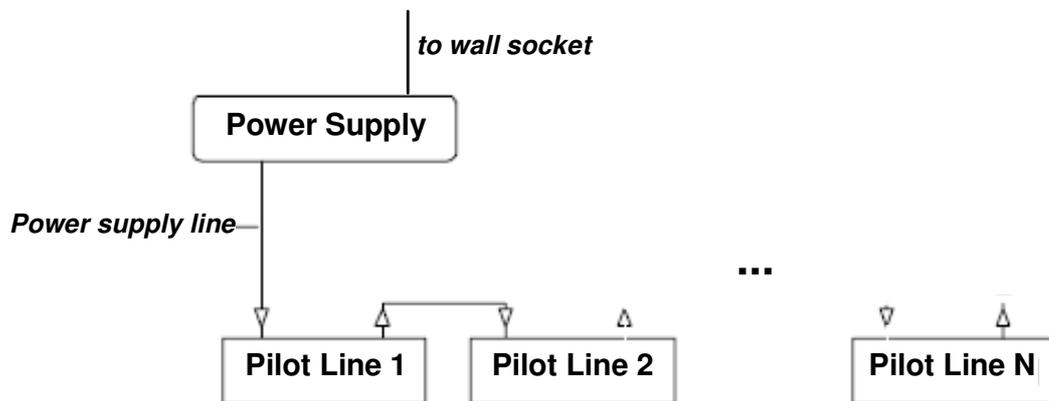
Pilot Line units (BL-2, BL-3, WL-2 or WL-3) can be connected among them for lighting long linear stretches. For calculating the number of power supply units that are necessary, you can suppose that 1 meter of linear stretch is equivalent to 1W of necessary power in the Power Supply unit.

Connections between two elements are through square-shape connectors which are easy to install.



*Fig. 15: Female connector*

For connecting units in series, you must insert a male connector (power supply input) into a female connector (power supply output) creating a serial circuit as shown in figure 16.



*Fig. 16*

These connectors can be joined inserting a male one inside a female one. When you hear a “click”, they will be fitted by the external flange of the male connector which will have been inserted in the orifice of the female connector.

If you want to fix the Power Supply Pilot Line unit to a wall, mark and drill the 2 holes that are bored in the rear side, and then screw it on the surface. BL-2, BL-3, WL-2 and WL-3 Pilot Line incorporate 2 clamps for mounting on a surface.

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## 4. Maintenance

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### Regular cleaning

To prevent the growth of dust and dirt which may impair the proper operation of the equipment, it should be cleaned regularly.

For cleaning it, use a soft, slightly and damp cloth (if the equipment is very dirty, apply a little liquid detergent to the cloth).

**WARNING:** Do not use solvents or products containing alcohol. Make sure that no liquid get inside the equipment.

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## 5. Most common problems

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<b>Problem</b>	<b>Usual cause</b>	<b>Solution</b>
Leds do not light	Power supply problem	Check mains connection
One unit does not start up	Wrong connection	Check connections

If the problem persists despite these measures, please contact to FRESNEL's Technical Service Department.

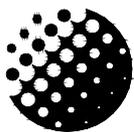
Telf 34 93 274 54 28

Telf 34 93 360 02 30

Fax 34 93 274 47 47



If you want to do without this product, do not mix it with the ordinary waste. There are specific methods and systems for dividing electronic and electromagnetic used products that are described in 2002/96/EC directive, which is in force in the European Community countries.



**FRESNEL S.A.**

**DC-01**

**STATEMENT OF COMPLIANCE**

DATE: 01/01/12

We declare that the products:

*Mark:*

**STRONG**

*Models:*

**BL-10 Pilot  
BL-10 R Pilot  
BL-10 RO Pilot  
BRL-1 Pilot Battery  
BL-2 Pilot Line y BL-3 Pilot Line  
WL-2 Pilot Line y WL-3 Pilot Line  
Power Supply Pilot Line 12W / 50W**

*Year of construction:*

**2012**

Conforms to the following EC directives:

**2006/95/EC:** In relation to the safety requirements for material intended for use within specific voltage limits.

**2004/108/EC:** In relation to the electromagnetic compatibility of equipment, systems and installations.

Sole administrator

Ángel Torrecillas Redón

Barcelona, January 1st of 2012

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