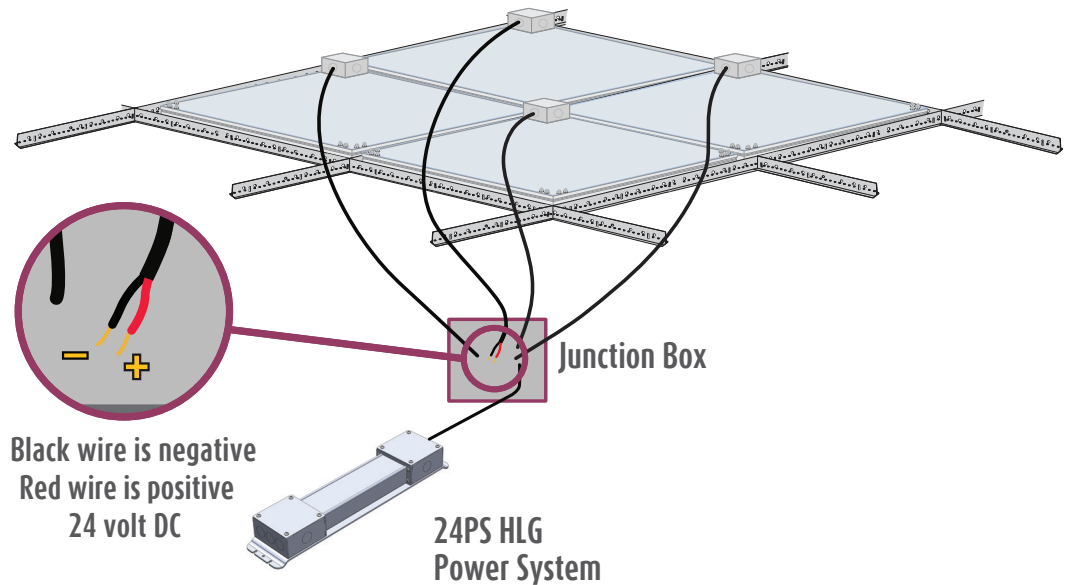


## Classic w/ EcoSlim Electrical Instructions (24PS HLG)



### Installation Packet Includes:

Classic w/ EcoSlim Electrical Instructions (24PS HLG)

Installation specific wiring diagram (where applicable)

EcoPlus and EcoSlim Drawings and Charts (24PS HLG)

Wiring Diagrams EL001199, EL001423, EL001447, EL001454, EL001455

Sky Factory 24PS HLG Power System Dimensions and Weights

For technical support at any time during the installation, please call us **toll free at 866-759-3228**.  
We want your installation to go as smoothly as possible. Thank you for choosing Sky Factory.

## Classic w/ EcoSlim electrical requirements:

ES22 Series: ES22 (2' x 2'), ES22M (60cm x 60cm), ES22G (62.5cm x 62.5cm)

ES24 Series: ES24 (2' x 4'), ES24M (60cm x 120cm), ES24G (62.5cm x 125cm)

NOTE: For custom sizes, see installation specific wiring diagram included (where applicable)

All EcoSlim fixtures are 24V DC only.

EcoSlim fixtures must be mounted in dry locations only.

EcoSlim fixtures must be powered by provided UL, CSA and CE Compliant 24PS HLG Power System

### Sky Factory 24PS HLG Power System:

Input (Typ): 90-305V, 47 - 63 Hz

Output: 24V DC

Maximum Watts (useable) per power system: 600 Watts

Available sizes: 40W, 60W, 80W, 100W, 120W, 150W, 185W, 240W, 320W, 480W, 600W

Power System aluminum enclosure

Mounted on baseplate with junction box on input and output ends

For mounting dimensions and weights, see "EcoPlus and EcoSlim Drawings and Charts (24PS HLG)"

For power system wire sizes, see "EcoPlus and EcoSlim Drawings and Charts (24PS HLG)".

Power system must have 2" clearance for air flow. A 4-6" (10-15cm) clearance must be kept when the adjacent device is a heat source

Power system must be mounted in dry locations. Wall mount recommended.

Power system is specified for Sky Factory EcoSlim and EcoPlus fixtures only.

For installations with multiple power systems, see

installation specific wiring diagram included (where applicable)

For EcoSlim with 24PS HLG Power System wiring diagrams, see

"EcoPlus and EcoSlim Drawings and Charts (24PS HLG)"

For installations with one or more custom sizes, see also

Installation specific wiring diagram included (where applicable)

RF filter, if used, is not provided by Sky Factory. One filter per power system required.

## Classic w/ EcoSlim electrical requirements (cont'd):

Sky Factory provided dimmer control (where specified):

Lutron Diva DVSTV 0 - 10V dimmer/switch (UL & CSA compliant)

Input: auto-ranging 120 - 277V AC

Lutron Diva DDTV 0 - 10V dimmer/switch and PP-DV power pack (UL & CSA compliant)

Input: auto-ranging 120 - 277V AC

Lutron Diva mounts in standard single-gang electrical box

White standard, other colors available on request

Jung 240-10 dimmer/switch and external relay where specified (CE compliant)

Input: 230 - 240V AC

Installs in appliance box to DIN 49073

For dimming requirements, see page 6.

For dimmer wiring diagrams, see dimmer control (and relay where specified) and wiring diagrams included

For other dimmer controls provided, see installation specific wiring diagram included (where applicable)

*Electrical work must be performed by a qualified electrician who is familiar with DC lighting systems and must conform to all local and national codes.*

## Non-Dimmable and Dimmable Certification:

ES22 Series, ES24 Series, ES26 Series, ES33 Series, ES34 Series, ES36 Series, ES44 Series, ES46 Series, ESCST Series, EP22 Series, EP24 Series, EP26 Series, EP33 Series, EP34 Series, EP36 Series, EP44 Series, EP46 Series, EPCST Series fixtures when used with 24PS HLG Power System UL, CSA and CE Listed by Intertek Group plc

## Step 1: Wiring the EcoSlim fixtures to the power system

See also “EcoPlus and EcoSlim Drawings and Charts (24PS HLG)” and installation specific wiring diagram (where applicable)

EcoSlim Lighting System - ES22 and ES24				
TSF Model No.	Dimensions: WxLxH	Weight	System Wattage (Max)	Input Current @ 24 Volts DC
ES22	23.75 x 23.75 x 3.72 (inches)	10.5 lb	24.5	1.02 A
ES24	23.75 x 47.75 x 3.72 (inches)	19.7 lb	36.7	1.53 A
ES22M	59.4 x 59.4 x 9.45 (cm)	4.76 kg	24.5	1.02 A
ES24M	59.4 x 119.4 x 9.45 (cm)	8.94 kg	36.7	1.53 A
ES22G	61.9 x 61.9 x 9.45 (cm)	4.76 kg	24.5	1.02 A
ES24G	61.9 x 124.4 x 9.45 (cm)	8.94 kg	36.7	1.53 A

NOTE: For custom sizes, see also installation specific wiring diagram (where applicable)



**Notice:** The LED fixtures are 24V DC ONLY.  
AC voltage connected directly to the fixtures  
will destroy the lighting system.

Fixtures are wired together in single or multiple circuits. Each circuit is dedicated to a single power system and may be arranged in rows or clusters, depending on installation.

A junction box with 1/2" trade size knock-outs is attached on top corner of each fixture.

- Power leads inside fixture junction box are polarized, red (+) and black (-).
- Where fixtures have multiple junction boxes, see installation specific wiring diagram included.
- Fixture wire size 18 AWG stranded.

## Step 1 continued

Wiring from fixtures to V DC side of provided power system is polarized, positive (+) to positive (+) and negative (-) to negative (-):

EcoSlim fixture red “+” to power system **Vo+**

EcoSlim fixture black “-” to power system **Vo-**

For power system V DC wire sizes, see “EcoPlus and EcoSlim Drawings and Charts (24PS HLG)”

HLG-480H-24B and HLG-600H-24B have two sets of output leads. Meanwell recommends loading no more than:

240 Watts on each set of cables for HLG-480H-24B

480 Watts on each set of cables for HLG-600H-24B

Wire and additional junction boxes from fixtures to power supply provided by others.

Wire gauge must conform to local and national codes. Voltage drop of no more than 3% is recommended.

## Step 2: Wiring the power system to source V AC

Run power to V AC side of the power system.

For power system V AC wire sizes, see “EcoPlus and EcoSlim Drawings and Charts (24PS HLG)”

Load to power system **ACL**

Neutral to power system **ACN**

Ground to power system  **(GREEN/YELLOW)**

Wire gauge must conform to local and national codes.

Install the power switch on the V AC input side of the power system.

### Step 3: Dimming requirements

Contact the Sky Factory if you plan on using a dimming system provided by others.



**Notice:** Dimming using non-approved systems may permanently damage LED's and will void the warranty!

#### Wiring a Sky Factory provided dimmer control:

To wire the dimmer control (and external relay where specified), refer to wiring diagram included with dimmer and relay and "EcoPlus and EcoSlim Drawings and Charts (24PS HLG)", and installation specific wiring diagram included (where applicable.)

**NOTE:** For all single fixture ES22 installations, dimmer control is factory set for optimal dimming.

### Step 4: Checking the polarity



**Notice:** CHECK THE POLARITY BEFORE TURNING ON POWER. MAKE SURE:

Red wires on the fixtures go to the "+" terminals of the power supply

Black wires on the fixtures go to the "-" terminals of the power supply

**IF THE SYSTEM IS WIRED BACKWARD, IT WILL DESTROY THE LED'S!**