Classic w/ EcoPlus Electrical Instructions
(24PS HLG)

Installation Packet Includes:

Classic w/ EcoPlus Electrical Instructions (24PS HLG)
  Installation specific wiring diagram (where applicable)

EcoPlus and EcoSlim Drawings and Charts (24PS HLG)
  Wiring Diagrams Wiring Diagrams EL001199, EL001201, EL001423, EL001424, EL001425
  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/ EcoPlus electrical requirements:

EP22 Series: EP22 (2’ x 2’), EP22M (60cm x 60cm), EP22G (62.5cm x 62.5cm)
EP24 Series: EP24 (2’ x 4’), EP24M (60cm x 120cm), EP24G (62.5cm x 125cm)
NOTE: For custom sizes, see installation specific wiring diagram included (where applicable)

All EcoPlus fixtures are 24V DC only.
EcoPlus fixtures must be mounted in dry locations only.
EcoPlus 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. Wall mount recommended.
Power system must be mounted in dry locations.
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 EcoPlus 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 the Sky Factory. One filter per power system required.
Sky Factory provided dimmer control (where specified):

Lutron Diva DVSTV 0 - 10V sliding dimmer/switch (UL & CSA compliant)
   Input: auto-ranging 120 - 277V AC
   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
   “EcoPlus and EcoSlim Drawings and Charts (24PS HLG)”.

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, ESCST Series,
when used with 24PS HLG Power System UL, CSA and CE Listed by Intertek Group plc
Step 1: Wiring the EcoPlus fixtures to the power system

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

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

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**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 (–).
- 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 (–):

EcoPlus fixture red “+” to power system Vo+
EcoPlus 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 2% 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)”

- Line 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)”.

**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!*