Custom EcoPlus Electrical Instructions
(24PS HLG)

Installation Packet Includes:

- Custom EcoPlus Electrical Instructions (24PS HLG)
  - EL001250 - Without Dimmer
  - EL001251 - With Dimmer
  - EL001201 - Lutron Diva Dimmer with Multiple Power Systems
  - EL001202 - Lutron Lyneo Dimmer with Multiple Power Systems

- Electrical Layout EL1 & EL2

- Sky Factory 24PS HLG Power System Installation

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.
Custom EcoPlus electrical requirements:

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 “Sky Factory 24PS HLG Power System Installation”

For power system wire sizes, see EL001250 and EL001251
Power system must have 2” clearance for air flow. Wall mount recommended.
Power system must be mounted in dry locations.

For installation specific number of power systems and number of fixtures per power system,
  see Electrical Layout EL1 & EL2

For EcoPlus with 24PS HLG Power System general wiring diagrams, see
  EL001250-EL001251

For single dimmer control and multiple power systems, see
  EL001201-EL001202

RF filter, if used, is not provided by Sky Factory. One filter per power system required.
Custom EcoPlus electrical requirements (cont’d):

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 5.

For dimmer wiring diagrams, see dimmer control (and relay where specified) and EL001251-EL001202

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:

Step 1: Wiring the EcoPlus fixtures to the power system

See also drawings on pages 6-9 and Electrical Layout EL1 & EL2

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.

For installation specific number of fixtures per power system, see Electrical Layout EL2

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 (-).
• Wire size 18 AWG stranded.
• NOTE: Where a fixture has multiple junction boxes, each junction box will be included in a separate circuit.

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 EL001250 and EL001251

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 the fixtures to the power system supplied 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 size, see EL001250 and EL001251

- 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 EL001251-EL001202

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!