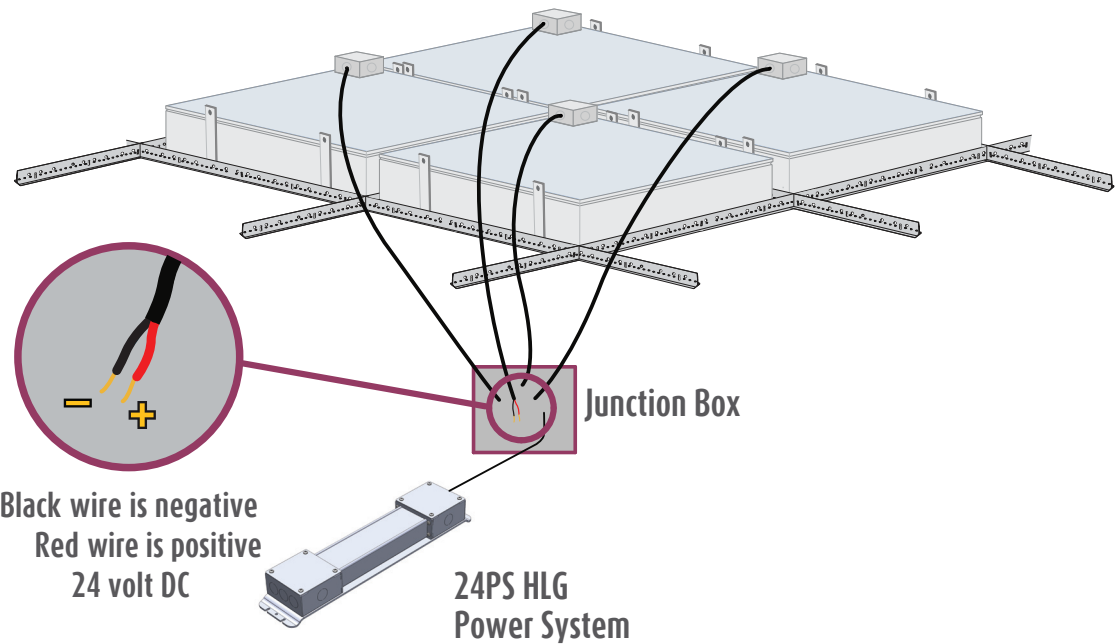


## Custom EcoPlus Electrical Instructions (24PS HLG)



### 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

Wire Sizing Chart

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 the 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

Lutron Lyneo preset 0 - 10V sliding dimmer/switch and external relay (CE compliant)

Input: 220 - 240V AC

Mounts in standard UK style single gang backbox. 35mm depth recommended.

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:

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 and EPCST Series fixtures 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 drawings and charts on pages 6-10 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

Wire and additional junction boxes from the fixtures to the power system supplied by others.

Voltage drop will occur over long distances. For appropriate lengths and gauges, see  
Wire Sizing Chart

Wire gauge must conform to local and national codes.

## 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 0-10V 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:

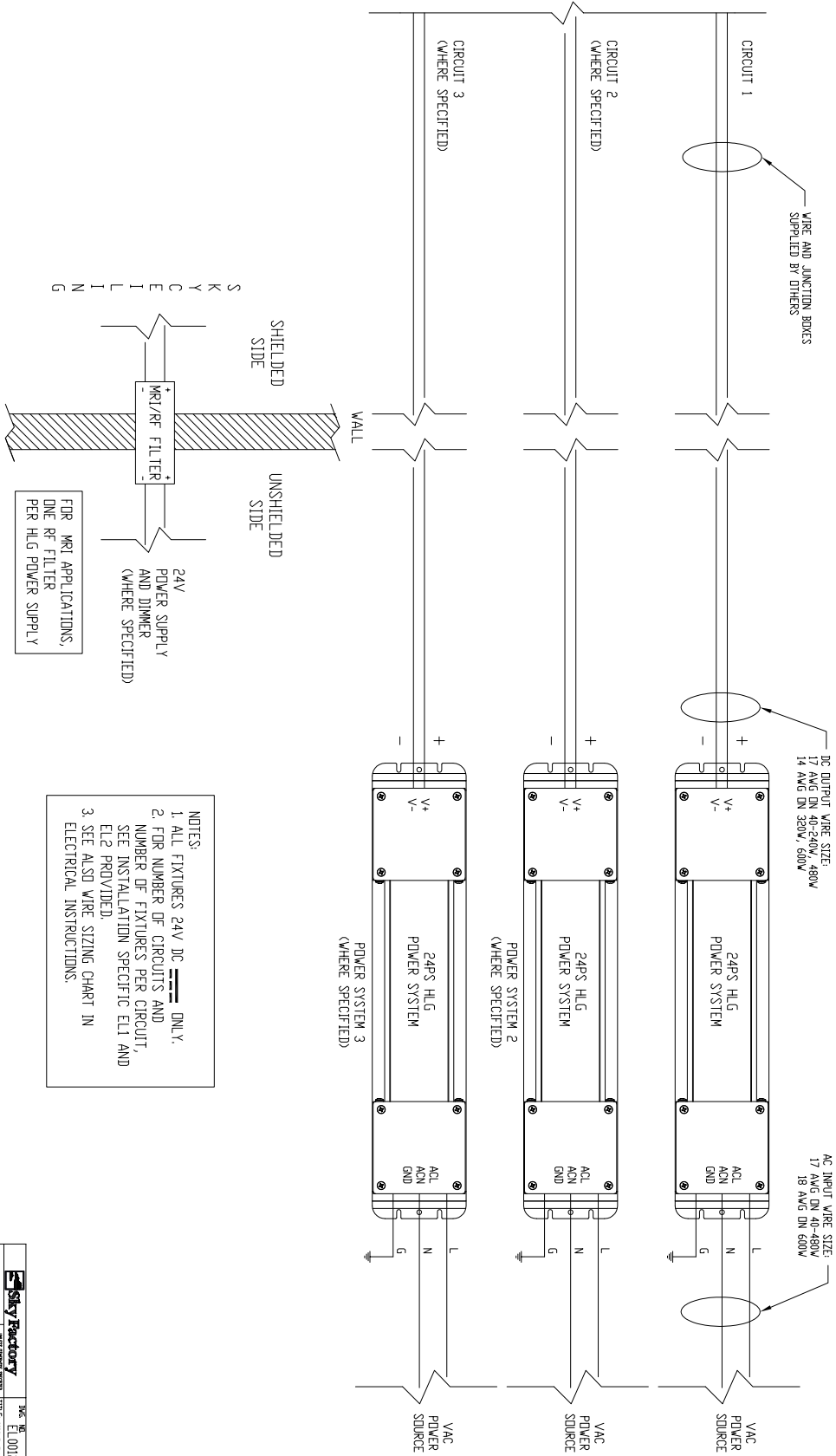
Red wires on the fixtures go to the "+" terminals of the power supply

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!**

CIRCLE, ELLIPSE OR CUSTOM  
 ECOPUS WITH 24PS HLG POWER SYSTEM  
 NON-DIMMING OPTION

S K Y F A C T O R Y  
 E L E C T R I C A L

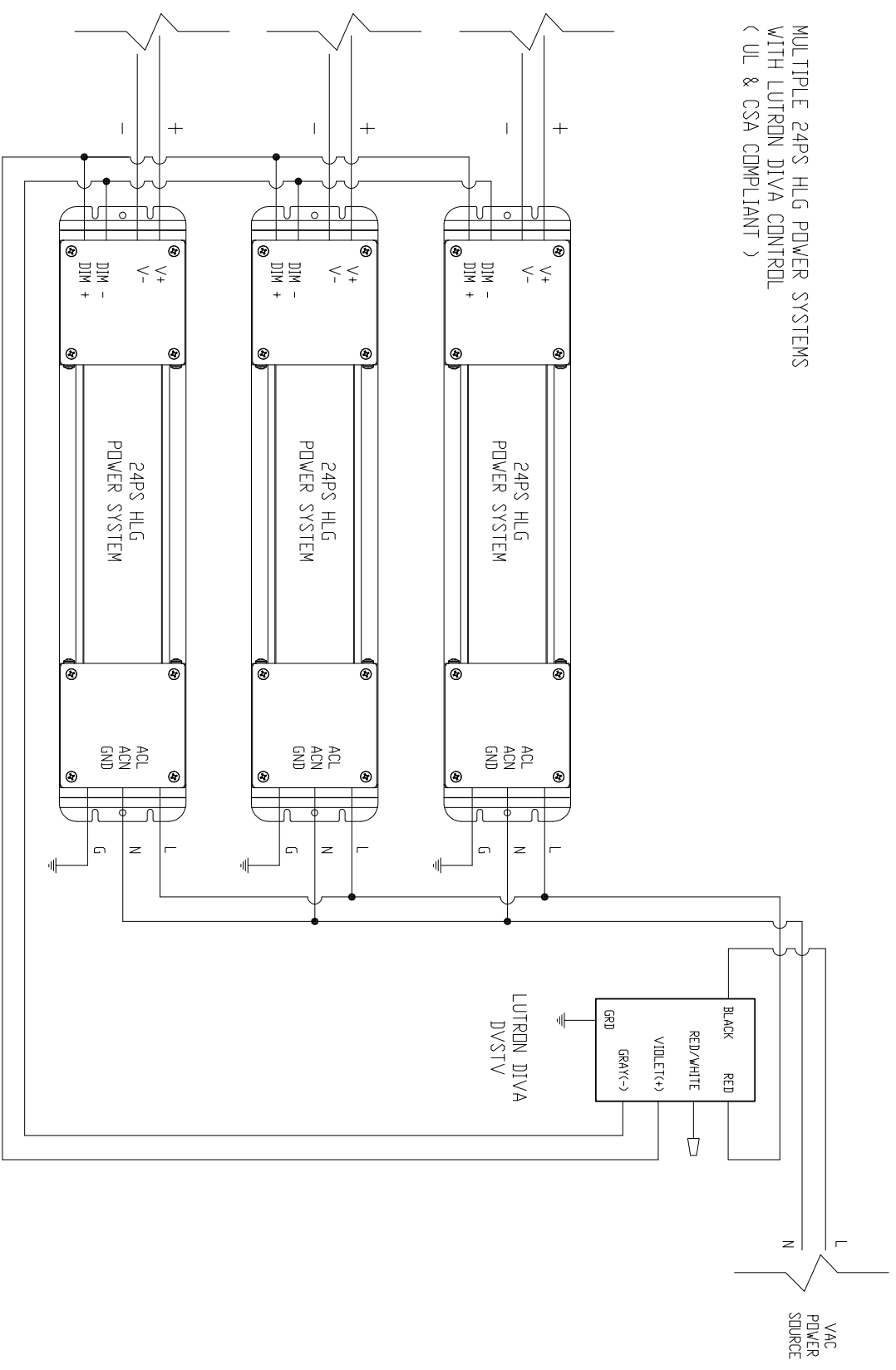


- NOTES:
1. ALL FIXTURES 24V DC ONLY.
  2. FOR NUMBER OF CIRCUITS AND NUMBER OF FIXTURES PER CIRCUIT, SEE INSTALLATION SPECIFIC EL1 AND EL2 PROVIDED.
  3. SEE ALSO WIRE SIZING CHART IN ELECTRICAL INSTRUCTIONS.

<b>Sky Factory</b>	THE MFG. CO.	REV. 0
10000 W. 10TH AVENUE DENVER, CO 80202 TEL: 303.751.1000 WWW.SKYFACTORY.COM	TITLE: CIRCLE, ELLIPSE OR CUSTOM ECOPUS WITH 24PS HLG POWER SYSTEM NON-DIMMING OPTION	DATE: 12/04/2018
BY: [Signature]	SCALE: NOT SHOWN	SHEET: 081



MULTIPLE 24PS HLG POWER SYSTEMS  
 WITH LUTRON DIVA CONTROL  
 ( UL & CSA COMPLIANT )

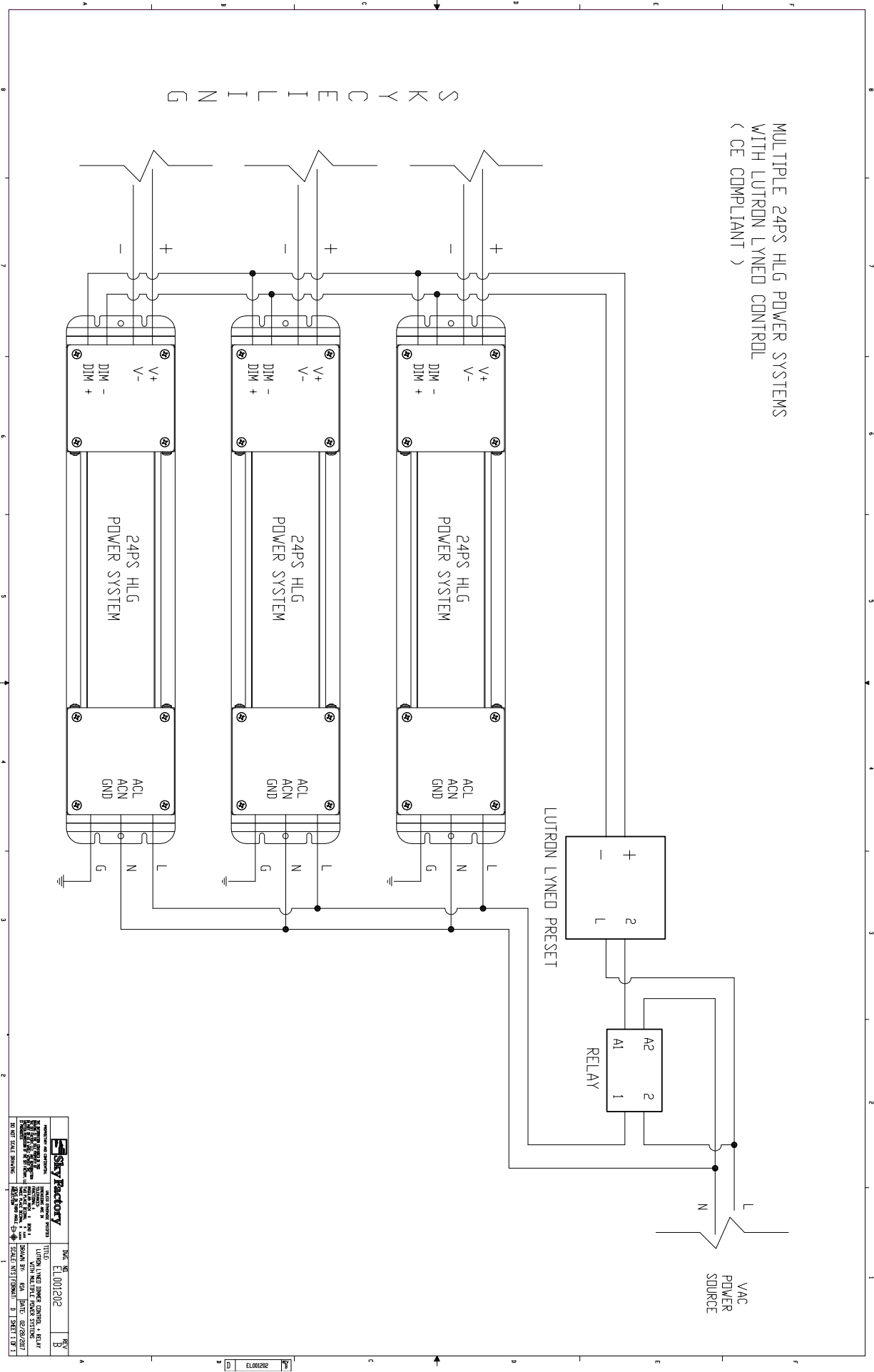


S K Y F A C T O R Y

<b>Sky Factory</b>		DATE	REV
MANUFACTURER OF SKYFACTORY <small>10000 Skyway Blvd. Suite 100        Dallas, TX 75243        972-443-8888        www.skyfactory.com</small>		ELO01201	B
TITLE: LUTRON DIVA DIMMER CONTROL WITH MULTIPLE HLG POWER SYSTEMS		ISSUED	02/28/2017
DRAWN BY: RJA		SCALE	AS SHOWN
CHECKED BY: JTB		SHEET	1 OF 1



MULTIPLE 24PS HLG POWER SYSTEMS  
 WITH LUTRON LYNEO CONTROL  
 ( CE COMPLIANT )



		TITLE: ELO01202 DATE: 08/28/2017 SCALE: 1/8" = 1'-0"
PROJECT: SKYCEILING DRAWING NO.: ELO01202 SHEET NO.: 1 TOTAL SHEETS: 1	TITLE: MULTIPLE 24PS HLG POWER SYSTEMS WITH LUTRON LYNEO CONTROL - 80A DATE: 08/28/2017 SCALE: 1/8" = 1'-0"	DATE: 08/28/2017 SCALE: 1/8" = 1'-0"

# Wire Sizing Chart

This chart is a guideline for recommended wiring practice.

Applies to 24V DC power only, i.e. from “fixture to power system.”

Not meant for “V AC to power system” nor “dimmer to power system.”

Wire sizes in AWG Conversion chart below.

Distance: Feet (Meters)	AWG for 5A	AWG for 10A	AWG for 15A
20 (6)	18	14	12
30 (9)	16	12	10
40 (12)	14	10	10
50 (15)	12	10	*
60 (18)	12	10	*
80 (24)	10	*	*
100 (30)	10	*	*

\* Terminal block wire range #10 - #22 Awg.

AWG	MM
10	6.271
11	5.156
12	3.302
13	2.629
14	2.088
15	1.652
16	1.308
17	1.039
18	0.823