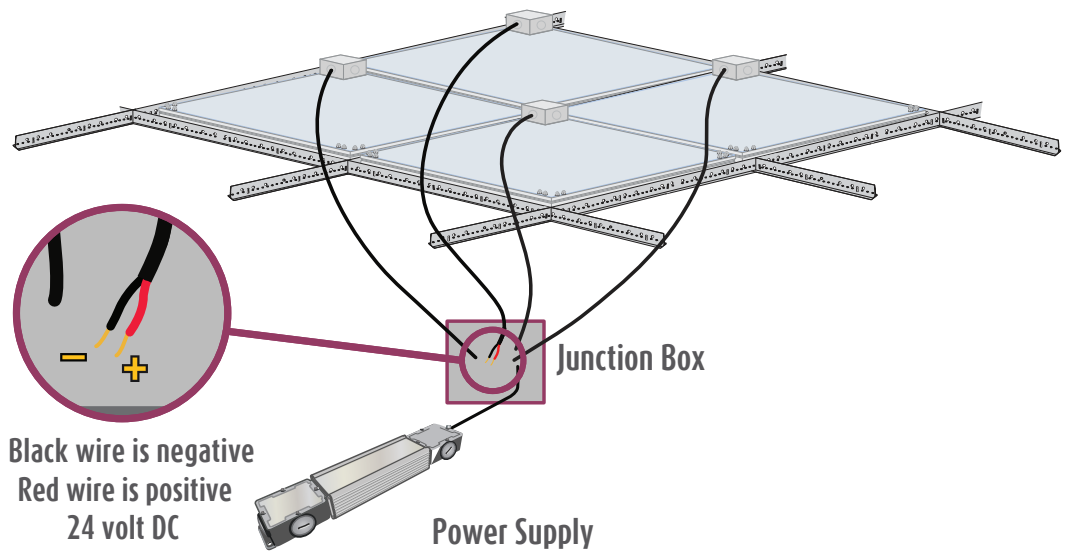


Classic w/ EcoSlim Electrical Instructions (HLG)



Installation Instruction includes:

Classic w/ EcoSlim Electrical Instructions (HLG)

Wiring Diagram EL001391, EL001428 & EL001429

Installation specific wiring diagram (where applicable)

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 powered only by provided UL Recognized, CE Compliant 24V DC power supply

Dry locations only.

For installations with multiple power supplies, see
installation specific wiring diagram included (where applicable)

For installations with one or more custom sizes, see
installation specific wiring diagram included (where applicable)

RF filter, if used, is not provided by Sky Factory.

Sky Factory provided external dimmable power supply:

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

Output 24V DC

UL (U.S. and Canada) Recognized and CE Compliant

Surface mountable

Classic w/ EcoSlim 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

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

Input: 230 - 240V AC

Helvar TK4 140 sliding dimmer/switch (CE compliant)

Input: 220 - 240V AC

For dimming requirements, see page 6.

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

EL001180 or EL001391

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 supply

See supporting drawings on pages 7-8 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 (-).
- Wire size 18 AWG stranded.

Step 1 continued

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

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

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

For power supply V DC wire size, see EL001180

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 supply to source V AC

Run power to V AC side of the power supply. For power supply V AC wire size, see EL001180

Load to power supply **ACL**

Neutral to power supply **ACN**

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

Wire gauge must conform to local and national codes.

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

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 or power supply 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 drawings attached

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

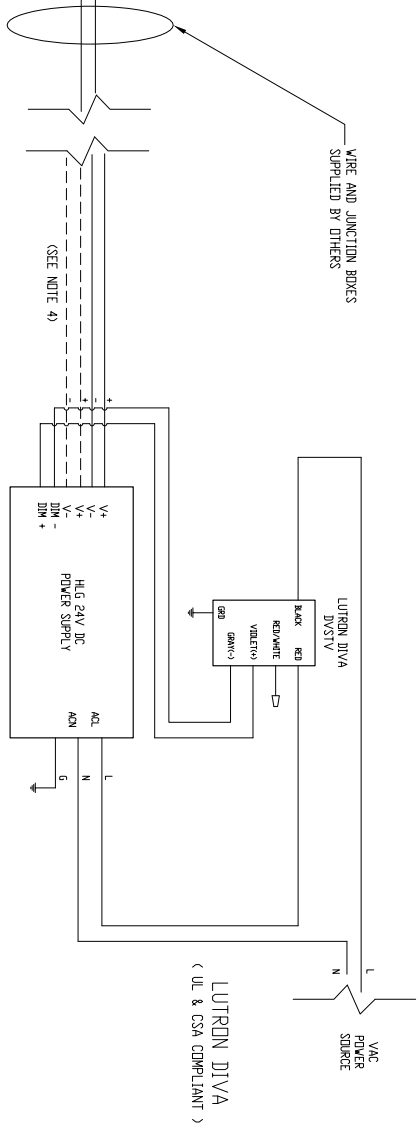
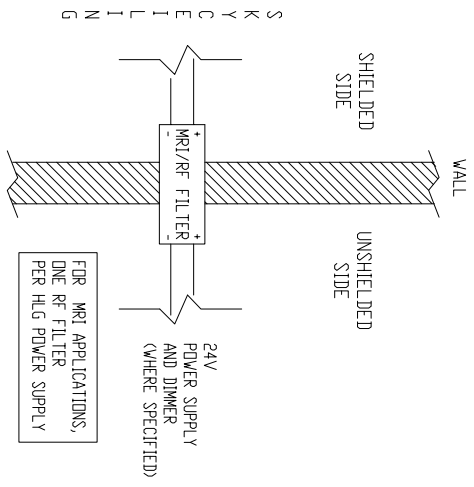
Black wires on the fixtures go to the "-" terminals of the power supply

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

EP AND ES SERIES FIXTURES
WITH HLG POWER SUPPLY
DIMMING OPTION

- ECOPULS
EP22 SERIES, EP24 SERIES,
EP26 SERIES, EP33 SERIES,
EP34 SERIES, EP36 SERIES,
EP44 SERIES, EP46 SERIES
- ECOSLIM
ES22 SERIES, ES24 SERIES,
ES26 SERIES, ES33 SERIES,
ES34 SERIES, ES36 SERIES,
ES44 SERIES, ES46 SERIES

- NOTES:
1. ALL FIXTURES 24V DC ONLY.
2. JUNCTION BOX ATTACHED TO EACH FIXTURE;
WIRE SIZE 18 AWG STRANDED
- WIRE COLORS:
RED (+) (POSITIVE)
BLACK (-) (NEGATIVE)
3. SEE ALSO WIRE SIZING CHART
4. HLG-480H-24B AND HLG-600H-24B HAVE TWO SETS
OF OUTPUT LEADS. MEANWELL RECOMMENDS 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



SkyFactory
WIRE SIZING CHART
WIRE SIZE (AWG) vs. LENGTH (FT) vs. CURRENT (Amps)

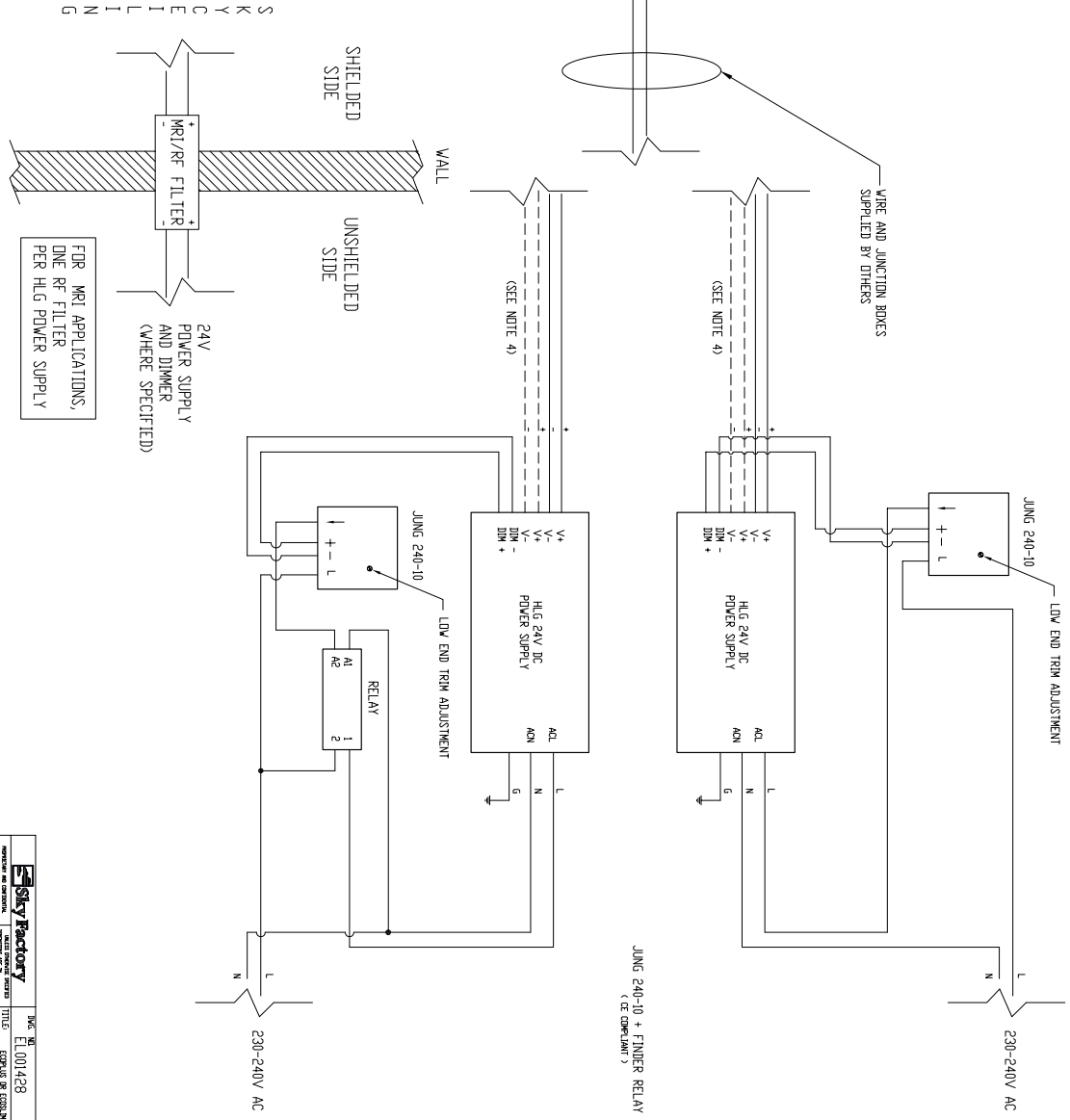
Length (ft)	Current (Amps)	Wire Size (AWG)
10	10	18
20	10	18
30	10	18
40	10	18
50	10	18
60	10	18
70	10	18
80	10	18
90	10	18
100	10	18
10	15	16
20	15	16
30	15	16
40	15	16
50	15	16
60	15	16
70	15	16
80	15	16
90	15	16
100	15	16
10	20	14
20	20	14
30	20	14
40	20	14
50	20	14
60	20	14
70	20	14
80	20	14
90	20	14
100	20	14
10	25	12
20	25	12
30	25	12
40	25	12
50	25	12
60	25	12
70	25	12
80	25	12
90	25	12
100	25	12

DATE: 10/27/2023
DRAWN BY: BSA
CHECKED BY: BSA
SCALE: NOT SHOWN

EP AND ES SERIES FIXTURES
WITH HLG POWER SUPPLY
DIMMING OPTION

- ECOPLUS
EP22 SERIES, EP24 SERIES,
EP26 SERIES, EP33 SERIES,
EP34 SERIES, EP36 SERIES,
EP44 SERIES, EP46 SERIES
- ECOSLIM
ES22 SERIES, ES24 SERIES,
ES26 SERIES, ES33 SERIES,
ES34 SERIES, ES36 SERIES,
ES44 SERIES, ES46 SERIES

- NOTES:
1. ALL FIXTURES 24V DC DNL.Y.
2. JUNCTION BOX ATTACHED TO EACH FIXTURE:
WIRE SIZE 18 AWG STRANDED
- WIRE COLORS:
RED (+) POSITIVE
BLACK (-) NEGATIVE
3. SEE ALSO WIRE SIZING CHART.
4. HLG-480H-24B AND HLG-600H-24B HAVE TWO SETS
OF OUTPUT LEADS. MEANWELL RECOMMENDS 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

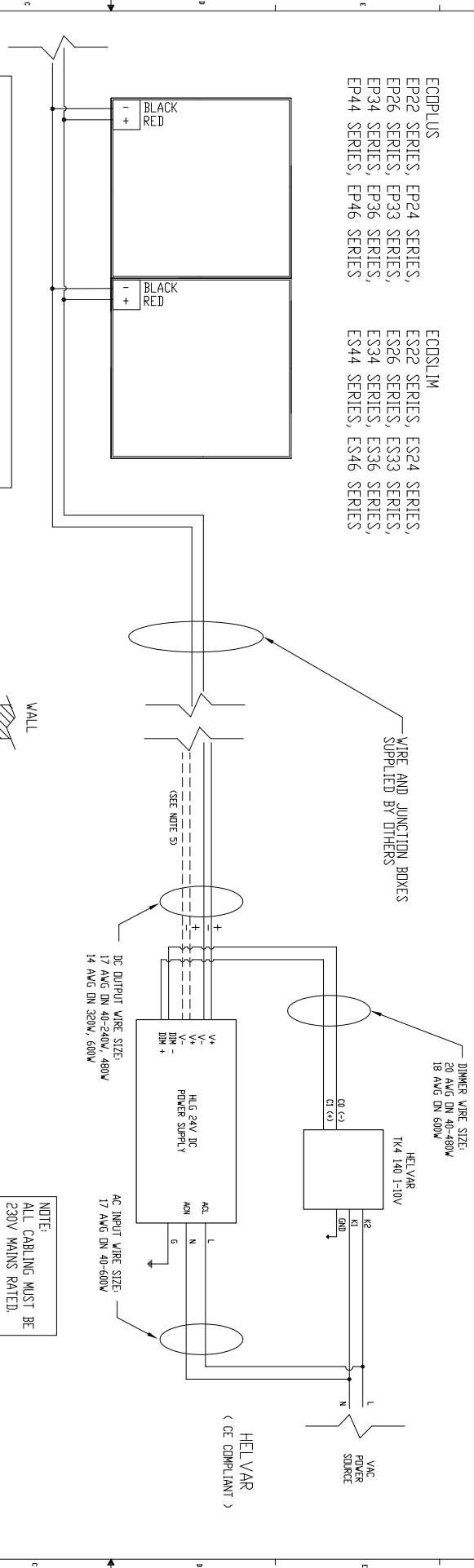


Sky Factory	TITLE	NOV
WIRING DIAGRAM FOR EP AND ES SERIES FIXTURES WITH HLG POWER SUPPLY AND DIMMING OPTION	NOV	1
DATE: 11/11/2020	SCALE: 1/8"=1'-0"	SHEET NO. 1
BY: [Signature]	CHECKED: [Signature]	DATE: 11/11/2020

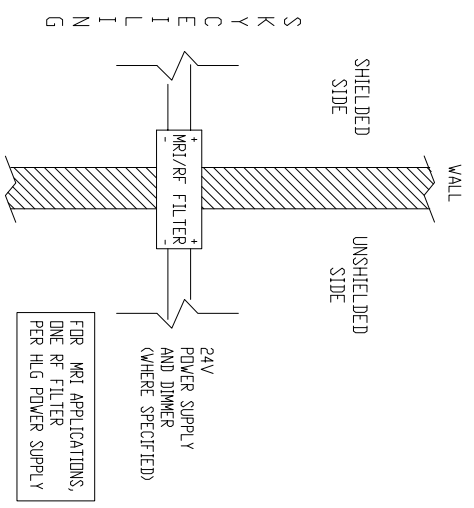
EP AND ES SERIES FIXTURES
WITH HLG POWER SUPPLY
DIMMING OPTION

ECOPULS
EP22 SERIES, EP24 SERIES,
EP26 SERIES, EP33 SERIES,
EP34 SERIES, EP36 SERIES,
EP44 SERIES, EP46 SERIES

ECOSLIM
ES22 SERIES, ES24 SERIES,
ES26 SERIES, ES33 SERIES,
ES34 SERIES, ES36 SERIES,
ES44 SERIES, ES46 SERIES



- NOTES:
1. ALL FIXTURES 24V DC **DNLY**.
 2. JUNCTION BOX ATTACHED TO EACH FIXTURE:
WIRE SIZE 18 AWG STRANDED
WIRE COLORS:
RED (+) (POSITIVE)
BLACK (-) (NEGATIVE)
 3. SEE ALSO WIRE SIZING CHART.
 4. USE OF SKY FACTORY APPROVED DIMMING SYSTEM **DNLY**!
CONTACT THE SKY FACTORY IF YOU PLAN ON USING A
DIMMING SYSTEM PROVIDED BY OTHERS.
 5. 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
- NOTICE: DIMMING USING NON-APPROVED SYSTEMS
MAY PERMANENTLY DAMAGE LEDS AND WILL
VOID THE WARRANTY!



NOTE:
ALL CABLING MUST BE
230V MAINS RATED.

Sky Factory		DATE: 01/01/2024	REV: 01
PROJECT: EL001391		DATE: 01/01/2024	REV: 01
TITLE: WIRING DIAGRAM FOR HLG POWER SUPPLY		DATE: 01/01/2024	REV: 01
DRAWN BY: [Name]		DATE: 01/01/2024	REV: 01
SCALE: 1:1		DATE: 01/01/2024	REV: 01
SHEET 1 OF 1		DATE: 01/01/2024	REV: 01