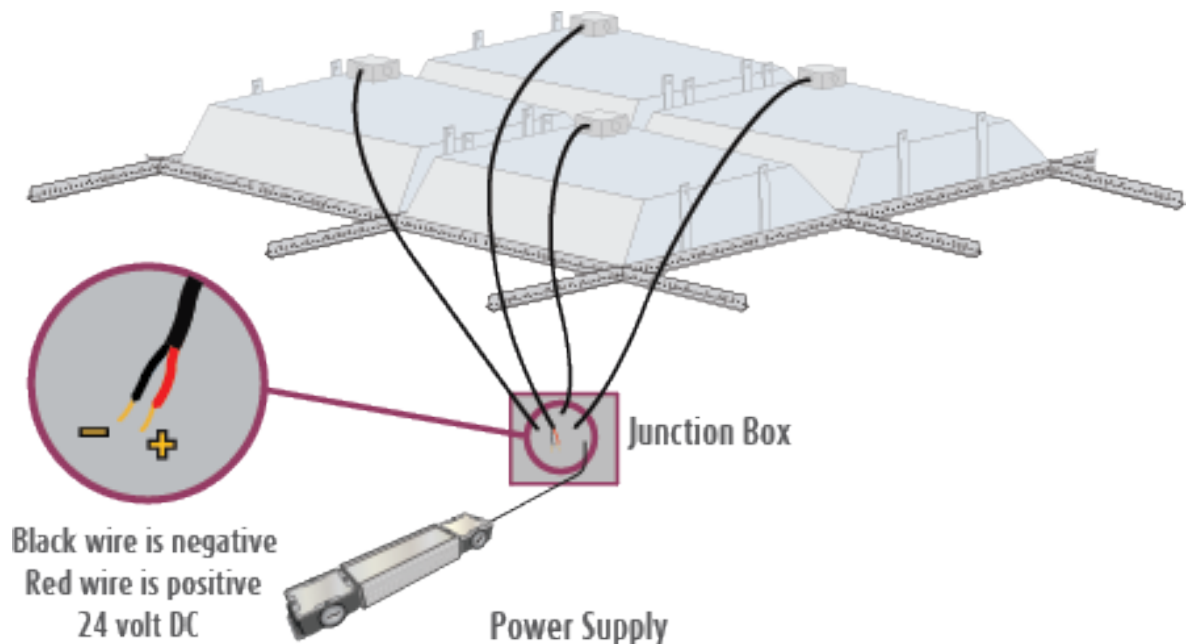


Classic w/ EcoPlus Electrical Instructions (Fixture Only)



Installation Instructions includes:

Classic w/ EcoPlus Electrical Instructions (Fixture Only)

Wiring Diagram EL001181

Total Wattage per Number of EcoPlus Fixtures

Wire Sizing Chart

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/ 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 powered only by a UL Listed or CE Compliant 24V DC power supply with wattage greater than total wattage of EcoPlus fixtures.

Dry locations only.

For number of fixtures per power supply, see

“Total Wattage per Number of EcoPlus Fixtures” on page 6

For installations with one or more custom sizes, see

installation specific wiring diagram attached

For dimming requirements, see page 4.

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

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.

Step 1: Wiring the EcoPlus fixtures to the power supply

See supporting drawing and charts on pages 5-7 and installation specific wiring diagram (where applicable)

EcoPlus Lighting System - EP22 and EP24 Series				
TSF Model No.	Dimensions: WxLxH	Weight	System Wattage (Max)	Input Current @ 24 Volts DC
EP22	23.6 x 23.6 x 5.63 (inches)	4.0 lb	23	0.96 A
EP24	23.75 x 47.75 x 5.85 (inches)	11.7 lb	47	1.96 A
EP22M	58.9 x 58.9 x 14.3 (cm)	1.8 kg	23	0.96 A
EP24M	59.4 x 119.4 x 14.86 (cm)	5.31 kg	47	1.96 A
EP22G	61.4 x 61.4 x 14.3 (cm)	2.1 kg	23	0.96 A
EP24G	61.9 x 124.4 x 14.86 (cm)	5.31 kg	47	1.96 A

NOTE: For custom sizes, see also installation specific wiring diagram



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 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.

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

Wire and additional junction boxes from the fixtures to the power supply provided 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: Dimming requirements

IMPORTANT: Use of Sky Factory approved dimming system only! 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!

In MRI applications, an RF Filter is required and is not provided by the Sky Factory.

Step 3: 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

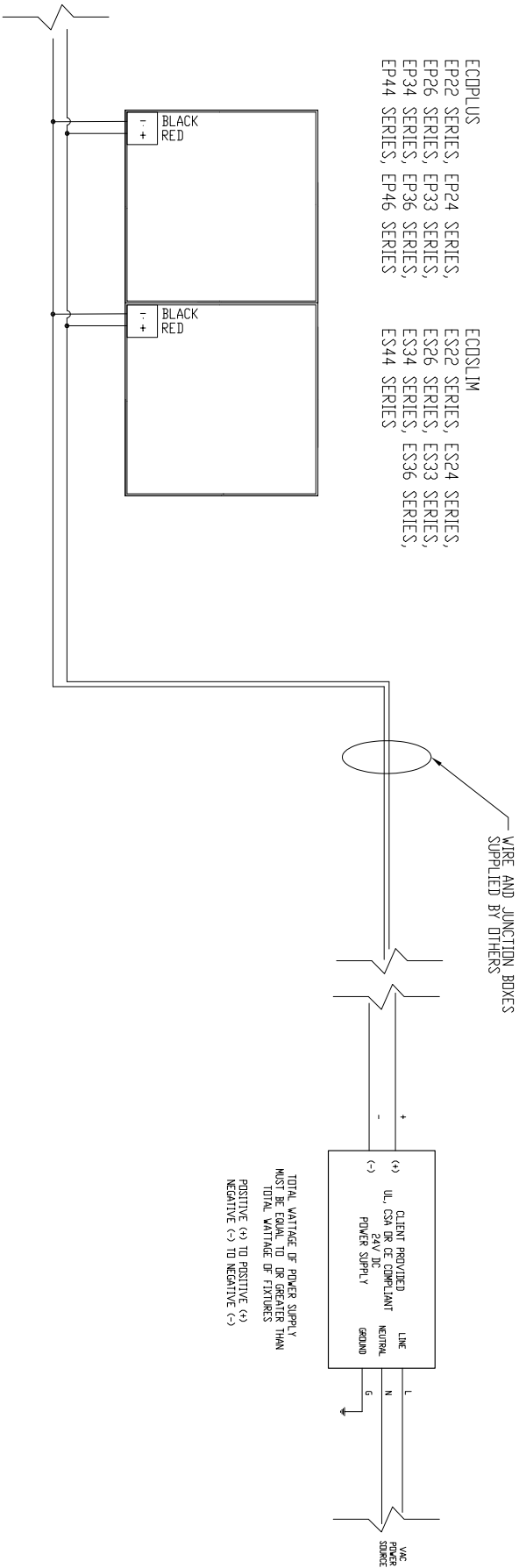
Black wires on the fixtures go to the “-” terminals of the power supply

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

EP AND ES SERIES FIXTURES
WITH CLIENT PROVIDED POWER SUPPLY

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



TOTAL WATTAGE OF POWER SUPPLY
MUST BE EQUAL TO OR GREATER THAN
TOTAL WATTAGE OF FIXTURES
POSITIVE (+) TO POSITIVE (+)
NEGATIVE (-) TO NEGATIVE (-)

- NOTES:
1. ALL FIXTURES 24V DC ONLY.
 2. JUNCTION BDX ATTACHED TO EACH FIXTURE:
WIRE SIZE 18 AWG STRANDED
WIRE COLORS:
RED (+) (POSITIVE)
BLACK (-) (NEGATIVE)
 3. SEE ALSO TOTAL WATTAGE PER NUMBER OF ECOSLIM FIXTURES
CHART AND WIRE SIZING CHART.
 4. USE OF SKY FACTORY APPROVED DIMMING SYSTEM ONLY!
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!

PROJECT NO. ELO01181 DATE: 12/26/2018 SHEET NO. 8 OF 8	TITLE: ELO01181
PROJECT ADDRESS: 10000 W. BROADWAY SUITE 100 DENVER, CO 80231	DRAWN BY: EDA DATE: 12/26/2018
PROJECT NO. ELO01181 SHEET NO. 8 OF 8	SCALE: NOT SHOWN

Total Wattage per Number of EP22 Series Fixtures

EP22 Series fixtures must be powered by
a UL/CSA Listed or CE Compliant 24V DC power supply.

This table provides information for properly sizing a power supply
given the number of fixtures in a given installation.

No. of EcoSlims	Required Current Amps	Required Current Watts
1	0.96	23
2	1.92	46
3	2.88	69
4	3.84	92
5	4.8	115
6	5.76	138
7	6.72	161
8	7.68	184
9	8.64	207
10	9.6	230
11	10.56	253
12	11.52	276
13	12.48	299
14	13.44	322
15	14.4	345
16	15.36	368
17	16.32	391
18	17.28	414
19	18.24	437
20	19.2	460
21	20.16	483
22	21.12	506
23	22.08	529
24	23.04	552
25	24	575
26	24.96	598
27	25.92	621
28	26.88	644
29	27.84	667
30	28.8	690
31	29.76	713
32	30.72	736
33	31.68	759
34	32.64	782
35	33.6	805
36	34.56	828

Wire Sizing Chart

This chart is a guideline for recommended wiring practice.

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

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

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