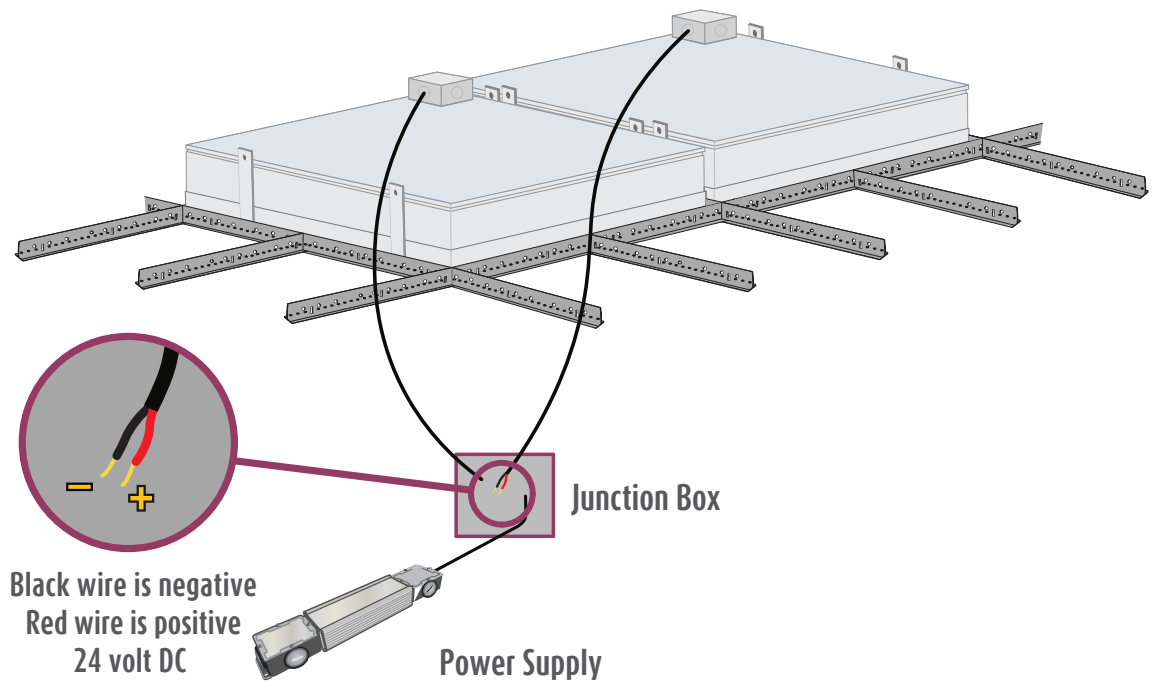




## Revelation w/ EcoPlus Electrical Instructions (EP Only)



### Installation Instructions includes:

Revelation w/ EcoPlus Electrical Instructions (EP Only)

Wiring Diagram EL001181

Total Wattage per Number of EcoPlus Fixtures

Wire Sizing Chart

Custom SkyCeiling 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 The Sky Factory.

## Revelation w/ EcoPlus Electrical Requirements:

EP26 Series = EP26, EP26M, EP26G

EP33 Series = EP33, EP33M, EP33G

EP34 Series = EP34, EP34M, EP34G

EP36 Series = EP36, EP36M, EP36G

EP44 Series = EP44, EP44M, EP44G

NOTE: For custom sizes, see Custom SkyCeiling wiring diagram (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 6-8

For installations with one or more custom sizes, see

Custom SkyCeiling 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 Revelation fixtures to the power supply

See supporting drawing and charts on pages 5-9 and Custom SkyCeiling wiring diagram (where applicable)

EcoPlus Lighting System - EP26 Series to EP44 Series				
TSF Model No.	Light Box Dimensions and Weight Only		System Wattage (Max)	Input Current @ 24 Volts DC
	WxLxH	Weight		
EP26	22.8125 x 34.8125 x 5.85 (inches)	16.6 lb	69.1	2.88A
EP33	34.8125 x 34.8125 x 5.85 (inches)	12.6 lb	51.8	2.16A
EP34	34.8125 x 46.8125 x 5.85 (inches)	15.8 lb	69.1	2.88A
EP36	34.8125 x 70.8125 x 5.85 (inches)	22 lb	103.7	4.32A
EP44	46.8125 x 46.8125 x 5.85 (inches)	19.9 lb	92.2	3.84A
EP26M	57 x 177 x 14.86 (cm)	7.6 kg	69.1	2.88A
EP33M	87 x 87 x 14.86 (cm)	5.8 kg	51.8	2.16A
EP34M	87 x 117 x 14.86 (cm)	7.2 kg	69.1	2.88A
EP36M	87 x 177 x 14.86 (cm)	10 kg	103.7	4.32A
EP44M	117 x 117 x 14.86 (cm)	9.1 kg	92.2	3.84A
EP26G	59.5 x 184.5 x 14.86 (cm)	7.6 kg	69.1	2.88A
EP33G	90.8 x 90.8 x 14.86 (cm)	5.8 kg	51.8	2.16A
EP34G	90.8 x 122 x 14.86 (cm)	7.2 kg	69.1	2.88A
EP36G	90.8 x 184.5 x 14.86 (cm)	10 kg	103.7	4.32A
EP44G	122 x 122 x 14.86 (cm)	9.1 kg	92.2	3.84A

NOTE: For custom sizes, see also Custom SkyCeiling wiring diagram



**Notice:** The LED fixtures are 24V DC ONLY.

AC voltage connected directly to the fixtures  
will destroy the lighting system.

Fixtures may be arranged in rows or clusters, depending on the 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 (+) to (+) and black (-) to (-).
- Wire size 18 AWG stranded.

## Step 1 continued

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

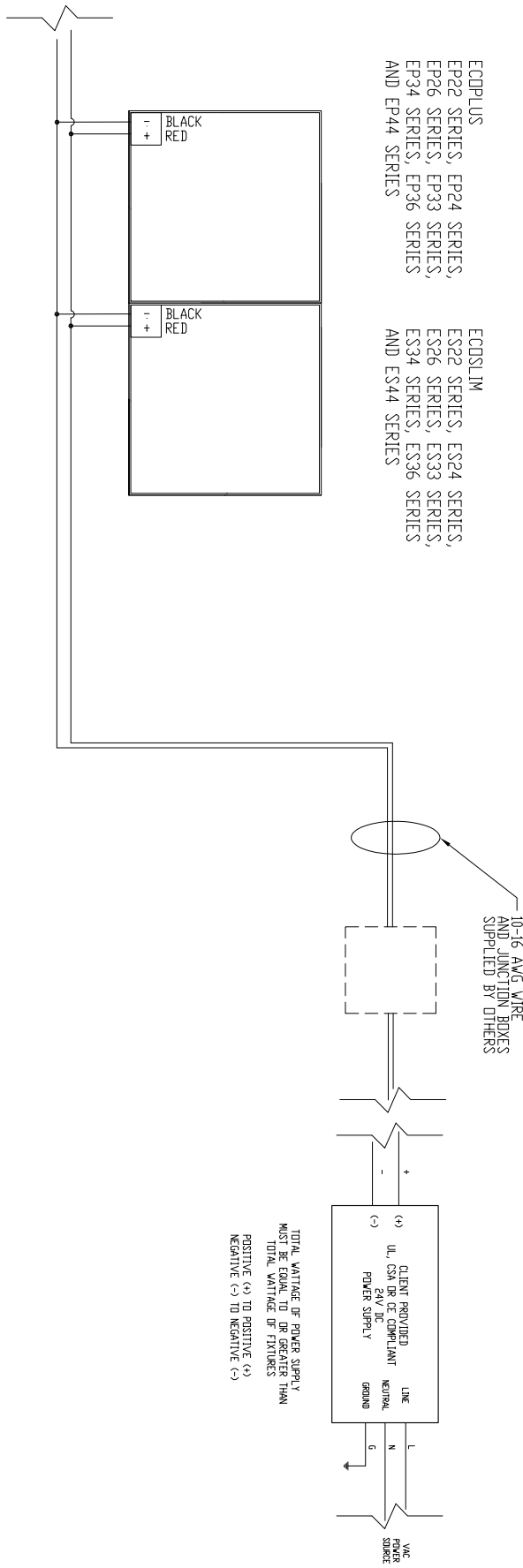
Black wires on the fixtures go to the “-” terminals of the power supply

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

# EP AND ES SERIES FIXTURES WITH CLIENT PROVIDED POWER SUPPLY

ECOSLIM  
EP22 SERIES, EP24 SERIES,  
EP26 SERIES, EP33 SERIES,  
EP34 SERIES, EP36 SERIES  
AND EP44 SERIES

ECOSLIM  
ES22 SERIES, ES24 SERIES,  
ES26 SERIES, ES33 SERIES,  
ES34 SERIES, ES36 SERIES  
AND 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 BOX 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 LEDS AND WILL  
VOID THE WARRANTY!

<b>Sky Factory</b>		DATE: 09/28/2016
PROJECT: EL001161	REV: 1	
DESCRIPTION: EL001161	REV: 1	
DESIGNED BY: [Signature]	CHECKED BY: [Signature]	
DRAWN BY: [Signature]	DATE: 09/28/2016	
PROJECT: EL001161	REV: 1	

# Total Wattage per Number of EcoPlus Fixtures

All Revelation fixtures must be powered by a UL 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.

	EP26 Series		EP33 Series	
No. of Fixtures	Required Current Amps	Required Current Watts	Required Current Amps	Required Current Watts
1	2.88	69.1	2.16	51.8
2	5.76	138.2	4.32	103.6
3	8.64	207.3	6.48	155.4
4	11.52	276.4	8.64	207.2
5	14.4	345.5	10.8	259
6	17.28	414.6	12.96	310.8
7	20.16	483.7	15.12	362.6
8	23.04	552.8	17.28	414.4
9	25.92	621.9	19.44	466.2
10	28.8	691	21.6	518
11	31.68	760.1	23.76	569.8
12	34.56	829.2	25.92	621.6
13	37.44	898.3	28.08	673.4
14	40.32	967.4	30.24	725.2
15	43.2	1036.5	32.4	777
16	46.08	1105.6	34.56	828.8
17	48.96	1174.7	36.72	880.6
18	51.84	1243.8	38.88	932.4
19	54.72	1312.9	41.04	984.2
20	57.6	1382	43.2	1036
21	60.48	1451.1	45.36	1087.8
22	63.36	1520.2	47.52	1139.6
23	66.24	1589.3	49.68	1191.4
24	69.12	1658.4	51.84	1243.2
25	72	1727.5	54	1295
26	74.88	1796.6	56.16	1346.8
27	77.76	1865.7	58.32	1398.6
28	80.64	1934.8	60.48	1450.4
29	83.52	2003.9	62.64	1502.2
30	86.4	2073	64.8	1554
31	89.28	2142.1	66.96	1605.8
32	92.16	2211.2	69.12	1657.6
33	95.04	2280.3	71.28	1709.4
34	97.92	2349.4	73.44	1761.2
35	100.8	2418.5	75.6	1813

# Total Wattage per Number of EcoPlus Fixtures

All Revelation fixtures must be powered by a UL 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.

	EP34 Series		EP36 Series	
No. of Fixtures	Required Current Amps	Required Current Watts	Required Current Amps	Required Current Watts
1	2.88	69.1	4.32	103.7
2	5.76	138.2	8.64	207.4
3	8.64	207.3	12.96	311.1
4	11.52	276.4	17.28	414.8
5	14.4	345.5	21.6	518.5
6	17.28	414.6	25.92	622.2
7	20.16	483.7	30.24	725.9
8	23.04	552.8	34.56	829.6
9	25.92	621.9	38.88	933.3
10	28.8	691	43.2	1037
11	31.68	760.1	47.52	1140.7
12	34.56	829.2	51.84	1244.4
13	37.44	898.3	56.16	1348.1
14	40.32	967.4	60.48	1451.8
15	43.2	1036.5	64.8	1555.5
16	46.08	1105.6	69.12	1659.2
17	48.96	1174.7	73.44	1762.9
18	51.84	1243.8	77.76	1866.6
19	54.72	1312.9	82.08	1970.3
20	57.6	1382	86.4	2074
21	60.48	1451.1	90.72	2177.7
22	63.36	1520.2	95.04	2281.4
23	66.24	1589.3	99.36	2385.1
24	69.12	1658.4	103.68	2488.8
25	72	1727.5	108	2592.5
26	74.88	1796.6	112.32	2696.2
27	77.76	1865.7	116.64	2799.9
28	80.64	1934.8	120.96	2903.6
29	83.52	2003.9	125.28	3007.3
30	86.4	2073	129.6	3111
31	89.28	2142.1	133.92	3214.7
32	92.16	2211.2	138.24	3318.4
33	95.04	2280.3	142.56	3422.1
34	97.92	2349.4	146.88	3525.8
35	100.8	2418.5	151.2	3629.5

# Total Wattage per Number of EcoPlus Fixtures

All Revelation fixtures must be powered by a UL 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.

	EP44 Series	
No. of Fixtures	Required Current Amps	Required Current Watts
1	3.84	92.2
2	7.68	184.4
3	11.52	276.6
4	15.36	368.8
5	19.2	461
6	23.04	553.2
7	26.88	645.4
8	30.72	737.6
9	34.56	829.8
10	38.4	922
11	42.24	1014.2
12	46.08	1106.4
13	49.92	1198.6
14	53.76	1290.8
15	57.6	1383
16	61.44	1475.2
17	65.28	1567.4
18	69.12	1659.6
19	72.96	1751.8
20	76.8	1844
21	80.64	1936.2
22	84.48	2028.4
23	88.32	2120.6
24	92.16	2212.8
25	96	2305
26	99.84	2397.2
27	103.68	2489.4
28	107.52	2581.6
29	111.36	2673.8
30	115.2	2766
31	119.04	2858.2
32	122.88	2950.4
33	126.72	3042.6
34	130.56	3134.8
35	134.4	3227



# 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