Avici Integrated LED Lighting System
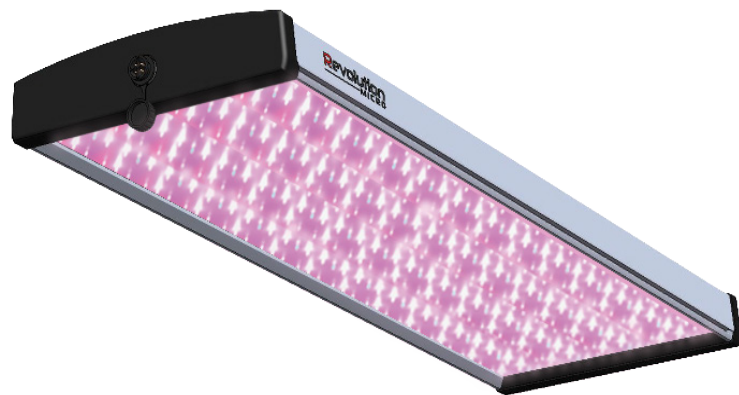
Congratulations on your new Avici 750. The Avici combines an array of Osram LEDs with our custom-designed drivers for one amazing, programmable spectrum, computer-controlled grow lighting system.

This manual will tell you how to hang, connect and operate your new Avici.

The Box Contains

- Avici 750 Integrated LED Lighting System
- Two (2) RJ-14 Data Cables
- RJ-14 Dual Splitter
- Two custom wire light hangers

Installing and Powering Up

1. Remove the protective cap from the power socket.

2. Use the two provided metal hangers to attach the Avici 750 to your ceiling or racking system by hooking them through the two metal tabs.


3. The bars need to be arranged in the following pattern so the power flows through one bar to the next. The ends of the bar are labeled either IN or OUT, and should be alternated with consideration for how it will be wired. Up to eight Avici 750 can be wired per 3kw supply.
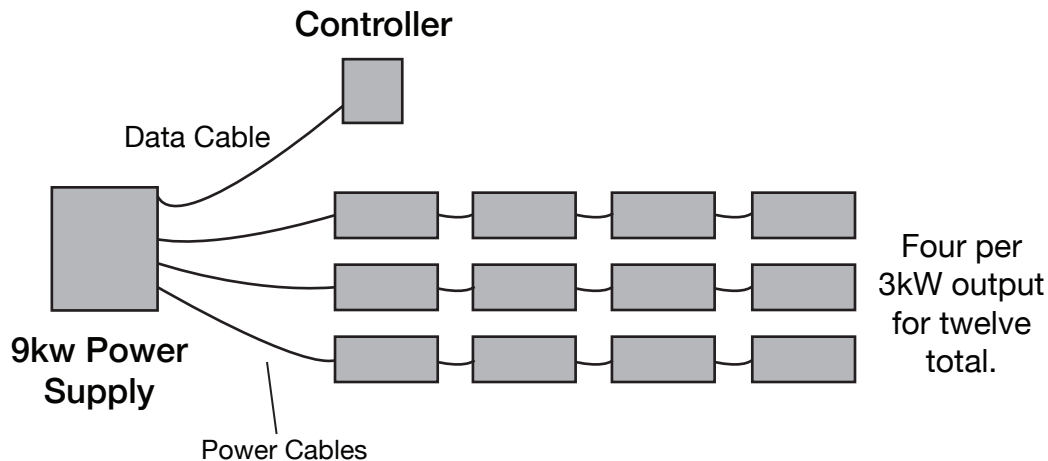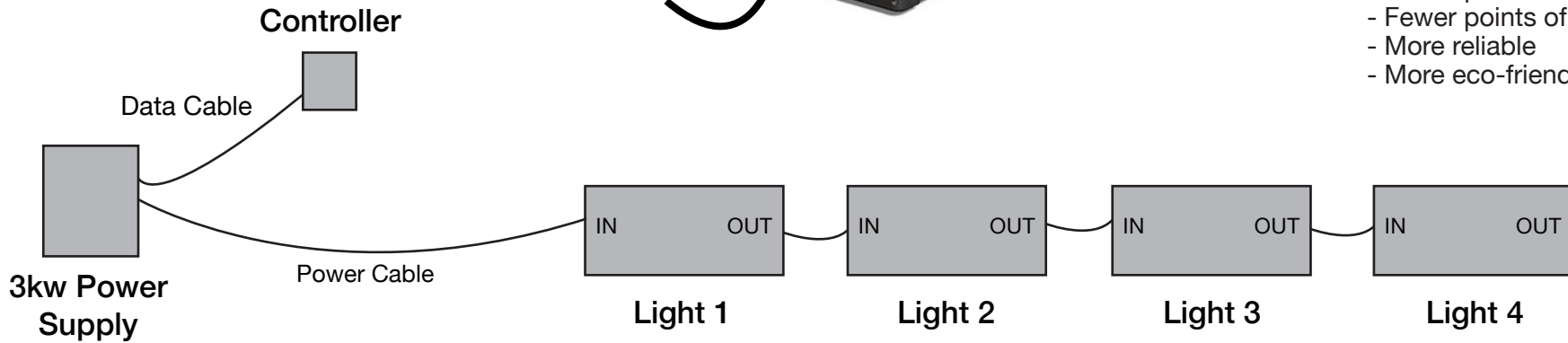

-OR-
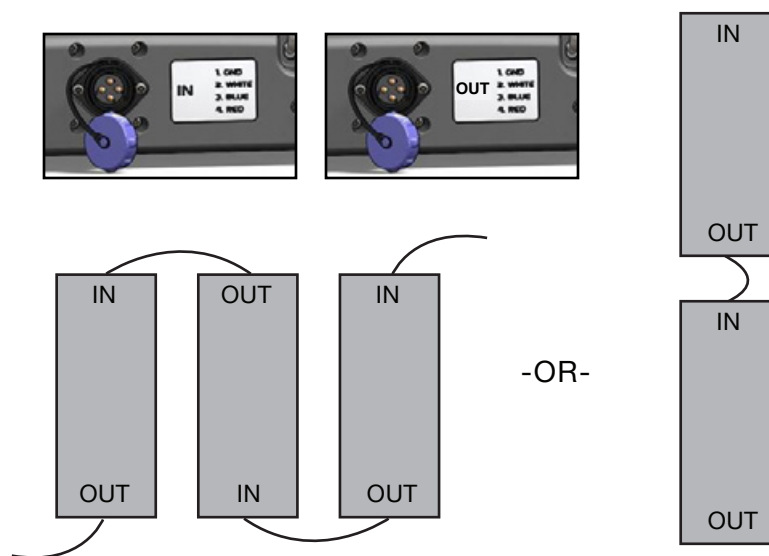
Power Supply and Wiring Guide

4. **Wire the lights to the provided power supply.**

You can have up to four Avici 750 on one 3kw power supply. A 9kw power supply will have three such outputs, for a total of twelve Avici 750.
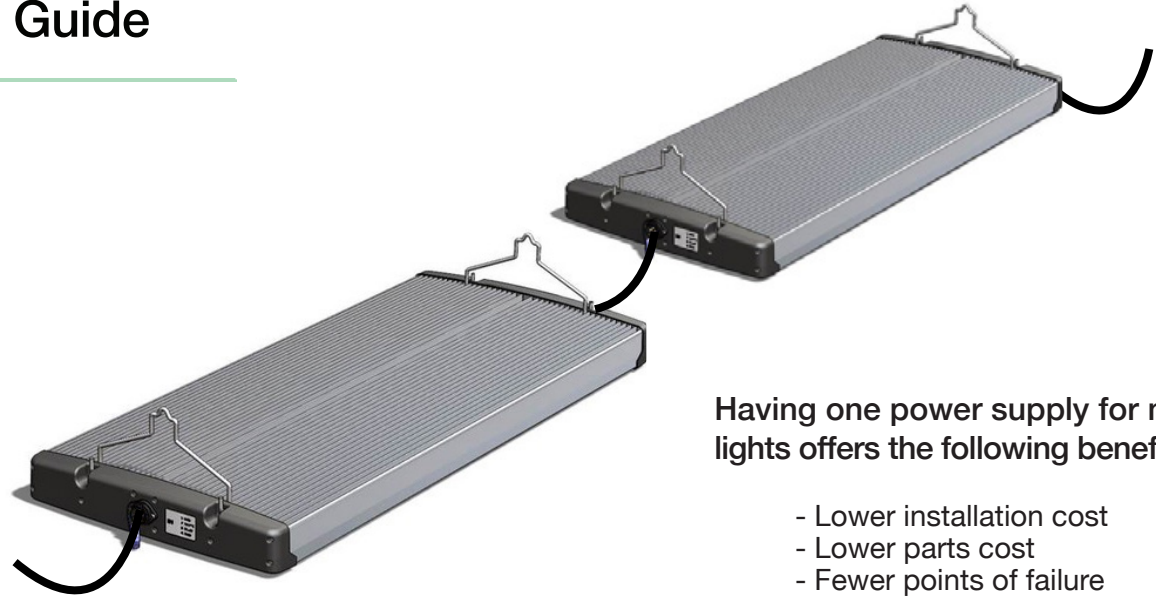
Having one power supply for multiple lights offers the following benefits:

- Lower installation cost
- Lower parts cost
- Fewer points of failure
- More reliable
- More eco-friendly

Controller

Data Cable

3kw Power Supply

Power Cable

IN OUT	IN OUT	IN OUT	IN OUT
Light 1	**Light 2**	**Light 3**	**Light 4**

Controller

Data Cable

9kw Power Supply

Power Cables

Four per 3kW output for twelve total.

5. Align the sections on the socket with those on the power cable. They'll only fit together one way.
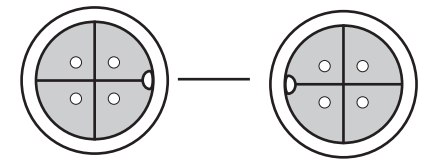
6. Push the cable into the socket until it won't go any further.
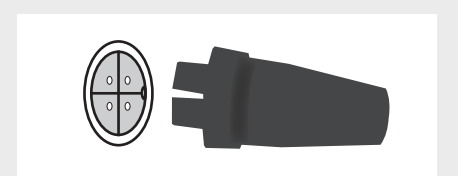
Installing and Powering Up Continued

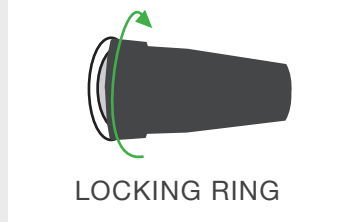7. Rotate the locking ring until it begins to thread onto the socket. Continue to push the plug into the socket until it is firmly plugged in, and tighten the locking ring.
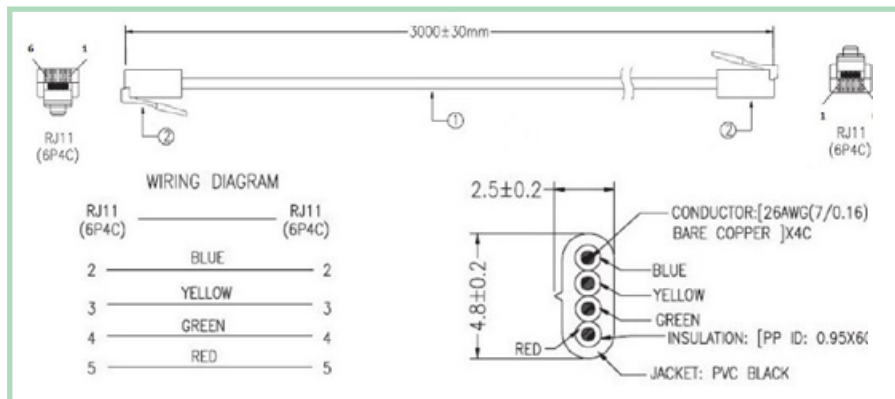
LOCKING RING

8. Attach cables to power supply and to the controller.

9. Please see controller manual for communications Instructions.

Data Cables and Connections

These are the data cables we supply. If you get longer or different ones, make sure they are wired like this.

Data Cables and Connections Continued

Look at the cable ends in the pic to the right and you'll see the wires are the same by color, pin 1 to 1, pin 2 to 2, etc. on each connector.
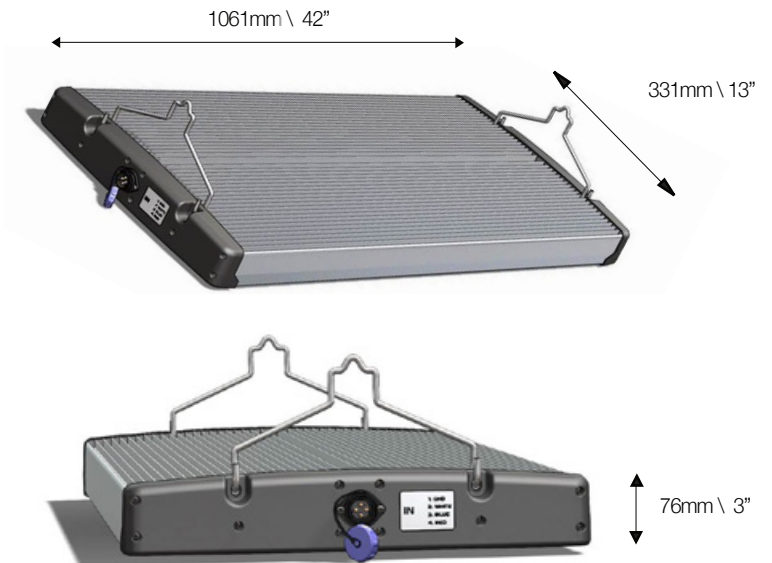
RevMicro has the right cables of all sizes should you need them, or http://digikey.com is a good source in the USA.

We have tested and recommend these cables:
Digikey Part Number A2662R-07-ND, 7' long.
Digikey Part Number A2662R-25-ND, 25' long.

Dimensions

1061mm \ 42"

331mm \ 13"

76mm \ 3"

Problem Solving

Blinking LEDs – What Your Avici Is Telling You

Blinks Once A Second – Over Temperature

If the Avici internal heatsink reaches a programmed over temperature point, it's way too hot and it will shut off with the OFF LED blinking on and off once a second. Once the internal temperature falls below the over temp point, the Avici will automatically restart.

Blinks Four Times A Second – Over Voltage or Under Voltage

If supplied power is outside safe operating range for the Avici, the LED will flash quickly to let you know the fixture is working but not going to come on.

If the status LED is flashing quickly you can either remove and reapply power, but best to check the electrical supply first. Incorrect supply voltage can destroy the fixture. Avici normal voltage range is 208v-277v and must be stable for 10 seconds to power up.

Flickers Briefly Once a Second – External Control

The RLC1 and TouchMi Room Controller can control 512 Revolution lights in two zones. You can set on and off times, sunrise and sunset ramps, dimming with temperature and over temperature shutdown for each zone for lights that support these commands. Avici also accepts commands for color mixing for custom spectra. Please see the RLC1 and TouchMi manuals for details on controlling the output spectrum.

When the provided RJ-14 phone cable is plugged into the Avici and a Revolution controller, the front panel LED will blink off, very briefly, once a second to show you that Avici is controlled by an outside source and that communication is up and running.

If the cable becomes disconnected, Avici will maintain chosen power level and spectrum – just as you would expect. After a power failure, Avici returns to full power and spectrum if not commanded otherwise by a controller.

We're Here to Help.

We'd be happy to answer any questions or help you through the installation.

Specifications

Spectrum	Programmable
PPF	2,310 µMole/sec dimmable in 1% steps
Max Wattage	750w
Input Current	2.7 A @ 277 volts
Input Voltage	208-277 volts AC, 50/60 Hz
Input Power Plug	Direct Wire
Power Factor	0.99 @ 277volts
Light Source	Osram OSLON LED array
Rated Life	> 150,000 hours
Efficacy	3.06 - 3.8 uMole/J
Operational Temperature	35C
Fixture Temperature	55C
Ingress Rating	IP67
RMH (Recommended Mounted Height Above Canopy)	> 18"
Dimming / Spectrum Control	External Controller
Dimensions	331mm x 1061mm x 76mm (~ 13" x 42" x 3") 17.5 kg (~ 38.6 lbs)

FCC Compliance Statement

Avici 750W

The Avici Integrated LED Lighting System has been tested at FCC-certified laboratories in the United States and conforms to FCC's Part 15B Consumer standard for both conducted and radiated emissions.

Given that all electronic equipment emits some RF energy, please note that compliance with these standards does not mean a zero level of emission, only a very low level of emission.

The FCC requires that we also state:
This product may cause interference to radio equipment and should not be installed near maritime safety communications equipment or other critical navigation or communication equipment operating between 0.45-30 MHz.

This device complies with Part 15 of the FCC Rules. Changes or modifications not expressly approved by Revolution Microelectronics could void the user's authority to operate the equipment.