“The simplicity of installation is as ingenious as the science behind the lighting.”

-Minnesota Farmer
Incredibly easy to install modular lighting for layer, pullet, or breeding cage systems

The AgriShift EL poultry cage lights use standard conduit bodies as a housing for LED light engine modules. Any number of 3 Watt LED lamps can be mounted on standard pipe conduit spaced to meet any configuration requirement for your system. Tap connectors make installation fast with nothing more than a screwdriver and pliers.

Easy lamp wiring instructions

1. Position the run wire in an open tap connector (do not strip wire).
2. Fold the connector body until the element contacts wire, then crimp the connector closed with pliers.
3. Plug the completed tap connector onto one of the 2 male tabs located on the back of the LED module. There is no polarity required.
4. Repeat procedure for the second wire.
5. Fasten the LED module to the conduit body with 2 screws.

Each lamp has an output of approximately 200 lumens and uses very little electricity. In fact, the electricity it would take to run just three 100 watt incandescent bulbs would power 100 AgriShift EL lamps at full intensity!

AgriShift EL lighting advantages

- Dimmable on standard commercial dimmers
- Output per lamp equivalent to a 25 watt incandescent
- Power input 0-3 watts each lamp (dimmable)
- Spray clean; liquid & dust resistant (IP66 rated)
- Energy efficiency rebates available
- Rated for 50,000 hours at full intensity: 5 X longer than CFLs; 50X longer than incandescent
- No negative effects of on/off cycles
- No audible buzz, negligible EMI
- Contain no hazardous, hard-to-dispose of, mercury
Technical and Ordering Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light Output Equivalence</td>
<td>25 W Incandescent</td>
</tr>
<tr>
<td>Voltage</td>
<td>120 VAC</td>
</tr>
<tr>
<td>Frequency</td>
<td>60 Hz/50 Hz</td>
</tr>
<tr>
<td>Nominal Power</td>
<td>3 W (at full intensity)</td>
</tr>
<tr>
<td>Color Temperature/Wavelength</td>
<td>Breeder &amp; Layer</td>
</tr>
<tr>
<td></td>
<td>5400 to reddish white</td>
</tr>
<tr>
<td>Power Factor</td>
<td>&gt;.98</td>
</tr>
<tr>
<td>Total Harmonic Distortion</td>
<td>&lt; 20%</td>
</tr>
<tr>
<td>Beam Angle</td>
<td>120°</td>
</tr>
<tr>
<td>Luminous Flux</td>
<td>200 lm domestic fowl photopic</td>
</tr>
<tr>
<td></td>
<td>(130 lm human photopic)</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-20°C to 45°C</td>
</tr>
<tr>
<td>Dimmability Range</td>
<td>100% to 0%</td>
</tr>
<tr>
<td>Dimmer Type</td>
<td>Phase Modulation or Amplitude Control</td>
</tr>
<tr>
<td>RoHS</td>
<td>Fully Compliant</td>
</tr>
<tr>
<td>Rated Life</td>
<td>50,000 Hours</td>
</tr>
<tr>
<td>Warranty</td>
<td>3 Years (24/7)</td>
</tr>
</tbody>
</table>

Specify details of your order based on the following: **AGRISHIFT EL – AAAA – BB – 120 – DDD – EEE**

**Color (AAAA)**
- **Poultry Specific**
  - **FSWR** Full Spectrum dimmed to Reddish hue
- **General Purpose**
  - **6400** Cool White
  - **5000** Natural White
  - **3000** Warm White
  - **CSTM** Customer Specified

**Body Type (BB)**
- **1C** Straight through feed, single sided
- **2L** L-shape double-sided
- **TS** T-shape, side opening
- **TB** T-shape, back opening
- **LB** L-shape, back opening
- **LL** L-shape, left opening
- **LR** L-shape, right opening
- **DE** Dead end

**Total Average Power (DDD)**
- **003** Single-sided types
- **006** Double sided types

**Input Voltage (EEE)**
- **120** 120 VAC at 60 Hz

Authorized Distributor

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A look at what poultry see

The difference between the spectral sensitivity of poultry and humans is seen on the first graph. Note that poultry are more sensitive to blue and red compared to us and, unlike humans, can see UV light. In other words, blue and red light appear brighter to poultry.

A look at the light from AgriShift® EL lamps

The second graph shows how the spectral distribution of AgriShift EL lights closely mimics the color sensitivity of poultry (fluorescent, incandescent, and HID lamps do not). AgriShift EL lights are predominately within poultry’s peak spectral sensitivity range. The luminous efficacy (lumens per watt) is poultry optimized and results in maximum perceived light at minimum power. For that reason, blue and red light can be dimmed low to save energy and still provide adequate light for poultry.

Application color options

Poultry Specific (Layer and Breeder)
- Full spectrum natural white dimmed to reddish hue

Customized Applications
- Other colors and color dimming combinations available on request

For more information, download The Science of Poultry Lighting document at onceinnovations.com

* Data source: “Spectral sensitivity of the domestic fowl (Gallus g. domesticus)” N. B. PRESCOTT AND C. M. (1999)

Human and Poultry Spectral Sensitivity

Relative Luminous Power - CCFL/ Standard CFL13W, 4000K

Typical Relative Luminous Power from AgriShift® EL

(TB) T-shape, back opening
(LB) L-shape, back opening
(DE) Dead end
(UL) L-shape, double-sided

Patented in the U.S. Other Worldwide Patents Pending.

24/7 3 YEAR GUARANTEE
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