

ONCE® Products Designed for Turkeys

AgriShift® MLM-B

The AgriShift® MLM-B 10W fixture with Dim-to-Blue® technology is an animal welfare-friendly retrofit lighting solution. It is made with a Built For Your Barn® design and an optimized color spectrum with full dimming capability, meeting the birds' developmental needs at every stage of growth.

AgriShift® MLM-R for Turkey Breeders

The AgriShift® MLM-R with Dim-to-Red® technology and a Built For Your Barn® design is made to naturally simulate sunrise and sunset, calming the flock, reducing injury and decreasing time to peak production. Various mounting options available.

Additional Essentials and Product Accessories

Junction Box

This Junction Box is designed to withstand routine cleanings and resist corrosion in wet, damp and dry locations.

AgriShift® G Controller

The AgriShift® G Controller is a slave dimmer that provides full potential to any ONCE® AC lighting fixture. It offers smooth dimming solutions that can easily be controlled by two separate 0-10 VDC control signals and several advanced features, adding flexibility while addressing the complex modern agriculture facilities.

AgriShift® Master Controller and Slave Dimmer

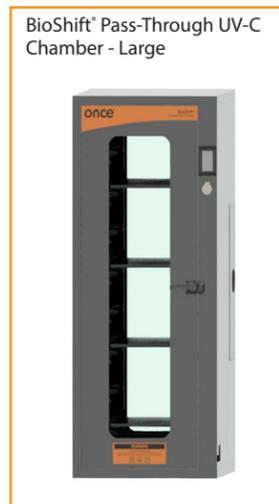
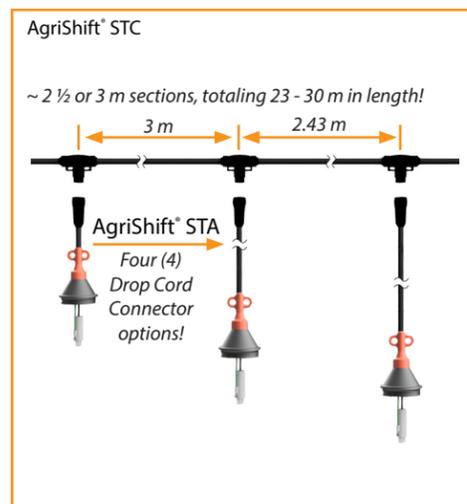
The AgriShift® Master Controller and Slave Dimmer provide full potential to any ONCE® lighting fixture. They offer smooth dimming solutions that can easily be controlled manually with the front panel controls or remotely with a 0-10 VDC control signal.

BioShift® Pass-Through UV-C Chamber

The BioShift® Pass-Through UV-C Chamber is an Eco-Friendly tool to use alongside established biosecurity protocols. It is designed to fix key vulnerabilities within agriculture facilities, while enhancing protocols by killing viruses and other pathogens in a recommended time of 5 minutes, before they can enter your biosecure farm facility.

AgriShift® STC/STA

The AgriShift® STC/STA is a stringer designed with the flexibility to fit any ONCE® ML fixture or select in-system tube lighting option. The various drop cord lengths allow for easy and cost efficient installation. Attaching to the ceiling of barns up to 152 meters long, the AgriShift® STC/STA comes in 25 or 30½ meter lengths, with 2.43 or 3 meter sections.



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Animal-Centric Lighting Systems for Turkeys

- Promotes animal welfare
- Out-performs generic LED lighting
- Optimizes production efficiency
- Reduces energy costs





The Science Behind Our Technology

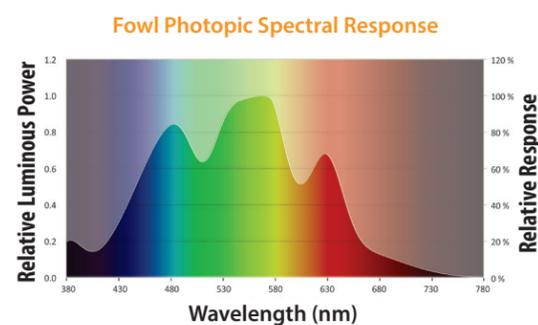
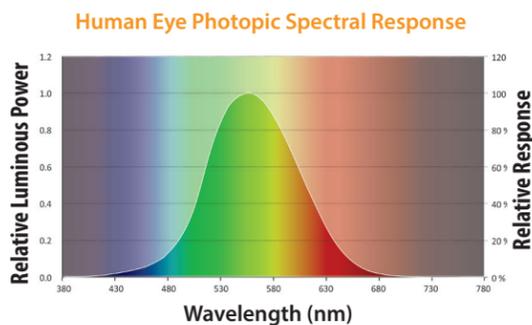
Light is a key environmental factor and is essential to sustain life. This is why specialized lighting programs are required to achieve optimal results when raising animals indoors. ONCE® animal-centric lighting systems go beyond traditional LED technologies by offering a lighting solution designed to influence desirable physiological and biological processes in animals. With AgriShift® technology and a production dimmer program, light intensity, photoperiod and color spectrum can be adjusted for better performance, naturally resulting in increased production and enhanced animal welfare. However, artificial lighting programs must be applied with a thorough understanding of the animal's response to light and the significance of the different characteristics of light.

The Importance of Light Color in Poultry Vision

ONCE® turkey-specific lighting solutions use an enhanced blue/green spectrum with added red content for healthy bird development. The spectrums used stimulate a birds' highest color sensitivity, encouraging growth during the early stages by enhancing proliferation of skeletal muscle satellite cells, while repairing and building muscle. Green light can be helpful in the growth and sexual development of poultry during the early stages, while blue light has been shown to elevate plasma androgens, allowing the bird to put on more muscle mass at later stages of development. Studies have also shown that blue light can calm birds and positively affect glucose and triglyceride levels.

How Poultry Sees

The graphs below show the typical color sensitivity of a human eye compared to the sensitivity of a typical chicken eye. In the Human Eye Photopic Spectrum (left), the smooth white line and large hill in the center of the curve shows that humans see green and yellow colors better than they see blue and red. In the Fowl Photopic Spectral Chart you can see there are 4 (four) distinct color peaks. Their highest sensitivity is to green, blue and red light, in addition to the UV spectrum (far left peak).



Benefits of ONCE® Lighting Systems

Animal Welfare

Reducing stress improves animal livability and performance. Sunrise and sunset simulation eliminates the stress inputs of switching lights on and off abruptly, lowering mortality and supporting a bird's immune response.

ONCE® lighting programs and systems are directed toward minimizing extreme changes in lighting. Abrupt changes have been shown to excite flight responses which have a negative effect on the well-being of the bird. By offering LED fixtures that present uniform coverage and a consistent light, as well as the ability to provide sunset and sunrise functionality, corticosterone levels and other stress markers are minimized.

Energy Savings

AgriShift® LED fixtures are more energy efficient than fluorescent and incandescent lighting. Switching from incandescent lighting to a LED with dimming can save from 75 to 85% of your lighting electricity costs. Switching from compact fluorescent lamps (CFLs) to ONCE® LED lighting products saves from 45 to 50%.

Productivity Enhancement

When applying ONCE® recommended lighting schedules, you're ensuring the light is adjusted at key times in your animals' development cycle, allowing for uniform growth. Under Dim-to-Blue® technology birds have been shown to be calmer, less prone to flight, notably less aggressive and consequently put more feed energy into just growing.

Green light increases growth during early stages of development, while blue light is shown to be helpful in the growth of poultry at a later age. Blue light keeps birds calm by reducing corticosterone levels and heterophil:lymphocyte ratios—blood markers for short- and long-term stress.

For Turkey Breeders, a red enhanced spectrum encourages the onset of the egg-laying period and extends the peak production period.

Our Technology



AgriShift® lighting systems "shift" spectrum and intensity, meeting the individual needs of your animals†.



Dim-to-Blue® technology encourages uniform growth by offering healthy bird development during every growth stage.



A Built For Your Barn® design uses techniques and materials that withstand harsh barn environments for years to come.



Dim-to-Red® technology for turkey breeders provides natural dawn and dusk simulation, reducing stress on your animals.