

# Poultry Lighting Solutions



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#### PURE LED POULTRY LIGHTING SYSTEM

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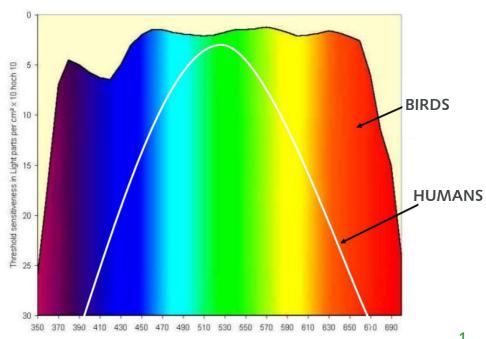




# **KEY ASPECTS OF POULTRY LIGHTING**

## **KEY FEATURES**

- Electyromagnetic Spectrum
- Radiation
- Ultra Violet (UV)
- Visible
- Infra Red (IR)
- Light Environment:
  - Duration, ie. Photoperiod, Day Length
  - Luminance, ie. Intensity
  - Wavelength, ie. Colour



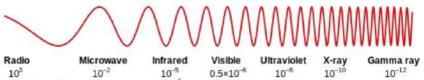
# **DID YOU KNOW?**

Poultry sight is sharp and more sensitive to light changes & wavelength

#### PENETRATES EARTH'S ATMOSPHERE



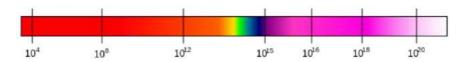
#### RADIATION TYPE WAVELENGTH (m)



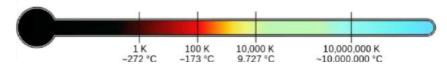
#### APPROXIMATE SCALE OF WAVELENGTH



#### FREQUENCY (Hz)



# TEMPERATURE OF OBJECTS AT WHICH THIS RADIATION IS THE MOST INTENSE WAVELENGTH EMITTED





#### 1. Retinal

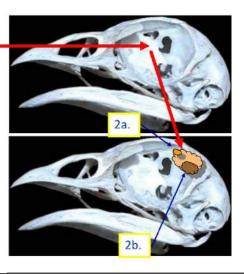
- Cone Photoreceptors
- Visual Perception
- Dopamine & UV-A Melatonin

#### 2a. Pineal "Sould Gland"

- Photoreceptors (>4 lux)
- Circadian clock: Seratonina dn Melatonin

## 2b. Hypothalamic "Sexual Maturity"

- Deep Encephalic Photoreceptor
- Sexual Hormones



# 1. Facilitate Sight

- Food Search
- Stimulate Internal Cycles
- Circadian day length changes

# 2. Initiate & Regulate Hormone Release

- Metabolic Regulation:
  Fat & muscle deposition
- Reproduction
- Calcium & Phosphorus & Bone Formation

### **ULTRAVOILET A-B LIGHT**

Vitamin D conversion, calcium & phosphorus metabolism, bone formation, immune system, blood pressure & circulation, muscle development

### **VISUAL LIGHT**

Birds have 4 types of single-cone photoreceptors and tetra-chromatic colour vision a 5th single-cone is luminance based for motion detection

#### **INFRARED**

Perceived as heat

# INTELLIGENT DIMMING SYSTEM

# Poultry Range

#### **PRODUCTS**

OUTPUT INPUT VOLTAGE PRODUCT CODE POWER INPUT VOLTAGE FREO. 1\*10A AC85-277V AC82-277V 50/60Hz PLIDIM2000W 2000W PLIDIM4000W 4000W 2\*10A AC85-277V AC85-277V 50/60Hz

#### PRODUCT DESCRIPTION

- Auto- programmable operation setting modes in 24 hour cycles.
- Built-in digital CPU with smart control performance.
- · Leading edge & trailing edge dimmable.
- Triac
- 0%-100% dimmable, dimming precision 1% simulate sunrise.
- 1x10A/2x10A output terminals 10xm.
- 7" LCD clearly displays current status.
- IP66 rating, IK08 anti-collision grade.

#### **TECHNICAL SPECIFICATIONS**

Luminous Efficiency 130lm/w CRI >80 Viewing Angle 270°

Input Voltage AC220-240V

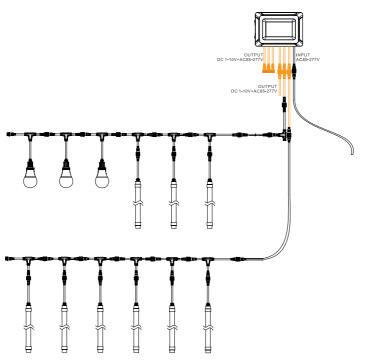
IP Rating IP66

Light Source SMD 2835 Frequency 50Hz 5-YEAR WARRANTY





# LED DIMMING SYSTEM WIRING





# MAIN INTERFACE

Month	D	Day Year		Start L1+L2-Table:		1+L2-Table:	
	Start Day	End Day	Hour	Min	Light Level	Ramp Minutes	
1	1	7	1	45	50	15	Save
2	1	7	10	45	100	15	Clear
3	1	7	23	0	0	15	Cicui
4	8	52	6	45	65	15	
5	8	52	10	45	10	15	
6	8	52	23	0	0	15	Page 1/1
7	0	0	0	0	0	0	▼
8	0	0	0	0	0	0	
9	0	0	0	0	0	0	Exit
10	0	0	0	0	0	0	

# **AUTO SETTING**

The following lighting program is for broilers, users can set their own programs as the follwoing operation

#### Mode 01

Running Status/1st-7th Days

T01:02:00 - 10:45 (50%)

T02:11:00 - 23:00 (100%)

T03:23:15 - 01:45 (0%)

From 01:45 -02:00, the light level will increase gradually from 0% - 50% in 15 minutes

From 10:45 - 11:00 the light level will increase gradually from 50%-100% in 15 minutes

From 23:00 - 23:15 the light level will decrease gradually from 100% - 0% in 15 mintes

#### Mode 02

Running Status/8<sup>th</sup>-52<sup>nd</sup> Days

T04:07:00 - 10:45 (65%)

T05:11:00 - 23:00 (10%)

T06:23:15 - 06:45 (0%)

Above steps are the same for setting other modes

#### **NOTICE**

Rising & dropping time is 15 mins to standard of chicken farm lighting



# Poultry Light

## **PRODUCTS**

PRODUCT CODE	POWER	DIM. MM	LUMENS	LED QTY
PLPU-24WH-D	24W	1200	3120	384
PLPU-28WH-D	28W	1500	3640	576
PLPU-36WH-D	36W	1800	4680	640

#### HANGING AND SURFACE MOUNTED OPTIONS AVAILABLE



# **TECHNICAL SPECIFICATIONS**

Luminous Efficiency 130lm/w CRI >80 Viewing Angle 360°

Input Voltage AC220-240V

IP Rating IP66

Light Source SMD 2835 Frequency 50Hz

















## **ROTATING**

# Poultry Fitting

### **PRODUCTS**

PRODUCT CODE	POWER	DIM. MM	LUMENS	LED QTY
PLP-09WH-D	9W	600	1170	96
PLP-15WH-D	15W	900	1950	160
PLP-20WH-D	20W	1200	2600	192
PLP-24WH-D	24W	1500	3120	256
PLP-28WH-D	28W	1800	3640	288



5-YEAR

**WARRANTY** 

# **TECHNICAL SPECIFICATIONS**

Luminous Efficiency

Viewing Angle Input Voltage

IP Rating

Light Source Frequency

130lm/w >80

AC220-240V

IP66

270°

SMD 2835

50Hz













# **INSTALLATION OPTIONS**

#### A: SUSPENDED INSTALLATION

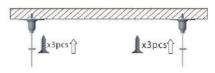
① Ceiling punch



3 Tighten the clamp



2 Self-tapping screws hold the sling



4 Hanging installed



#### **B: CEILING INSTALLATION**

1 Tighten double-threaded screw



② V shape mounting bracket fixed



3 Tapping screw tighten V shape bracket to the ceiling



4 Ceiling mounted



#### **C: SERIES CONNECTION**



Recommended Installation Quantity (Rated Voltage: 220V)

Q'ty(Suggested) Power Type	20W	24W	28W
Non-dimmable	50pcs	40pcs	30pcs
Dimmable (600W Dimmer)	25pcs	20pcs	15pcs

