BIRDIE™ LIGHT

LED colour lighting that works for you – fewer floor eggs, less feather pecking, higher production.



Barn under BIRDIE™ LIGHT – warm red light over nests and system, blue light in the floor zone.

Lighting that pays for itself

BIRDIE™ LIGHT is a complete LED lighting solution for aviary systems – developed specifically for laying hens and pullets from week 18. We use colour technology to manage the hen's natural behaviour, giving you a calmer flock, fewer floor eggs and lower losses. In short: light that works for your bottom line.

Fewer floor eggs

The hen is guided up into the nest by warm yellow/red light – and away from the floor.

Less feather pecking

Under red light the hen cannot see blood as clearly – and pecking behaviour drops significantly.

Calmer flock

Blue light under the system has a calming effect and reduces unwanted activity in the floor zones.

Application

Aviary systems – ceiling, nests, system and floor zones.

How it works

Hens prefer warm yellow and red light. By dividing the barn into colour zones, we guide the hen's movement pattern throughout the day – entirely naturally, without extra work for you or your staff:

- **Nests:** warm yellow/red light encourages the hen to move up and lay eggs in the right place.
- **Floor zone:** blue light has a calming effect, makes the area unattractive and guides the flock upwards.
- **Anti-pecking:** red light reduces the hen's ability to see blood – and therefore the risk of feather pecking and cannibalism.
- **Catching:** blue light can be used when catching the birds and reduces stress during handling and transport.



Red light in the system: calmer flock and reduced pecking behaviour.

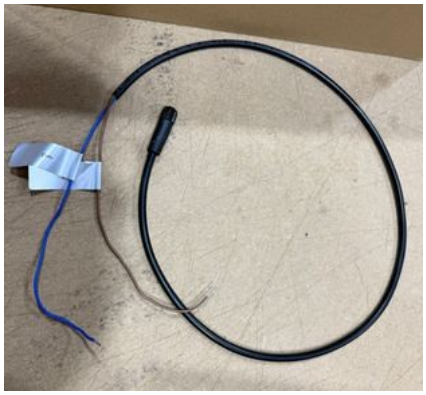


Bluish light under the system guides the flock away from the floor zone.

> Coloured light is a supplement to the correct lux level and a stable light rhythm – not a replacement. RN Solutions designs the solution based on barn type, production phase and the specific challenges in the poultry house.

The system – simple, reliable and Plug 'N Play™

The entire system is 100% Plug 'N Play™. This means faster installation, fewer electrician hours and less risk of errors – also when expanding or servicing later.



Plug 'N Play™ cable for 0–10 V control signal.



Flat interconnection cable, 3 × 2.5 mm².

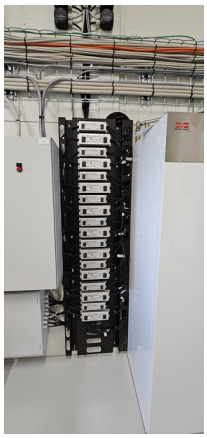
System data	
System voltage	48 VDC
Drivers	Mean Well – available in both 115 VAC and 230 VAC
Cabling	Flat interconnection cables, 3 × 2.5 mm² – heavy cross-section for long runs and minimal voltage drop
Flat cable design	The luminaires do not twist when mounted close together – cleaner installation, fewer adjustments
Dimming	Fully dimmable 0–100% via 0–10 V – Flicker Free, no flicker when dimming
Protection rating	IP69K – ammonia-resistant and high-pressure wash proof
LEDs	Specially coated against ammonia – long service life even in demanding poultry environments

Drivers and control

Control is simple: each driver is controlled via 0–10 V from your existing barn computer or lighting controller. Not enough outputs? No problem – we supply an additional control unit, so you keep control in your barn computer. The Mean Well drivers are supplied complete as 100% Plug 'N Play™ and require only 1 × 13 A CEE connector per driver set.



Lighting control in the technical room with Mean Well drivers.



Drivers fitted on ready-to-mount plates.

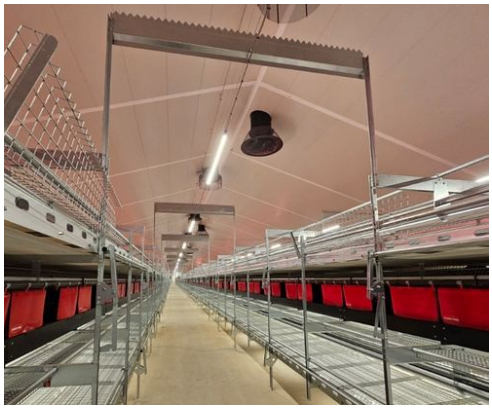
Drivers and control	
White light driver	320 W (typical configuration)
Colour driver	240 W – red or blue
Control interface	0–10 V from barn computer/lighting controller
Typical requirement per house	Minimum 6 × 0–10 V outputs – 2 for ceiling, 2 for nests, 2 for floor zone
Recommended	Barn computer with 6–10 × 0–10 V outputs depending on house design

The luminaires

Ceiling lighting – LAYER-LIGHT MIX-TO-RED



LAYER-LIGHT MIX-TO-RED – 1500 mm, 3000 K 18 W + red 8 W.

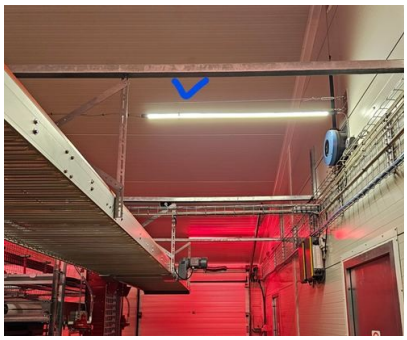


Ceiling lighting installed in a laying house with aviary system.

LAYER-LIGHT MIX-TO-RED	
Length	1500 mm
Output	3000 K: 18 W + red 8 W
Mounting	Suspended from piano wire or equivalent
Interconnection	Plug 'N Play™, 225–450 cm between luminaires
Mounting height	Typically 2.5–4 m above floor

> **Installation tip:** Mount as close to the ceiling as possible – or run an extra wire above the luminaires – so the hens do not use them as a perch.

In the system – AVIARY-LIGHT MIX TO RED



Red light in the system creates a calm flock and guides the hen towards the nest.

AVIARY-LIGHT MIX TO RED	
Output	3000 K: 5 W + red 3 W
Length	2150 mm
Cable	400 mm

Under the system – AVIARY-LIGHT MIX TO BLUE



AVIARY-LIGHT mounted under the aviary system.



MIX TO BLUE has a 180° spread – one row covers up to 250 cm.

AVIARY-LIGHT MIX TO BLUE	
Output	3000 K: 5 W + blue 3 W
Length	2150 mm
Cable	400 mm
Optics	Integrated special lens with 180° light spread

> **Distribution tip:** With an aviary width of 250 cm, one row under the system is typically sufficient – thanks to the 180° spread of MIX TO BLUE. This saves luminaires, cabling and installation time.

Why BIRDIE™ LIGHT?

- **100% Plug 'N Play**™ – faster installation, lower installation costs.
- **180° light spread on MIX TO BLUE** – fewer luminaires, same coverage.
- **Flat cables** – the luminaires sit neatly, even when mounted close together.
- **Documented colour strategy** – warm yellow/red light in the nest, blue light on the floor, red light prevents pecking and more.
- **Flicker Free and fully dimmable** – 0–100% via 0–10 V without flicker.
- **IP69K and ammonia-coated LEDs** – robust, with a long service life in demanding poultry environments.
- **Works with your existing barn computer** – 0–10 V standard, or we supply the control unit.

Ready to see the numbers for your barn?

Call us – we will quickly calculate a solution that fits your house and your operation.

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