About Your Rooster Booster

Thank you for purchasing the Rooster Booster Low Voltage Lamp and Timer

Your Package Contains

ROOSTER BOOSTER Timer unit and Lamp including: -
Light sensor and clip.
Fused Power Lead.
PP3 Back-up Battery Fitted
User Guide.

The user guide explains in simple steps how to set up and operate your new Rooster Booster. Please read it.
You may need this guide again so please keep it safe.
Your Rooster Booster will need to be connected to a 12-Volt supply.
The fluorescent lamp will need cable to connect it to the timer unit at least 1mm diameter electrical installation cable is recommended.

How the ROOSTER BOOSTER works

Day length has an important bearing on a hen's egg laying cycle. As the days shorten the number of eggs reduce until laying may cease.
The Rooster Booster is a self-regulating timer. It monitors the naturally occurring day light hours, and compensates for the reduction in natural day light, by turning on a lamp for the hens.
When necessary the lamp will come on at both ends of the day to keep the hen's day in line with yours.
At the end of the day the lamp is dimmed. It then goes into a 9 Hour period when the lamps **will not** come on so as the hens can rest.
(Refer to the timing chart for a graphical representation of the timing cycle)
When using fluorescent lamps the light output can only be adjusted with improvised shading.

Features and Functions

Power Supply lead.	The power supply lead should be connected to a good quality 12-volt battery or 11 – 14V @ DC Power Supply. *Do not exceed power supply current rating.* Red + Positive Black - Negative
Light Sensor.	The light sensor controls the lamp timer by sensing the day and night periods.
Fuse.	3 A on the input in the red battery lead and 5 A on the circuit board.
Red LED	Indicates the Rooster Boosters status
Push Switch	Provides interaction with timer sequence and turns lamps on in night mode for 3 minutes. *Refer to LED and Push Switch section.*
Output Terminals.	Connection for extension lamps.

Installing your Rooster Booster

Mount the timer unit and lamp inside your hen house where it won't be exposed to wet conditions. *Bare in mind you may want to access the push switch.* Position the batten lamp in the preferred location and mark the fixing holes in the feet at the end of the batten. Drill suitable holes for the fixing screws and secure the batten lamp to the mounting surface.
Connect the lamps to the timer Unit using the terminals

Red + Black

When routing lamp cables, avoid sharp object or over bending, as this may cause damage. If running cable outside it may be necessary to protect the cable with suitable outer shroud, i.e. water pipe

Mount the Sensor

Use the clip provided to mount the sensor. The sensor must be able to monitor outside light conditions at all times either through a hole or a window. Don't expose it to wet/damp conditions, or position it where it can be affected by artificial light sources such as car headlights, streetlights, house lights Or the Rooster Boosters own lamps. The moon could also affect the sensor if it shines directly down on it.

Always make sure the sensor lead is plugged in fully.

Connecting the power

Connect the power leads to your power supply.

Red + Positive (fused) Black - Negative

When you first install the Rooster Booster, connecting power and exposing the sensor to light will start the timer running 5 hours into a 12-hour day. Push the red push switch once and the LED will flash 5 times. Cover and uncover the sensor to see the lamps come on.

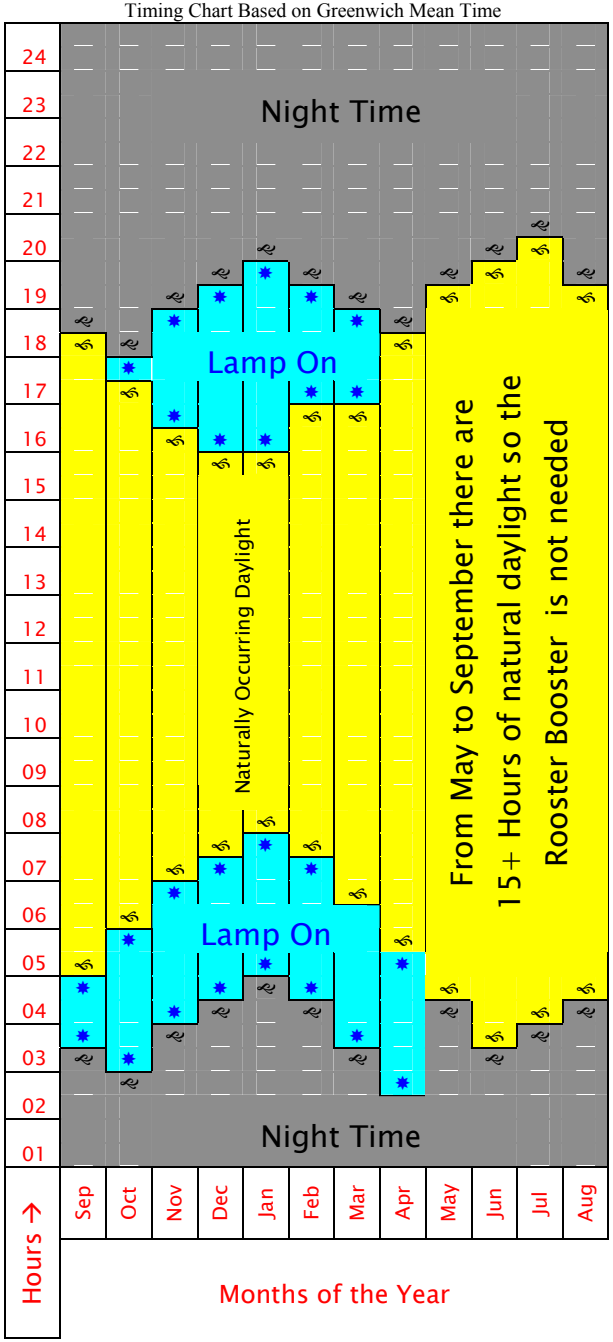
Timer Operation

The Rooster Booster has been designed to use two automatic time settings (9 hours Night and 12-hours Day). Which when combined with naturally occurring daylight and darkness provide the hens with a 15-hour day. *Note: - if daylight exceed 12 hours the timer will not switch to its night mode until the sensor detects dark. This ensures the hens have nine hours without artificial light in the summer.*

L E D and Push Switch functions

The **LED** provides feedback on the Rooster Boosters status it is positioned between the light sensor and the push switch.
2 quick flashes indicate day mode when the lamps will come on if it falls dark.
1 flash indicates night mode when the lamps will not come on.
The LED will not flash if your battery voltage is low and needs charging. *Refer to questions and answers section.*
The **Push Switch** has several functions and is used with the LED.
Push once and the LED will flashes the number of hours it is since it got light in day mode. Or how many hours into night mode it is. If the LED does not flash it means it is within the first hour.
In night mode pushing the switch will turn the lights on for 3 minutes allowing you to **check your hens.**

Timing Chart Based on Greenwich Mean Time



Advancing the timer

The timer can be advanced in hourly steps by holding the push switch in. This can be done in night and day mode. To advance the hours follow these instructions.

1. Push in and hold the push switch
2. The LED will flash the amount of hours the timer is at. *For example, in day mode if 5 hours have past since it got light the LED will give 5 flashes.*
3. Continue to hold the switch in and there will be a short pause and the LED will give 6 flashes.

You can advance the timer up to 12 hours in day mode and 9 hours in night mode.
If you want to advance through day to night or vice versa, you should pause at 12 or 9 and cover and uncover the sensor, the timer needs a light dark change over to switch from one time setting to the next.
The timer can be reset to five hours into the day by disconnecting both the back-up battery and the main battery or power supply.

Maintenance

To keep your Rooster Booster operating reliably, wipe over the outer surfaces including the light sensor with a cloth. Smear the sensor with a thin film of light grease / Vaseline to protect it from damp.
When using a Battery you will need to check it regularly and charge when necessary.
A PP3 9V battery is used to maintain the timer cycle if the external power supply is removed. *The* PP3 *should be renewed annually*.

Changing the PP3 9V battery

1. Remove the 4 screws from the cover and remove cover.
2. If you have a standard unit remove the reflector.
3. Lift out the battery and unclip from the terminals, fit new one
4. Replace cover. DO NOT over tighten the screws. *Note: - if the internal battery becomes flat the Rooster Booster may not operate correctly.*

The internal battery will not power the lamps; so charging should be carried out during day light hours.
Check the lamps are working. This can be done during the day by covering the light sensor. (Always keep spare lamps) 8 watt Fluorescent tubes can be purchased from good electrical stores or caravan centres.
Check all connections are clean and sound.

If you have fluorescent lamps, Changing the tubes

1. Rotate the tube to release it from the spring terminal clips.
2. Fit the new tube by pushing it into the terminal clips and rotate to fix in position.
3. **The fluorescent tube is fragile and contains chemicals that can be dangerous. Dispose of damaged tubes carefully and in accordance with local directives.**

If you have standard lamps, Changing the bulbs

1. Remove the 4 screws from the cover and remove cover.
2. Unscrew the defective bulb and replace; only screw them into the bulb holder's finger tight.
3. Replace cover. DO NOT over tighten screws as you could crack the cover.

Batteries

The **Backup Battery** is a PP3, 9-volt type and should be renewed at the beginning of each season. *Refer to Maintenance section.*
The main supply Battery must be 12 volt. The size (*Amp Hour rating*) of the battery is your choice depending on your circumstances.
Calculate the amount of current required (*when the lamps are on*) by dividing the total lamp Wattage by the voltage (12V).
For example with 2 lamps at 8W each this is 16W divided by 12V = 1.3 Amps. If the lamps are on for eight hours in every 24 (1.3A x 8 Hours) = 10.4 Amp Hours of battery life. Most small car batteries are rated at 30 to 40 Ah; so expect roughly 3 to 4 days use from each charge. The power required when the lamps are off is insignificant.

A word about batteries

If left unused for long periods lead acid batteries tend to deteriorate, the plates "sulphate" which dramatically reduces the Amp Hour rating. A Sulphated battery will reach a fully charged state quickly and also flatten quickly effectively acting like a much smaller battery. Charging and fattening a sulphated battery may revive it a little but full capacity will never be achieved.
Modern car batteries are designed to provide large amounts of current for a short period of time rather than the small current for a long period. **Batteries intended for caravan or emergency lighting are more suitable**. When charging a lead acid cell you should be aware that explosive hydrogen gas is produced so never smoke or use a naked flame near a charging battery and always turn off the charger before connecting /or disconnecting it. When the cells start to bubble the battery is charged.
Maintenance free batteries that have no holes to top up the electrolyte level should only be charged with a special charger, normal charging equipment would almost certainly cause permanent damage and possibly an explosion.
The old car battery behind the shed or under the flower pots in the garage probably won't be up to the job especially if it was faulty when removed from the car and has been unused for several months let alone years.

The Rooster Booster has a 12-month Guarantee
If at any time you have a problem please contact us.

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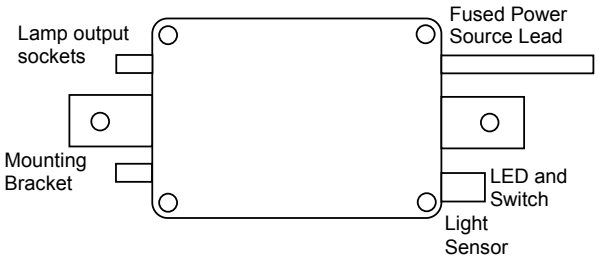
Barrow Lane

ROOSTER BOOSTER

A lighting system for hens able to roam freely during daylight hours.

Model: - LV0900/Multi

Retain for future reference



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