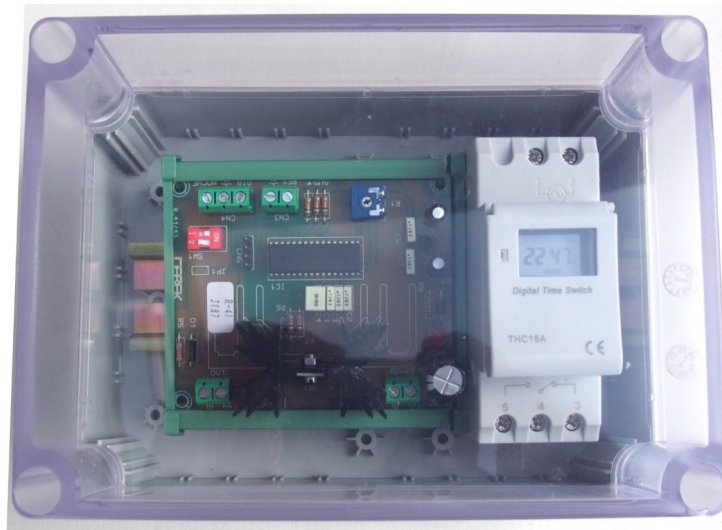


# Automatic LED Light Sunrise to Sunset Controller



## Digital Controller

The Automatic LED light sunrise to sunset controller has been designed for use with aviaries, fish tanks and reptile enclosures. It simulates the natural progression from day to night and from night to day to give your animals a more natural environment. The on and off times are easy to adjust and the rate of change from light to dark can also be adjusted to suit you and your animals requirements. The controller is supplied with a reel of 'Daylight' LED tape (6000k). The tape is IP65 rate with 60 LED's per metre. The LED's are covered in epoxy resin to give them good protection from the elements. The tape is just 2.8mm deep and at 10mm wide, it will fit easily into many locations. Supplied on a 5 metre reel with a 3M self-adhesive back, this tape is easily applied to most smooth surfaces by simply removing the backing paper. The tape can be easily cut or joined, with cutting points at every 3rd LED (50mm) intervals. Highly flexible and versatile and with a low power consumption

## SAFETY

Thank you for choosing this product. Please read the manual thoroughly before using this equipment. If the unit was damaged in transit, do not install or use it and contact your dealer.

- Not Suitable for children under the age of 16 years
- Children shall not play with the appliance
- For indoor use only
- Do not use in bathrooms, wet rooms or other damp locations
- Do not operate equipment with wet hands to reduce the risk of electric shock
- Do not use this appliance in locations where paint, petrol or other flammable liquids are used or stored
- Please ensure the unit is switched off and unplugged when not in use
- Do not use the appliance for other than its intended use
- Do not use this product in close proximity to gas appliances
- Periodically check this product for any signs of damage. If any damage is detected stop using it immediately and consult your supplier
- Only install in well ventilated areas
- There are no user serviceable parts in this product
- Do not move or knock this product while in use
- Do not overload. Maximum load is 4A (48W)
- This product must only be used in an upright position
- Do not cover
- Do not use in areas with high concentrations of dust or fibre particles
- Care should be taken when fitting this product

## Included in the package

- 1 x 5 metre LED Tape
- 1 x 4 Amp Power Supply
- 1 x Automatic LED Dimmer
- 1 x DC Coupler
- 4 x Fixing Screws
- 1 x Pack of LED tape couplers (5) 156.658
- 1 x Instruction Manual

## Installation

Installation must take place before the unit is plugged in.

1/ Install the LED Tape in a suitable position to give you maximum light coverage. The surface must be completely free of dust and grease.

**Note.** The LED Tape can be cut at 50mm (3 LED's) intervals to the required length, highlighted by a line with a pair of scissors. This cut can be made with regular scissors (not supplied).

If you need to join the LED Tape to negotiate corners and bends use the connectors provided or if you feel competent solder the joint.

Once the final location has been established simply remove the self-adhesive backing on the rear of the tape and apply firm pressure along the length of the tape to ensure it has adhered in all locations

2/ If required you can mount the Automatic LED Sunrise to Sunset Controller to a wall with the fixing screws provided. Or it can be used as free standing unit on a shelf or table. Fit the DC **RED** Coupler to the DC power plug from the LED tape then connect it into the **RED** DC Socket located on the top of the case. You can now connect the power supply for the Automatic LED dimmer into the **Black** DC socket and plug the mains plug into a suitable socket outlet.

3/ It is recommended to leave the unit with power on for approximately 2 hours before setting the clock or altering the running times. This is to allow the battery in the timer module to charge.

4/ Set the clock on the Timer module. (See time clock operating instructions)

5/ The Automatic LED Sunrise to Sunset Controller will now run with the settings used to test the unit.

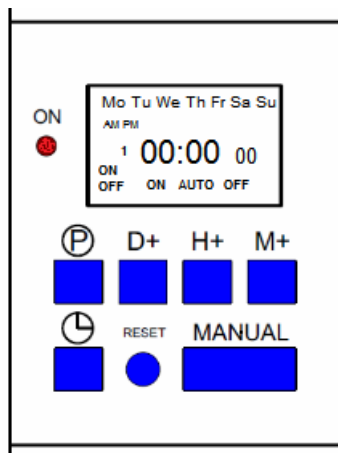
6/ If you wish to alter the 'On' and 'Off' times or the time from sunrise to sunset follow instruction for the dimmer module.



### Digital Time Clock

#### Operating Instructions:

The digital timer has been programmed for testing purposes before you receive the unit. The Initial program has been set for Monday – Sunday with the 'On' time starting at 7.00am. The LED tape will start to come on and at 9.00pm the LED's will start to dim to 'Off'. The dimming function has been for approximately 45 minutes, this and the clock can be adjusted to suit your own personal requirements.



<b>P</b>	Press to access programming mode
D+	Press to select day
H+	Press to increase hour
M+	Press to increase minute
<b>L</b>	Press to set time
MANUAL	Press to toggle between On, Off or Automatic

To alter the clock time or the On/Off times please follow these instructions.

#### Setting the Clock:


##### Day

Press **L** keep button pressed down, and then keep pressing D+ until the day you require appears on the top row of display.

##### Hour

Press **L** keep button pressed down, and then keep pressing H+ until the correct hour appears on the display (Note AM/PM indicator).

### Minute

Press  keep button pressed down, and then keep pressing M+ until the correct minute appears on the display.

Programming Mode:

Press  to enter programming mode. (Program 1)

'On Time' Press H+ for hour you would like the light to start to come 'on' followed by M+ for the minutes

Press D+ to select one of the following options: (keep pressing for next option)


Option	Symbol	Function
1	Mo	Only operates on Mondays
2	Tu	Only operates on Tuesdays
3	We	Only operates on Wednesdays
4	Th	Only operates on Thursdays
5	Fr	Only operates on Fridays
6	Sat	Only operates on Saturdays
7	Sun	Only operates on Sundays
8	Mo, We, Fr	Only operates on Mondays, Wednesdays and Fridays
9	Tu, Th, Su	Only operates on Tuesdays, Thursdays and Sundays
10	Sa, Sun	Only operates on Saturdays and Sundays
11	Mo, Tu, Wed	Only operates on Mondays, Tuesdays and Wednesdays
12	Th, Fr, Sat	Only operates on Thursdays, Fridays and Saturdays
13	Mo, Tu, We, Th, Fr	Only operates on week days
14	Mo, Tu, We, Th, Fr, Sa	Only operates on week days and Saturday
15	Mo, Tu, We, Th, Fr, Sa, Sun	Operates every day of the week {*}

Press  again to program the Off (Program 1)

Press H+ to select the hour followed by M+ for minutes to select the time you wish the light to start and dim off

Press D+ to select one of the above options (if you require same option as don't press this button)

To set up any of the other programs (2 – 20) repeat above procedure.

When finished press 

### Note:

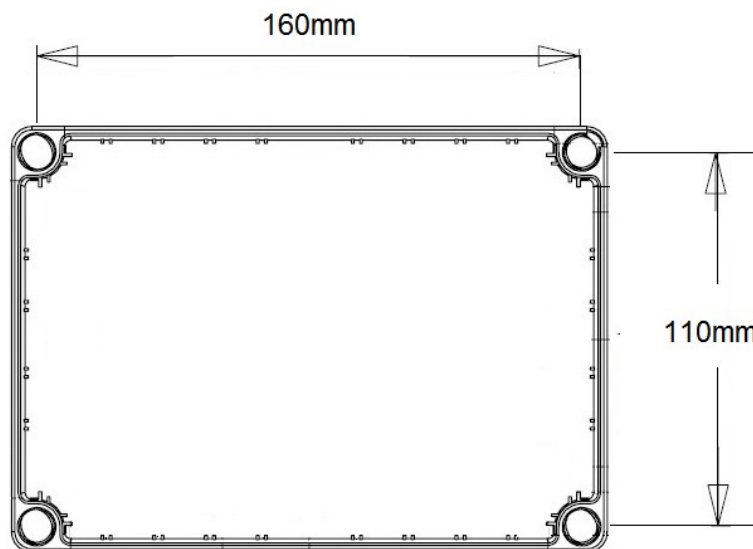
Timer will quit automatically if no buttons have been pressed within 10 seconds and no data will be saved.

### Specifications:

LED Tape	
No LED's	120
Colour Temperature (K)	6000
LED Tape 5 metre	2.8 x 10mm
Cut Intervals	50mm
IP Rating	65
LED Type	5050
LED's per metre	60
Power Supply	12Vdc

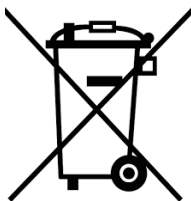
Dimmer Module	
Dimming Range	1 second to 2 hours
Maximum Load	4A (48 watts)
Time Clock Digital	
Time	Quartz
Range	7 day 24 hour ON/OFF programming
Minimum Programming	1 minute
Timing Error	$\leq \pm 2 \text{ sec/day @ } 25^{\circ}\text{C}$
Battery Back Up	Yes
Power Failure Memory	3 Years
Mechanical Life	10,000,000 operations
Electrical Life	100000 operations
Temperature Range	-10 to 50°C
Ambient Humidity	35 to 85% RH
Power Supply	4 Amp 230Vac
Dimensions	125 x 175 x 125mm
Weight	

#### Fixing Centres



Not to Scale

Product Designed and Assembled in the UK Manufactured in Europe and Asia



This symbol on the device or the package indicates that disposal of the device after its lifecycle could harm the environment. Do not dispose of the unit (or batteries) as unsorted municipal waste; it should be taken to a specialized company for recycling.

This device should be returned to your distributor or to a local recycling service. Respect the local environmental rules. If in doubt, contact your local waste disposal authorities.

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