

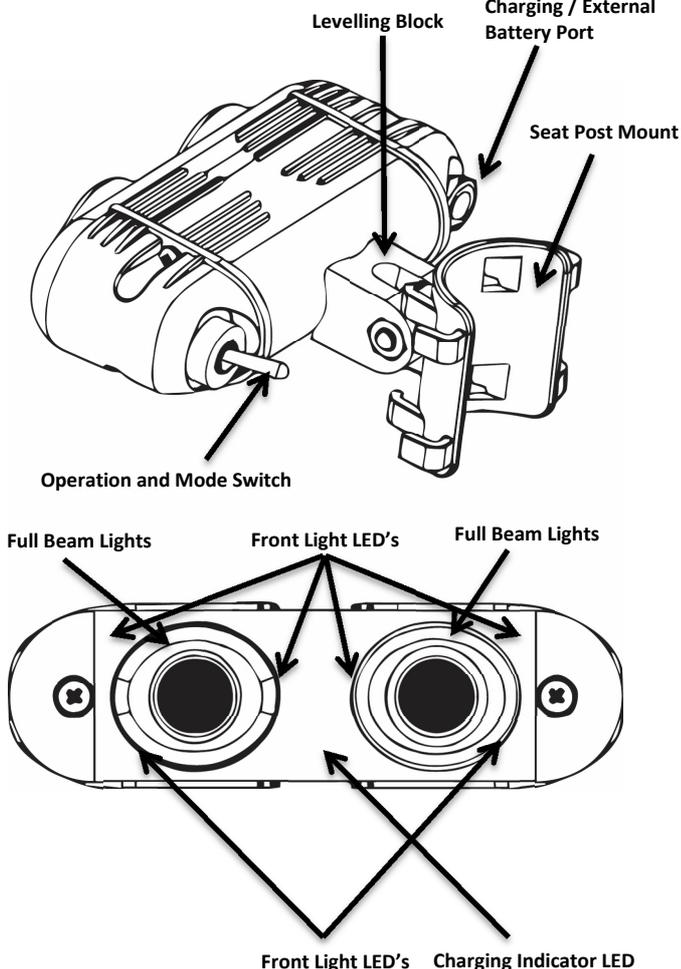
InSight

Front Light Operation guide

Overview

The Lumicycle InSight front light is a precision piece of electronic design, developed specifically to provide cyclists with a means to warn other road users. It uses high grade components and should provide years of trouble free service. To obtain the best performance from your InSight light please read these instructions carefully and keep them in a safe place for future reference.

Product features



Installation of InSight onto your bike

The tubular mount can accommodate a wide range of different tube diameters, select a location, and then using the two rubber straps provided securely attach the mount to the bike. Different strap location points are provided to ensure a tight fit to the bike. It is important that the InSight light is securely attached to the bike frame/handlebar mount such that it does not vibrate, you may need to experiment with different mount positions to get the best fit.

Mounting block

The InSight light is designed to be mounted either horizontally or vertically. To change orientation, undo the screw inside the levelling block and turn the block through 90 degrees before re-fastening. Ensure that screw is tightened to prevent the light unit rattling. **IMPORTANT:** Use only the screw provided, using a longer screw could damage the unit.

Operation/Mode Switch

The Operation/Mode switch has three positions:

Off

Switch is pushed fully toward the body of the light. In this location the system is in sleep/charge mode. If charging is required connect the USB cable to the battery port and connect to a suitable DC supply (see later) charging will then occur until the battery is fully charged.

On

Switch is moved to the central location, system will perform a short self-check and provide an indication of internal battery health (see overleaf). The front light LED's will now flash whilst the internal circuitry is initiated. When the front light LED's are constantly illuminated the unit is ready for use. The InSight light will always switch on in "Mode 0" (see overleaf).

Mode

The switch has a momentary selection action – pushing the lever away from the light will activate the modes available, and releasing the lever will result in it moving back to the "On" position in the selected mode. The mode switch should be held until the desired mode is indicated by the LED's and then released to confirm this mode to the unit.

Available Modes

- Mode 0** *Default mode after switch on. Solid front light LED's illuminate.*
- Mode 1** *Moving the switch again will cause the light to go into full beam mode.*
- Mode 2** *Holding the mode switch for 3 seconds then releasing will put the light into flashing mode. Once in flashing mode you can revert back to Mode 0 by once again holding the mode switch for 3 seconds and then releasing.*
- Mode 3** *Whilst in flashing mode, move the switch again to give a full static beam.*

Battery Health and indication

When the InSight light is first powered on it will perform a self check, and provide you with an indication of internal battery level.

Front Light LEDs illuminate

Battery is above 80% capacity.

Full Beam Light LED's only illuminate

Battery has between 80 – 20% capacity remaining.

Front Light LED's only illuminate

Battery has less than 20% capacity remaining and should be recharged as soon as possible.

On board battery management

The microprocessor constantly monitors the battery capacity, should it detect that the battery is running flat, it enters a contingency mode as follows:

Battery <10% capacity remaining

High Power LED's will be switched off automatically – just leaving the front light LED's illuminated. If the InSight light is connected to a Lumicycle external battery it will revert to the last mode setting before power off.

Battery <5% capacity remaining

Front light LED's will begin to flash, this is not a user selectable mode and is only used to ensure that if you are still in need of rear illumination a further 1.5hours of run time is provided to get you home. If possible we recommend that you connect one of the leads from the external battery to the charge port to prevent the light unit shutting down completely to prevent damage occurring to the internal battery.

Battery Charging

The InSight light has an on board charge control system that allows for a huge range of different methods for charging. The light will auto detect the power delivery ability of whatever it is connected to and adjust charging times and current accordingly.

Basic DC voltage accepted 5V – 14.8V DC

IMPORTANT: *In order to remain compatible with Lumicycle External battery systems only use the USB charging cable provided to charge the InSight Light - if another USB lead is used the unit will not charge.*

Suggested charging options

Fast Charge Mode

- 12V 1A DC Power Supply provided.
- 12V Car USB adaptor.
- Lumicycle external battery pack.

Slow Charge Mode

- 5V 500mA Computer USB output.

Note you can run and charge the InSight Light at the same time when connected to a Lumicycle external battery.

The battery charging LED's show the current status of charging when a suitable device has been connected:

Red Indication *Charging*

Green Indication *Charge Complete*

Trouble Shooting

LED's illuminate, but after power up no further indication is seen – battery is very flat, recharge and try again.

LED's fail to illuminate when mode switch is moved to the on position.

Internal battery is flat – connect a suitable charging device and wait until green LED illuminates.

Battery LED fails to illuminate when USB cable connected.

- 1) Check that DC connector is fully pushed into the socket.
- 2) Check that Power supply is receiving power.
- 3) Ensure that you are using the Lumicycle charging cable, as other cables will not work with this unit.

- 4) Check that the USB port you have connected the cable to can provide a minimum of 5V 500mA DC output.

There are no user serviceable parts inside the Light unit, if the above fails to resolve the problem the unit will need to be returned for repair or replacement.

