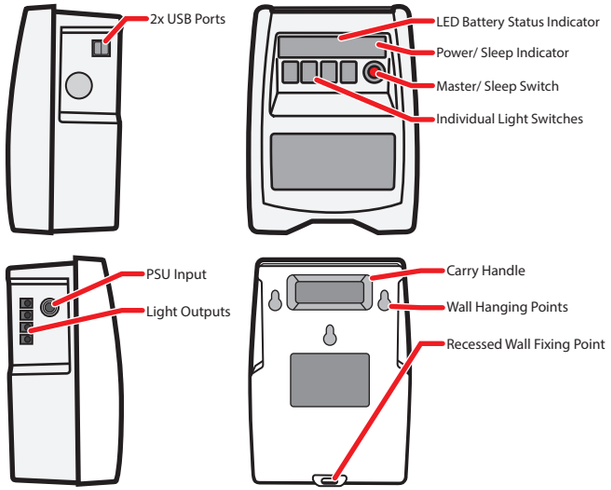
System Operation:

The following diagrams illustrate all cable connection points, switches and mounting points.



Blue light flashing indicates that the battery is being charged.

Green light indicates that the battery is fully charged.

Yellow light indicates that the battery is three quarters charged.

Amber light indicates that the battery is at half charge.

Red light indicates that the battery is almost flat/ empty.

Note: It is normal for the system to fluctuate between different charge levels indication, due to fluctuations in the output power from the solar panel.

Warranty:

12 Month Warranty: This Limited Warranty applies to physical goods, and only for physical goods in the Insele product range.

This Limited Warranty cover any defects in material or workmanship under normal use during the Warranty Period.

During the Warranty Period, Microtronix Manufacturing will repair, at no charge, products or part of a product that prove defective because of improper material or workmanship, under normal use and maintenance.

This Limited Warranty does not cover any problem where: physical goods are not kept in the recommended conditions; malfunctions or damage caused does not result from defects in material or workmanship; malfunctions or damage is caused by unapproved tampering or modifications; the Warranty Void seal is broken.

Warnings:

Do not allow any liquids to spill on the battery charger.

Note that this unit contains no user serviceable parts and disassembly will void your warranty.

Do not connect any 220V AC appliances to the charger (e.g. kettles, stove, iron, fridge)

Do not connect any other power source to the input except for the solar panel or compatible AC/DC (18-20V 2A) adapter (input DC ONLY!).

12VDC System ONLY, no other voltages allowed.

Keep the battery control unit away from direct heat e.g. stove, candles or open flames.

Do not use battery pack outside where it is exposed to direct sunlight, wind. or rain.

The light source of this luminaire is not replaceable, when the light source reaches its end of life the whole luminaire shall be replaced.

Troubleshooting and Maintenance:

Should you be experiencing any problems please follow these steps:

Check all connections to ensure that they are secure and free from debris.

If none of the indicating lights are lit, the system may have gone into battery protection mode and has shut down. Please wait for power to be available to recharge the system and restore full functionality.

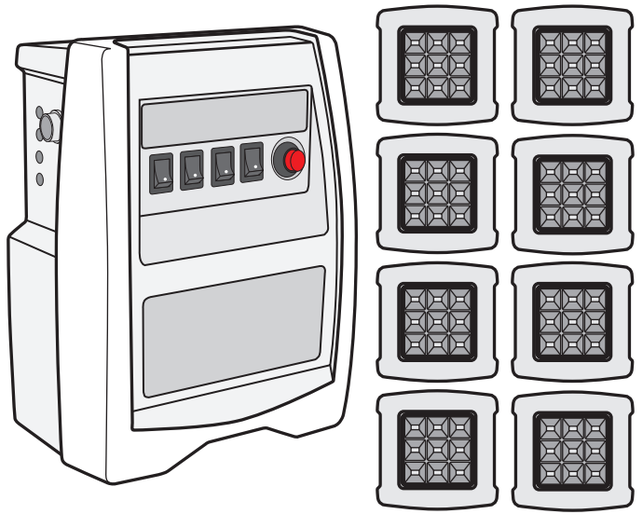
If all instructions are done as per this manual and the unit is still not functioning, please contact your installer.

The system is low maintenance; however please take note of the following:

The batteries expected life span is 3 years, with proper care is can last up to 7 years. Should the battery stop functioning correctly please contact the unit supplier to find out where to buy a replacement battery at www.insele-solar.co.za. Be aware that abuse of the system will shorten the battery life span.

Insele Backup Lights

Intelligent Emergancy Backup 12V Lighting Management System



i100 Emergency Backup Lights

Emergency Battery Backup 12VDC Lighting System

Installation Instructions and Operations Manual

Made in South Africa

* Lights sold seperately

Thank you for your purchase of the Insele Battery Charger System. Our products are manufactured and assembled in Johannesburg, South Africa providing a uniquely African product that can withstand the African environment.

This high-quality power system will give you many hours of enjoyment and light. Please read the manual carefully to understand your system and get the maximum benefits from your system.

Contents of Kit:

Our kit consists of the following:

1x i100 Emergency Backup Unit (8Ah LiPo battery built in)

1x 18V Power Supply

1x Unit Installation Kit, includes mounting bracket, screws and various cable securing items

1x Installation Instructions and Operations Manual

Unit can support upto 12x 3W Insele surface mount internal lights, sold seperately.

PSU Installation:

The unit is supplied with a 18V PSU, DO NOT USE any other PSU other than the one supplied with the unit. Plug the PSU kettle cord plug into a 220VAC supply and the special 2 pin jack into the PSU/ Solar input on the side of the unit.

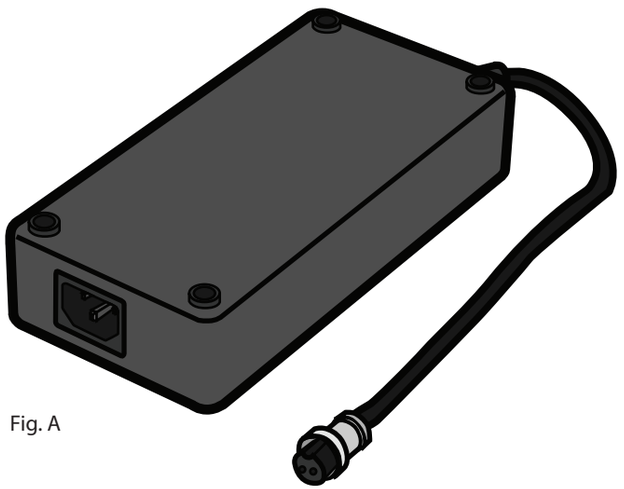


Fig. A

Unit and Light Installation:

The Insele Battery Charger Unit should be placed in an easily accessible area where the cables from both the PSU and lights can be reached. The area should be cool, not in direct sunlight or be exposed to water (rain, steam, damp etc.)

The unit can either stand on a surface or be mounted to a wall using the bracket and wall plugs and screws provided - see Fig B

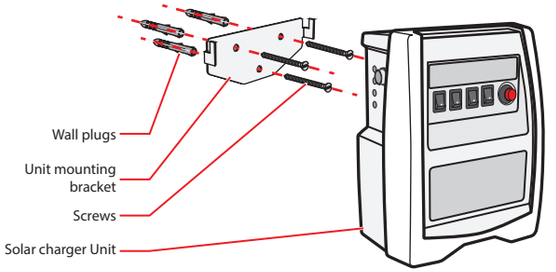
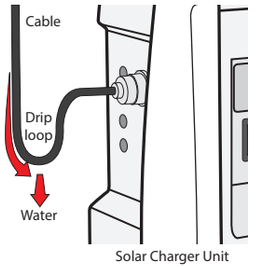


Fig. B

The unit can support up to 12x lights, 2 per 12V output. Lights are available with 5m and 10m cable lengths. Please ensure cables will reach your unit before ordering and mounting your lights.

Route the main cable from the PSU and lights to the Solar Charger Unit.

Cables must have a drip loop before connecting to the unit to avoid condensation entering the unit along the cable.



To mount the surface mount lights the white cover must first be removed to expose mounting holes. The flood light is mounted with 4 screws points - see Fig C

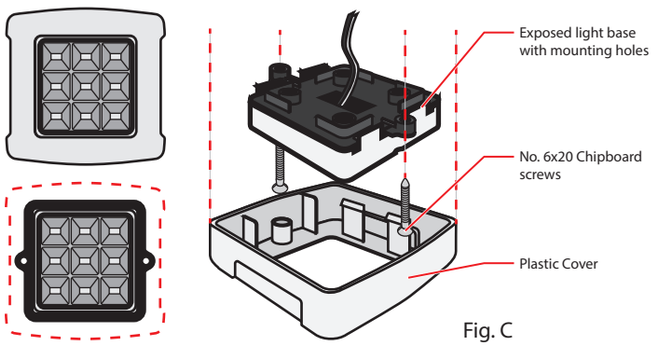


Fig. C

Other devices such as cellphones and tablets can be plugged directly into the unit for charging.
Be careful not to break or bundle the cables as this can lead to electricity loss and shorts causing a system failure.

System Operation (Functionality):

- The unit has a **AUTO-ON** function, this means that the unit will automatically turn on when normal power (220VAC) is lost, unless it is **SLEEP MODE**. Ensure all light outputs remain on in order to use the unit for emergrancy backup lighting.

- To turn **ON** the unit press the red power button once.

- To turn **OFF** the unit press the red power button once (Does not operate with **AUTO-ON** functionality).

- To turn the unit **OFF** whilst in **AUTO-ON** mode enter **SLEEP MODE.** To enter **SLEEP MODE** hold down the power button for 4 seconds the white LED will flash to indicate **SLEEP MODE** is active, after 2 minutes the unit will turn off completely. To exit **SLEEP MODE,** hold down the power button for 4 seconds.

- **DUAL MODE LED LAMPS** Switch on the light once for **FULL BRIGHTNESS**, flick the switch off and on again to enter **DIM** mode. Flick the switch off and on again to return to F**ULL BRIGHTNESS.**

USB ports have a 2A max output (2x 1A or 1x 2A) and are compatible with most major cellphone and tablet brands that charge via a USB cable.

Each light switch has its own indication light, if the white light is on it means the lamp output for the corresponding switch is live. Lamp switches and outputs are marked 1 to 4.

The system should function as follows:

When the PSU is plugged in and normal power is available the charge LED should be on.

When the battery is fully charged and the PSU is unplugged or normal power is not available the USB ports and lamps will remain on.