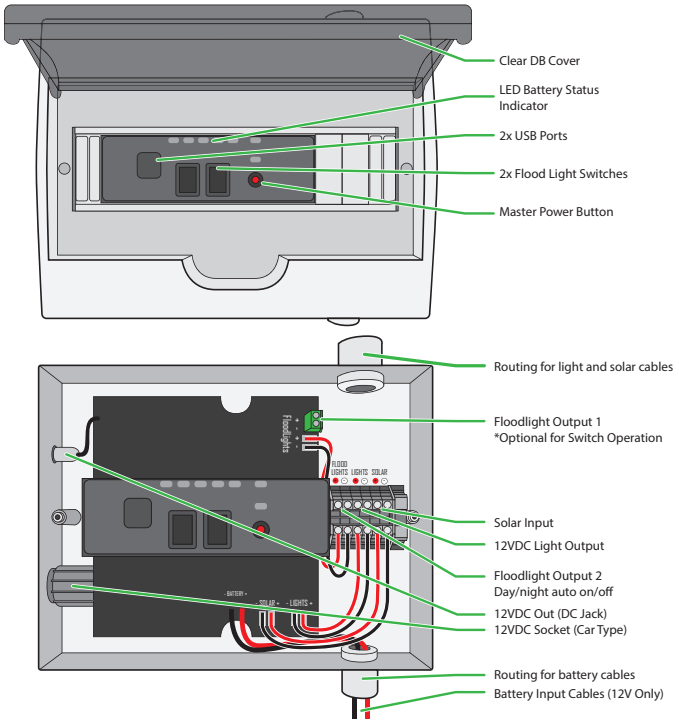
System Operation:

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.

USB ports have a 3A max output and are compatible with most major cellphone and tablet brands that charge via a USB cable. Output on the "car" charger socket is 12V 2A 24W.

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. 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.

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) **12VDC System ONLY,** no other voltages allowed.

Do not connect any other power source to the input except for the solar panel (input DC ONLY!).

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 solar power to be available to recharge the system and restore full functionality.

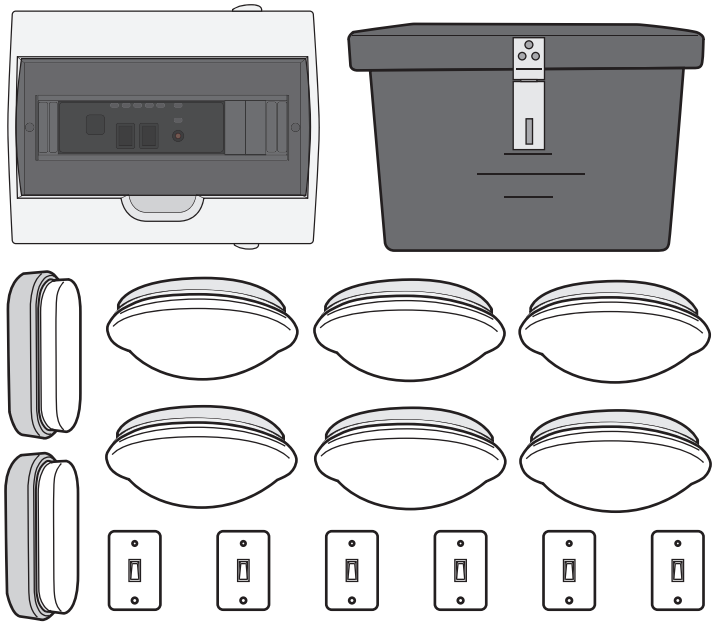
If all instructions are done as per this manual and the unit is still not functioning, please contact your installer.

The system is low maintenance; however, the following should be done to ensure the systems life: Clean the Solar Panel monthly to prevent dirt build up; Remove any structure or trees casting shade onto the Solar Panel.

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 Solar Charger

12VDC 8x Light, 2x USB, Intelligent Solar and Battery Management System



i1000 Homegrow DB

Installation Instructions and Operations Manual

Made in South Africa

Thank you for your purchase of the Insele Solar Charger System. Our solar 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 i1000 Homegrow DB Unit
1x Battery Box with 12V 50Ah Lithium Battery
6x B-light Indoor Round lights
2x X-light Outdoor Bulkhead 12V Light (waterproof)
6x Standard Light Switches
1x 150W Solar Panel
1x Solar Installation Kit, includes brackets, nut bolts and washers
1x Unit Installation Kit, includes solar and battery cables, screws and various cable securing items
1x Installation Instructions and Operations Manual

Solar Panel Installation:

The Solar Panels should be placed facing the unobstructed midday sun, where it appears in the winter months (when the sun is the weakest). This is the North facing side of a structure. For optimal charging the sun light must not be obscured by any trees or other structures.

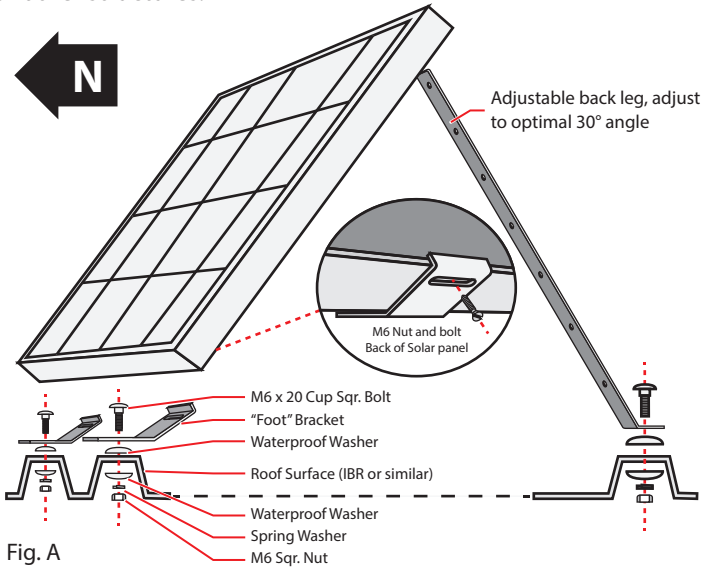


Fig. A

The Solar Panels can be mounted to any steady structure and must be firmly secured. The Solar Panels are weather resistant and can be left outdoors permanently if required.

Locate an area on the roof structure where the solar cable can be easily run to the intended position of the Insele Solar Charger. Mount the back leg of the panel to the roofing structure first, using the supplied nuts, bolts, and washers as per the Fig A.

Prepare the solar panel by mounting the foot brackets to the bottom edge of the panel using provided nut and bolt to the existing holes in the panel frame, as shown in Fig A.

Place the panel onto the roof surface with top edge against the already mounted back leg. Adjust angle as needed by bending brackets and secure back leg to existing mounting hole on the solar panel frame. Then secure the front feet to the roof surface as shown.

Unit and Light Installation:

The i1000 Homegrow should be mounted in an easily accessible area where the cables from both the Solar Panel 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 is mounted to the wall via hanger(s) on the rear of the DB box, whilst the battery box can sit flush on the floor or any other suitable surface.

After installation, connect the battery and test the unit. Lastly, connect the Solar Panel. If all the status LEDs start flashing, except the power LED, there's a battery error. First, check all connections to the battery. If the LEDs keep flashing, the battery is faulty and needs to be replaced.

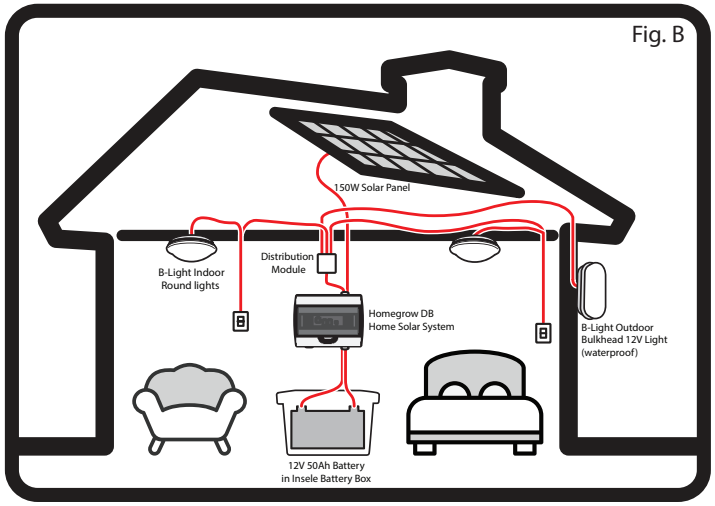


Fig. B

8 Lights are provided with the system in total, 6 of the round indoor lights and 2 bulkhead outdoor lights. We recommend 0.5mm ripcord for the lights to join and install with the switches as per a standard electrical installation. The system is supplied with spitters to make installation easier - splitting the light output from the unit to various light outputs. See Fig C

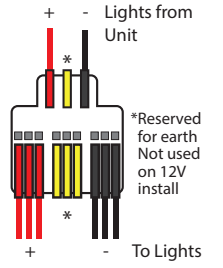


Fig. C

The lights provided are standard ceiling and bulkhead-style fixtures with 12V DC luminaires. Install them as you would in a typical home setup using 0.5mm ripcord. Be sure to correctly connect the positive and negative wires - see Fig D & Fig E.

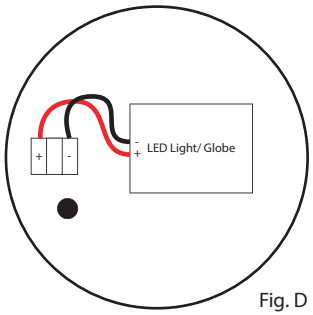


Fig. D

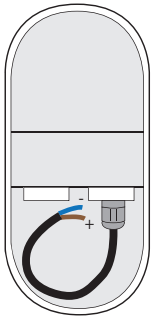


Fig. E

! DO NOT connect any light circuits to a 220V supply.
! Doing so will destroy your 12V light globes, and may cause electrical damage or fire.
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:

- To turn **ON** the unit press the red power button once.
- To turn **OFF** the unit press the red power button once.
- To turn off the unit completely and enable **SLEEP MODE**, hold down the power button for 4 seconds the white LED with start flashing, after 2 minutes the unit will turn off completely. To exit **SLEEP MODE**, hold down the power button for 4 seconds. *Only available when there is no Solar Input, unit will turn on when solar detected
- **DUAL MODE LED LAMPS** Switch on the light once via the corresponding switch connected to the distribution module for **FULL BRIGHTNESS**, flick the switch off and on again to enter **DIM** mode. Flick the switch off and on again to return to **FULL BRIGHTNESS.**