

SPECIAL NOTE Hubi Retro can deliver a maximum of 3.5A at any one time so if all the power sockets are used and the combined current exceeds 3.5A, Hubi Retro will close down to protect its circuits. To reset Hubi Retro, remove the solar panel from the hub and use the reset tool provided in this kit (or a paperclip or similar object) and insert it into the Reset socket (Fig 1. 9) on the front of Hubi. Press it once to reset the system. Then connect Hubi back to the solar panel and once daylight activates the solar panel the hub will be reset. Hubi is not designed to work with an inverter. If an inverter is connected to Hubi Retro, the hub will close down and will need to be re-set as above. Should the above occur, it will not have damaged Hubi Retro.

9. Warning

Keep Hubi away from fire and don't allow it to get wet. Any severe shock or impact may result in damage and will invalidate the warranty. It is strictly forbidden to dismantle Hubi except by Solar Technology personnel or agents appointed by Solar Technology. Any sign of tampering will result in the warranty being terminated.

10. Warranty

All items in this box including Hubi, LEDs and cables are supplied with a 24 month global warranty* except the solar panel, which is supplied with a 10 year module warranty and 20 year performance warranty.

Should a failure occur during this time Solar Technology International Ltd will repair or replace any faulty part, at its discretion. Solar Technology International Ltd does not accept liability for any 3rd party damage how so ever caused or any costs associated with the return of faulty products.

*Global warranty means if a product is returned to the address overleaf at the sender's expense and a warranty claim is found to be valid, Solar Technology International Ltd will return the repaired or replaced product to the sender at Solar Technology International Ltd's expense irrespective of where the sender is located in the world.

11. Optional accessories

Solar Technology supplies a comprehensive range of accessories for Hubi, which is constantly being updated. Please visit www.solartechnology.co.uk to view.

- | | |
|-----------------------|----------------------------------|
| 1. Lap top adaptor | 7. Extension cables |
| 2. Apple / HP version | 8. 12v fan |
| 3. Lumi light | 9. Expansion kits (Hubi + panel) |
| 4. Lumi splitter | 10. Hubi boxes (without panel) |
| 5. LED strip light | 11. Mains adapter to charge Hubi |
| 6. LED bulb and cable | 12. Camcaddy2 |

Frequently Asked Questions

1. The solar panel never seems to fully charge Hubi

- Check the panel is not shaded and that it is outdoors. If inside, even if against a glass window, the charge capability of the panel reduces significantly. Also bear in mind a solar panel loses approximately 8 times its summer charging capability in the winter.

2. The power indicator on Hubi never shows 4 bars

- This does not necessarily signify that the Hubi is not full. LEDs are not a totally accurate way to measure power and inaccuracies can sometimes be experienced. So long as the Hubi after a full sunshine charge delivers power as indicated in section 3 it is working well.

3. Is there any other way to charge up Hubi other than solar?

- There are two options; charge by mains wall plug or charge by 12v auto plug – see www.solartechnology.co.uk and look under Hubi Accessories.

4. What happens if Hubi gets wet?

- Hubi is not water resistant although is very robust and designed for use outdoor but should it get wet disconnect it from the solar panel and other devices and let it dry naturally indoors for a period of one week. There is a very good chance it will recover without future problems and can be used as normal. However, if it will not work then it must be assumed the battery has been damaged and can be returned to Solar Technology for battery replacement – see section 8.

5. What about if I break something?

- All parts of the Hubi system are replaceable and we have spares at Solar Technology in the UK. In this instance please call +44 (0) 1684 774000 for a quotation.

6. I plugged a device into Hubi and it instantly stopped working and would not work again.

- In this instance Hubi's sockets have been overloaded. Hubi can only deliver a maximum of 3.5A and if more is demanded of it, it will automatically shut down to protect its circuits from overload. To reset Hubi disconnect the solar panel cable and follow the instructions in the 'Special Note', top left next to this page.



Solar
Technology
International
Without boundaries

Hubi® Retro

User manual



Solar Power Station

Models:

Hubi Retro 1, 2, 3 and 4

Congratulations on purchasing the Hubi Power Station and another step toward grid independence!

The instruction manual will help you understand how Hubi works, how to get the best from it, and just as important, its limitations.

Important: please read before first use.



We want your photos and videos!

Here is your chance for you and your Hubi power station to be a star! Just send in pics or videos of you and your Hubi in a great location and if selected we will not only give you ever lasting recognition on our online favourite users wall of fame but we will send you a Freeloader Sixer, 6000mAH solar power bank worth £70 completely free!

Please send to hello@solartechnology.co.uk including your address details and best of luck!

Note – we cannot guarantee to publish every entry and only those selected by our marketing department for publication will be awarded a Sixer. By providing your images you automatically grant us the right to use these images or videos howsoever we see fit.



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Hubi is a sophisticated power station that uses its solar panel to charge the battery hub and this will then power the special 12v lighting supplied and will charge portable electronic devices via its USB and 12v auto socket ports. From new, we recommend that once fitted the Hubi battery hub is connected to the solar panel and it is left with all switches turned off to enable it charge itself over a period of 24hrs before first use.

Specification

Hubi Retro 1 Part no. SHV001

- 1x Hubi Power Hub includes:
- 2000mAh/12v lithium battery pack (1)
 - Intelligent charge electronics
 - 1x 12v auto socket output - max 3A (2)
 - 2x 12v lighting jack (3)
 - 2x USB socket outputs - max 2A (for charging 5v devices: phones, tablets etc) (4)
 - Light on/off switch (5)
 - Power station on/off switch (6)

- Battery power indicator (7)
- Solar charging indicator (8)
- Reset button (9)
- 1x 5w 12v solar panel and 2.5m cable (not shown)
- 1x Solar panel bracket (not shown)
- 1x Table lamp with 5m cable and switch (11)
- 1x 5m cable, switch and E14 bulb holder (12)
- 2x 0.8 lumen LED filament type bulb (13)
- 1x Cable fixings and user manual (14)

Hubi Retro 2 Part no. SHV002

- 1x Hubi Power Hub includes:
- 10000mAh/12v lithium battery pack (1)
 - Intelligent charge electronics
 - 1x 12v auto socket output - max 3A (2)
 - 2x 12v lighting jack (3)
 - 2x USB socket outputs - max 2A (for charging 5v devices - phones, tablets etc) (4)
 - Light on/off switch (5)
 - Power station on/off switch (6)
 - Battery power indicator (7)

- Solar charging indicator (8)
- Reset button (9)
- 1x 10w 12v solar panel and 2.5m cable (10)
- 1x Solar panel bracket (not shown)
- 1x Table lamp with 5m cable and switch (11)
- 1x E27 expandable ceiling bulb holder (not shown)
- 1x 5m cable from hub to bulb holder (12)
- 1x 3.5 lumen LED filament type bulb (not shown)
- 1x 0.8 lumen LED filament type bulb (13)
- 1x Cable fixings and User manual (14)

Hubi Retro 3 Part no. SHV003

- 1x Hubi Power Hub includes:
- 10000mAh/12v lithium battery pack (1)
 - Intelligent charge electronics
 - 1x 12v auto socket output - max 3A (2)
 - 2x 12v lighting jack (3)
 - 2x USB socket outputs - max 2A (for charging 5v devices - phones, tablets etc) (4)
 - Light on/off switch (5)
 - Power station on/off switch (6)
 - Battery power indicator (7)
 - Solar charging indicator (8)
 - Reset button (16)

- 1x 10w 12v solar panel and 2.5m cable (10)
- 1x solar panel bracket (not shown)
- 1x floor lamp with 5m cable and switch (not shown)
- 1x table lamp with 5m cable and switch (11)
- 1x E27 expandable ceiling bulb holder (not shown)
- 1x 5m cable from hub to bulb holder (12)
- 2x 3.5 Lumen LED filament type bulb (not shown)
- 1x 0.8 Lumen LED filament type bulb (13)
- 1x Hub Y Split cable (not shown)
- 1x Cable fixings and User manual (14)

Hubi Retro 4 Part no. SHV004

- 1x Hubi Power Hub includes:
- 10000mAh/12v lithium battery pack (1)
 - Intelligent charge electronics
 - 1x 12v auto socket output - max 3A (2)
 - 2x 12v lighting jack (3)
 - 2x USB socket outputs - max 2A (for charging 5v devices - phones, tablets etc) (4)
 - Light on/off switch (5)
 - Power station on/off switch (6)
 - Battery power indicator (7)

- Solar charging indicator (8)
- Reset button (16)
- 1x 10w 12v solar panel and 2.5m cable (10)
- 1x solar panel bracket (not shown)
- 2x floor lamp with 5m cable and switch (not shown)
- 1x table lamp with 5m cable and switch (11)
- 2x 3.5 Lumen LED filament type bulb (not shown)
- 1x 0.8 Lumen LED filament type bulb (13)
- 1x Hub Y Split cable (not shown)
- 1x Cable fixings and User manual (14)

Hubi Winter Panels

Designed to extend the charging time of Hubi Retro in the winter months.

Part No. STP010V

(for Retro 1)

- 1x 10w Panel
- 1x wall bracket and fixings
- 1x daisy chain cable

Part No. STP020V

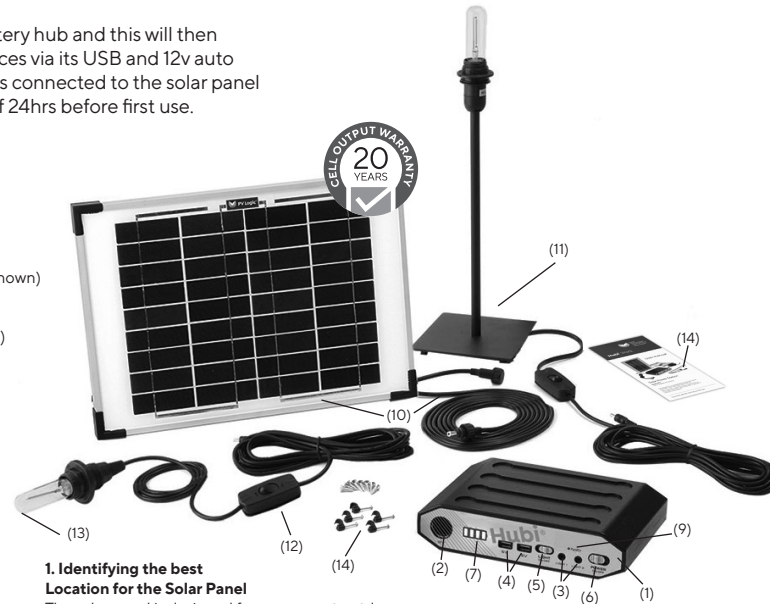
(for Retro 2)

- 1x 20w Panel
- 1x wall bracket and fixings
- 1x daisy chain cable

Part No. STP045V

(for Retro 3 and 4)

- 1x 45w Panel
- 1x wall bracket and fixings
- 1x daisy chain cable



1. Identifying the best Location for the Solar Panel

The solar panel is designed for permanent outdoor use (please don't position the panel behind a window as this will massively reduce its effectiveness). There is a white ABS bracket in the kit with fixings and this is designed to hold the panel at a steep angle (ideal for winter charging) when positioned against a wall. You need to select a wall where the solar panel won't interfere with your day to day use of the building, but also bear in mind the hub needs to be within 2.5m of the cable fixed to the panel.

NOTE - if the Hubi Retro needs to be located further from the solar panel than 2.5m, a 5m or 2.5m extension cable can be purchased from www.solartechnology.co.uk. The ideal solar panel position is on a south facing unshaded wall, but good power generation will still be achieved anywhere from due east to due west (in the southerly half of the compass). Avoid north facing walls and heavily shaded areas.

2. Fixing the Solar Panel

The panel frame is drilled and these holes will match those on the bracket. First attach the solar panel to the bracket (see Fig 2) using the bolts and nuts provided so the panel and bracket are ready to be fixed to the wall in a landscape orientation. Use the self-tapping screws provided to fix the panel and bracket to a wall made of wood. If fixing to a wall made from other materials some rawlplugs may be needed (not supplied). A hole will need to be drilled to thread the cable from the outside of the building to the inside. Once the cable is inside it's a sensible precaution to fill the hole around the cable with Polyfiller or similar.

3. Positioning Hubi

The Hubi Retro is not waterproof so needs to be protected from direct contact with water. A powder coated metal bracket can be purchased that completely protects the hub and its cables allowing the hub to be safely fixed to any wall - see www.solartechnology.co.uk. The hub needs to be within 2.5m from the solar panel and can be extended (see point 2).

4. Connecting the Solar Panel to Hubi

The solar panel is fitted with a 2.5m cable and connector plug. This inserts into the back of Hubi Retro into the socket named 'Solar In' (1). That's it - the Hubi Retro will be charged by the solar panel whenever there is daylight and is protected from overcharging by its smart control electronics. You can also charge the Hubi Retro from the mains if you purchase a separate mains charger available at www.solartechnology.co.uk. This is plugged into the 'Aux input' (2).

If you have a Hubi Retro 2, 3 and 4 the you will also see a 3rd connector on the rear of Hubi. This connector allows you to connect multiple Hubi Retro's together giving you more storage power and outputs. Simply connect the 'output' (3) on one unit to the 'Aux input' (2) on the other unit with the supplied cable.

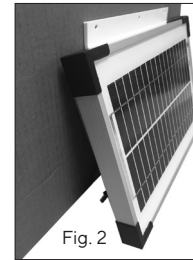


Fig. 2



5. Connecting the LED(s) to Hubi

The supplied Hub-to-LED cable is 5m long so consider where the LED light unit is to be positioned. It's worth holding the illuminated LED in the dark room before fitting so you can decide which location will give the best illumination. The plug end of the 5m cable connects into socket (c) (Fig. 4) named Light 1 on the Hub. Now fix the cable to wall and ceiling using the panel pins supplied until you arrive at the chosen location of the LED. The cable end has a mating connector to the LED so join the two together and fix the LED in position.

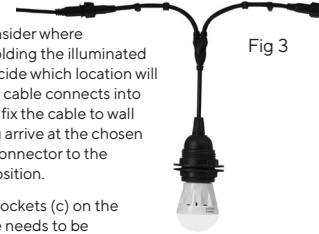


Fig 3

The table and floor light should be plugged into sockets (c) on the hub and for Retro 3 or 4 the supplied Y split cable needs to be connected to sockets (c) and then the lights can be connected to the two sockets from the Y split.

If the cables are exposed or a trip hazard, a conduit or some form of encapsulation should be considered to provide protection.

6. Operating the Hubi Retro System

To enable power to be delivered from the Hubi Retro, you must turn it on, by sliding the Power Switch (a) to the ON position. Instantly you will see the power indicators illuminate and the four segments (b) each represent 25% of the batteries capacity: 1 segment < 25% charged, 2 segments < 50% charged, 3 segments < 75% charged, 4 segments < fully charged.

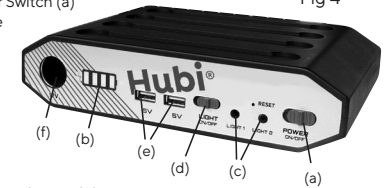


Fig 4

If power is needed for charging or running electrical devices there are two USB sockets (e) capable of powering any 5v device such as a smart phone or tablet. There is a single 12v auto socket (f) and devices with a matching plug and compatible power demand can be powered by Hubi Retro if the Power Switch is in the ON position.

Devices you can power or charge from the Hubi are phones, tablets, torches, lights, fans, in fact most 12v devices that have a car plug and 5v devices that have an USB connection (please see special note in below).

Tip: To maximise the power in your Hubi Retro system when not in use always switch both ON/OFF buttons to the off position. The solar panel will still deliver a charge to the solar hub but the hub itself won't waste any of that power.

7. Expanding Hubi Retro

If longer illumination times are needed all Hubi Retro models can achieve this if the Hubi Retro Winter Panels are purchased. These kits contain an additional solar panel that daisy chains to the panel supplied.

If more power is needed, an expansion hub HUBI1010AE can be purchased for Retro 2, 3 and 4. The additional hub is supplied with a linking cable to join the two hubs - see note 4.

8. Replacement Battery

Hubi has been designed so its battery can only be replaced by Solar Technology or its appointed agents. In no circumstances should any other party attempt this process as it will invalidate any warranty. The battery in a Hubi is designed to last between 2 and 5 years depending on levels of use. The cost of a new Hubi battery can be found on www.solartechnology.co.uk under Hubi Accessories. This price includes return postage.

SPECIAL NOTE

Charging Hubi from new If from new there is only one bar or no bars showing on Hubi's battery meter, it will be necessary to allow the solar panel to charge the battery before first use. Once it is at least 50% charged, the system can be used.

Please ensure Hubi is covered or indoors and the solar panel is outside and tilted at around 45 to 55 degrees, facing as near to south as possible and in an unshaded location. Make sure all of the switches on Hubi are OFF and the solar panel cable is plugged into the Solar In socket on the back of the hub.

Charge-up times from flat to full: Hubi Retro 1 (summer 1 day / winter 4 days) Hubi Retro 2, 3 and 4 (summer 3 days / winter 12 days)

NOTE - once Hubi is showing 2 bars of charge (50% full) it can be used. Thereafter, the solar panel will generate sufficient power each day, even during winter to provide light for 1 to 2 hours each night. If longer lighting times are needed (in the winter) please consider adding a Hubi Expansion solar Panel, which will provide twice the solar power, thus doubling the nightly run time.