

SolarMate[®] Tibu

User manual

Pack content

Included:

- 1 x Tibu light; 1 x Lock nut
- 2 x Rubber weather proof gaskets

Tools needed for installation, but not supplied:

- 1 x 51mm hole cutter
- 1 x Flat head screw driver
3mm wide, or less



Thank you for purchasing the SolarMate Tibu portaloo light. This product will give many years' service and the only maintenance required will be to replace the re-chargeable battery every few years. They can be purchased from most electrical retailers and through www.solartechtechnology.co.uk

The Tibu light is a movement operated light designed to switch on when movement is detected and remain on for 90 seconds, or for however long its infra-red sensor detects movement. Once 90 seconds has elapsed, or movement has stopped, the light turns off therefore conserving its power. On entering a portaloo fitted with Tibu, the user is not blinded with light directed at their face but rather the light will flood the centre and back of the portaloo making for a much safer experience.

Fitting Tibu does not compromise the waterproof nature of a portaloo because it is supplied with two weatherproof gaskets and is double locked in position ensuring that even storm driven rain cannot penetrate the portaloo. Tibu itself is fully weather resistant.

Tibu is made from tough, impact resistant ABS material and its unique anti-theft lock nut prevents it being shaken from a portaloo even during cleaning, loading and transportation.

Tibu will deliver approximately 240 activations per 24-hour period from a fully charged battery and its in-built 3w solar cell will charge the internal battery from flat to full in as little as five hours.

Tibu has a three-position switch located underneath its main body with the functions as follows:

- 1 With the switch in '**Auto day night**' it means the light will illuminate in daytime and night-time – this is useful if, for health and safety reasons (e.g. a building site), illumination must be provided throughout the day and night.
- 2 With the switch in the middle '**Off**' position, the light will not illuminate.
- 3 With the switch in '**Auto night only**', the light will only illuminate during the hours of darkness – this will be the most common setting and is ideal for festivals, exhibitions, weddings etc.

In all three settings, the solar cell will charge the battery (so long as the unit is outside) but its internal management system will prevent the solar panel from overcharging and damaging the battery. Therefore, it is perfectly safe to leave the Tibu permanently fitted to a portaloo.

Installation

- 1 Use the template on the back of these instructions as guide to where the hole should be cut in the roof of the portaloo.
- 2 Cut a hole using a 51mm hole cutter (available from most DIY stores) and de-burr any rough edges.
- 3 Remove the lock nut and one of the rubber gaskets from Tibu and set aside.
- 4 On the long side of the Tibu's body there are two letters embossed F (Front) and B (Back). This refers the position of the portaloo door. Tibu should have F facing the door and B facing the back of the portaloo.
- 5 Select the switch position on the underside of Tibu as noted above. Generally, we recommend '**Auto night only**'.
- 6 Insert Tibu's domed threaded light into the newly cut hole ensuring one of the rubber gaskets is sandwiched between the underside of Tibu and the portaloo outer roof and taking note of point 4. If you find inserting Tibu into the hole is tight, and cannot be pushed into the hole fully, that is normal. It has been designed to be a pressure fit to eliminate the potential for water ingress. Push Tibu into the hole as far as it will easily go and then go inside the portaloo and fit the lock nut. As you tighten the nut it will draw the Tibu down into position, flush with the roof – see point 7.
- 7 Now take the remaining rubber gasket and locknut inside the portaloo and fit the gasket first. Then fit the nut to the domed threaded section of Tibu light that you will see protruding through the roof.
- 8 Once tightened, the lock nut can be further locked in positioned preventing accidental unthreading and theft by tightening both retained lock screws using a small flat head screwdriver. Do not overtighten the lock screws as they are designed to only apply pressure to the roof and not pierce it.



Removal of Tibu

Should you offer the Tibu as an optional upgrade to renting customers (for hire companies), removing the Tibu is the reverse of the above. With Tibu removed, the hole in the portaloo roof can be plugged by a bung (available from www.solartechtechnology.co.uk) and this will ensure the portaloo remains weather resistant.

If, once removed, Tibu is stored in a warehouse or similar for a long time, please ensure the switch is in the middle position so it is turned off. If you intend to hire the portaloo with a Tibu and the Tibu has been in covered storage for longer than a few weeks (without being exposed to outside day light) we would recommend a portaloo fitted with a Tibu is left outside for one or two days prior to use to allow its solar cell to charge up the battery.

FAQ

The light is not working

- Internal battery has no power – take the unit outside for 1 to 2 days to allow recharging.
- No movement has been detected – check the sensor is clean and un-damaged.
- Unit has become damaged by misuse / tampering – check for damage to light and sensor.
- The battery needs to be replaced. Lifecycle is typically three years – depending on use. To replace the battery, remove Tibu from the portaloo, remove the 10 screws on the underside of its body, separate the two halves, remove the old battery and replace with new.

What is the ideal portaloo location for optimum Tibu performance?

- Clear, unshaded locations are best. Shaded areas will still work but the charge capability of the solar panel will be restricted so the number of nightly operations of Tibu might be less.
- If you have placed the unit inside, please note it will not be able to charge and will only work until the internal battery becomes flat. You will then need to place the unit outside to recharge.

Can I adjust the time the light is on for?

- No this has been pre-set to around 90 seconds and can NOT be adjusted.

Can the light be set to permanently on?

- No, it can only operate via the PIR sensor and run for 90 seconds at a time.

Can the light be set to come on in the day?

- Yes if you set the switch to '**Auto day night**' position.

I am only getting around 100 activations per days in the winter why?

- Depending on the time of year and how much sun hits the panel, the charge time of the internal battery will vary. But the unit will work with whatever energy is in the battery.
- Summer charge times could be as low as five hours of daylight to fully charge the battery
- Spring and Autumn charge times will be between eight and 15 hours of daylight to fully charge the battery
- Winter charge times could be as long as three days of daylight to charge the battery from flat to full.

In most cases, however, the battery is never being charged from flat because the 240 nightly operations will usually never be fully used, particularly in the winter, thus the reduced performance of the solar cell in winter is compensated by lower use of the portaloo.

Are spare parts available?

- Yes – see www.solartechtechnology.co.uk where replacement light dome, lock nut, gasket, hole bung and batteries can be purchased.

Specifications

- Solar panel: 5.5v, 3w
- Panel size: 180X140mm
- Battery: 1 x 18650, 3.7V 3000mAh
- Illumination time: ≥6h – 240 activations
- Work delay time: 90sec
- Detection distance: 6m max (22°C)
- Detection range: 360°
- LED Power: 1W; 70LM
- 5h charge time

Don't expose Tibu to a jet wash – the high power of the jet could penetrate the seals of Tibu and cause permanent damage to its electronics.

Warranty

All items in this box are supplied with a 24 month global 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. For more details see our full terms and Conditions on www.solartechtechnology.co.uk

*Global warranty means if a product is returned to the address below 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.



SolarMate[®] Tibu

Template for cutting guide



Solar
Technology
International
Without boundaries

Use this template as guide to where the hole should be cut in the roof of the portaloo.

EDGE OF
LIGHT FITTING →

CUT HERE
↓

50MM HOLE FOR
LIGHT TUBE

240MM

170MM