

SOLAR POWERED PARKING POST FITTING AND OPERATIONAL INSTRUCTIONS

The Solar Powered Parking Post is a radio controlled, impact resistant, solar powered post. It trickle charges a battery enabling the post to operate for long periods without sunlight. It is radio operated from a maximum distance of approximately 10 metres. If a vehicle bumps into the post in any direction the post will 'give' and an alarm will sound. Neither the vehicle nor the post should be damaged (depending on the force of impact). Installation is straightforward, the post is surface mounted so there is no need to dig any holes. It is simply bolted to any solid surface on an incline of up to 45 degrees. When in the upright position its height is 700mm, and in the lowered position the ground clearance is 77mm. It takes around 10 seconds per operation.

NOTE: Check with your car manufacture on the ground clearance for your vehicle. In most cases this should not cause a problem. It is important to remember that a flat tyre or heavy loads can considerably reduce the ground clearance of a vehicle. Always check before driving over the post and always drive over the post at a slow speed.

1. Position of post on drive/entrance

- 1.1. If installing the post on a slope, it must be installed facing uphill so that when the post is operated it lowers towards the upper part of the slope, coming to rest pointing up the hill, figure 1. (If unsure, use a spirit level to determine which direction is uphill).
- 1.2. If the site is level then the post can be fixed in whichever position is preferred. Ideally it should be positioned to get the maximum amount of sunlight on the solar panel.
- 1.3. Make sure the post does not obstruct public right of ways.
- 1.4. When fitting the post in a parking bay it can flatten into (A) or away from (B) the bay, figure 2. It is possible to leave the post down whilst a car is parked in the bay, however this may reduce the charge from the solar panel.
- 1.5. Should you require the post to be upright when a car is parked, you must ensure there is room for the post to move freely even when the car is parked in the bay, figure 2.
- 1.6. In very wide entrances two posts may be needed. A transmitter can be provided with two buttons, one button operating each post.

2. Preparing the post for installation

- 2.1. Carefully remove the post from its packaging.
- 2.2. Open the lid of the lockable box by pressing down firmly on the lid and turning the key anticlockwise. Raise the lid and move the solar panel to one side. Connect the battery, BLACK wire to the BLACK terminal, RED wire to the RED terminal. Replace the solar panel ensuring it locates over the battery correctly. Close the lid and push down firmly whilst locking. Remove the key.

3. Installation

- 3.1. The post must be bolted to a solid surface e.g. brick, concrete, block paving or tarmac over concrete. If the surface is not at least 50mm deep it will be necessary to provide a suitable concrete base to this depth.
- 3.2. Check there are no wires or pipes under the surface to be drilled, down to a depth of 50mm.
- 3.3. Lay the post in the desired position on the ground. Use the four fixing holes on the base of the parking post to mark the position on the ground, (two of these are found within the lockable solar panel box, figure 3). Remove the post and drill the four holes using a 12mm diameter tipped drill, then secure using the fixing screws provided.

4. Operation

- 4.1. When the post is moving a warning siren and flashing light indicate this movement.
- 4.2. Press and release the blue button on the transmitter and the post will start to rise and stop automatically in the vertical position. Press the button again and the post will lower to the ground.
- 4.3. The post will always stop in a vertical position whether installed on flat ground or a slope of up to 45°.
- 4.4. Pressing the button whilst the post is moving will stop it. The next press of the button will move the post in the opposite direction.
- 4.5. **Pressure cut off:** If there is something in the posts way when it is trying to raise or lower it will stop on the object and do a small reverse off it.
- 4.6. **Alarm:** If the post is hit an alarm will sound. To check this push the post in any direction with your hand, it will only sound whilst it is held over.
- 4.7. A remote alarm kit can be purchased which will transmit a radio signal to a remote receiver, which can be used to operate floodlights, CCTV etc. If a vehicle bumps into the post in any direction, neither it nor the post should be damaged (depending on the force of impact).
- 4.8. Any number of transmitters can be used on the one post when set to the same code.
- 4.9. The posts are set on a standard code. If you have more than one post it is necessary for them to be set on different codes. To change the transmitter code, unscrew the cover of the transmitter and move switches 1-10 inside the transmitter case to a new code. Screw the cover back onto the transmitter. You then need to set the post to this same code. To do this unlock the lid and locate the yellow button on the circuit board inside the lockable solar panel box. Press this button momentarily and the red LED will glow next to it. Press the transmitter button and the LED will go out. On the next press of the transmitter button nothing will happen. One further press and the post will operate. Close the box, re-lock and remove the key.

5. Emergency Release

- 5.1. Should you require manual operation of the post i.e. you are unable to use the transmitter provided, there is an emergency release which can be used. The post can be disconnected from its drive mechanism by first unlocking the solar panel box lid and removing the special “L” shaped Allen key, figure 3, H. Next slide the emergency release cover to one side to reveal a hole, figure 3, D. Insert the short end of the Allen key into this and engage it into the head of the screw within. Turn anti-clockwise until the screw is removed. Note: it may be necessary to rock the post gently to release any pressure on the screw and enable it to turn freely. Once the screw has been removed the post can be moved manually.
- 5.2. To reinstate the mechanism, return the post to the position it was in when the screw was removed. You will now be able to re-insert the screw into the post, and gently tighten. Again it might be necessary to rock the post gently for the screw to re-engage.

6. Maintenance

- 6.1. Ensure the solar panels and the area around the post are kept clean and clear from debris.
- 6.2. Lubricate moving parts. To remove the cover, lower the post so it is laying flat on the ground. This will reveal two screws that were hidden by the base cover, figure3, E. Remove these and slide the post cover upwards to reveal the drive screw thread within the chassis, figure 4. Lubricate the drive screw using spray grease. Replace the cover and re-tighten the screws.
- 6.3. Depending on usage and average daylight exposure it may be necessary to charge the battery from time to time. Any car battery charger can be used to charge the 12volt 7Amp battery.

7. Troubleshooting

Q: Is the post failing to respond?

A: Check the red LED light on the transmitter is glowing when the button is pressed. If not change the battery in the transmitter (Battery type: 12v Alkaline type GP 23AE).

A: The post may have decoded. To recode the transmitter to the post; refer back to point 4.9.

A: The vertical sensor may have become dislodged due to a glancing knock to the post. A sharp blow to the side of the post with the palm of the hand should rectify the problem.

Q: The post is running slowly/is not working properly or at all!

A: The battery may need charging as per point 6.3. Refer back to section 5 for manual operation whilst charging the battery.

Q: Alarm is not sounding when the post is pushed over!

A: Check the connectors on the circuit board are pushed in fully.

Figure 1

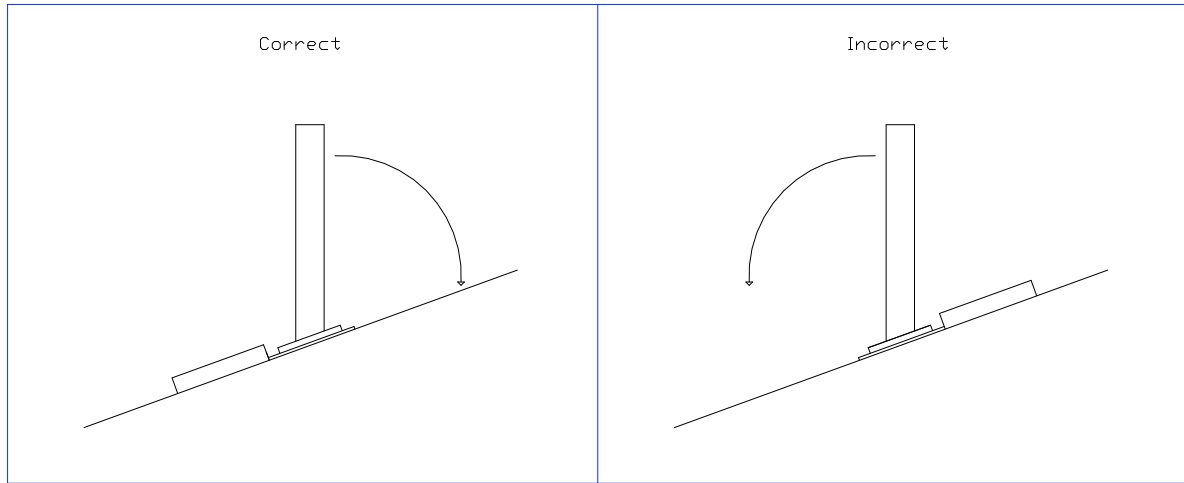


Figure 2

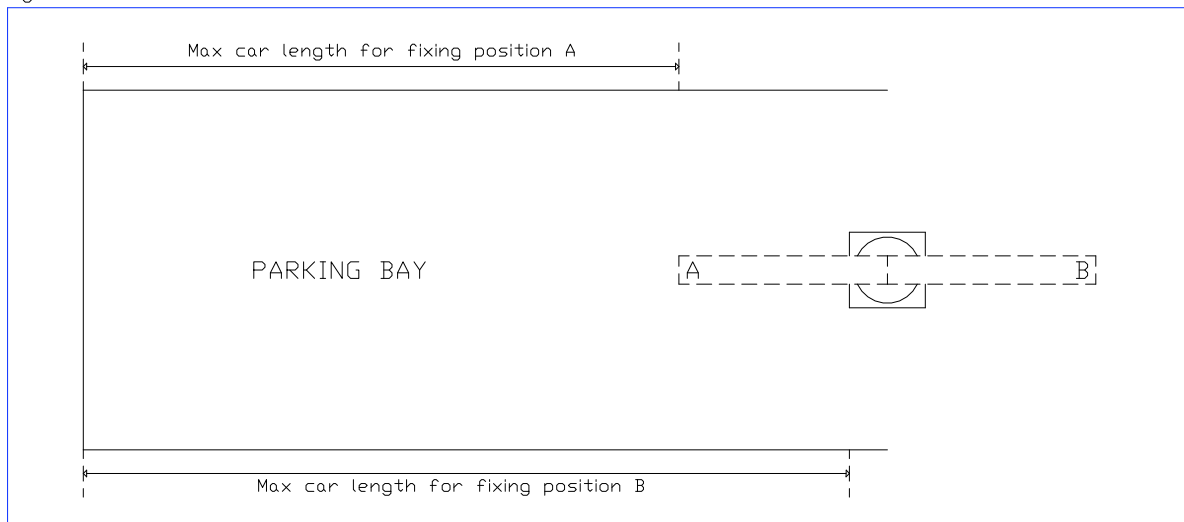


Figure 3

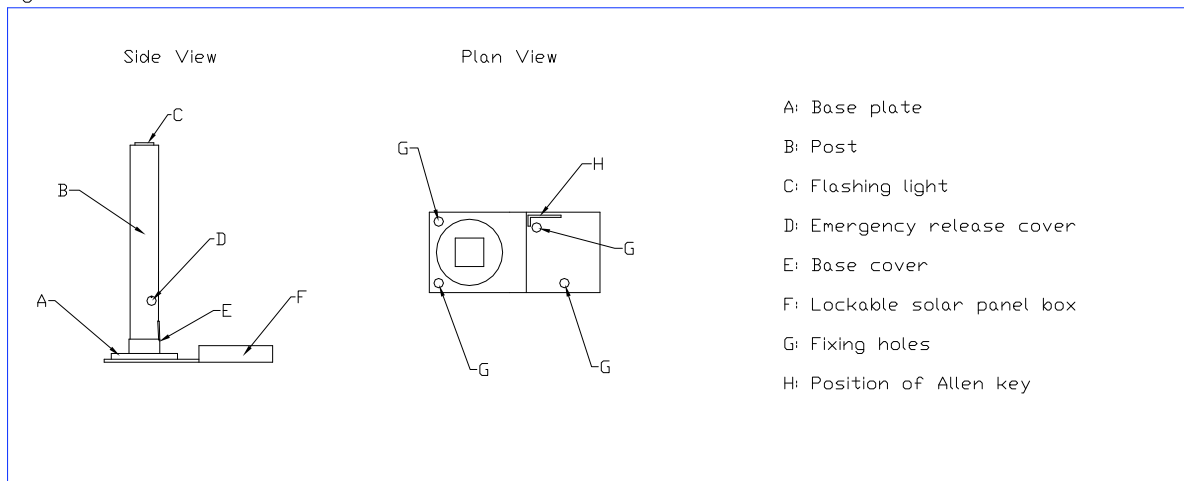


Figure 4

