

# PANEL SERIES



## **User Guide**

**REVISION 1.0** 

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# Stay Updated: Access the Latest Installation Resources

The information in this manual is intended to provide general guidelines for installing your POYNTING antenna. For the most up-to-date and comprehensive mounting and installation instructions, as well as the latest product information, please visit our website: <u>https://poynting.tech/</u>

We recommend checking the website periodically for any updates or revisions to ensure you have the most current information for optimal product performance.



## 1. Packing Check List

ltem	Description	Quantity
1.	Antenna Only	1
2.	Velcro Mount Assembly (Velcro Strips Attached)	2
3.	M6x16mm S/S Countersunk Captive Screw	4
4.	Allen Key	1
5.	Suction Cups with Screw	4
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## Appearance of Components

### Antenna Unit



Velcro Mount Assembly



### M6x16mm S/S Countersunk Captive screw



Allen Key



### Suction Cups with Screw





### Spare Velcro Strips



### 2. Introduction

This User Guide provides information on the installation instructions for the Panel Series antenna. Please refer to the antenna mounting precautions before proceeding with the installation.

**Note:** Check that the surface the antenna will be mounted onto is flat, non-porous, and has been adequately cleaned to ensure proper adhesion.

#### **Antenna Configuration 1**

Window Mount with supplied Velcro Mount Assembly



- Identify the best location to mount your antenna on a window inside a vehicle or building.
- Thoroughly clean the selected area using an alcohol-based solvent and dry it completely. Cleaning is necessary to ensure good contact with the Velcro to the mounting area. Ensure that there is no debris (such as oil, dirt, dust or water marks) on the selected mounting area.

- Remove the top Velcro strip from the Velcro mount assembly. Please ensure the bottom Velcro strip is still adhered securely.
- Place 2x M6x16mm S/S C/S Captive Screws into the holes of the Velcro Mount Plate and the bottom Velcro strip. Repeat on the second Velcro mount assembly.
- Fasten the Velcro mount plates to the back of the Panel using the Allen Key, in the orientation shown below. The screws should locate into the screw holes on the back of the antenna.



- Once securely tightened, re-apply the top Velcro strips to the Velcro mount assembly.
- Remove the adhesive backing on the top Velcro strip, as shown below.



 Carefully position the antenna at the designated mounting location, ensuring the sticky adhesive side is pressed against the window.

- Press down firmly on the edges of the antenna. Do not put too much pressure on the middle of the antenna.
- Route the cables as required.
- Please note: 2x additional top Velcro strips are included in the accessories box if the antenna is to be relocated.

### Antenna Configuration 2

### Window Mount with supplied Suction Cups



• Screw the 4x M6 suckers into the back of the antenna. Ensure they are tightly screwed.



- Identify the best location to mount your antenna on a window inside a vehicle or building.
- If required, the dimensions alongside can be used to measure the mounting points.



- Thoroughly clean the selected area using an alcohol-based solvent and dry it completely. Cleaning is necessary to ensure good contact of the suckers with the mounting area. Ensure that no debris (such as oil, dirt, dust or water marks) is on the selected mounting location.
- Align the antenna towards the chosen mounting area, ensuring that the side with the installed suckers faces the window.
- Press down the edges of the antenna mounted on the window carefully. Avoid putting too much pressure on the middle of the antenna.
- Route the cables as required.

#### Note

- To improve suction cup adhesion to a window, it is advisable to dampen them slightly. Simply moisten your fingertip with clean water and gently rub a thin layer of water onto the edge of the suction cup. Avoid excessive water, as this can reduce adhesion.
  - Do not use excess water: Using too much water can reduce the suction cup's ability to stick and lead to slipping.
  - Avoid soapy water: Soap can create a slippery surface and weaken the suction's adhesion.
  - Temperature Considerations: In extreme temperatures, suction cups may lose adhesion. Ensure the surface is not too hot or cold before mounting
- To remove the antenna from the mounting location, insert a flat blunt object (e.g. ruler) behind the antenna and the suckers to create an air pocket beneath the sucker. This will allow for easy removal from the mounting surface.

### 3. Antenna Mounting Precautions

#### Window Tints and Coatings

- Mounting cellular antennas on tinted or coated windows may attenuate or reflect cellular signals, potentially degrading antenna performance.
- Tinted windows often contain metallic films that can either reflect or block radio frequency (RF) signals. Similarly, window coatings containing metal oxides, such as heat-reflective or UVresistant coatings, can interfere with signal propagation and hinder antenna performance.
- To ensure optimal performance, install your Panel antenna on non-metallic or ceramic tints, and avoid window coatings with conductive materials that could obstruct cellular and GPS signals.

#### **Mounting Orientation**

- Ensure that the antenna is oriented facing outwards for optimal GPS reception.
- Pay attention to the illustrations below that show the correct and incorrect way of mounting your Panel antenna.

#### POYNTING

### CORRECT



- Place the antenna at the highest point on a window inside the vehicle or building, ensuring there are no obstructions around it.
- To prevent communication interference, ensure that the antenna is at least 0.5m away from other antennas and metal objects.
- Install the antenna away from heat sources and flammable gases.

### 4. Cable Routing

 Survey the planned cable route and look for any blocked passages. Consider alternate routes to find the best available path. Always keep the cables as short as possible to make sure that minimum cable losses are achieved.

**Note:** Take advantage of any existing cable channels (e.g., wiring conduits) to route the cables.

 Avoid running cables through components or sharp apertures that may cause excessive chafing. This could erode the jacket and break signal continuity. Also, refrain from kinking, pinching, or twisting a cable during installation.

# When handling the antenna cables, it is essential you follow these basic rules:

• Never pull on the cable connectors; pull only on the cable itself.

- Never run cables in a manner that interferes with the driver's ability to safely operate the vehicle.
- Tighten the connectors and ensure that the cables don't rattle loose.

### 5. Safety

- If you are installing an antenna for the first time or unsure about how to install your antenna, obtain the help of a professional installer.
- Before installation, carefully inspect the installation site to find secure handholds, identify any dangerous conditions, and determine the safest and most convenient placement for ladders if needed.
- The antenna should not be used as a climbing or pulling device.
- When mounting the antenna, special care must be taken to ensure that people do not hang on or pull at it.

#### When installing your antenna, remember:

- Avoid installation while under the influence of drugs, alcohol or medication.
- Make sure that any loose-fitting jewelry or clothing is secured and tie back long hair as they can get caught in moving parts during installation.

 If the antenna assembly starts to fall, get away from it and let it fall to avoid harming yourself.

#### CAUTION:

Antennas must be installed to provide a separation distance of at least 20 cm from all persons to comply with SAR (Specific Absorption Rate) RF exposure requirements.



European Waste Electronic Equipment Directive 2002/96/EC

Please ensure that old waste, electricals and electronics are recycled.

CE Directive 2011/65/EU (RoHS 3) This product is fully compliant with the RoHS 3 directive.



#### South Africa

Unit 4, N1 Industrial Park Landmarks Ave Samrand, 0157 South Africa Tel: +27 12 657 0050 info@poynting.tech

#### USA

1804 Owen Court, Suite 104, Mansfield, TX 76063 Tel: +1 817 533-8130 sales-us@poynting.tech

#### Europe

Kronstadler Straße 4, 81677 München Germany Tel: +49 89 2080 265 38 Mob.: +49 176 529 733 50 sales-europe@poynting.tech