

POYNTING

BEYOND A CONNECTED LIFE

SWIRL 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: <https://poynting.tech/>.

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

Item	Description	Quantity
1	Antenna unit	1
2	Surface mount foam	1
3	Surface mount stand	4
4	Magnet mount foam	1
5	Magnets*	4
6	M8 x 16mm flat washer	4
7	M8 x 12mm Cheesehead machined screw	4
8	RP SMA(M) TO SMA(F) Adapter	2

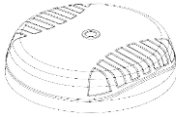
**Items not provided*

FOR THE BASE

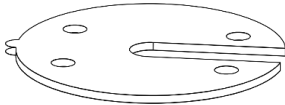
Item	Description	Quantity
1	Aluminum base	1
2	Silicone strap	1
3	Base gland seal 1hole	2
4	Base gland seal 2 hole	4
5	Base gland seal 3mm cab hole	4
6	Base gland seal blanking	4
7	External male plug	1
8	RJ45 connector w cable 450mm	1
9	M8 X 40mm Pan Head Hex Socket Machined Screw	4

Appearance of components (Antenna)

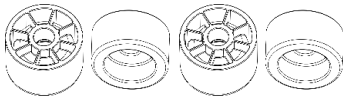
Antenna Unit



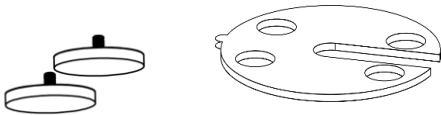
Surface mount foam



Surface mount stand



Magnet mount foam and magnets



M8 x 16 Flat washer and Hex Screw Head Cap

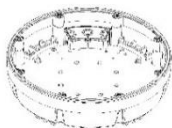


RP SMA(M) TO SMA(F) Adapter



Appearance of components (Base)

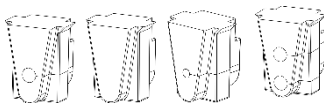
Aluminum base



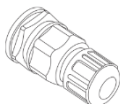
Silicone strap



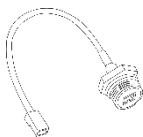
Base gland seal



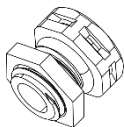
External male plug



RJ45 Connector



M25 Stopper with O-ring and nut



Tools Required

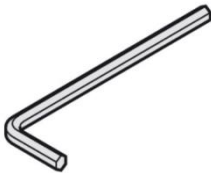
Drills (Pilot drill) and step drill



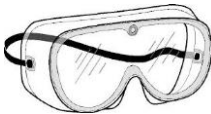
Impact Drilling Machine



Allen key



Safety Goggles



Spanner/Wrench



2. Introduction

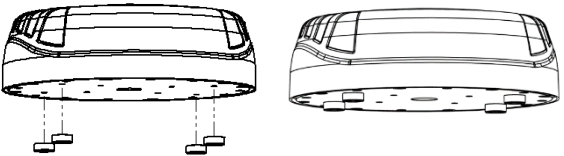
This User Guide provides information on the installation instructions for the **X-Polarized, Omni-Directional** antenna (SWIRL).

Antenna Configuration 1 Surface Mounting

- Select a suitable mounting place for mounting the antenna.

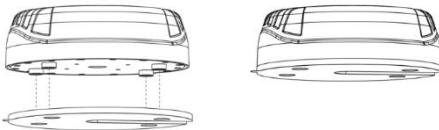
STEP 1

- Slot the surface mount stands onto the antenna as shown below



STEP 2

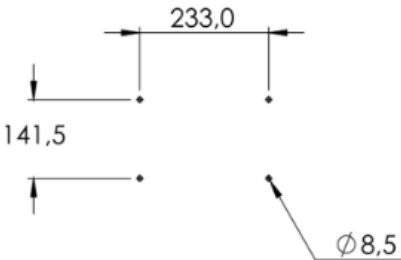
- Remove the adhesive cover on the surface mount
- Place the adhesive surface mount foam onto the antenna and align it with the surface mount stands.



- Remove the adhesive surface cover on the bottom of the antenna.

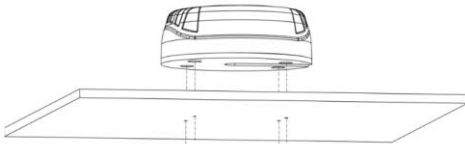
STEP 3

- Use an 8mm drill bit to drill four holes into the chosen surface. Use the dimensions below

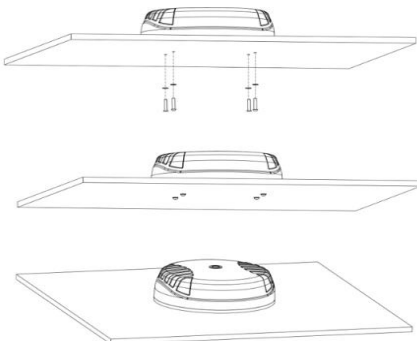


STEP 4

- Place the antenna surface mount stands lined with the four holes on the selected surface as shown below.



- Secure the antenna using an M8x16mm flat washer and M8X20mm inserted through the surface to the surface mount stands as shown below.
- Use a spanner to secure the Screws.



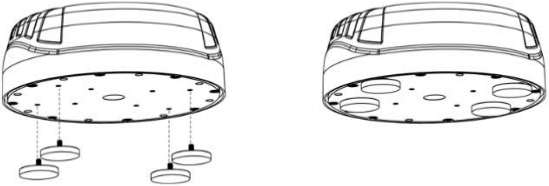
Antenna Configuration 2

Magnetic Mounting

- Clean the entire surface on which you plan to stick the antenna.

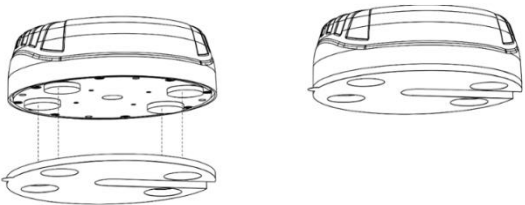
STEP 1

- Place the four magnets onto the antenna as shown below.



STEP 2

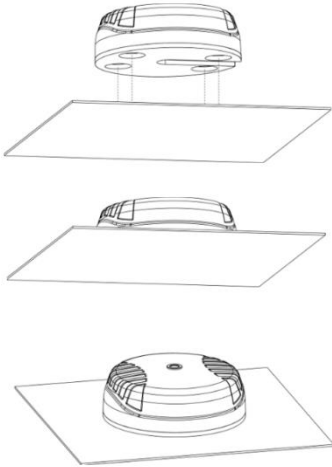
- Remove the adhesive cover on the magnetic mount foam.
- Place the adhesive magnetic mount foam onto the antenna and align it with the surface mount stands.



- Remove the adhesive mount foam bottom cover.

STEP 3

- Place the antenna onto the magnetic surface.



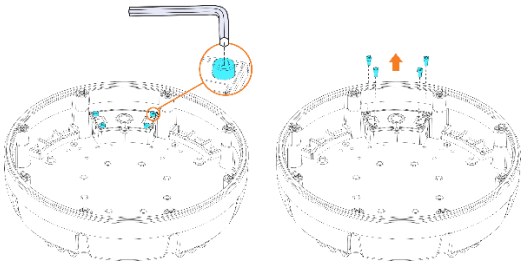
3. Antenna with the Base

Base Configuration 1

Cable to ethernet

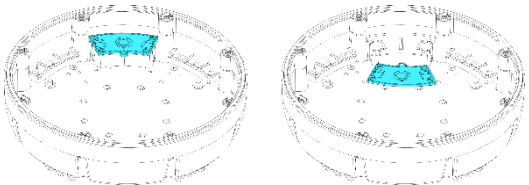
STEP 1

- Using an Allen key remove the screws as shown below.



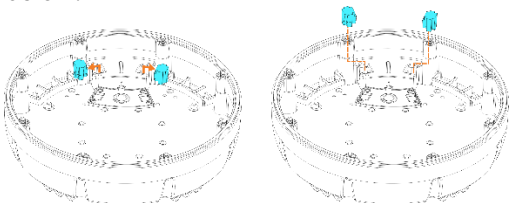
STEP 2

- Open the cap that has a silicone strap attached to it.



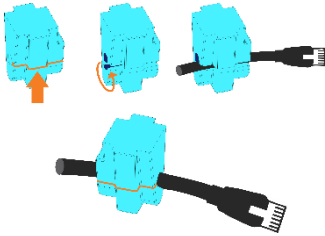
STEP 3

- Insert the ethernet glad on the slots as shown below.

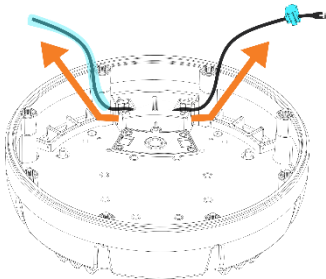


STEP 4

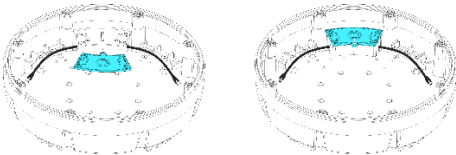
- secure the ethernet cables onto the glands provided.



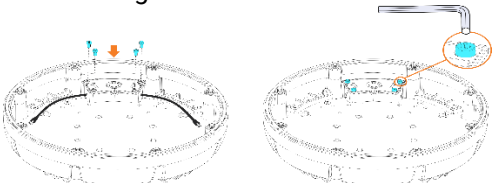
- Make sure the cables are slotted facing left and right as shown below.



- Insert the glands on the slots respectfully leaving a sufficient cable length to be able to connect the router.

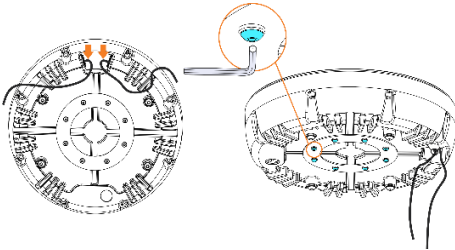


- Close the cap and use the Allen key to secure the glands.



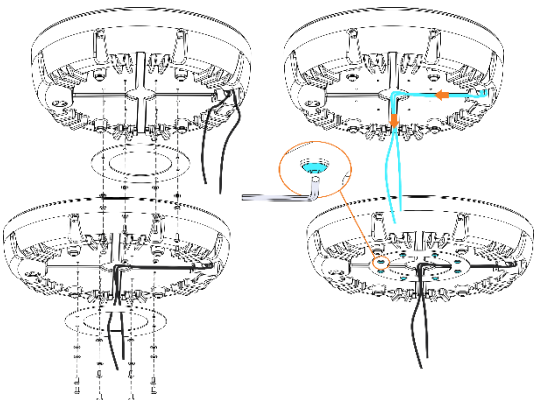
STEP 5

- Ensure that the cable is securely connected and allow the rest of the cable to hang freely from the base.



- Guide the Ethernet cable through the designated path or groove in the base of the antenna as shown by the arrows.
- Ensure the cable is properly aligned and positioned in the channel or bracket to prevent it from slipping out.
- As you tilt the base back to its original position, make sure the cables are hanging out freely without any kinks or tight bends.

Base Configuration 2

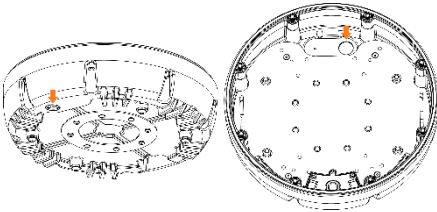


RJ45 CONNECTOR

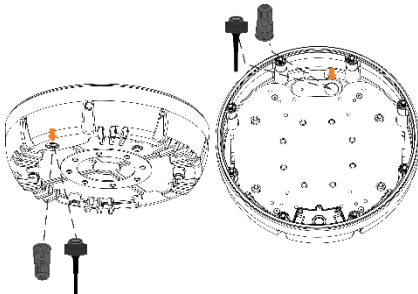
STEP 1

Positioning the Base:

- Begin by positioning the base antenna in the desired location.
- The diagram likely shows where to align the base with respect to any mounting surface or supporting structure.



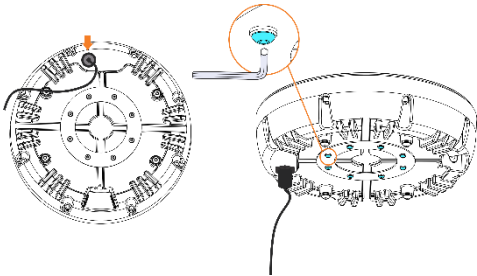
- As shown by the arrows in the diagram, you may need to route the cables through specific pathways or openings in the base.



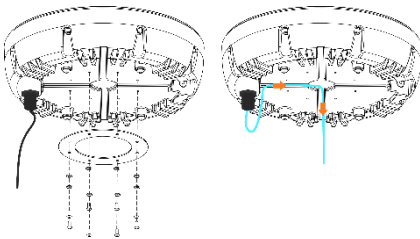
- Make sure to follow the indicated directions to prevent tangling or interference with other components.

STEP 2

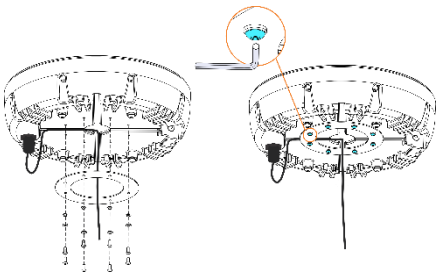
- Remove the adhesive cover bracket under the base using the Allen key.



- Align the ethernet cable on the paths engraved on the antenna base.

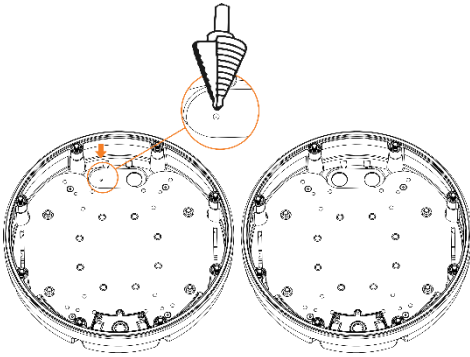


- Close the bracket and secure the cable. Tighten the bracket with the provided Allen key.



Drilling hole option

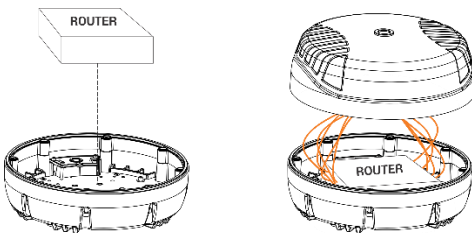
- Position the base on a flat surface.
- Use a Step drill bit to drill a second hole.



ASSEMBLING ANTENNA TO THE BASE

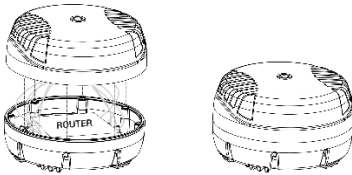
STEP 1

- Place the router onto the router plate.
- Connect the antenna cables to the respective connectors on the router. Unused antenna cables should be neatly wound and attached to the antenna plate appropriately.



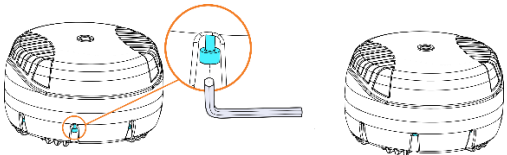
STEP 2

- Carefully place the antenna onto the base as shown below.



STEP 3

- Carefully screw the antenna to the base using the Allen key screw.



4. Antenna Mounting Precautions

- Place the antenna at the highest point of the vessel and ensure that there are no obstructions surrounding the antenna.
- to avoid communication interference, ensure that the antenna is placed at least 0.5m away from other antennas and metal objects.
- Avoid installing the antenna near the vessel's chimney, as the smoke and soot emitted by the chimney can obstruct the signal level achieved by the antenna.
- Install the antenna away from the vessel's heat sources and flammable gases.

5. Cable Routing

- Survey the planned cable route and look for any blocked passages. Consider alternate routes to find the best available path. If extension cables are needed, refer to the cable configuration diagram. 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. Doing so may erode the jacket and break signal continuity. Also, avoid kinking, pinching, or twisting a cable during a run.
- **When handling the antenna cables, you must follow these basic rules:**
- Never pull on the cable connectors; pull only on the cable.
- 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.

6. 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.
- Carefully survey the installation site before installation to locate secure handholds, dangerous conditions, and the safest and most convenient placement for ladders if necessary.
- The antenna may not be used as a climbing or pulling device.
- Considerations must be taken when mounting the antenna so that people do not hang or pull on it.
- When installing your antenna, remember:
 1. Do not install on a wet or windy day or when there is lightning or thunder in the area.
 2. Wear shoes with rubber soles and heels, protective clothing (long-sleeve shirt or jacket), and rubber gloves.
 3. Avoid installation while under the influence of drugs, alcohol, or medication.
 4. 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.
 5. If the antenna assembly starts to fall, get away from it and let it fall to avoid harming yourself.
- When drilling remember:
 1. Use safety goggles when drilling the holes.
 2. Avoid using bits that are dull, bent, or damaged.

3. Be aware of where your fingers are to the drill bit when using the drilling machine.
4. To stop the drilling machine, let the drill chuck come to a complete stop on its own. Do not grasp the chuck to stop the drill bit.
5. Avoid awkward hand positions where a sudden slip could cause a hand to move into the drill bit or cutting tool.

CAUTION:

Antennas must be installed to provide a separation distance of at least 20cm 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.



Directive 2011/65/EU (RoHS 3)

This product is fully compliant with the RoHS 3
directive.

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