



# MIMO-1 - User Guide

Version: 1.0

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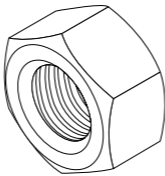
Item	Description	Quantity
1.	A-MIMO-0001 Antenna only	1
2.	M18 Nut - SS	1
3.	M18 Star washers	1

### The appearance of each component

#### Antenna Unit


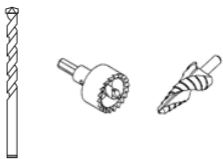
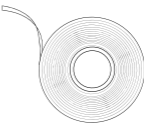
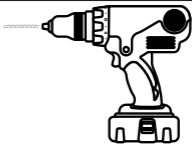



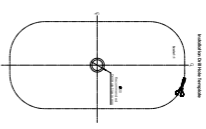


#### M18 Nut - SS



#### M18 Star Washer



Item	
Safety goggles	
Drills (Pilot drill (3mm) and Hole saw (20mm) or step drill (4 - 20mm))	
Masking tape	
Hand drilling machine	
Centre punch	
Hammer	
27mm spanner/wrench	
Drilling template (available on <a href="http://www.poynting.tech">www.poynting.tech</a> )	

**Optional Accessories**

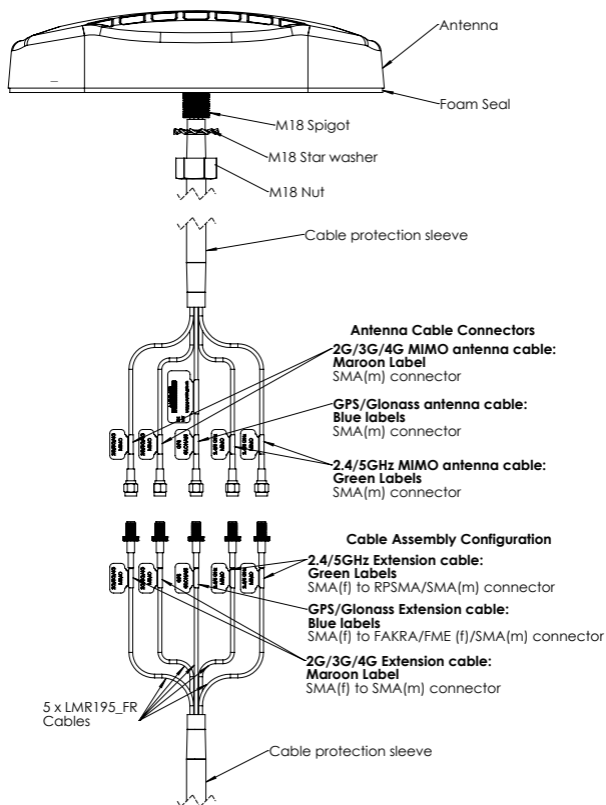
- 1. Various Cable extensions are available**

This User Guide provides information on the installation instructions of the MiMo-1 antenna.

## Cable Configuration

### Exploded View

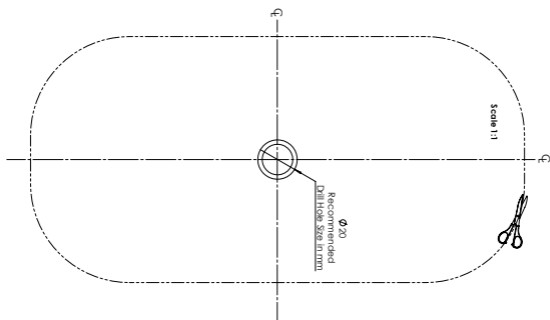
Extension Cable Wiring Diagram



## Mounting the antenna

- Download the 1:1 drill template from <http://www.poynting.tech>.
- Choose the mounting location carefully. Choose a position at least 50cm from heat sources and with a clear line of sight to the sky. It is recommended that the antenna be installed at the highest possible location on the vehicle's roof so that signal can be received in a 360° radius, clear of obstacles including parts of the vehicle's body and that the mounting surface is as flat as possible. The selected location must have a conductive metallic surface area which is a minimum of  $\pm 400 \times 400$ mm to achieve optimal performance.
- Once you have decided on the location and checked that there are no obstructions such as cables or channels below the mounting surface, for the fastening nut and cables to pass through, use the downloaded 1:1 drill template to mark the mounting location.
- To prevent the marking tool or drill sliding off course, use masking tape over the drilling point to help hold the drill point in place. The masking tape also prevents hot shavings from the drill or hole saw which could penetrate and damage the painted surface.
- Set the drilling machine to low speed and carefully drill a pilot hole ( $\varnothing 3$ mm drilling bit works well). Use a  $\varnothing 20$ mm metal hole saw or step drill to open the hole to the required size.

**Note:** The recommended drill hole diameter for MiMo-1 is  $\text{Ø}20\text{mm}$ .



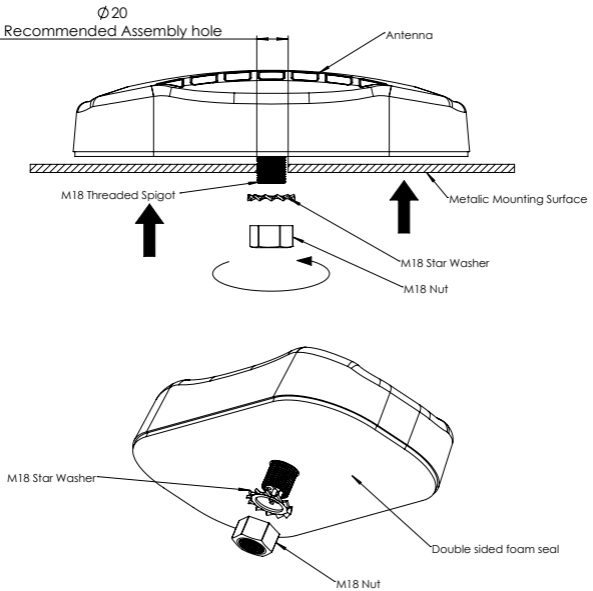
Go to: [www.poynting.tech](http://www.poynting.tech) to download the scale 1:1 template.

- Clean the entire surface on which you plan to mount the antenna. Cleaning is done so as not to damage the vehicle's paint and to ensure good contact of the foam surface to the mounting area. Alcohol wipes can be used to remove oil and dirt from the surface.
- Remove the wax protection paper from the adhesive foam seal at the base of the antenna.
- Insert the antenna cables and threaded spigot through the drilled hole.
- Push the antenna down onto the mounting surface and make sure the antenna is placed straight and correctly.
- Fit the M18 star washer and M18 nut from the inside of the mounting platform.
- Tighten the M18 Nut to 20Nm torque. Be careful not to over tighten the nut.



## Installation Drawing

**NOTE:** Torque specifications:  
Recommended fastening torque 20Nm  
max tightening torque is 30Nm



- 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.
- Tighten the cable's SMA connectors to 0.3-0.6Nm torque to ensure that the MiMo-1 cables are properly secured to the extension cables

**Note:** Take advantage of any existing cable channels e.g., brake light opening or 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.
- Use cable ties to secure the antenna cables.

**When handling the antenna cables, it is essential you 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 that connect to the modem/radio to 0.3-0.6NM to ensure that the cables don't rattle loose.

- Use safety goggles when drilling the antenna hole.
- Avoid using bits that are dull, bent or damaged.
- Be aware of where your fingers are in relation to the drill bit when using the drilling machine.
- To stop the drilling machine, let the drill chuck come to a complete stop on its own. Never grasp the chuck in an attempt to stop the drill bit.
- Avoid operating while under the influence of drugs, alcohol or medication.
- Make sure that any loose fitting jewellery or clothing is secured and tie back long hair as they can get caught in moving parts during installation.
- Avoid awkward hand positions where a sudden slip could cause a hand to move into the drill bit or cutting tool.