

# HUSKY

## Installation Instructions



The Husky PRO Series antenna is designed for high performance. The Husky provides up to 8 WIFI connections and GPS. This rugged omni-directional antenna works on all the common North American LTE bands with high efficiency. Also supports CBRS and LAA. The antenna requires a single 1.5-inch mounting hole. Optional magnetic mount allows mounting on a steel surface without mounting holes.

### OPTIONAL ACCESSORIES

**PTA0257** - 1.5in Star Lock Washer

**PTA0347** - Heavy Duty Hardware Kit (Nut, Lock Washer, Flat washer)

### REQUIRED TOOLS

**Hammer / Rubber Mallet**

**Drill and 0.1in Drill Bit**

**Phillips Screwdriver**

**1.5in Hole Saw**

**SMA Wrench**

### Mounting Options

#### Step 1.

Select a mounting location where there is no obstructions within a radius of 24in. and is easily accessible.

#### Step 2.

Select one of the mounting option below, depending on your use.

- **Roof Mount (Included)**

*Husky antennas can be mounted on an automobile roof or any flat surface using the hardware provided with it.*

- **Magnetic Mount (Optional Part Number and Configuration)**

*For temporary use. Husky antennas can be mounted on any ferrous metal surface using magnetic mount brackets.*

- **Pole Mount (Bracket Required: PTA0149H)**

*The gear clamp assembly can be used to mount the antenna on a mast of between 1.5" and 2.5" diameter.*

# Roof Mount Instructions

## Preparing the Hole

### Step 1.

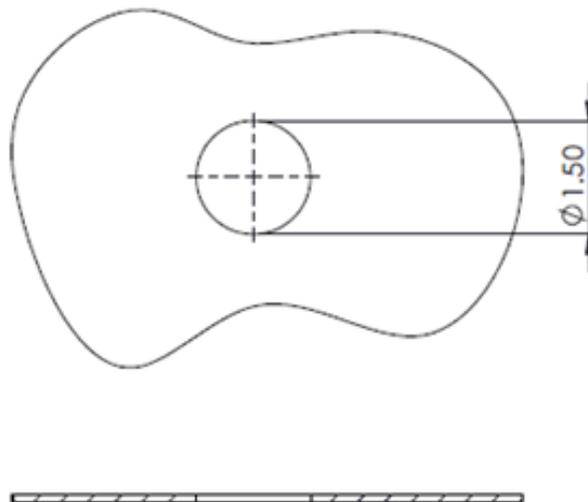
After selecting the location to mount the Antenna, mask the mounting location to avoid paint damage. Mark the hole center with ink or scribed cross hairs.

### Step 2.

Use a center punch to make a dimple on the marked location to avoid drill bits from walking across the sheet metal. Use a Twist drill of diameter about 0.1" and drill a pilot hole. Using a 1.5" diameter sheet metal hole saw, drill the hole.

### Step 3.

The hole saw will cut the required diameter hole with less risk of stretching and distorting the vehicle surface. Clean up any metal shavings from the hole cutting process. (Figure 1)



**FIGURE 1**

## Mounting the Antenna

### Step 1.

Feed the coaxial cables from the antenna through the hole from the outside surface to the inside surface and thread the entire length of the cable through the hole.

### Step 2.

Clean debris off the vehicle surface and then mark the desired antenna orientation by placing the antenna flat on the vehicle surface.

### Step 3.

Lift the antenna and remove the protective backing from the underside of the antenna and place the antenna back in the desired position. Apply downward pressure on the antenna to stick it to the panel.

### Step 4.

To avoid the gap between the antenna and panel, it is recommended to use neutral cure silicon sealant around the base of the mounting boot to fully compress the antenna to the mounting panel.

### Step 5.

A split flat washer and a split hex nut are provided in the kit for easy installation. (Star washer is optional and not supplied.)

On the inside of the vehicle, thread the flat washer over the cable, followed by star washer (if applicable) and then hex nut. (Figure 2 & 3)

Slide the washers and nut to the threaded flange of the antenna and tighten the hex nut until antenna compresses flat with the surface of the vehicle. (Figure 4)

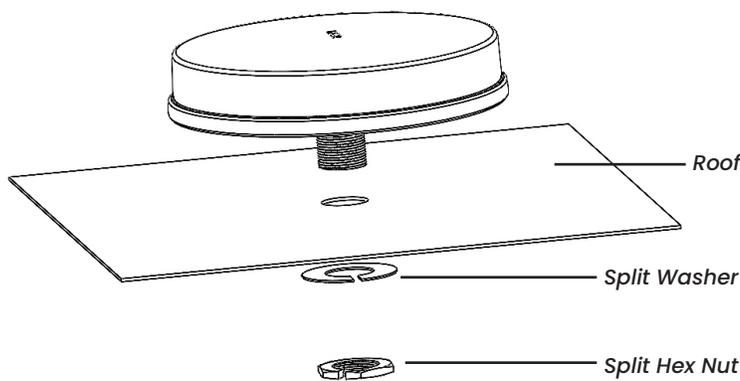


FIGURE 2

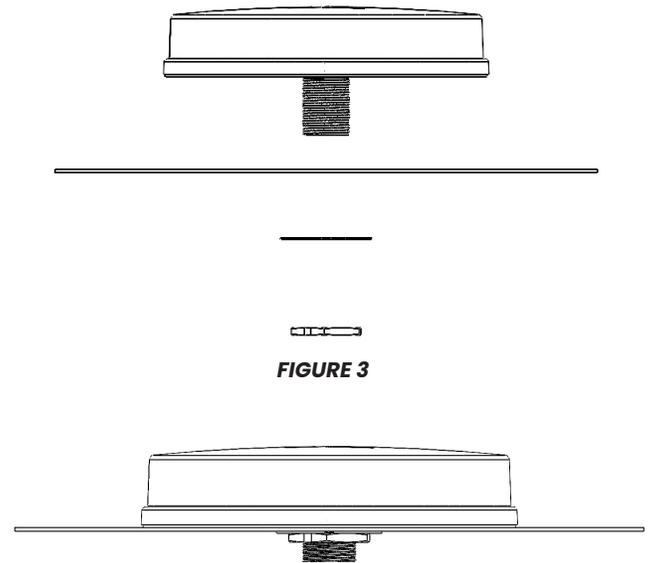


FIGURE 4

## Routing the Cables

### Step 1.

Route the cable from the antenna to the router by maintaining a minimum bend radius of 0.5in. Avoid sharp bends. Run the cables adjacent to existing wiring.

### Step 2.

Waterproof the RF connectors using electrical tape or a heat shrink tube, if required.

# Magnetic Mount Instructions (Optional)

## Step 1.

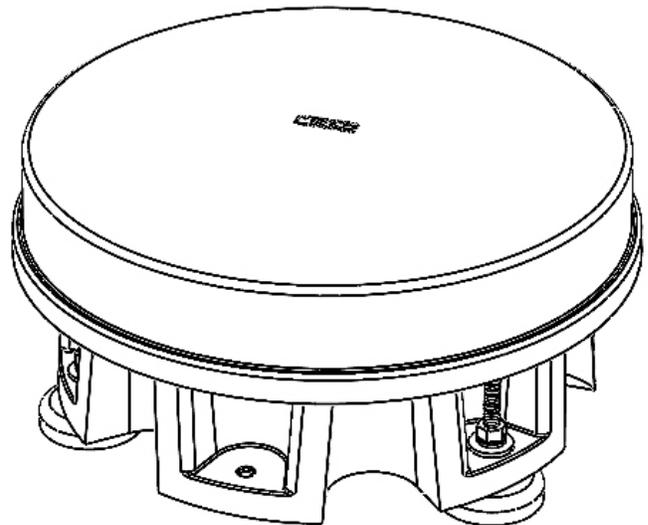
Choose a mounting location. The magnetic mount can be mounted on ferromagnetic metals like iron, steel, nickel etc but not aluminum, copper etc.

## Step 2.

Make sure all of the magnets stick firmly to the base. If the surface is a curve adjust the magnets heights using washer.

## Step 3.

Make sure the antenna is mounted at least 18 inches or as far as possible from the other roof mounted items like antennas, light bars etc. to avoid any de-tuning or interference issues.



## Routing the Cables

### Step 1.

Route the cable from the antenna to the router by maintaining a minimum bend radius of 0.5in. Avoid sharp bends. Run the cables adjacent to existing wiring.

### Step 2.

Waterproof the RF connectors using electrical tape or a heat shrink tube, if required.

# Pole Mount Instructions

## Mounting the Pole Mount Bracket on the Pole

**\*MAKE SURE THERE IS NO METAL OBSTRUCTIONS ABOVE THE ANTENNA. MOUNT THE ANTENNA AT THE TOP OF THE POLE FOR BEST PERFORMANCE.**

### Step 1.

Choose a pole with a diameter between 1 - 2.24 inches and cut it to the required length. Mount the pole vertically and confirm it with a level. Make sure the pole is firm before mounting the antenna. (Figure 5)

### Step 2.

Mount the pole mount bracket on the mast and position the bracket so at least 1 inch of the mast extends above the top saddle clamp. (Figure 6)

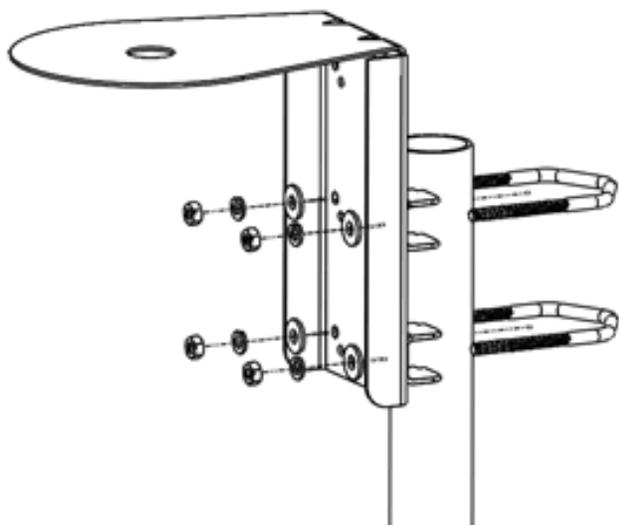


FIGURE 5

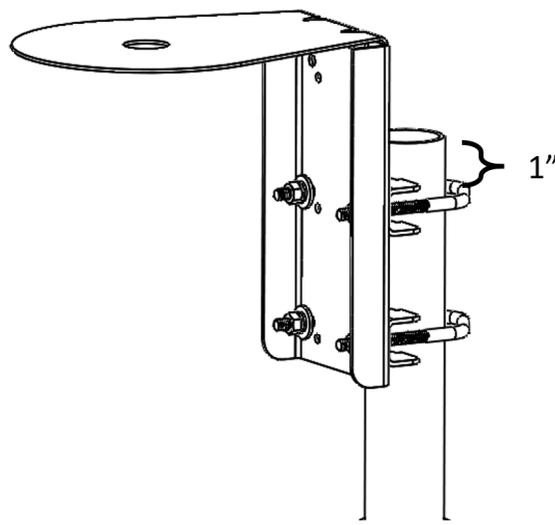


FIGURE 6

### Step 3.

Tighten the 4 nuts with your fingers, making sure equal lengths of thread extend past the nuts.

## Mounting the Antenna on the Pole Mount Bracket

### Step 1.

Feed the coaxial cables from the antenna through the antenna mounting hole on the bracket. Thread the entire length of cable through the hole.

### Step 2.

Remove the protective backing from the underside of the antenna and place the antenna on the bracket. Apply downward pressure on the antenna to stick it to the bracket.

### Step 3.

Fasten the antenna on to the bracket by threading the washers and nut through the cable. Fasten the hex nut such that the lock washer compresses flat with the washer surface. (Figure 7)

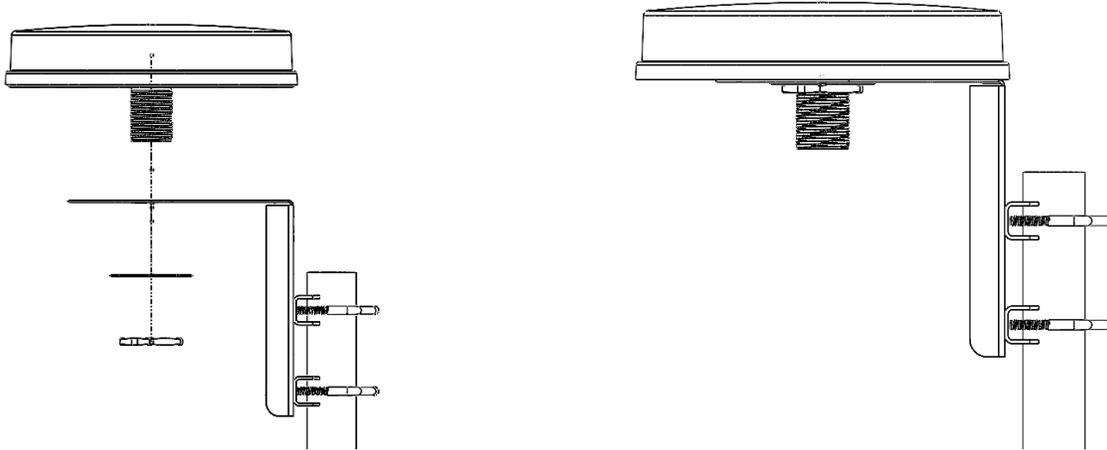


FIGURE 7

## Routing the Cables

### Step 1.

Properly route the cables making sure there is no sharp bends.

### Step 2.

Clamp the cables to the mast at about 3 inches away from the bracket. If long cables are used, secure the cable to the mast using zip ties, velcro, or tape. (Figure 8)

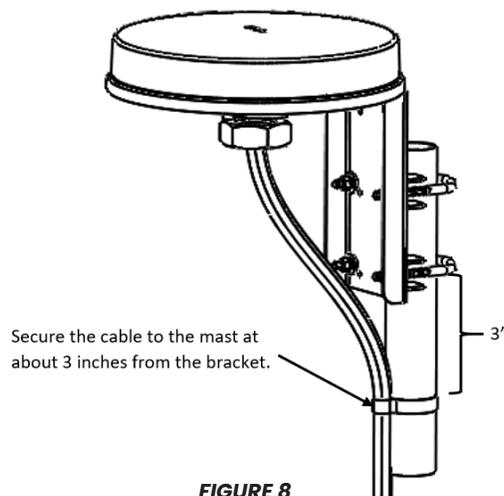


FIGURE 8

### Step 3.

Tighten the mounting hardware and waterproof the RF connectors using electrical tape or a heat shrink tube.

# Cable Connection Instructions

Note: SMA connectors have a **maximum** torque of 3-5 inch lbs.

## Step 1.

Clean the connector such that there is no dust in the terminals.

## Step 2.

Connect the cables from the antenna to the designated connector on the router as shown in the table below.

S.No	CABLE FROM ANTENNA	CONNECTOR ON ROUTER
1	LTE 1	MAIN0
2	LTE 2	AUX0
3	LTE 3	MAIN1
4	LTE 4	AUX1
5	GPS	GPS
6	WIFI 1	2.4/5GHz, LEFT GOLD
7	WIFI 2	2.4/5GHz, RIGHT GOLD
8	WIFI 3	5GHz, LEFT GOLD
9	WIFI 4	5GHz, RIGHT GOLD
10	WIFI 5	2.4/5GHz, LEFT SILVER
11	WIFI 6	2.4/5GHz, RIGHT SILVER

For best MIMO performance use the following in pairs:

*LTE1 & LTE2*      *WIFI 1 & WIFI 2*  
*LTE3 & LTE4*      *WIFI 3 & WIFI 4*  
*WIFI 5 & WIFI 6*

# Installing Multiple Antennas

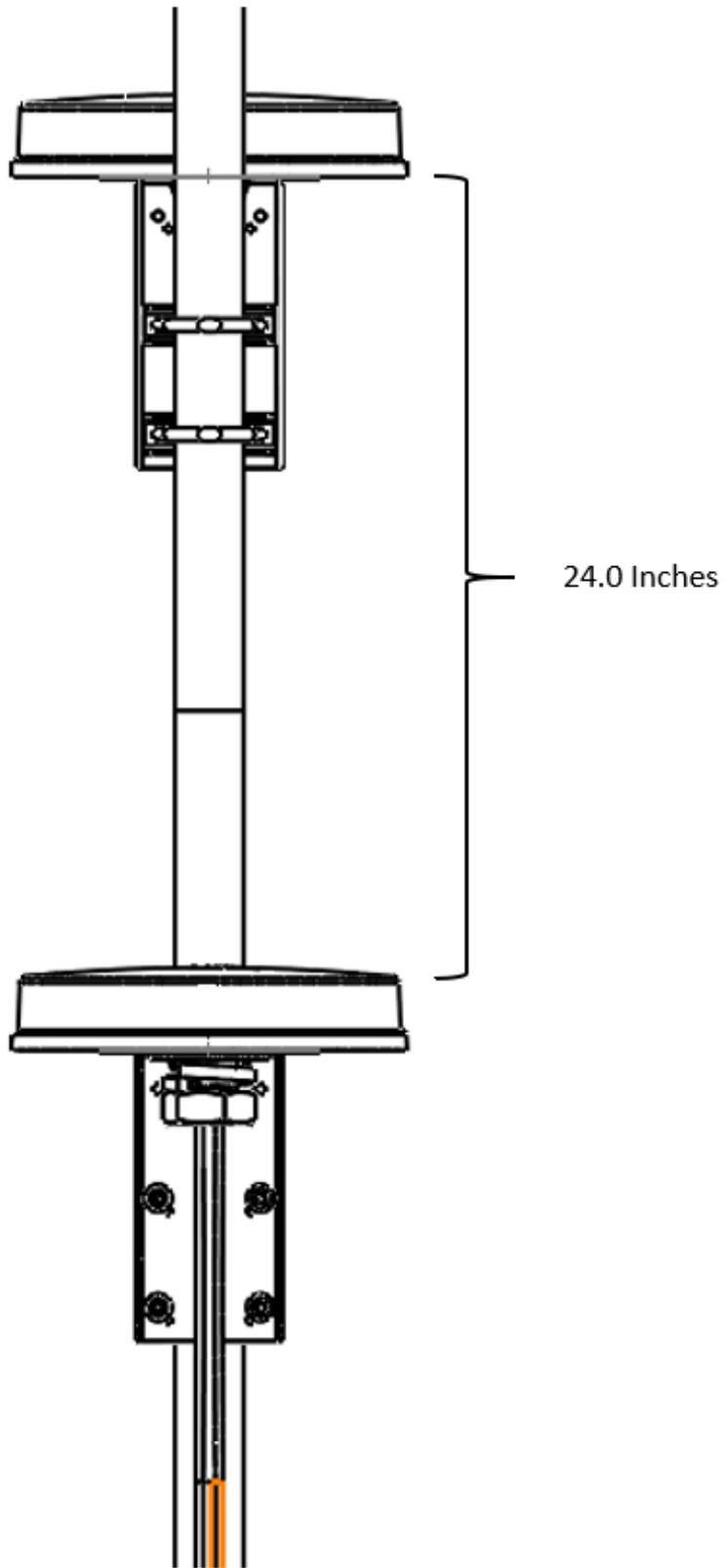
## Multiple Antenna Pole Mounting

Make sure the two antennas are mounted 18-24in apart on the pole. Properly secure the cables to the mast.

### Cable Connections for Multiple Antenna

S.No	CABLE FROM ANTENNA 1	CONNECTOR ON ROUTER 1
1	LTE 1	MAIN0
2	LTE 2	AUX0
3	LTE 3	MAIN1
4	LTE 4	AUX1
5	GPS	GPS
6	WIFI 1	2.4/5GHz, LEFT GOLD
7	WIFI 2	2.4/5GHz, RIGHT GOLD
8	WIFI 3	5GHz, LEFT GOLD
9	WIFI 4	5GHz, RIGHT GOLD
10	WIFI 5	2.4/5GHz, LEFT SILVER
11	WIFI 6	2.4/5GHz, RIGHT SILVER

S.No	CABLE FROM ANTENNA 2	CONNECTOR ON ROUTER 2
12	LTE 1	MAIN0
13	LTE 2	AUX0
14	LTE 3	MAIN1
15	LTE 4	AUX1
16	GPS	GPS
17	WIFI 1	2.4/5GHz, LEFT GOLD
18	WIFI 2	2.4/5GHz, RIGHT GOLD
19	WIFI 3	5GHz, LEFT GOLD
20	WIFI 4	5GHz, RIGHT GOLD
21	WIFI 5	2.4/5GHz, LEFT SILVER
22	WIFI 6	2.4/5GHz, RIGHT SILVER



**Multiple Husky Antennas Mounted**

# Commission and Testing

## Check Coaxial Cables

Check each coaxial cable connector and confirm it can't be easily unscrewed with two fingers. Visually inspect coaxial cable run for proper mechanical support.

## Confirm Connection to Cellular Network

Use a cellular device's built in diagnostics to confirm the RSSI is better than -75dB. Confirm the cellular connection supports communications at required data rates.

Connect the GPS / GNSS cable to the GPS / GNSS receiver and check for satellite acquisition.

Connect the Cellular / LTE & WLAN cables or stow unused pigtailed.

### Notices:

	<p><b>CAUTION</b> To comply with FCC RF Exposure requirements in section 1.1310 of the FCC Rules, antennas used with this device must be installed to provide a separation distance of at least 20 cm from all persons to satisfy RF exposure compliance.</p>
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	<p><b>DO NOT</b></p> <ul style="list-style-type: none"><li>• Operate the transmitter when someone is within 20 cm of the antenna.</li><li>• Install antenna or mast assembly on a windy day</li></ul>
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	<p><b>WARNING</b> Watch out for overhead power lines. Check the distance to the power lines before starting installation.</p>
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	<p><b>WARNING</b> This document gives the detailed instructions to install an antenna to the best of our knowledge. This document is for general information only. It cannot be used as a warranty. Parsec Technologies, Inc. will not accept any liability for any damage caused by an antenna due to unknown variables.</p>
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