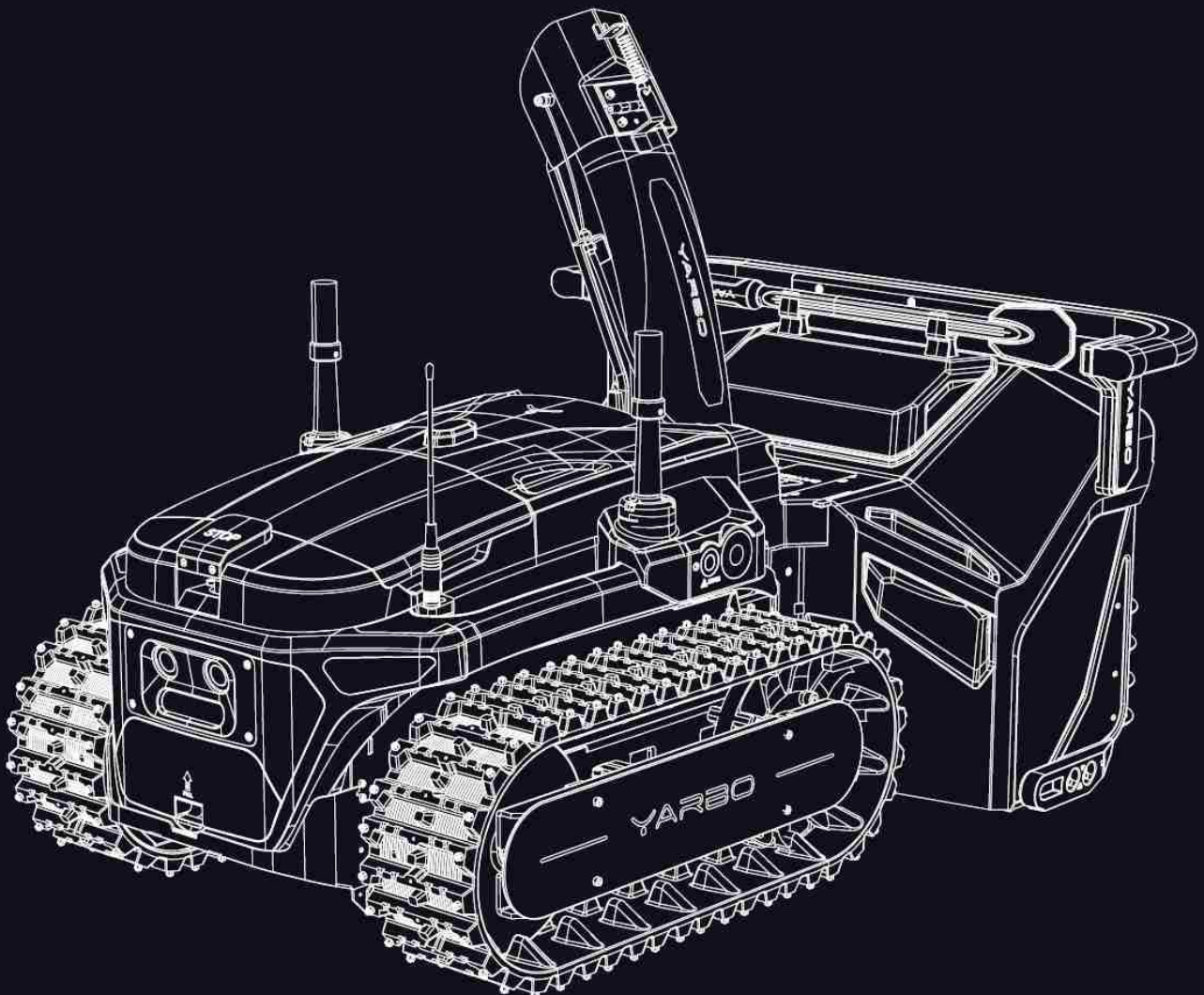


YARBO

2024

# USER MANUAL

**YARBO SNOW BLOWER**



User Manual



Video Assembly Guide

YARBO

TABLES OF CONTENT

## **Welcome**

### **Box Content Introduction**

1.1 Yarbo Core Box Content	01
1.2 Snow Blower Module Box Content	03
1.3 Docking Station Box Content	04
1.4 Battery Box Content	04
1.5 Product Overview	05

### **Installation Guide**

2.1 Assembling Snow Blower	07
2.2 Installing Yarbo App	12
2.3 Installing the Data Center	13
2.4 Installing the Docking Station	27

### **Yarbo App**

3.1 Features Statement	28
------------------------	----

## TABLES OF CONTENT

### **Physical Controller Instruction**

4.1 Connecting Yarbo Controller	31
4.2 Yarbo Controller Holder Installation Guide	33

### **Optional Operation**

5.1 Removing Skid Shoes	38
5.2 Removing Anti-slip Studs	39
5.3 Removing the Snow Plume Diverter	40
5.4 Removing Snow Blower Protection Fence	41
5.5 Track Replacement	42

### **Charging**

6.1 Charging Yarbo With Wired Charger	44
6.2 Charging Yarbo With Docking Station	45

---

**Maintenance Guide**

7.1 Before Conducting Any Maintenance	46
7.2 Cleaning Yarbo Core	47
7.3 Installing Tow Hitch	48
7.4 Applying Grease on the Tracks	49
7.5 Updating Firmware	49
7.6 Installing Anti-slip Studs	50
7.7 Keeping Battery at its Best Performance	51

**Specification**

8.1 Yarbo Core	52
8.2 Yarbo Snow Blower Module	53
8.3 Yarbo Docking Station	54
8.4 Yarbo Battery	55

**Limited Warranty**

9.1 Residential Warrant Coverage	56
9.2 General Statement	58
9.3 Warranty Forfeiture	59

---

## Welcome



Thank you for purchasing Yarbo Snow Blower. We are more than happy to welcome you to our user community. We understand your anticipation for this long-awaited yard robot to free yourself and your family members from the annoying cleaning routine. Before you start using our product, we kindly ask you to thoroughly read this user manual, especially the sections on how to use Yarbo safely and identify potential hazards.

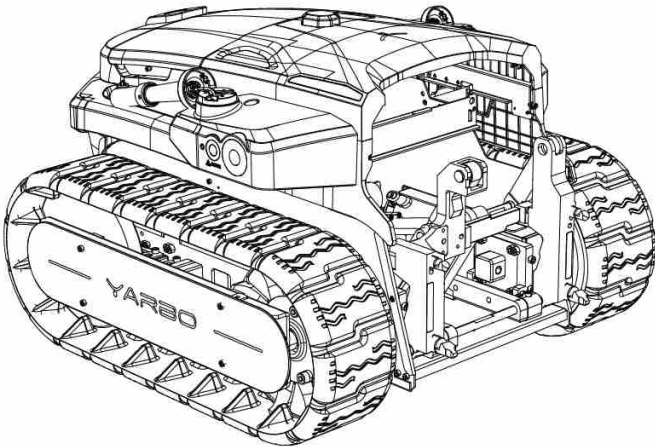


1. Box Content Introduction

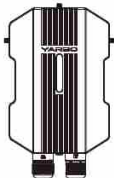
1. Box Content Introduction

1.1 Yarbo Core Box Content ①②③


①




Yarbo Core



Data Center




Snow Blower User Manual




Snow Blower Quick Start Guide

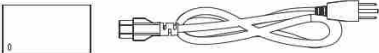
②




Smart Assist Module



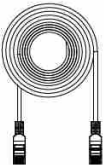
Physical Controller & Controller Holder & Controller Power Adapter



POE Power Adapter

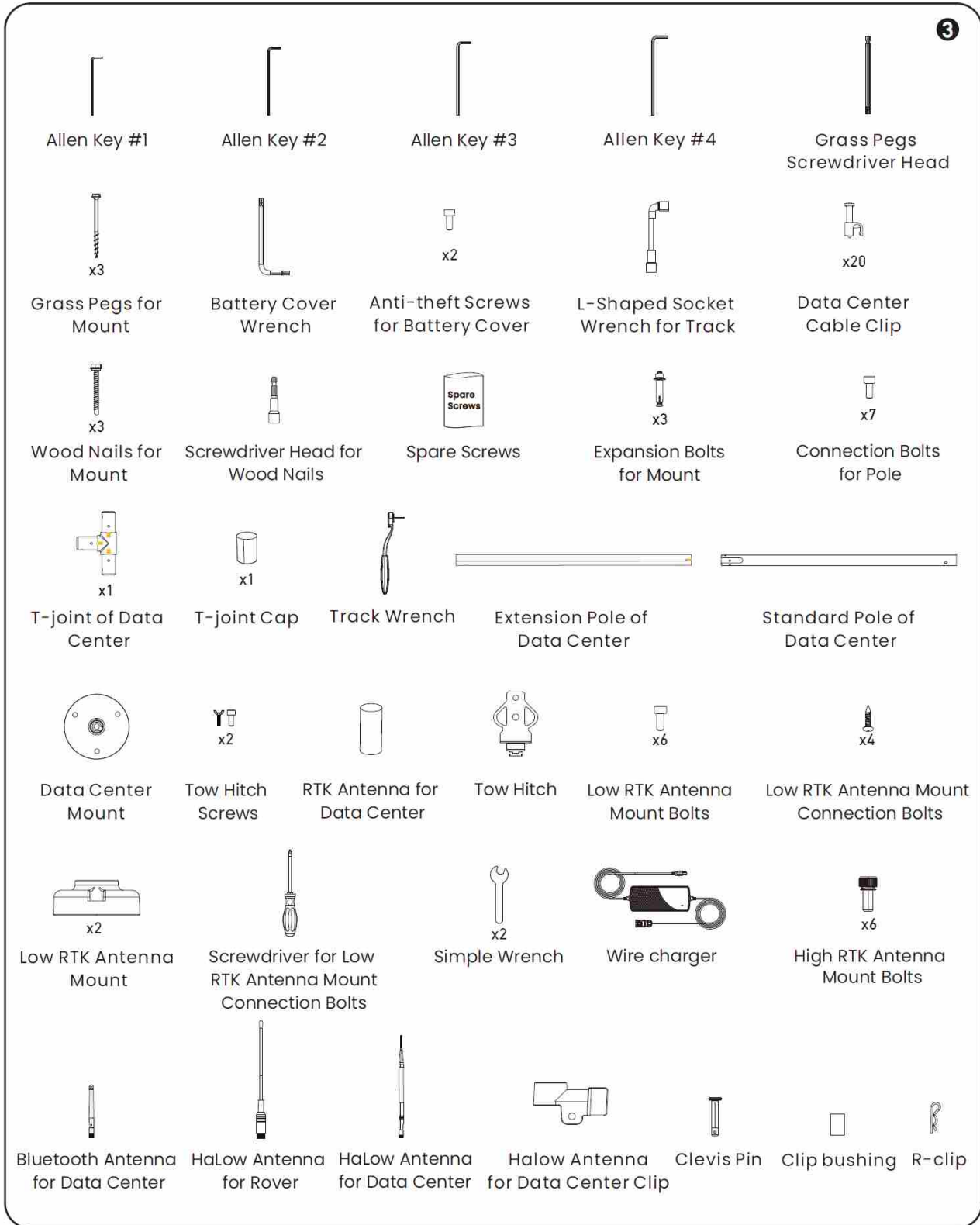


2 meter Ethernet Cable



30 meter Ethernet Cable

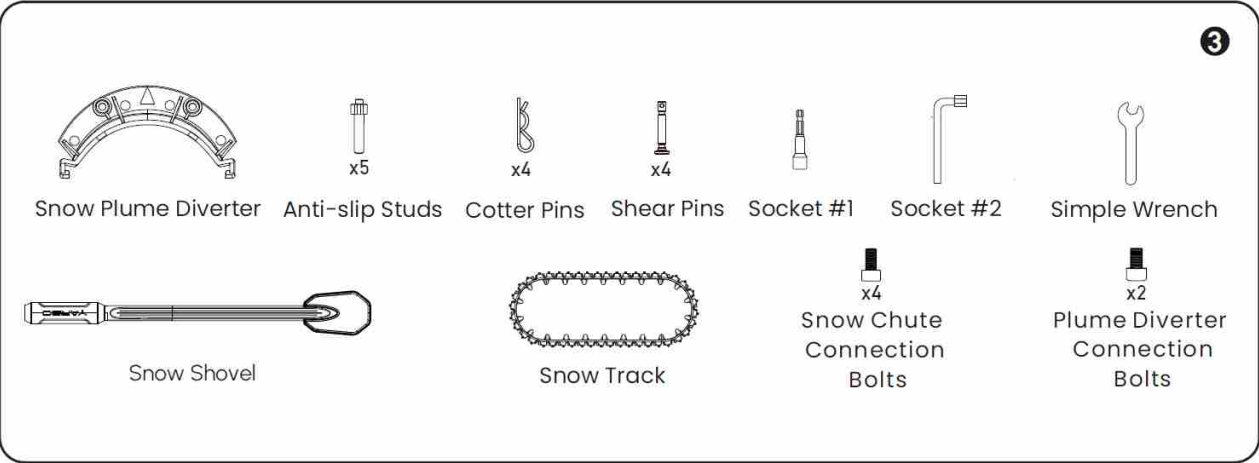
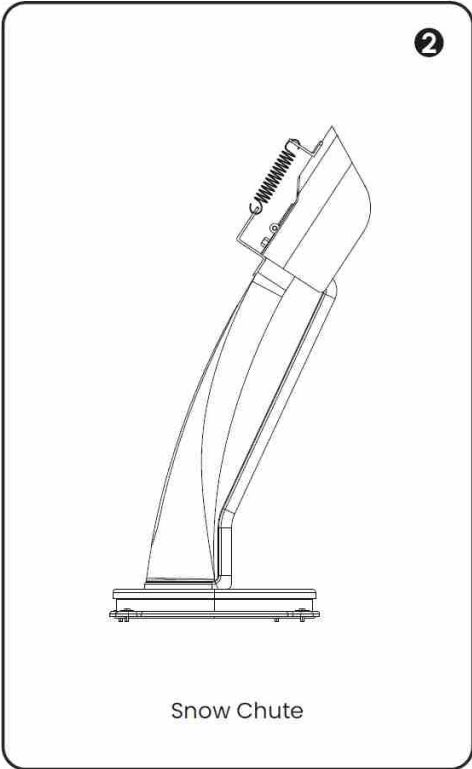
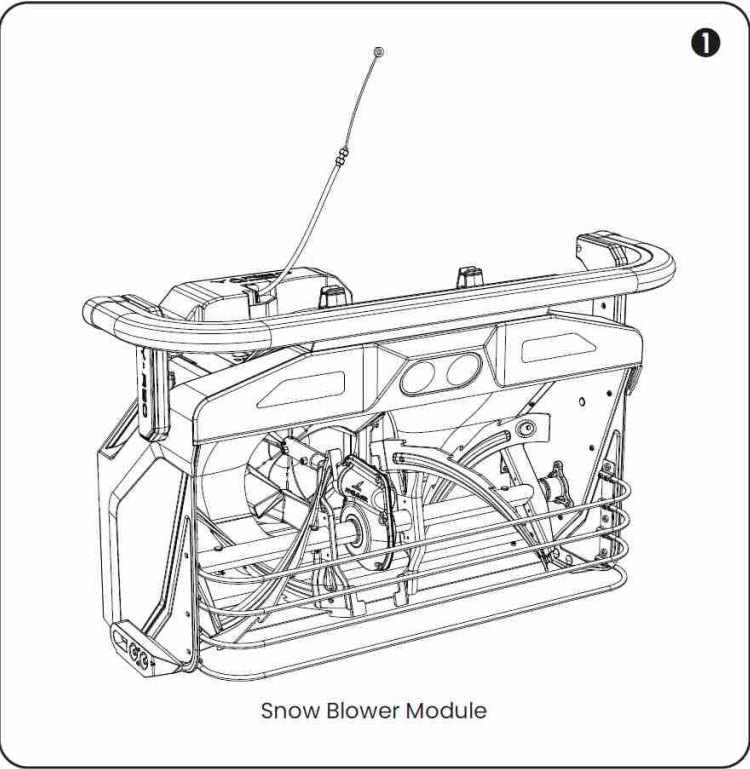
## 1. Box Content Introduction





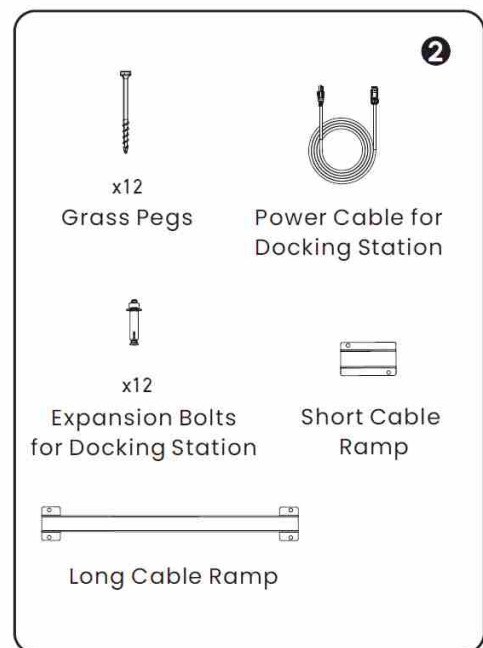
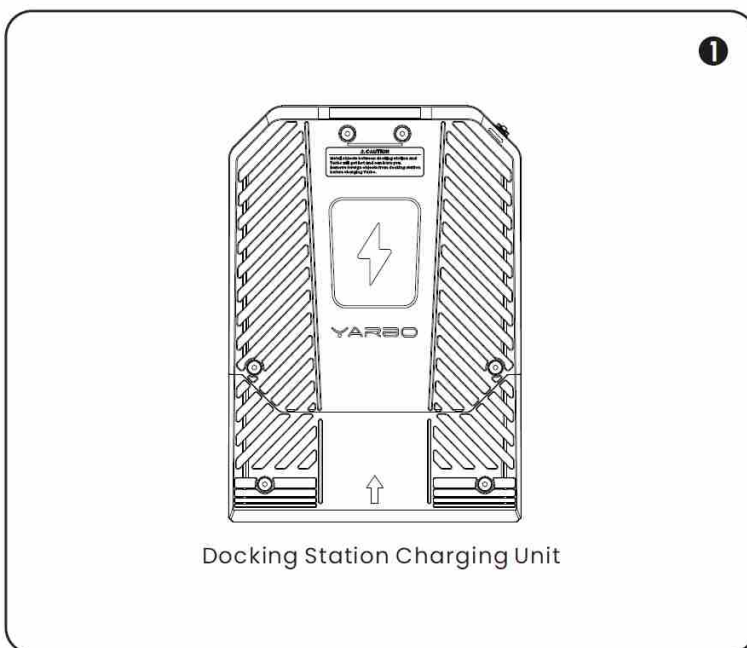
1. Box Content Introduction

1.2 Snow Blower Module Content ❶❷❸

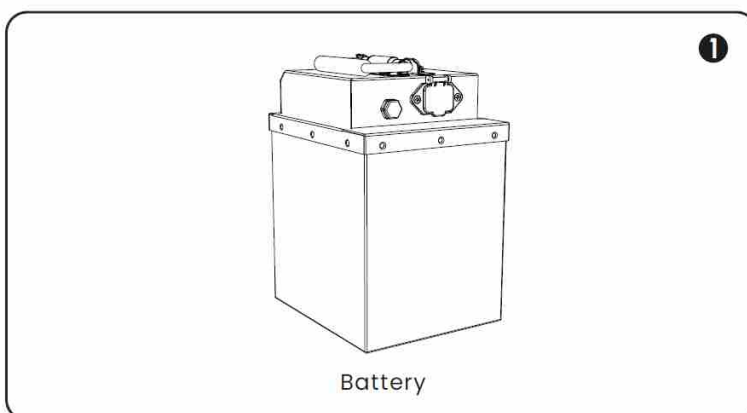


1. Box Content Introduction

1.3 Docking Station Box Content ❶ ❷



1.4 Battery Box Content ❶

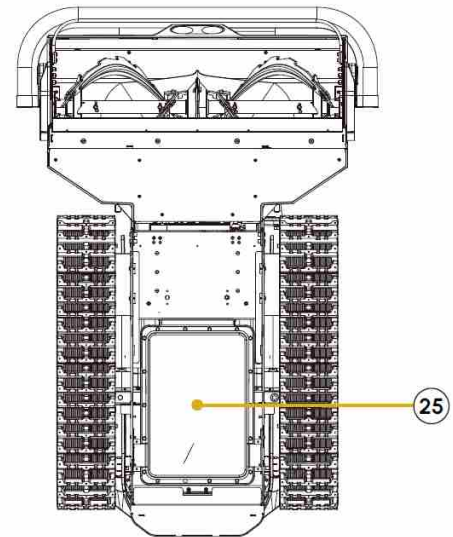
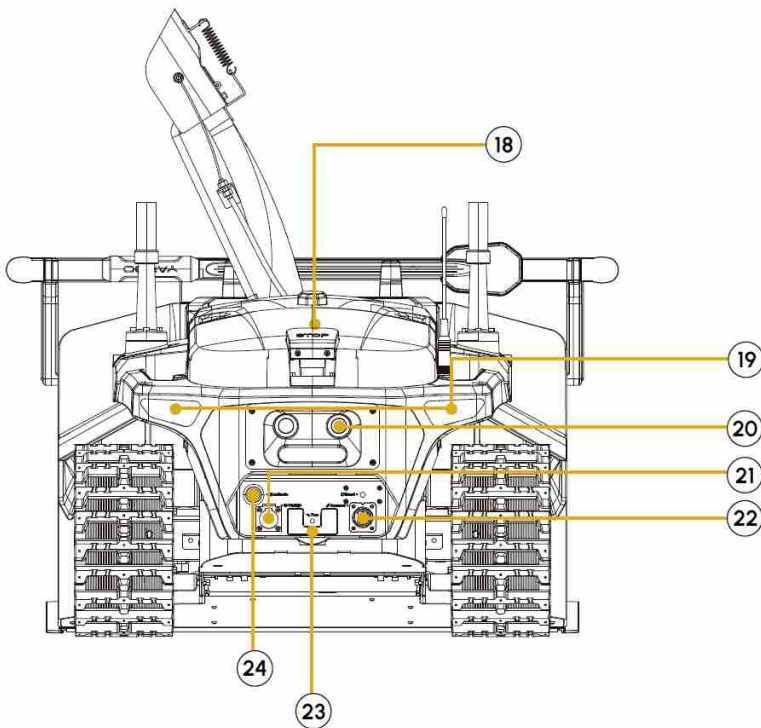


This diagram shows the chassis of a tracked vehicle, likely a snowmobile or light utility vehicle, with 17 numbered callouts pointing to various components. The components are as follows:

- 1: Fuel line / Fuel filter assembly
- 2: Fuel tank / Fuel reservoir
- 3: Fuel pump / Fuel injection system
- 4: Fuel filter / Fuel line connection
- 5: Fuel tank / Fuel reservoir
- 6: Fuel line / Fuel filter assembly
- 7: Fuel tank / Fuel reservoir
- 8: Fuel line / Fuel filter assembly
- 9: Fuel tank / Fuel reservoir
- 10: Fuel line / Fuel filter assembly
- 11: Fuel tank / Fuel reservoir
- 12: Fuel line / Fuel filter assembly
- 13: Fuel tank / Fuel reservoir
- 14: Fuel line / Fuel filter assembly
- 15: Fuel tank / Fuel reservoir
- 16: Fuel line / Fuel filter assembly
- 17: Fuel tank / Fuel reservoir

- 1 HaLow Antenna
- 2 RTK Antenna
- 3 Lifting Handle
- 4 Side Camera
- 5 Track
- 6 Skid Shoe
- 7 Auger
- 8 Front Light
- 9 Scraper Bar
- 10 Front Camera
- 11 Bumper
- 12 Chute
- 13 Deflector
- 14 Battery Cabin
- 15 Warning Light
- 16 Protection Fence
- 17 Indicator Light

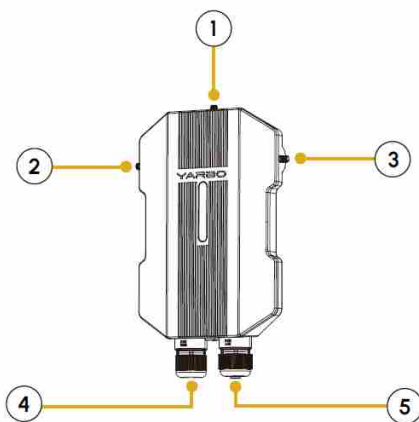
## 1. Box Content Introduction



- ⑱ Emergency Button    ⑲ Rear Lights    ⑳ Rear Camera
- ㉒ Power Socket    ㉓ Tow Hitch Mount    ㉔ Power Switch

- ㉑ Wired Charging Port
- ㉕ Wireless Charging Receiver

## Data Center

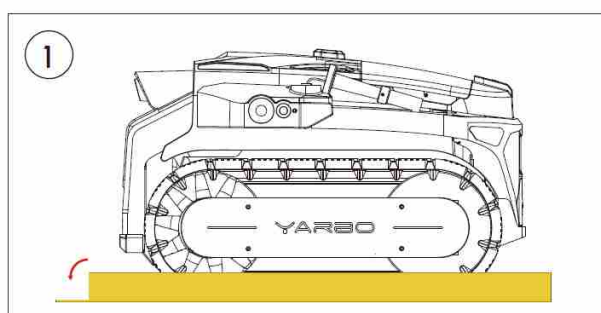


- ① RTK Antenna Port
- ② HaLow WiFi Antenna Port
- ③ Bluetooth Antenna port
- ④ POE WAN Port
- ⑤ POE LAN Port

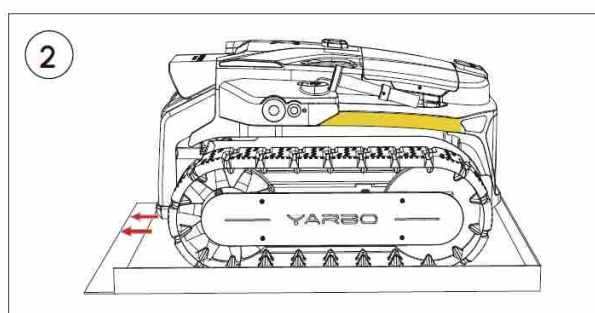
## 2.Installation Guide

# 2.Installation Guide

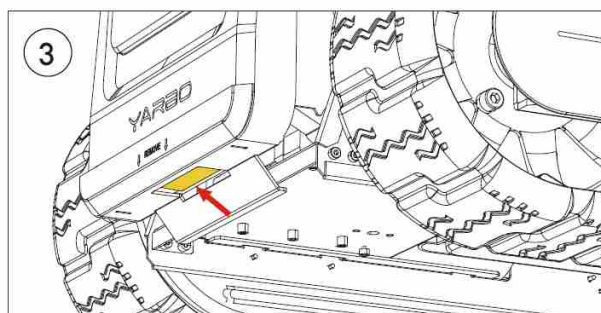
## 2.1 Assembling Snow Blower



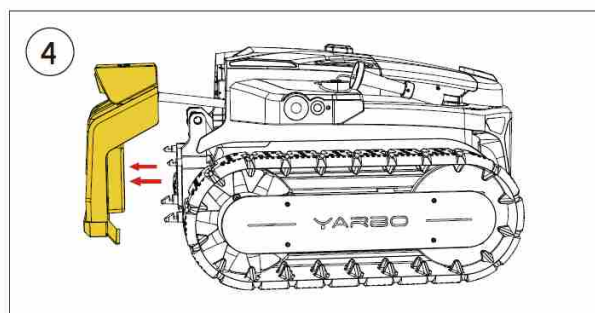
**Cut** the box along the cutting line on the bottom of the packaging box.



**Grasp** the lifting handles of the Yarbo Core and **push** the Yarbo Core out from the packaging box.



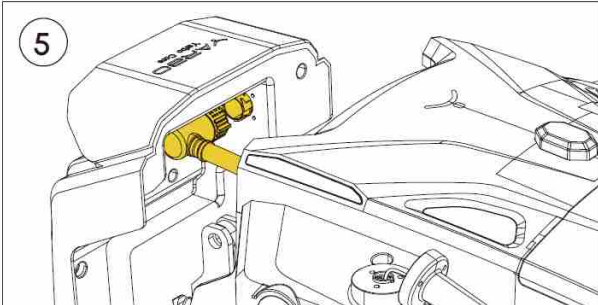
**Locate** the button of the Smart Assist Module shown in the picture.



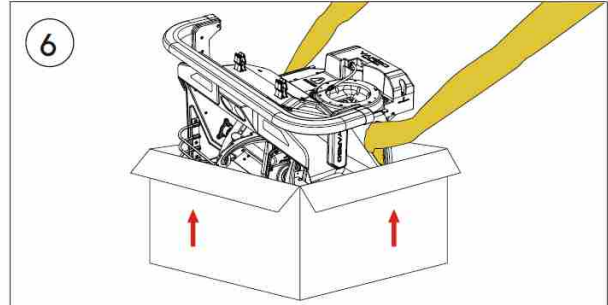
**Long press** the same button as **step 3** and gently **remove** the Smart Assist Module from the Yarbo Core.



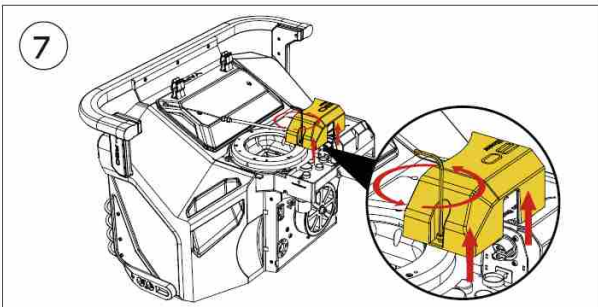
### 2.Installation Guide



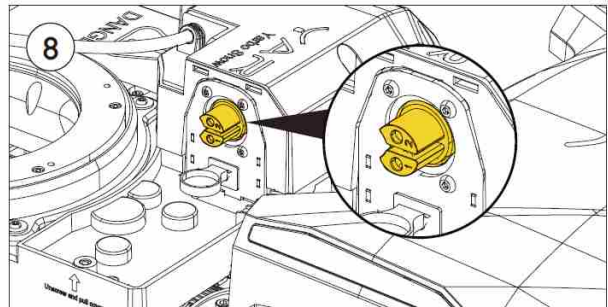
**Gently** remove the connection cable from the Smart Assist Module.



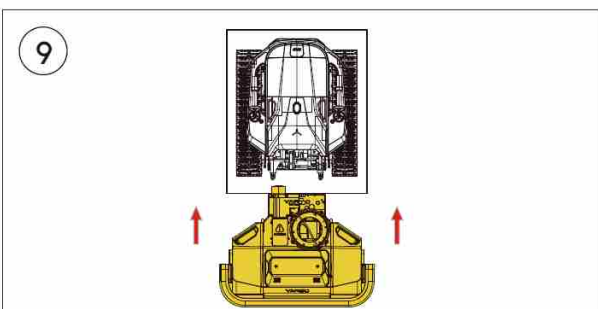
Carefully **lift** the Snow Blower Module out of the packaging box by grasping the handle at the **two sides** of the module.



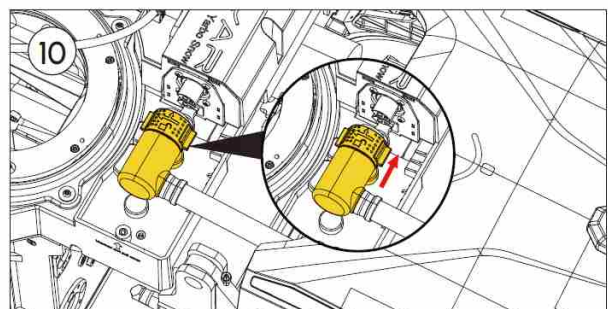
**Remove** cable protection cover by unscrewing the one connection screw using Allen Key #2.



**Locate** the connection port under the protection cover removed in the **last step**.



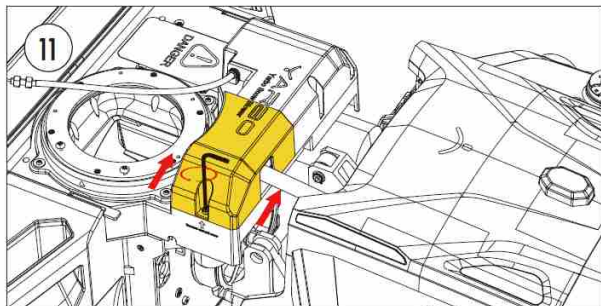
**Position** the Snow Blower Module next to the Yarbo Core and make sure they are close to each other. Do not connect these two parts now.



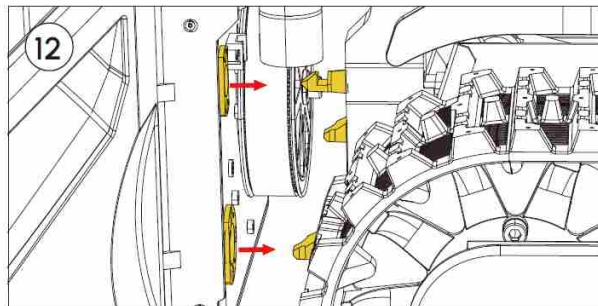
**Locate** the connection cable from the Yarbo Core and forcefully insert the connection cable to the port in the Snow Blower Module until you hear or feel a click.



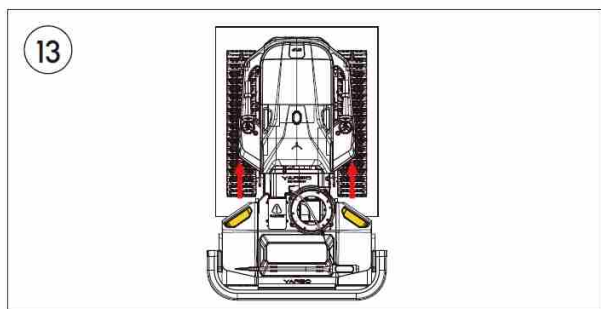
### 2.Installation Guide



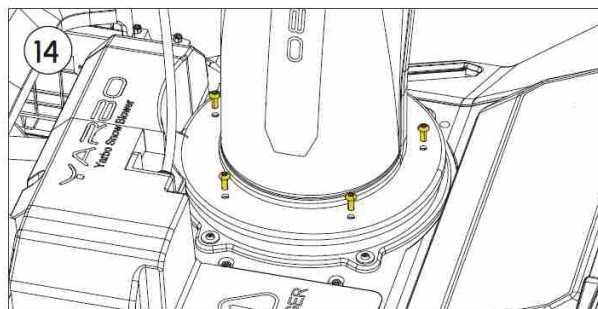
**Place** the protection cover back to its original position by putting it down on the track and sliding it to the end. Screw the connection screw to tighten the cover using Allen Key #2.



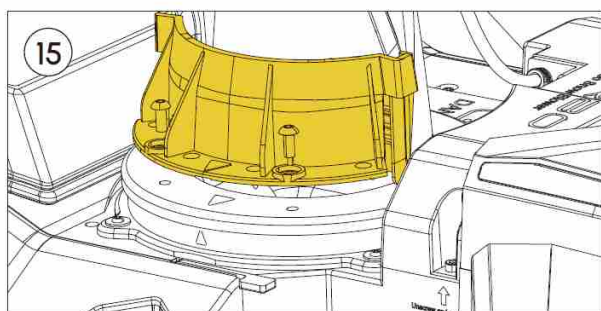
**Locate** the four shafts and holes. Do not push the two parts together right now.



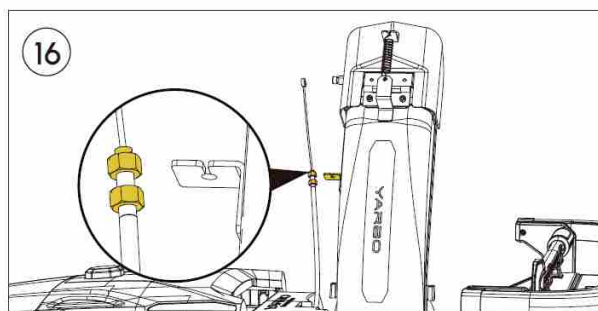
**Slightly** raise the Snow Blower Module. Gently push together two parts until you hear a click.



**Locate** the four Snow Chute Connection Bolts and the Snow Chute in the package. **Tighten** the **4 smaller bolts** to fasten the Snow Chute using Allen Key #1.

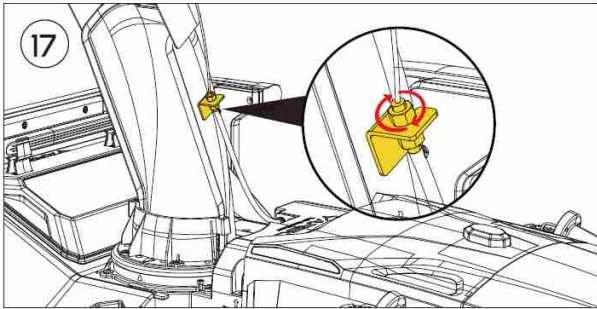


**Locate** the Snow Plume Diverter and the **two** Snow Plume Diverter Connection Bolts. **Tighten** the bolts to fasten the Snow Plume Diverter using Allen Key #2.

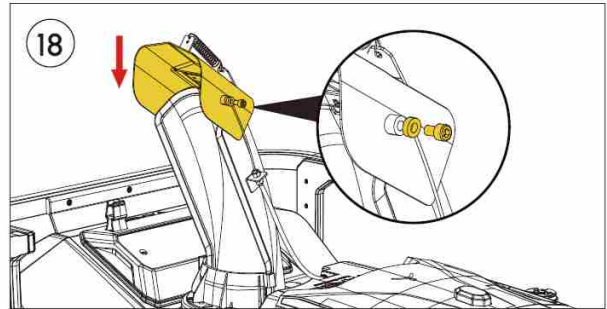


**Locate** the cable shown in the picture. Loosen the **top one** of the two nuts in the middle with Simple Wrench.

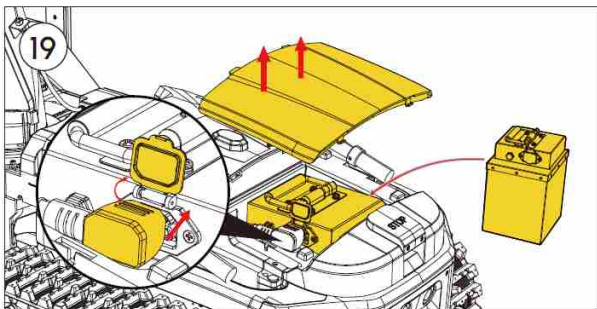
2.Installation Guide



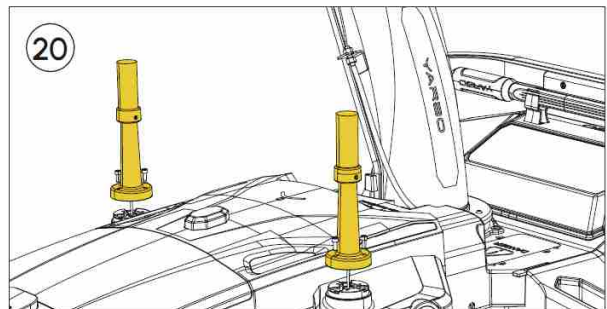
**Place** the cable in the open loop and screw the top nut with Simple Wrench to tighten the cable.



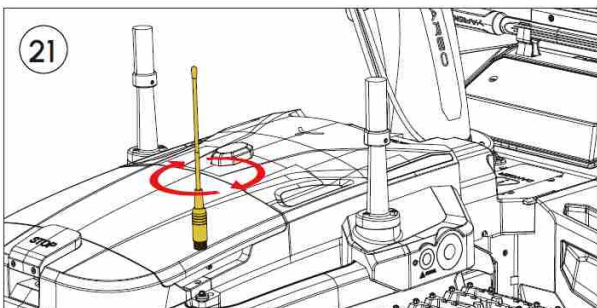
**Unscrew** the bolt shown in the picture. Press down the deflector on the chute. Insert the bolt through the ring at the end of the cable, and screw the bolt back in place using Allen Key #4.



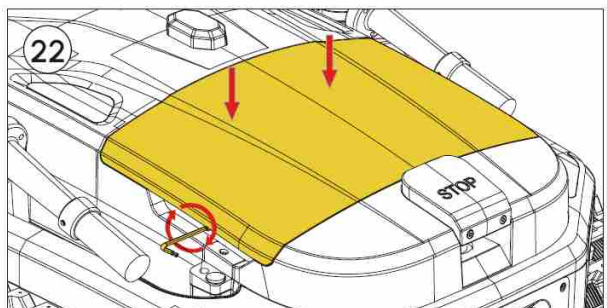
**Remove** the cover by grasping both sides with your hands and place the battery inside. **Connect** the cable from the Yarbo Core to the battery.



**Straighten** the RTK antennas and locate six Low RTK Antenna Mount Bolts provided in the package. **Screw** the six bolts using Allen Key #2.



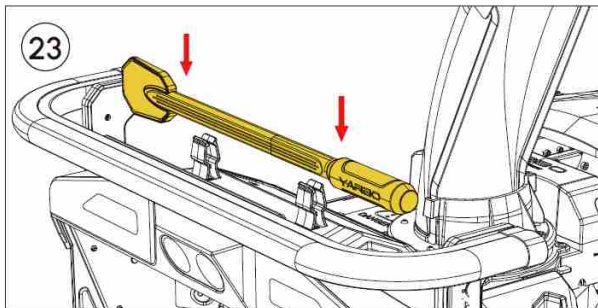
**Locate** the HaLow Antenna for Rover provided in the package and install the antenna by screwing it into the place shown in the picture.



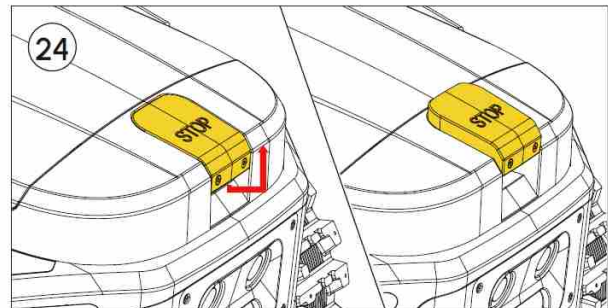
**Place** the battery cover back in place and screw the Anti-theft Bolts on both sides using **Battery Cover Wrench** provided in the package.



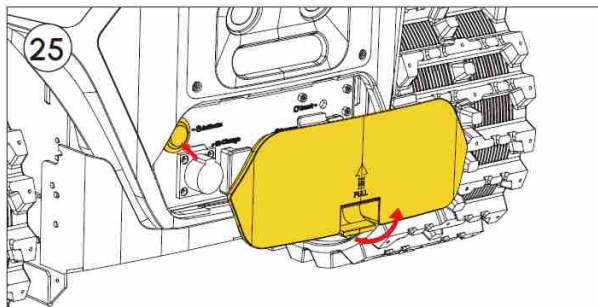
### 2.Installation Guide



**Place** the snow shovel in front of the snow blower.



**Lift** the Emergency Stop Button.



**Remove** the rear cover. **Press** the power button to turn on Yarbo. Place back the rear cover.

## 2.2 Installing Yarbo App

The Yarbo App is a professional application that empowers you to manage and control your Yarbo anytime, anywhere, elevating your snow cleaning experience to new heights. With its impressive features, you can easily set up work schedules, define multiple working areas and no-go zones, and monitor Yarbo's operating status. Additionally, you can receive the latest firmware updates and access instruction manuals, video tutorials, FAQs, and more through the App.

**Follow these simple steps to install and set up the Yarbo App:**

- ① Download the Yarbo App by scanning the QR code below or searching on the app store.
- ② After installation, log in to your Yarbo account. If you don't have one, please register.
- ③ Follow the steps of the first-time user guide on the app. If there are few steps that are hard to understand, please refer to the app section of this user manual.

\*Note: Once a device is associated with a Yarbo account, it cannot be linked to a new account. However, you can invite others to use your Yarbo through Yarbo Sharing in the app.

IOS



Android



## 2.Installation Guide

### 2.3 Installing the Data Center

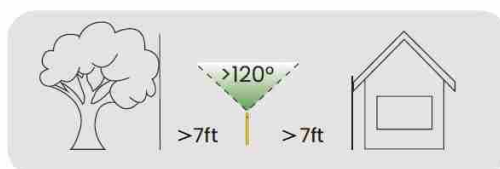
#### Method 1 Roof and Wall Installation(Recommended)

Make sure there's a clear view of the sky with at least 120 degree of unobstructed space. The reason we recommend this method is that the higher the Data Center is placed, the more stable RTK signal it will receive.



#### Method 2 Ground Installation

Make sure there's a clear view of the sky with at least 120 degree of unobstructed space.



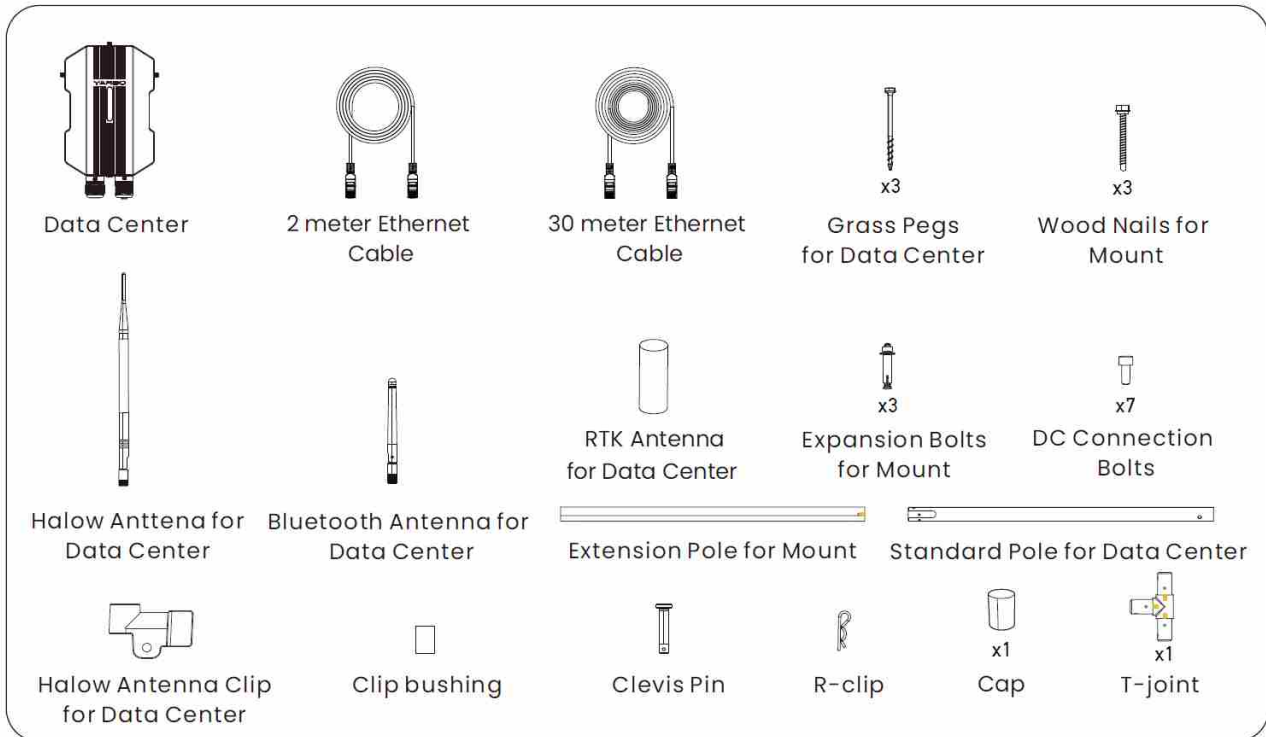
#### CAUTION

- Please read through all the following installation methods, and make sure you understand how to use required tools before installation.

#### NOTICE

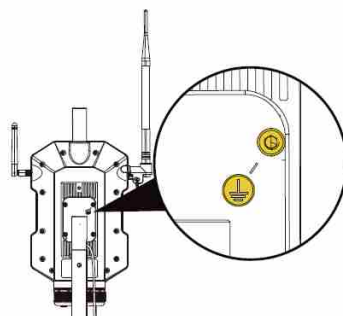
- The most important thing for installing the Data Center Set is to ensure that the Data Center have a 120° unobstructed view of the sky. Please choose the most suitable method for your home. Additionally, the Data Center requires a wired network connection (A 30-metre-long Ethernet cable is provided), so it is necessary to find a location where the Data Center is not too far from the router in your house and has a 120° unobstructed view of the sky.

### 2.3.1 Installation Preparation



#### WARNING

- Given the recommendation to install the Data Center at the top of a house, it is crucial to implement comprehensive lightning protection measures to safeguard against potential damage caused by lightning strikes. In areas where lightning activity is frequent, the risk of such damage increases significantly. We strongly advise those residing in high-lightning-activity regions to buy a grounding cable. This critical component allows for the safe dissipation of excess electrical current into the earth, minimizing the risk of Data Center damage.





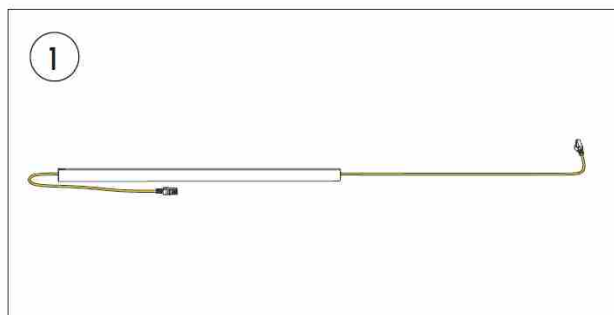
## 2. Installation Guide

### 2.3.2 Data Center Installation

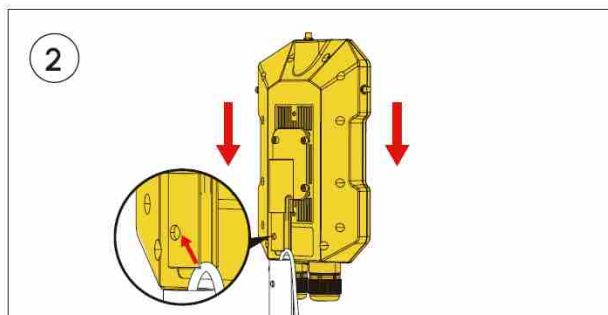
#### NOTICE

- Please make sure that the place you choose for installation has a clear of the sky with at least 120 degree of unobstructed space.

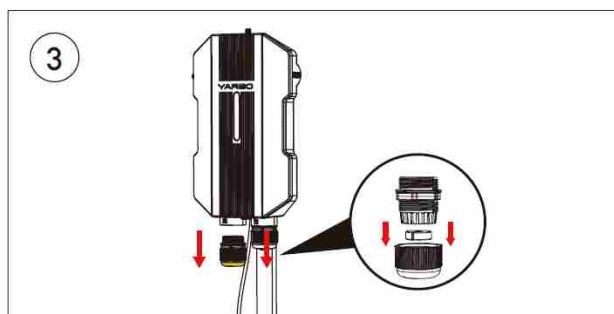
#### Method 1 Roof and Wall Installation



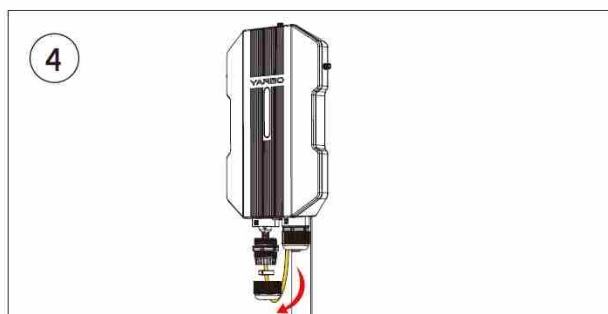
1. Locate the 30m ethernet cable and extension pole provided in the Yarbo Core box. Thread the ethernet cable through the extension pole.



2. Connect the Data Center to the extension pole (press the small button on the data center and aligning this button to the hole in the pole). Pull out a small section of the cable to ensure it can be reached and connected to the ethernet port.

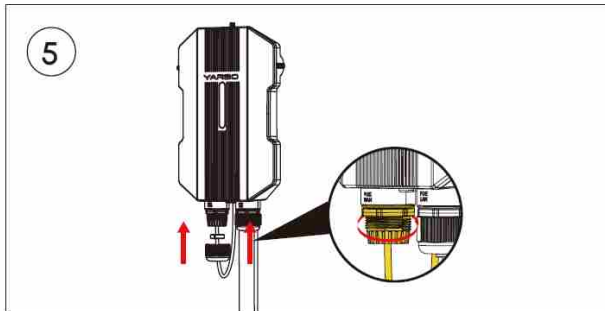


3. Carefully unscrew the entire gland set on the WAN port of the Data Center. Remove the gland cover and push out the black rubber plug.

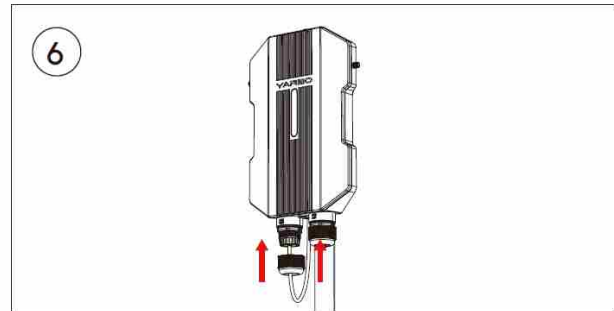


4. Thread the ethernet cable through the gland and its cover. Locate the opening of the black rubber plug and snap it onto the ethernet cable.

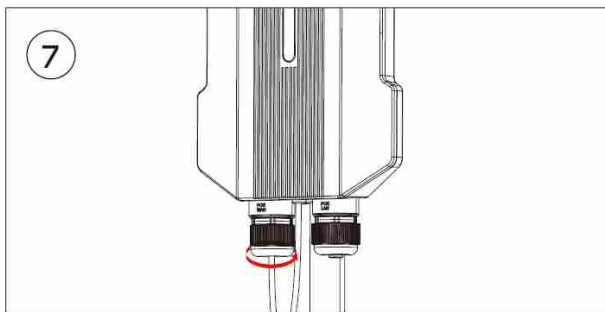
### 2.3.2 Data Center Installation



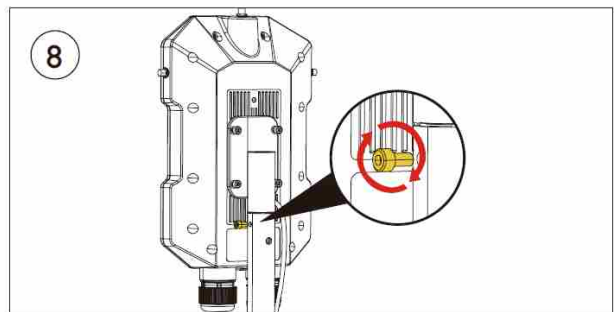
Connect the ethernet cable to the WAN port and tighten the gland by screwing it in.



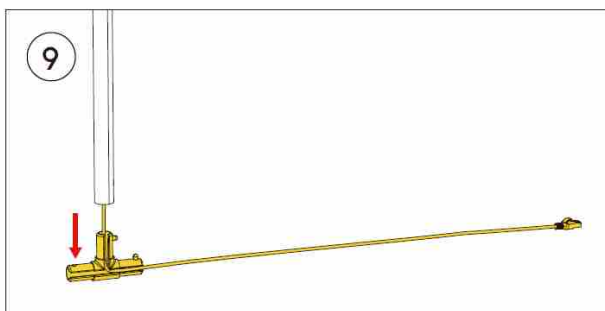
Push the black rubber plug into the gland.



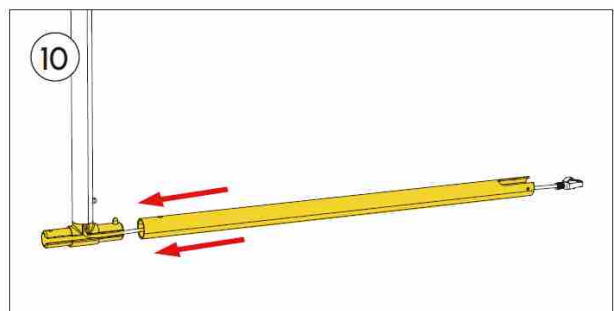
Screw and tighten the cover of the gland.



Screw one connection bolt to fasten the connection part between the Data Center and the extension pole.



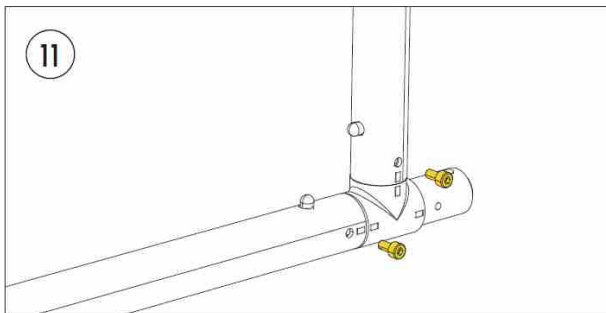
Press the cable into the crevice of a T-joint as shown in the picture. Connect the extension pole to the T-joint by pressing the round button on the T-joint and align this button with the hole in the extension pole.



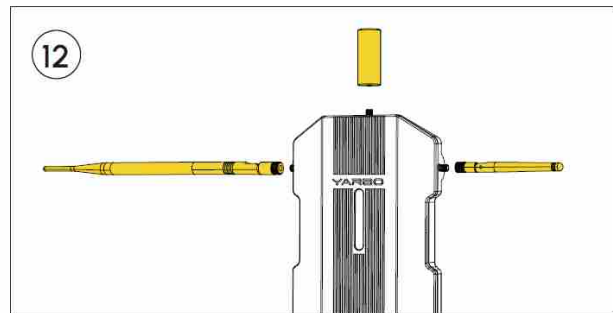
Press the round button on the T-joint and align it with the hole in the standard pole to connect two parts and secure the connection.

### 2.Installation Guide

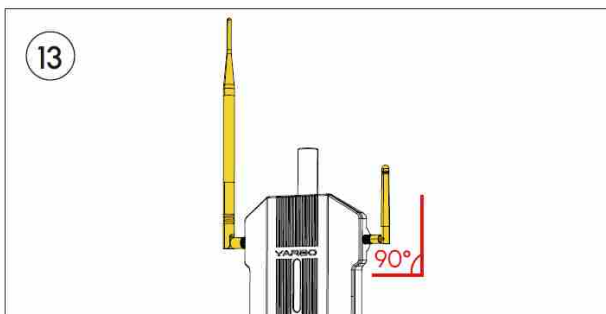
#### 2.3.2 Data Center Installation



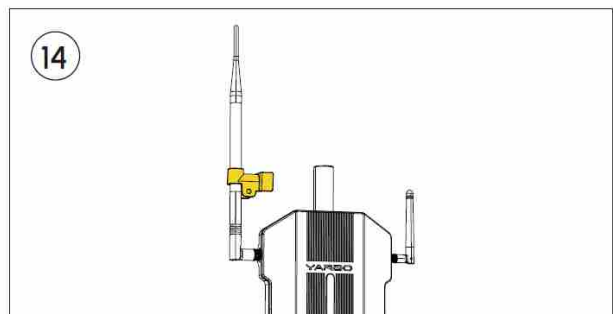
Screw in the two connection bolts to stabilize the T-joint, standard pole, and extension pole.



Locate the three antennas provided in the Yarbo Core box and securely tighten them.



Fold the Halow Antenna and Bluetooth Antenna at a 90-degree angle, directing them upwards towards the sky.



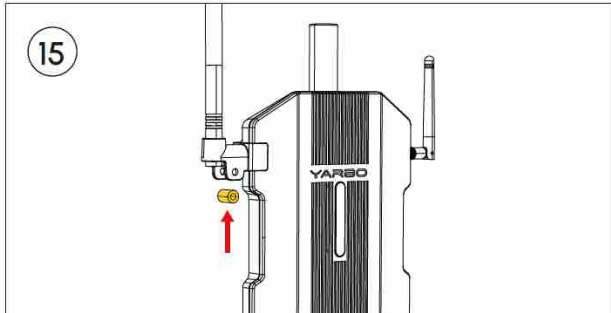
Locate the Halow Antenna Clip through the Halow Antenna.



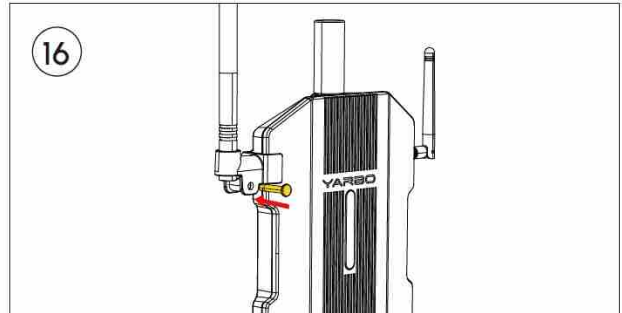
#### NOTICE

- If it is impossible to drill through the wall or other hard material, the cable can be dragged out from the side of the mount.

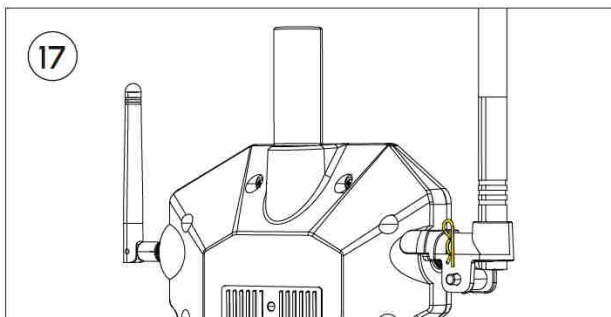
### 2.3.2 Data Center Installation



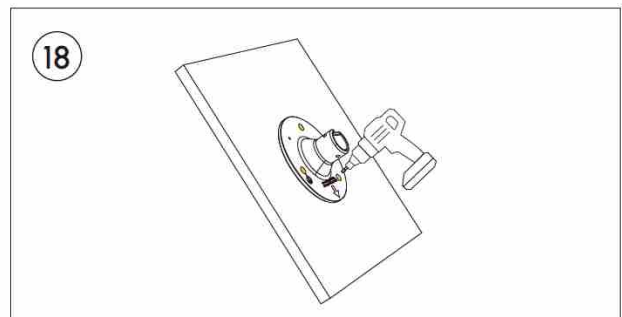
Move the Halow Antenna Clips to the bottom of the Halow Antenna and snap the Data Center. Then put on the Clip bushing.



Tighten the Clevis Pin to ensure that the antenna is secure.



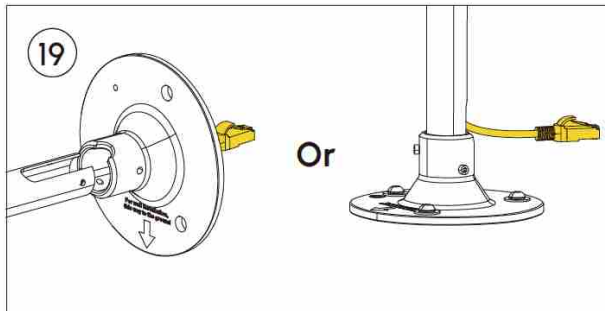
Pass the R-clip through the holes in the Clevis Pin, making sure the Clevis Pin are secure.



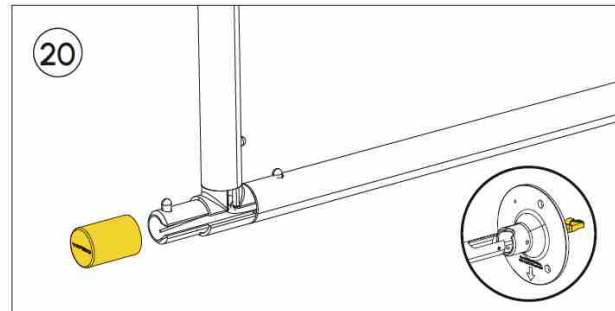
Position the mount on the roof and mark the locations for four holes (5/16" or 8mm). Drill the holes, ensuring that the center hole is drilled to an adequate depth to allow the ethernet cable to be threaded into the house for router connection.

### 2. Installation Guide

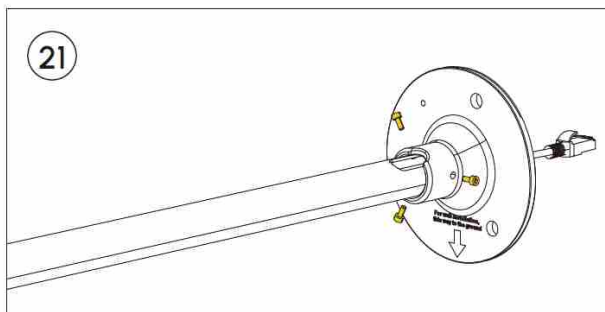
#### 2.3.2 Data Center Installation



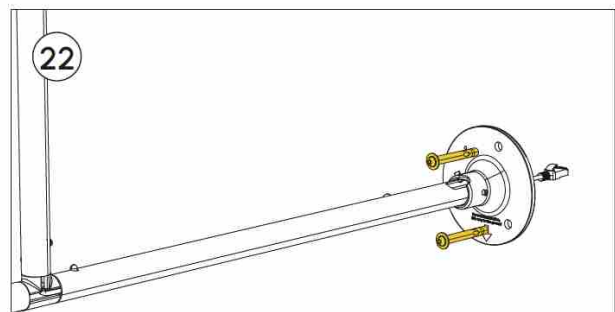
Thread the ethernet cable through the middle hole of the mount, or pull out the Ethernet cable through the opening or gap in the pole carefully.



Attach the cap securely to the side of the T-joint.



Screw in three connection bolts for pole to stabilize the mount and standard pole.



Secure the mount by fastening the three connection bolts. Use wood screws for wooden surfaces, expansion bolts for hard surfaces like concrete or walls and grass pegs for lawns.



#### WARNING

- When installing the Data Center Set on the roof, exercise extreme caution. Ensure compliance with local regulations regarding working at heights and always use appropriate safety equipment.



### 2.3.2 Data Center Installation

#### NOTICE

- Please make sure that the place you choose for insatallation has a clear of the sky with at least 120 degree of unobstructed space.

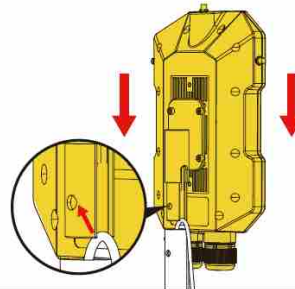
#### Method 2 Ground Installation

1



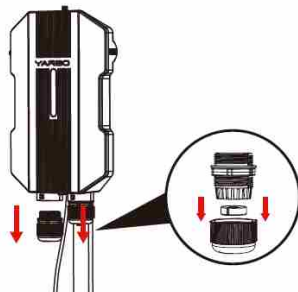
Locate the ethernet cable and extension pole provided in the Yarbo Core box. Thread the ethernet cable through the extension pole.

2



Connect the Data Center to the extension pole (press the small button on the data center and aligning this button to the hole in the pole). Pull out a small section of the cable to ensure it can be reached and connected to the ethernet port.

3



Carefully unscrew the entire gland set located on the WAN port of the Data Center. Remove the gland cover and push out the black rubber plug.

4

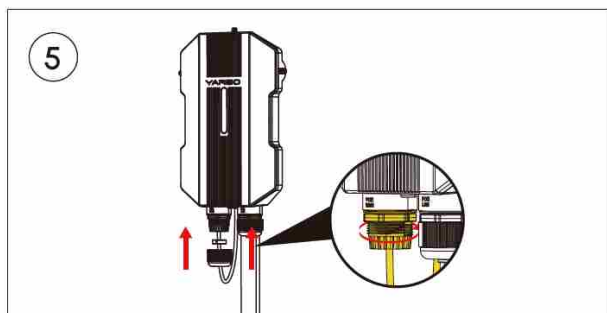


Thread the ethernet cable through the gland and its cover. Locate the opening of the black rubber plug and snap it onto the ethernet cable.

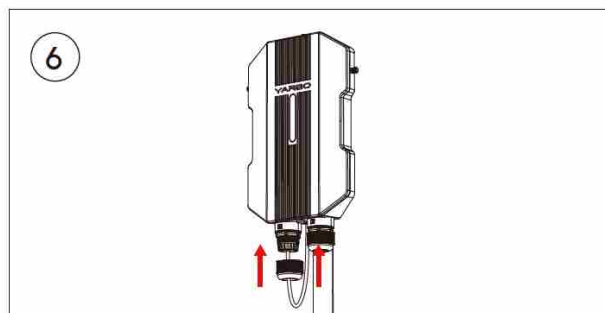


### 2.Installation Guide

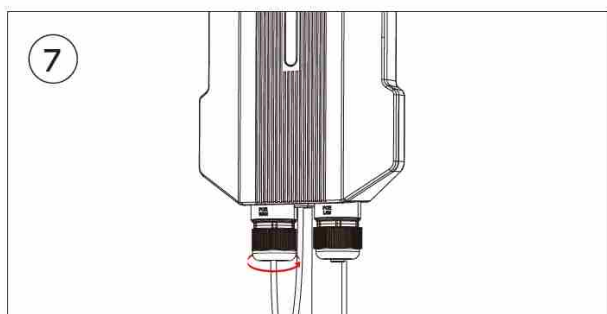
#### 2.3.2 Data Center Installation



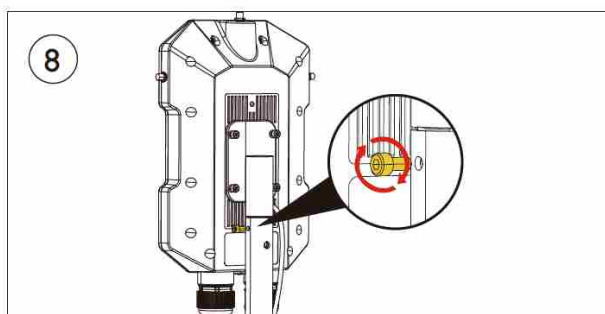
Connect the ethernet cable to the WAN port and tighten the gland by screwing it in.



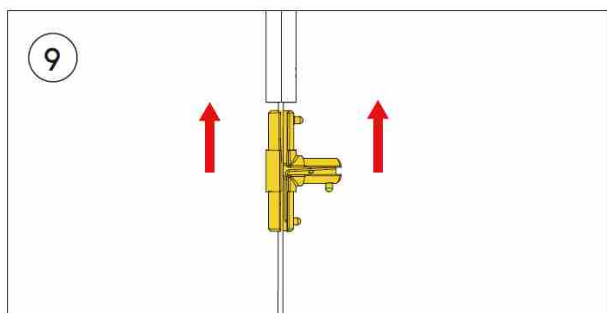
Push the black rubber plug into the gland.



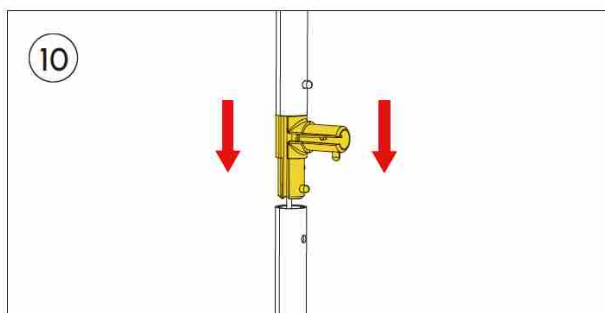
Screw and tighten the cover of the gland.



Screw one connection bolt to fasten the connection part between the Data Center and the extension pole.

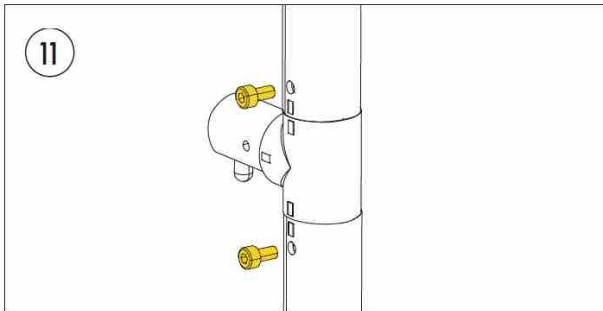


Press the cable into the crevice of a T-joint as shown in the picture. Connect the extension pole to the T-joint by pressing the round button on the T-joint and align this button with the hole in the extension pole.

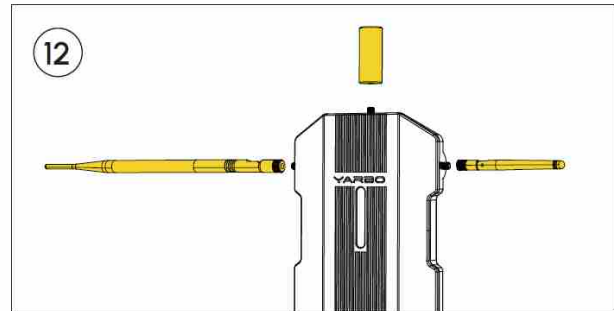


Press the round button on the T-joint and align it with the hole in the standard pole to connect two parts and secure the connection.

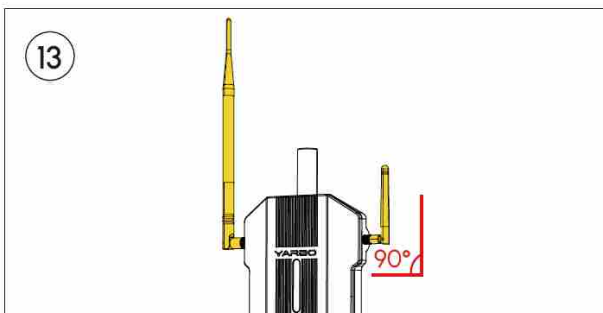
### 2.3.2 Data Center Installation



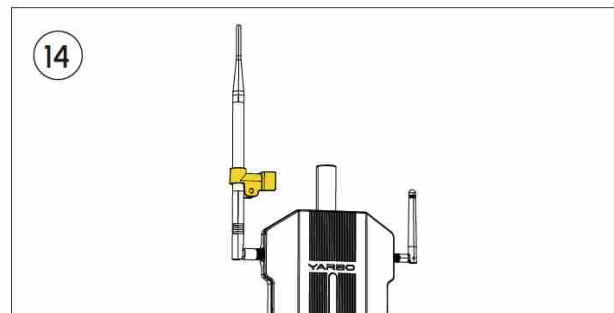
Screw in the two connection bolts to stabilize the T-joint, standard pole, and extension pole.



Locate the three antennas provided in the Yarbo Core box and securely tighten them.



Fold the Halow Antenna and Bluetooth Antenna at a 90-degree angle, directing them upwards towards the sky.



Locate the Halow Antenna Clips through the Halow Antenna.

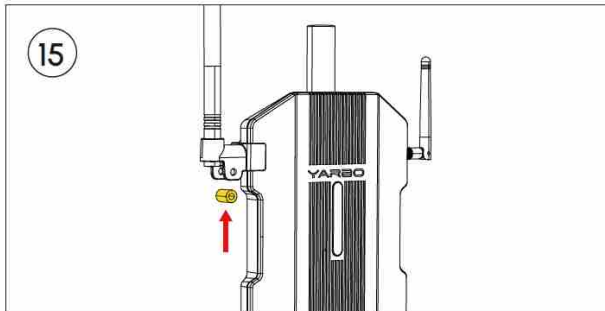


#### NOTICE

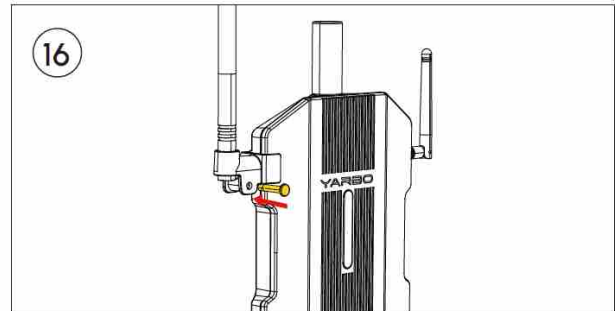
- If it is impossible to drill through the wall or other hard material, the ethernet cable can be dragged out from the side of the mount.

## 2.Installation Guide

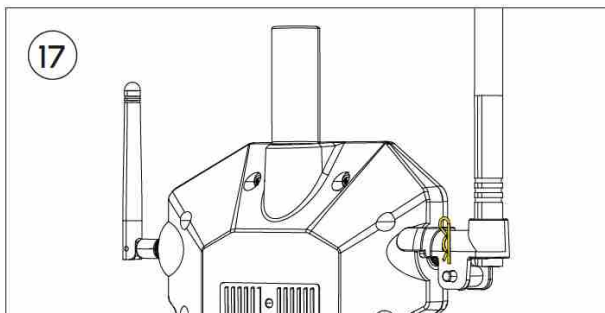
### 2.3.2 Data Center Installation



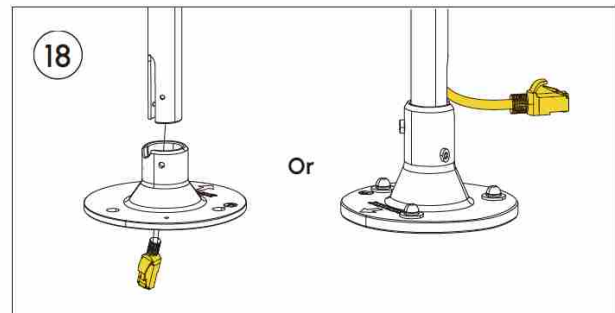
Move the Halow Antenna Clips to the bottom of the Halow Antenna and snap the Data Center. Then put on the Clip bushing.



Tighten the Clevis Pin to ensure that the antenna is secure.

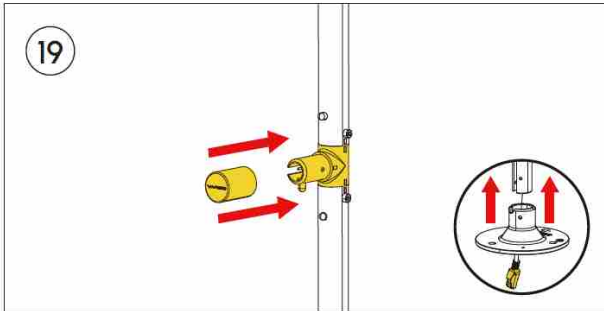


Pass the R-clip through the holes in the Clevis Pin, making sure the Clevis Pin are secure.

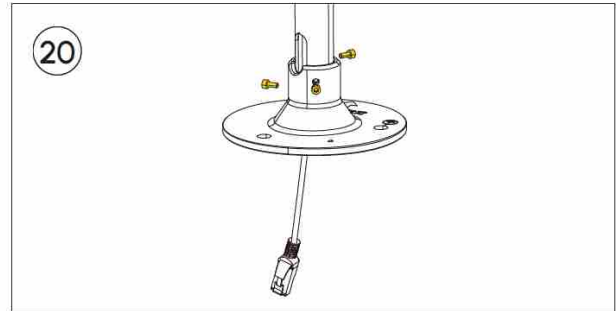


Thread the ethernet cable through the middle hole of the mount , or pull out the Ethernet cable through the opening or gap in the pole carefully.

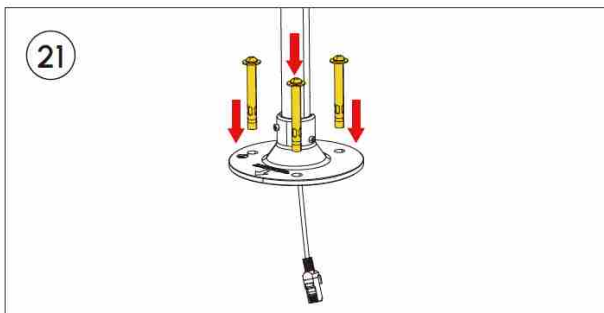
### 2.3.2 Data Center Installation



Attach the cap securely to the side of the T-joint.



Screw in three connection bolts for pole to stabilize the mount and standard pole.



Secure the mount by fastening the three connection bolts (use wood screws for wooden surfaces, expansion bolts for hard surfaces like concrete or walls, and grass pegs for lawns).

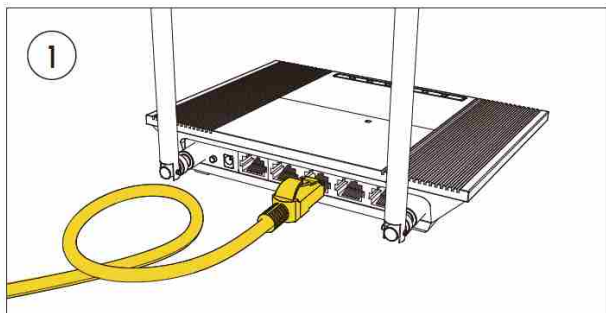


#### WARNING

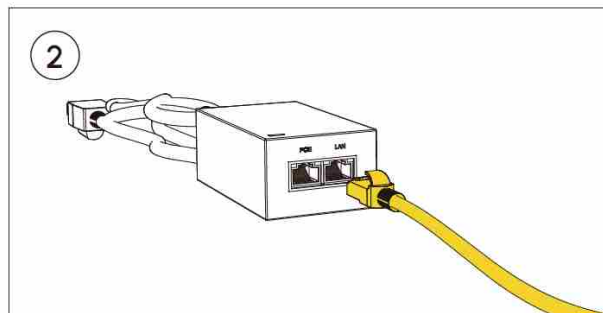
- When installing the Data Center Set on the roof, exercise extreme caution. Ensure compliance with local regulations regarding working at heights and always use appropriate safety equipment.

### 2.Installation Guide

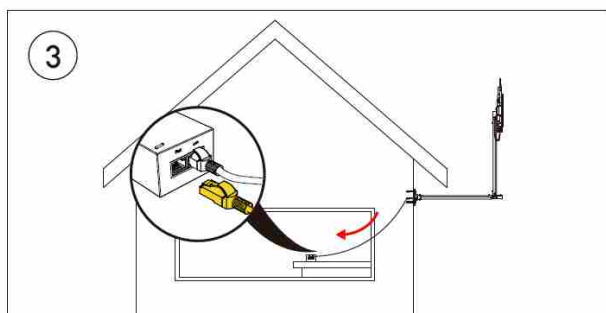
#### 2.3.3 Ethernet Cable Connection



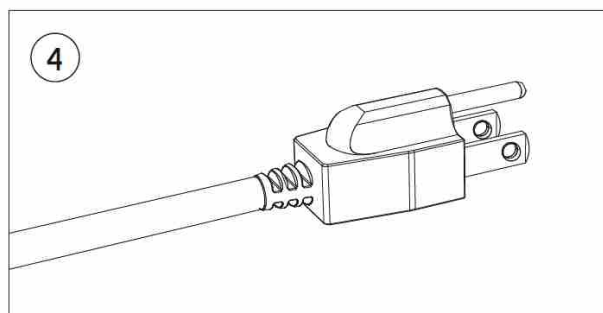
Locate the 2-meter long ethernet cable and the POE power adapter provided in the Yarbo Core Box and connect one side of the ethernet cable to the router.



Connect the other side of the ethernet cable to the LAN port of POE power adapter.








Pull the Ethernet cable that has been threaded through the Data Center Set and connect it to the POE port of the POE power adapter.



Insert the plug of the power adapter into the electrical outlet.

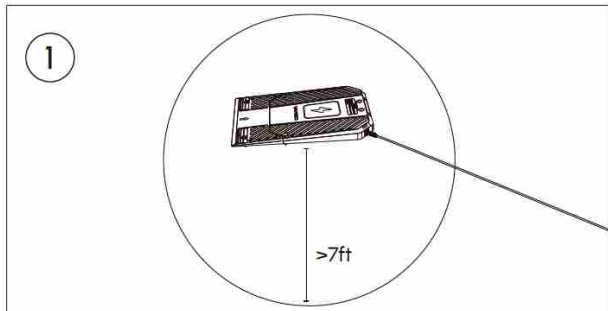
### 2.3.4 Data Center Signal Lights

LED Indicator	Status	Description	Action
 Solid Green	Normal	1. Normal RTK Signal 2. Normal Internet Connection	/
 Flashing Green	Internet abnormal	1. Normal RTK Signal 2. No Internet Connection	Check the status of Internet connection
 Flashing Red	RTK Signal abnormal	1. No RTK Signal	Check cable connection is correct, inspect if RTK antenna is broken or loose.
 Flashing Blue	Pairing mode	1. Pairing mode activated	/
 Solid Blue	Pairing successful	1. Pairing is successful	/

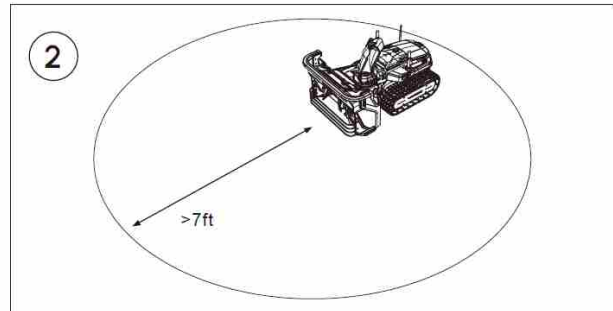


### 2. Installation Guide

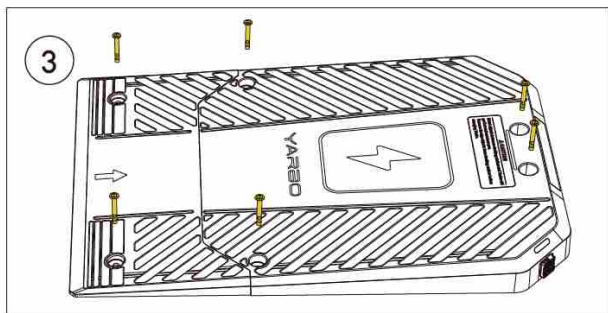
#### 2.4 Installing the Docking Station



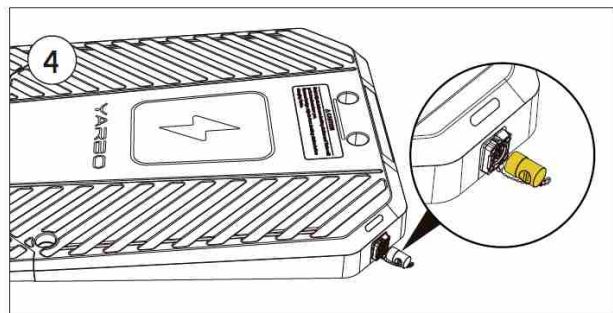
Ensure the installation location for the Docking Station has at least **7 feet** of clearance in all directions. Before proceeding, make sure you have already initialized Yarbo using the Yarbo App.



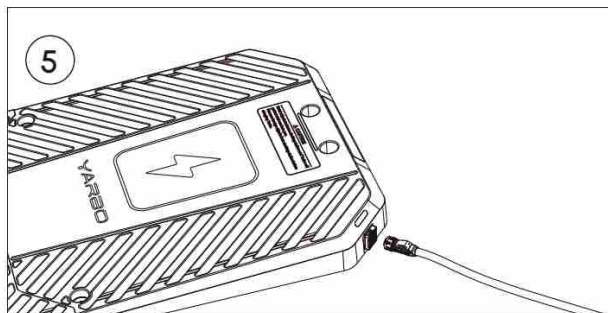
**Drive** Yarbo to the desired location for the Docking Station to test if there is strong GPS signal. Once Yarbo reaches a position with a strong GPS and network connection, the app will notify you.



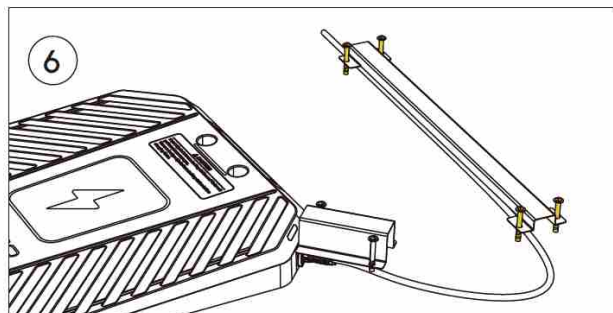
**Place** the Docking Station on the desired location. Secure the Docking Station by suitable methods. For soil/grass surface, use grass pegs. For concrete/brick surfaces, use expansion bolts. Grass pegs and expansion bolts are provided in the package



Press the snap and remove the cover



Connect the Power Cable to the port in the docking station



Place the Short Cable Ramp near the port and place the Long Cable Ramp on the Power Cable. Secure the Cable Ramp by suitable methods.



APP Tutorial

## 3.Yarbo App

## 3.Yarbo App

Before you embark on your journey with our app, we encourage you to take a few moments to read through this user manual since Yarbo App serves as an important tool for the operation. As a result, understanding the features and acknowledging how it works is essential for maximizing your experience. If you haven't downloaded the app yet, please refer to section 2.2.

### 3.1 Features Statement

#### 1.Mapping

The mapping function is tailored for users to create a detailed map of the area where Yarbo to operate. Normally, A map encompass the docking station, pathways, working areas, no-go zones. With the map, Yarbo can design its blowing route and execute the work plan depending on the personal schedule. The provided picture serves as an example of the map, showing two designated working areas, one No-go Zone, two Pathways and docking station. In addition, the yellow line of each area represents the snow blowing direction.

