

RTK BASE STATION

Quick User Guide

*Please read the user guide carefully before using our product.



“A Robot On Every Lawn”

Product: RTK Base Station
Model: S100

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BestMow We001

Read before use

To avoid or reduce the risk of injury, users must read and understand this user manual before using this product.

Please keep this user manual properly.

Safety Tips

This symbol indicates important safety instructions. Failure to follow these instructions may endanger the personal safety or property safety of operators and other personnel. Before attempting to operate the lawnmower, please read and understand all instructions in this manual.

Preface

Thank you for using the product of BESTMOW. This manual provides you with instructions on the functional characteristics, installation, debugging, deployment, and the usage of Robotic Lawn mower, as well as matters needing attention during use. Before using this product, please read this manual carefully and use it according to the instructions. If you encounter any problems during the use of this product, please contact customer service or after-sales services personnel, and we will serve you wholeheartedly.

1. Safety instructions

Please read this safety statement and the safety advice and precautions in the text carefully before using this product. You must comply with the safety information in this manual and all applicable local regulations.

The safety recommendations and precautions in this manual introduce important information that must be followed to prevent personal and property damage when using and working around the product, aiming to help users:

- Detect and prevent dangerous situations
- Safe and correct use of this product and related equipment
- View the information on the safety label posted on this product
- Work in a safe working environment

1.1 Notes

Operator Instructions

- Operators must be trained to use this product. Any losses or injuries caused by improper use shall be borne by the user.
- Prohibit unauthorized disassembly of RTK Base Station.

Who can't use this product

- Don't touch this product again after it has been installed by the staff. If there are any problems, please

contact the staff.

Where this product can't use

- Only use this product in the ways described in this manual.
- Never leave anything that can be climbed over by product in the working area which may cause damage to the product or injury to people.
- Keep any supply and extension cords away from the working area to avoid damage to the cords which can lead to contact with live parts.

When this product can't use

- Avoid using the machine and its peripherals in bad weather conditions, especially when there is a risk of lightning.
- Timely check the working area to remove any foreign objects that may damage the product or be damaged by the product. There should be no obstructions.
- Check the cables and power adapters in a timely manner to ensure that the base station is in good condition.
- Only use peripherals that come with the original product, such as charger. Any unofficial peripherals may lead to unexpected results.

What can't be done to this product

- Keep away from the product .
- Don't put anything on the top of the product.
- Don't do any modifications to the product which may lead to unexpected results.
- Don't dismantle any part that is not described in the manual.

2. Product introduction

2.1 Introduction

In the intelligent lawn mower system, the RTK base station serves as a fixed reference point and establishes a stable and reliable positioning coordinate system within a certain area.

Through centimeter-level high-precision positioning, it continuously detects changes in satellite signals and transmits correction information to the lawn mower in real time. Even when satellite signals are blocked (such as by trees, building shadows, etc.) or interfered with, the lawn mower can quickly and accurately adjust its own position information based on the dynamic correction data provided by the base station, maintain a stable and precise operation trajectory, ensure the coherence and accuracy of the entire lawn mowing operation, and will not deviate from the predetermined route due to temporary signal abnormalities.

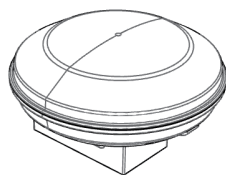
2.2 Specifications

Specs		
Capacity	Compatibility	BESTMOW series
	Pair machine number	one-on-one
	Net weight	1kg
	Dimension	(795mm~1395mm)×233mm×304mm ((31.3in~54.9in)×9.2in×12.0in)
	Waterproof level	IP66
Charging	Input voltage	5V
	Output Current	1A
	Power input	100~240V
	Operating temperature	-20℃ ~60℃
Positioning	Positioning method	Real-Time Kinematic
	Positioning accuracy	Centimeter
	Communication mode	2.4G wifi

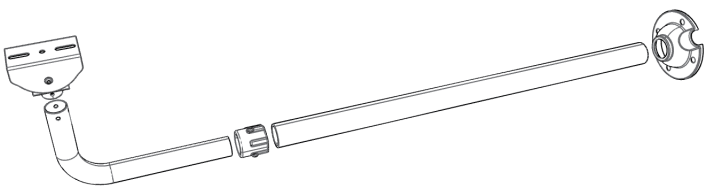
2.3 My RTK base station

► Unboxing

Please check the items in the package shown as below



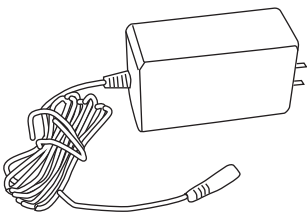
RTK
base station



Bracket set



user manual



Power supply



Velcro
Bolts
Blades
Pegs

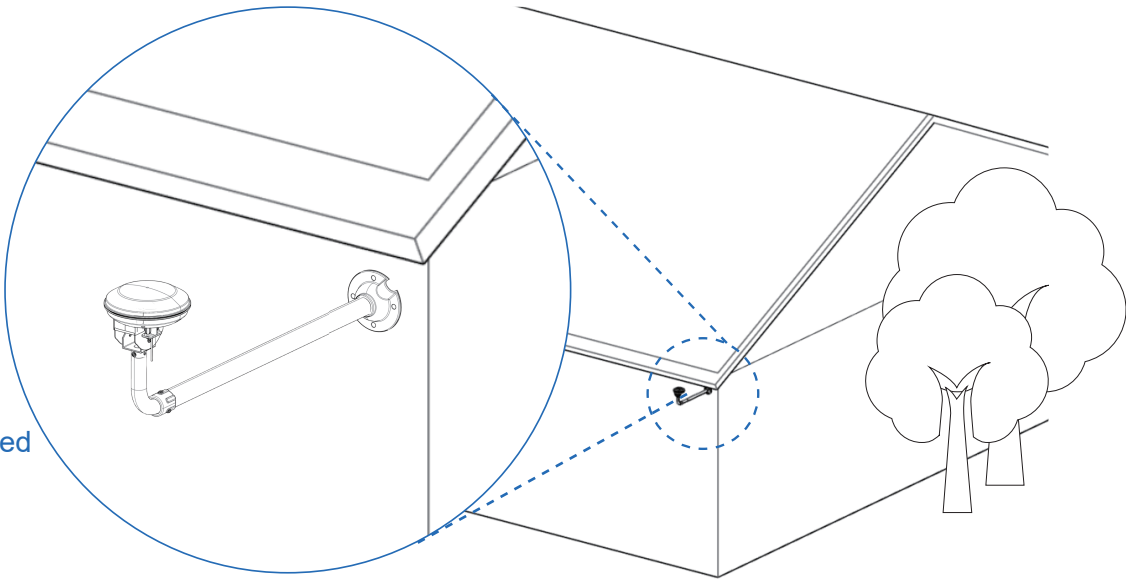
Other parts

Installation location

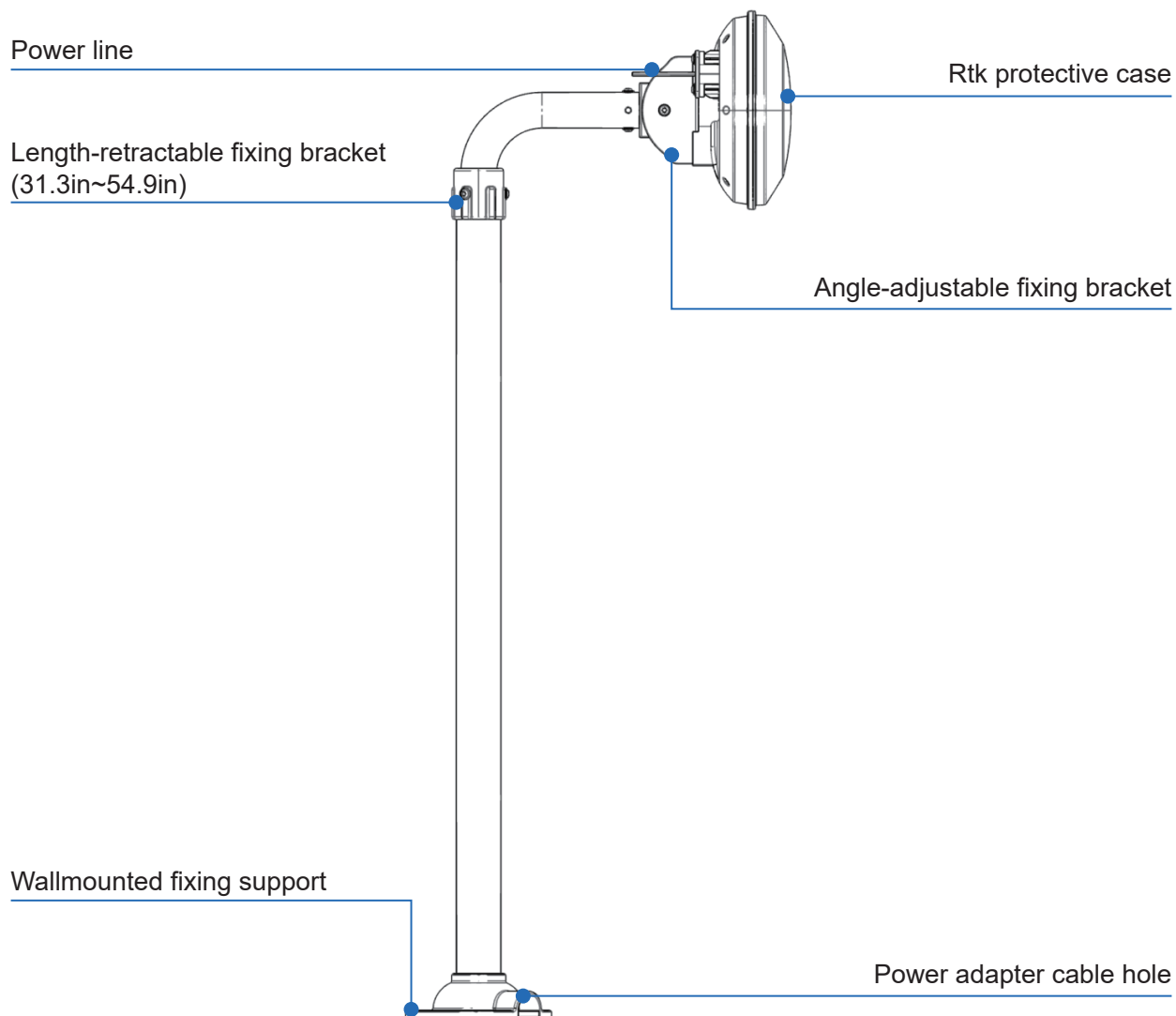
Please plan the installation location in advance. Install it close to the roof or on the outside of the balcony, and avoid locations where there are tall buildings, trees or other things that may block satellite signals around. Also, ensure a good view of the sky. Looking upward from the base station location, there should be no obvious obstructions in the sky area above 10° - 15°. This allows the base station to receive signals from multiple satellites simultaneously and improves the reliability and accuracy of positioning.

Notion:

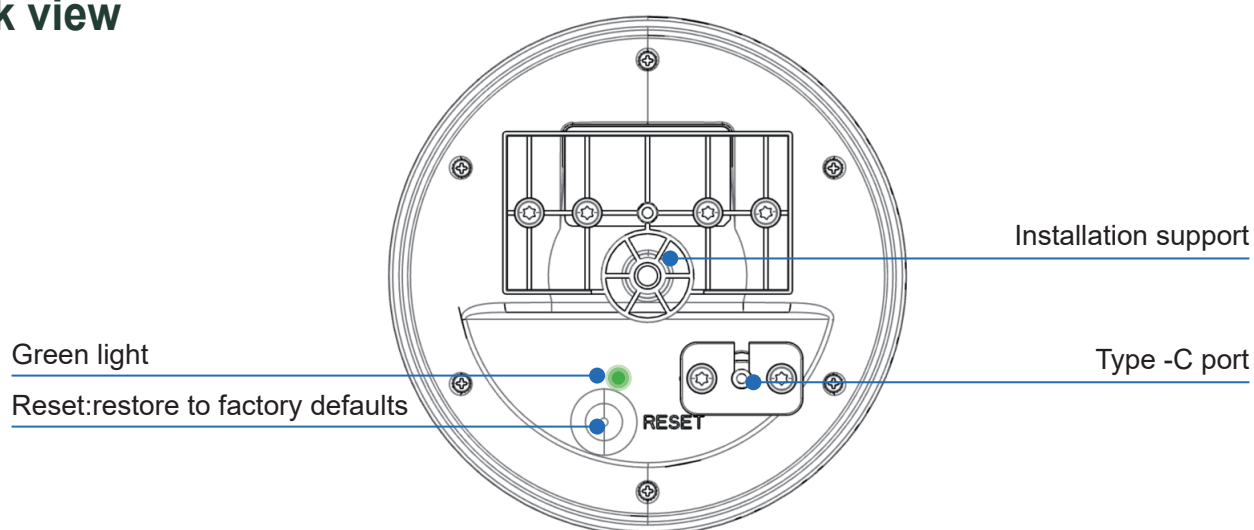
The installation should be carried out by professionals.



Right view



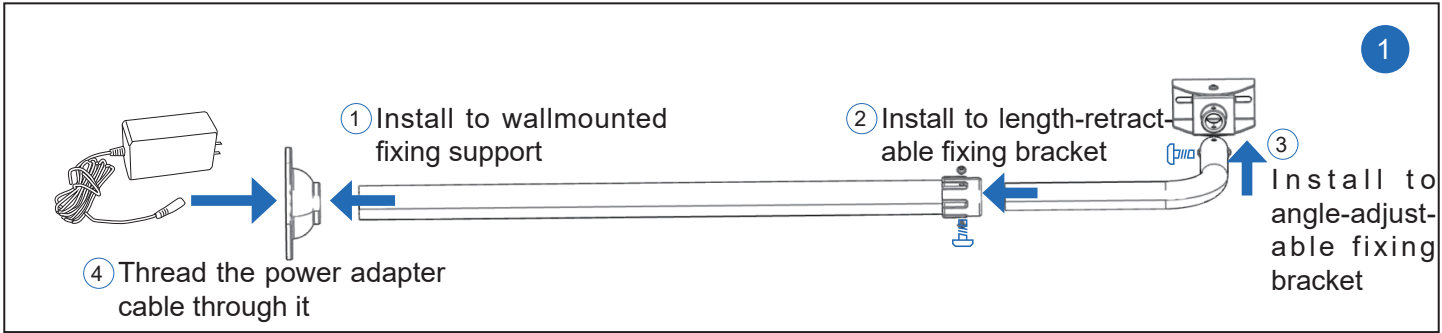
Back view



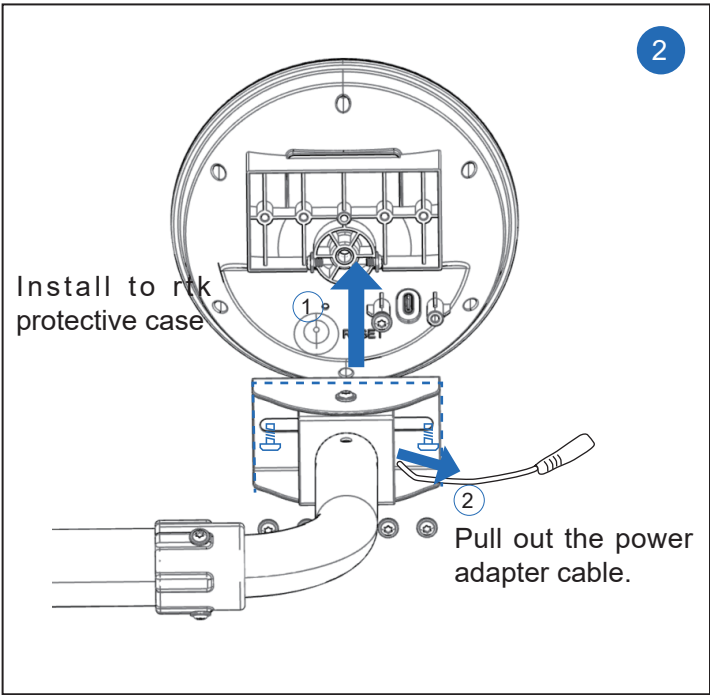
Green light

- Fast flashing (100 ms) indicates the network configuration state of 2.4G (priority 1).
- Slow flashing (1,000 ms) indicates that 2.4G is already connected (priority 2).
- Always on indicates that the server has been connected.

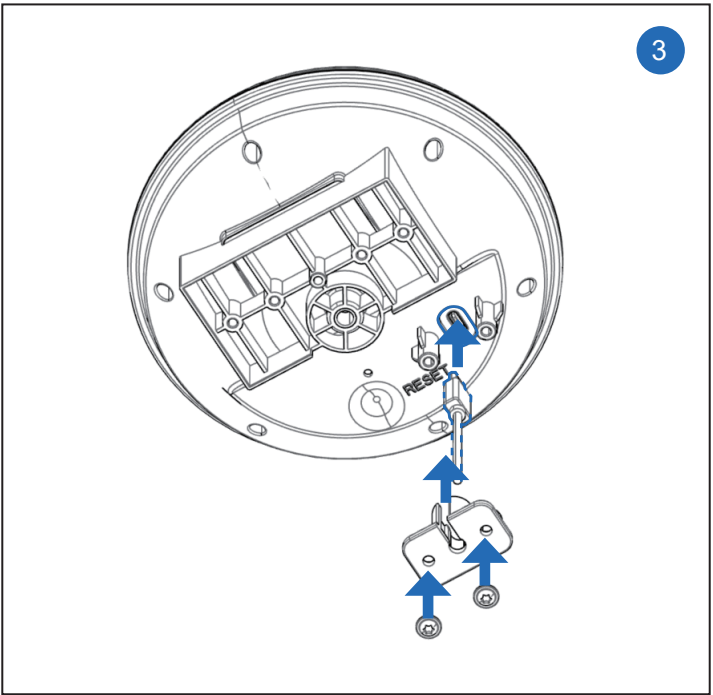
2.4 Install for use



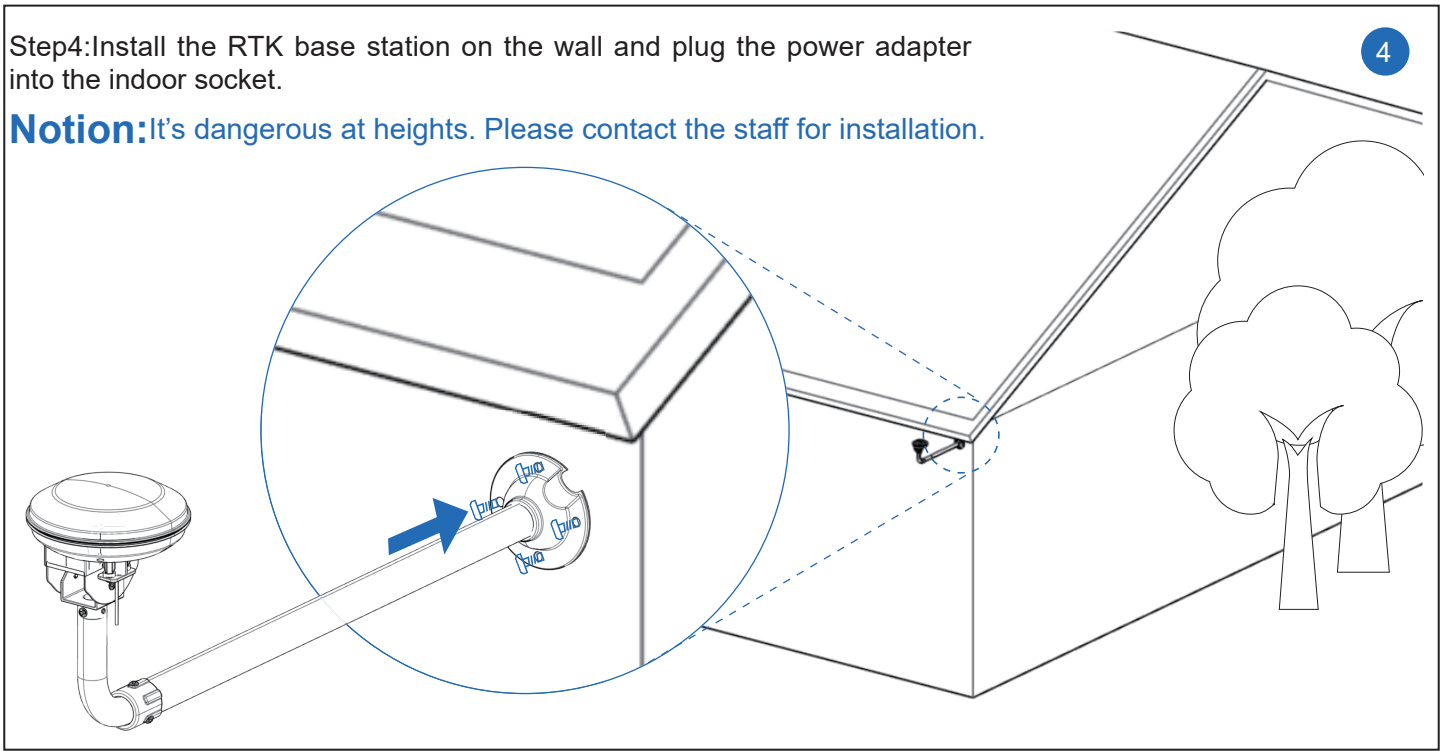
Step1:Install the mounting bracket of the RTK base station , and thread the power adapter cable through it.



Step2:Install the fixed pole of the RTK base station and the protective housing of the base station, and ensure that the pluggable interface for the power adapter cable is accessible.



Step3:Install the power adapter,Insert the Type-C interface into the RTK protective case, and then install the fasteners and screws properly to prevent the power adapter cable from being pulled out.



3. Troubleshooting and fault messages

SIGNAL		
SYMPTOM	CAUSE	SOLUTIONS
Weak GPS signal.	<ul style="list-style-type: none">• BESTMOW system error.• There are obstacles affecting the RTK base station signal.	<ul style="list-style-type: none">• Restart the BESTMOW, if it still fails, please consult the after-sales service.• Remove the obstacles or relocate the RTK base station to a place with a good signal.

4. Antenna Information

(1) Manufacturer: Guangzhou Hanwuji Electronics Technology Co., Ltd.

Address:Room 1119, 11th Floor, Building 1, Hongda Creative Park, No. 96, Yuanxiang Road, Yunpu Street, Huangpu District, Guangzhou City.

Antenna Gain: ≤4.3(peak) Antenna Type: PCB Antenna

Model: CA-C03

5. Warning

This device complies with Part 15 of the FCC Rules.

1. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

2. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

3. The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

4. Install and operate radiators at least 20 cm away from the human body in compliance with the FCC's radiation exposure limits for uncontrolled environments