



Barrier Gate

User Manual

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Symbol Conventions

The symbols that may be found in this document are defined as follows.

Symbol	Description
 Danger	Indicates a hazardous situation which, if not avoided, will or could result in death or serious injury.
 Caution	Indicates a potentially hazardous situation which, if not avoided, could result in equipment damage, data loss, performance degradation, or unexpected results.
 Note	Provides additional information to emphasize or supplement important points of the main text.

Contents

Chapter 1 Introduction	1
1.1 Product Introduction	1
1.2 Packing List	1
1.3 Barrier Gate Overview	2
1.4 Machine Core Structure	3
1.5 Boom Pole Overview	4
1.5.1 Octagonal Straight Boom Pole	4
1.5.2 Boom Pole with Strip Light	5
1.5.3 Cylinder Boom Pole	5
1.5.4 Anti-collision Cylinder Boom Pole	6
1.5.5 Anti-collision Octagonal Telescopic Boom Pole	6
1.5.6 Octagonal Telescopic Boom Pole	7
1.5.7 Folding Boom Pole	8
Chapter 2 Installation	9
2.1 Installation Environment	9
2.2 Install Barrier Gate Host	9
2.3 Install Boom Pole	11
2.3.1 Install Octagonal Straight Boom Pole	11
2.3.2 Install Boom Pole with Strip Light	12
2.3.3 Install Anti-collision Cylinder Boom Pole	14
2.3.4 Install Cylinder Boom Pole	16
2.3.5 Install Octagonal Telescopic Boom Pole	18
2.3.6 Install Anti-collision Octagonal Telescopic Boom Pole	20
2.3.7 Install Folding Boom Pole	23
2.4 Wiring	26
2.4.1 Connect to Power Supply	26
2.4.2 Connect to ANPR Camera	27
2.4.3 Connect to Anti-fall Radar	28
2.4.4 Connect to Vehicle Detector	31

2.4.5 Connect to Active Infrared Intrusion Detector	33
2.4.6 Connect to Arrow Indicator.....	35
2.4.7 Connect to Strip Light.....	35
Chapter 3 Parameters Configuration.....	37
3.1 Remote Control.....	37
3.2 Set Parameters via Control Board Buttons	37
3.2.1 Button Description	37
3.2.2 Operation Procedure.....	39
Chapter 4 Maintenance	43
4.1 Change Boom Pole	43
4.2 Change Spring	43
4.3 Change Machine Core	44
4.4 Left/Right Direction of Boom Pole	45
4.5 Change Left/Right Direction of Machine Core	47
A. FAQ.....	49

Chapter 1 Introduction

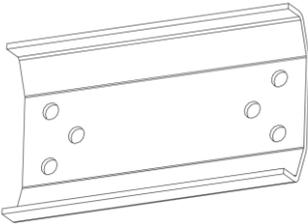
1.1 Product Introduction

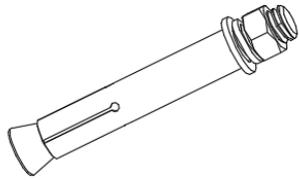
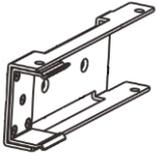
Barrier gate (hereinafter referred to as “device”) is the entrance and exit management device to limit motor vehicle passing. It can control the boom pole automatically via parking lot management system. Or you can control the boom pole via buttons on remote controller. Barrier gate is widely applicable to toll station, parking lot, the entrance and exit of community and unit, etc.

1.2 Packing List

Please check if there is any damage of the package first. Refer to the table below for the packing list of the barrier gate. According to the packing list, make sure no item is lost. After checking all the items are included, you can continue to install the device.

Table 1-1 Packing List

No.	Diagram	Name	Quantity
1		Barrier gate host	1
2		Remote controller	2
3		Chuck	1

No.	Diagram	Name	Quantity
4		Spindle rod screw set	4
5		Hex socket head cap screw	2
6		Flat washer	2
7		Hexagon lock nut	2
8		Key	2
9		Pole handle Cover (only for pole with strip light)	1
10		Pulling plate (only for folding pole)	1
11		Anti-collision chuck (only for Anti-collision Octagonal pole)	1

1.3 Barrier Gate Overview

 **Note**

The appearances of the devices vary with different models. The figure below just takes an example. Refer to the actual device for details.

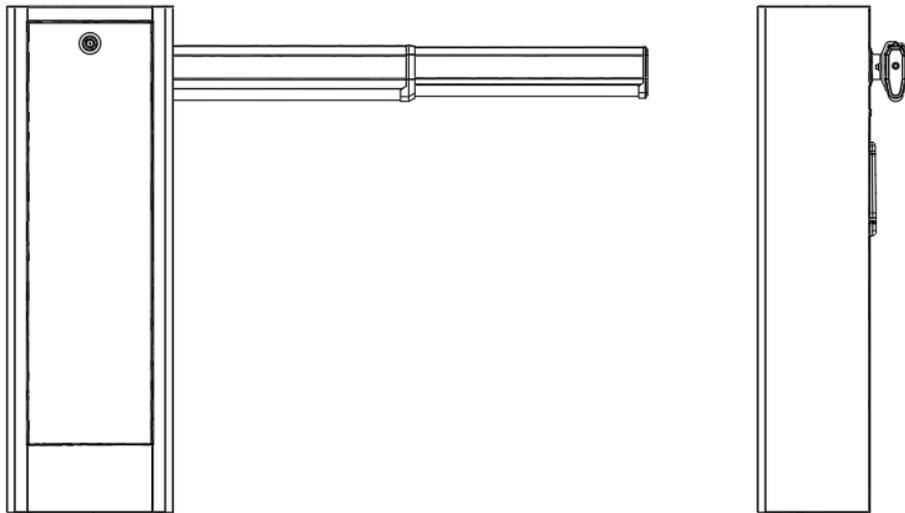


Figure 1-1 Barrier Gate Overview

1.4 Machine Core Structure

After you open the front cover, you can see the machine core of the device host.

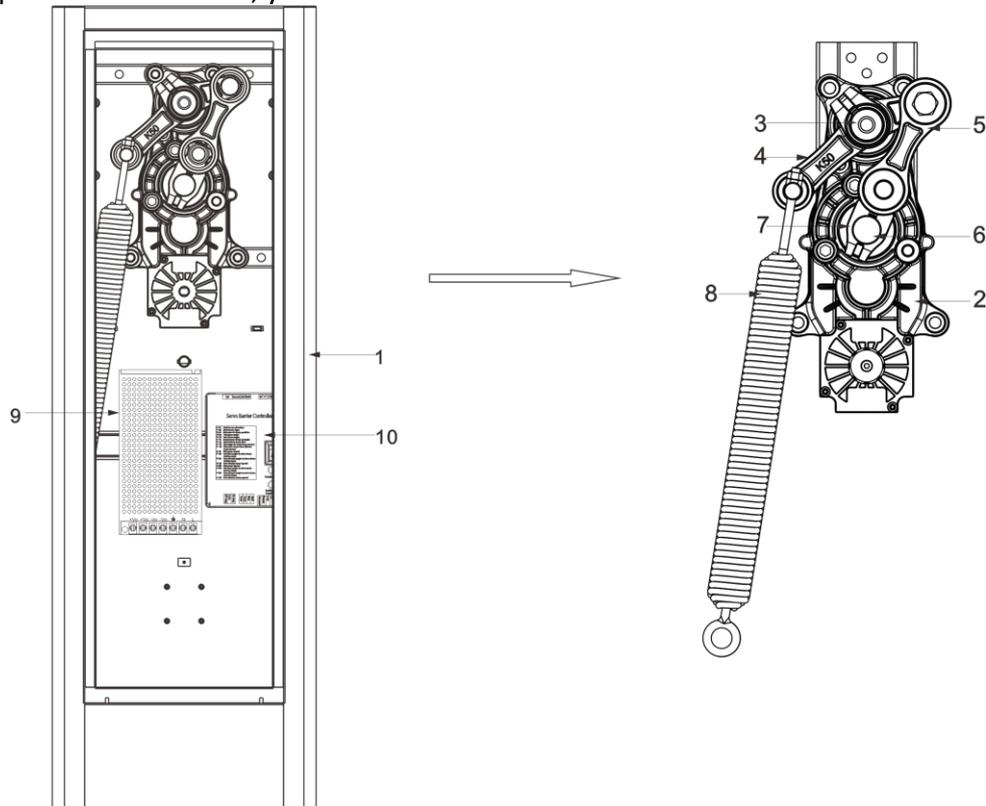


Figure 1-2 Machine Core Structure

Table 1-2 Machine Core Component Description

No.	Description	No.	Description
1	Host	6	Output shaft
2	Reducer	7	Output shaft crank arm
3	Principal axis	8	Spring
4	Spindle crank arm	9	Power supply
5	Linkage arm	10	Controller

1.5 Boom Pole Overview

The normal pole is not anti-collision, the model name with the word "anti-collision" supports this function.

1.5.1 Octagonal Straight Boom Pole

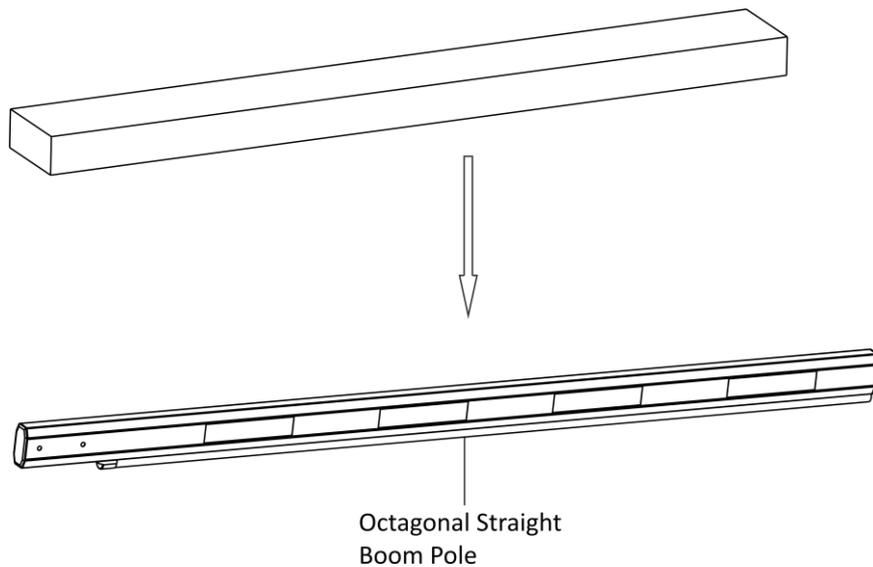


Figure 1-3 Octagonal Straight Boom Pole

Table 1-3 Octagonal Straight Boom Pole Packing List

Item	Quantity
Octagonal Straight Boom Pole	1

1.5.2 Boom Pole with Strip Light

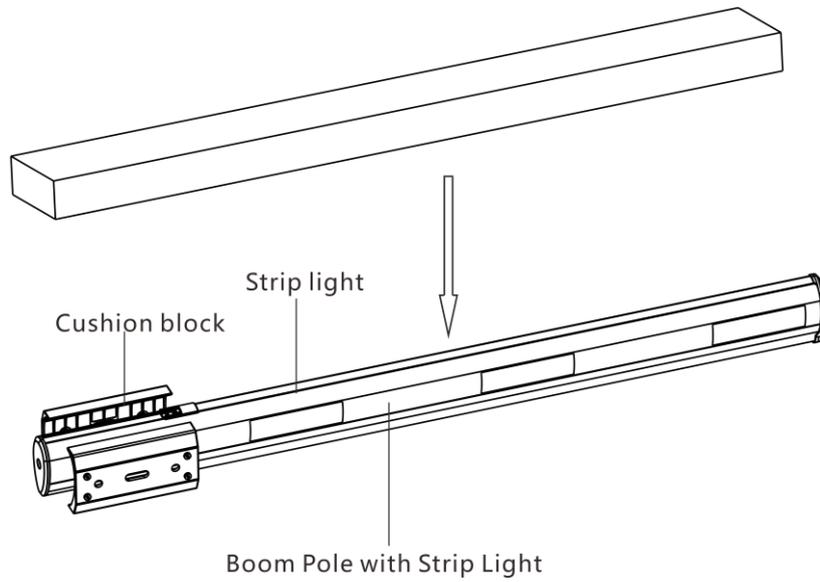


Figure 1-4 Boom Pole with Strip Light

Table 1-4 Boom Pole with Strip Light Packing List

Item	Quantity
Boom Pole with Strip Light	1
Cushion block	2

1.5.3 Cylinder Boom Pole

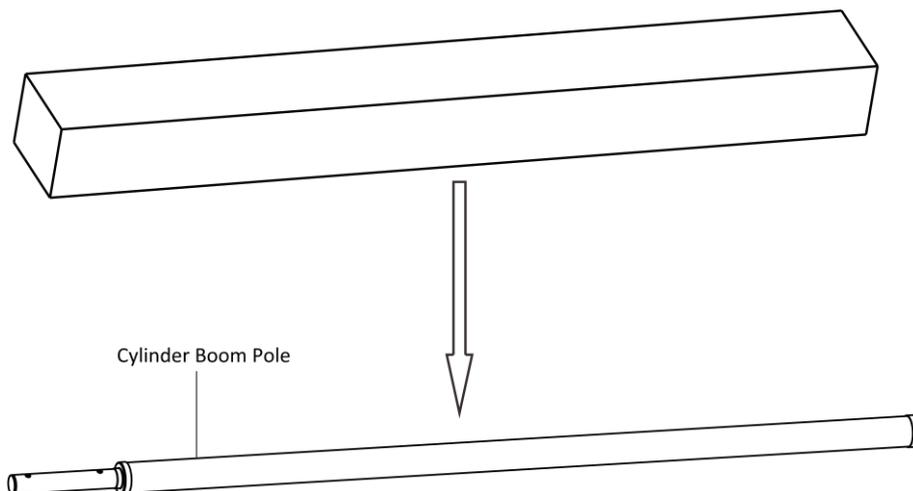


Figure 1-5 Cylinder Boom Pole

Table 1-5 Cylinder Boom Pole Packing List

Item	Quantity
Cylinder Boom Pole	1

1.5.4 Anti-collision Cylinder Boom Pole

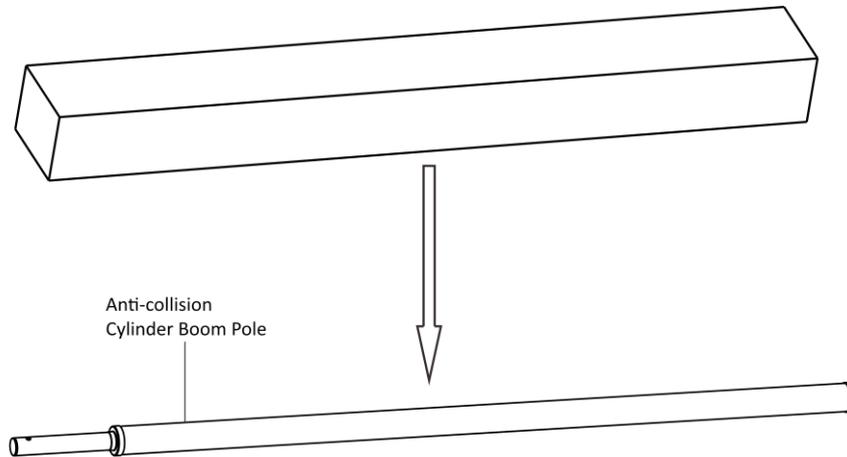


Figure 1-6 Anti-collision Cylinder Boom Pole

Table 1-6 Anti-collision Cylinder Boom Pole Packing List

Item	Quantity
Anti-collision Cylinder Boom Pole	1

1.5.5 Anti-collision Octagonal Telescopic Boom Pole

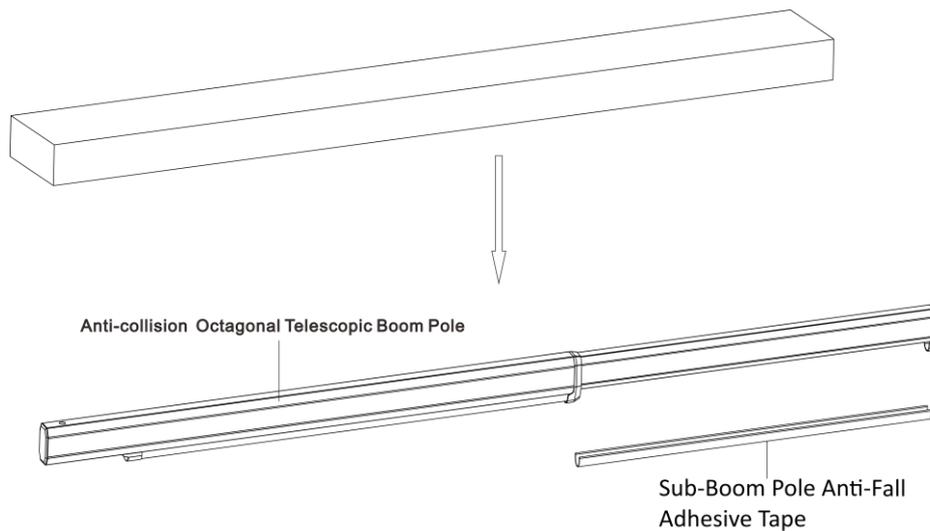


Figure 1-7 Anti-collision Octagonal Telescopic Boom Pole

Table 1-7 Anti-collision Octagonal Telescopic Boom Pole Packing List

Item	Quantity
Anti-collision Octagonal Telescopic Boom Pole	1
Sub-Boom Pole Anti-Fall Adhesive Tape	1

1.5.6 Octagonal Telescopic Boom Pole

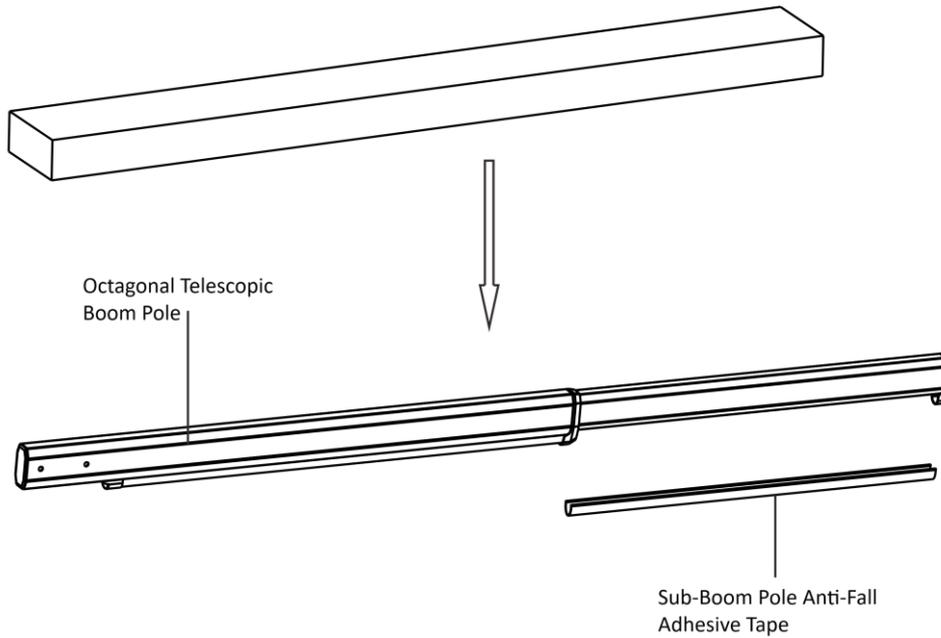


Figure 1-8 Octagonal Telescopic Boom Pole

Table 1-8 Octagonal Telescopic Boom Pole Packing List

Item	Quantity
Octagonal Telescopic Boom Pole	1
Sub-Boom Pole Anti-Fall Adhesive Tape	1

1.5.7 Folding Boom Pole

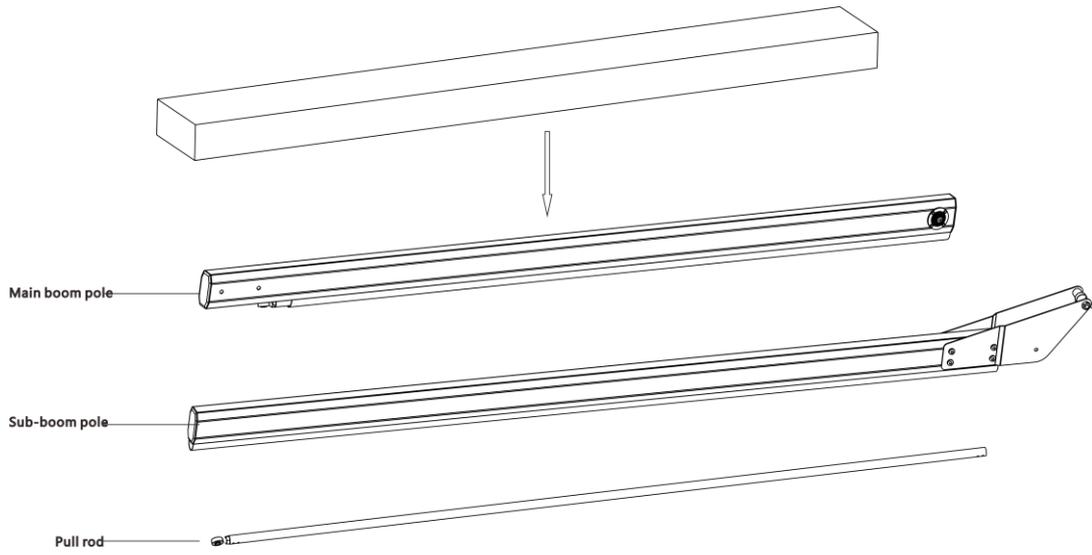


Figure 1-9 Folding Boom Pole

Table 1-9 Folding Boom Pole Packing List

Item	Quantity
Sub-Boom Pole	1
Main Boom Pole	1
Pull Rod	1

Chapter 2 Installation

2.1 Installation Environment

The installation position of the barrier gate should meet the customer's requirements and the following requirements.

- The installation space should be large enough to guarantee the boom pole can rise or fall normally.
- Install the barrier gate on horizontal ground.
- Installation surface requirements:
 - If no base is installed, the installation surface must be firm enough to fix the host to guarantee the barrier gate can run stably.
 - If base is needed, it is recommended to install the base with quick setting cement. The base should be horizontal. The height should be no more than 200 mm. The length and width of base should be larger than those of the actual barrier gate installation surface.
- If the barrier gate is anti-collision, the boom pole will flick 90° in reverse direction if it is impacted. Make sure there is no obstacle in the range.
- Bury the cables before installation. The conduit should be 50 mm higher than the ground to avoid the gathered water on the ground to enter into the cable and cause short circuit.

2.2 Install Barrier Gate Host

Follow the steps below to fix the host of barrier gate.

Steps

1. Mark the positions of holes on the refuge island as shown below. The hole depth is approx. 80 mm.

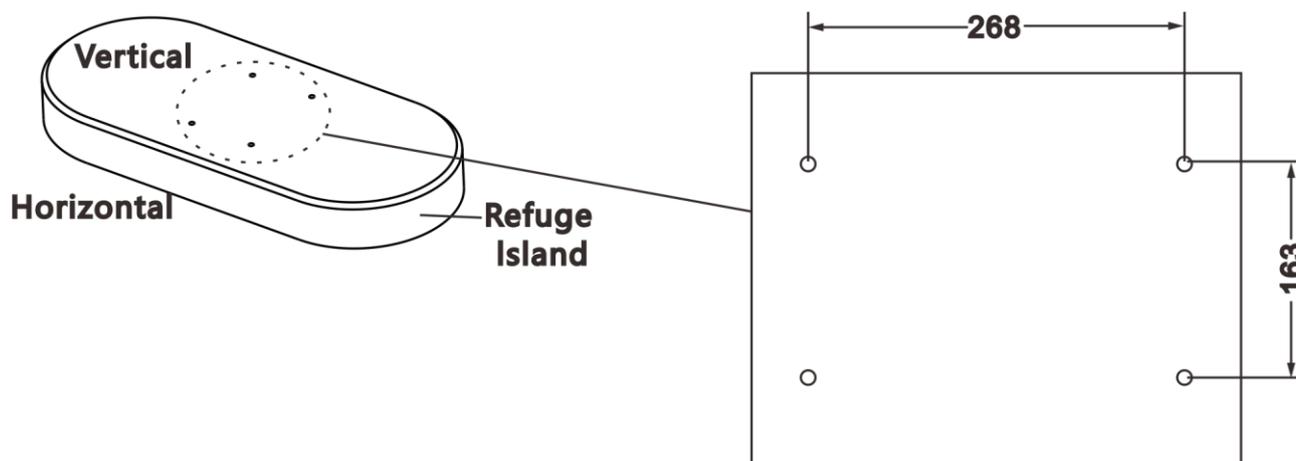


Figure 2-1 Mark Position

Note

The suggestions for positions of holes:

- The holes in vertical direction should be near to the switch.
- If the entrance/exit is unidirectional, the holes should be in the horizontal center of the refuge island. If the entrance/exit is bi-directional, the holes in the horizontal direction should be far away from the entrance/exit.

2. Punch the four M12 × 100 expansion screws in the package into the marked positions on the refuge island, and fasten the nuts to make the screws expand to grip the ground. Then unfasten the nuts.

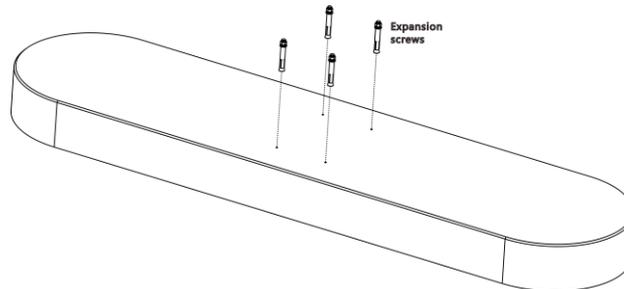


Figure 2-2 Install Expansion Screws

3. Turn the key clockwise to open the front cover.

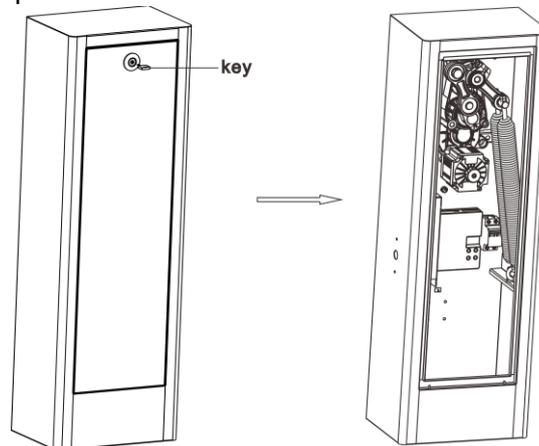


Figure 2-3 Open Front Cover

4. Fix the host.
 - 1) Put the layers on the host bottom and keep them perpendicular to the barrier gate's switch.
 - 2) Put the host on the positions of expansion screws on the refuge island to make the screws pass through the layers. Keep the layers perpendicular to the barrier gate's switch.
 - 3) Fasten the expansion nuts on the screws to fix the host.

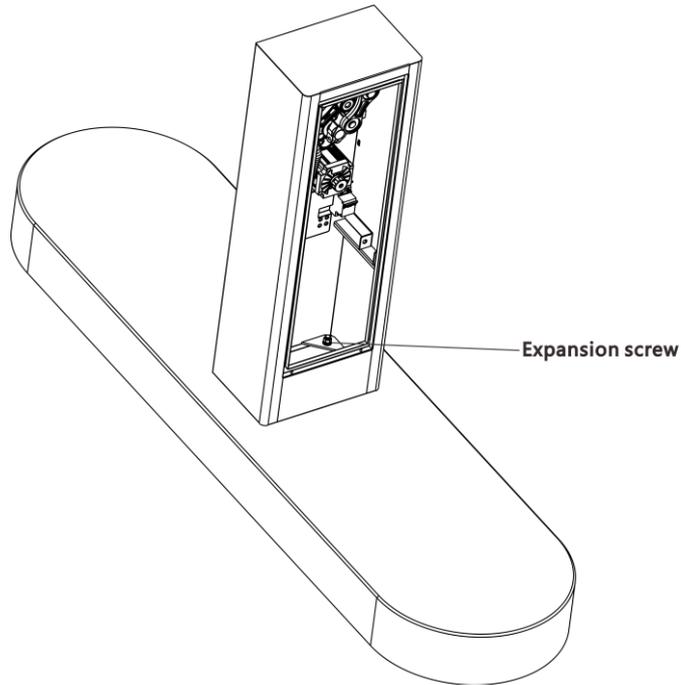


Figure 2-4 Fix Host

! Danger

Keep the supporting bracket of the boom pole vertically upward to avoid accident caused by accidental rotation.

2.3 Install Boom Pole

2.3.1 Install Octagonal Straight Boom Pole

Steps

1. Unscrew the cap nuts, spring washers, and flat washers on the other sides of the four assembling bolts. Save the components and parts for the following installations.

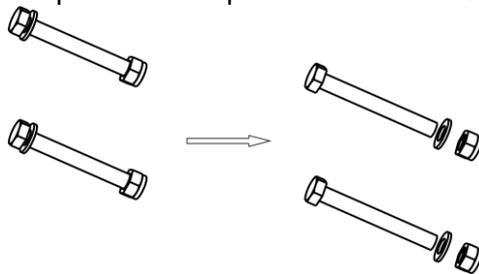


Figure 2-5 Unscrew Assembling Bolts

2. Install the chuck to the boom pole with the bolts as shown in the figure below.

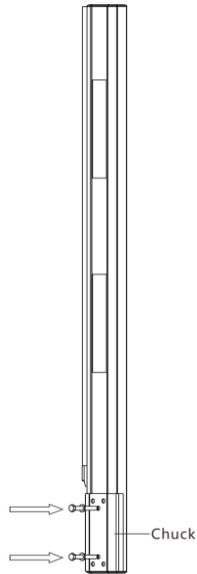


Figure 2-6 Install Chuck

3. Install the boom pole to the spindle rod and fasten the other ends of the bolts with the disassembled spring washers, flat washers, and cap nuts.

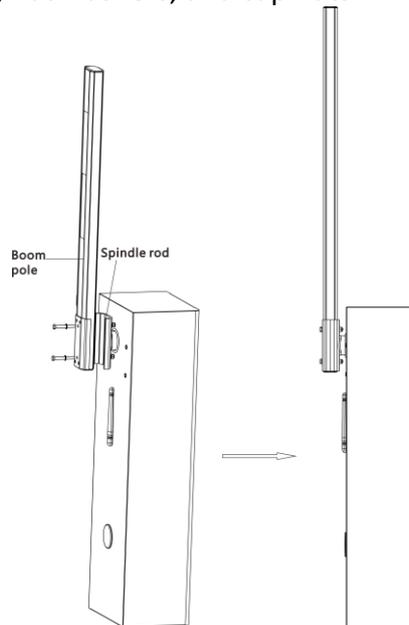


Figure 2-7 Fix Octagonal Straight Boom Pole

2.3.2 Install Boom Pole with Strip Light

Steps

1. Unscrew the cap nuts, spring washers, and flat washers on the other sides of the four

assembling bolts. Save the components and parts for the following installations.

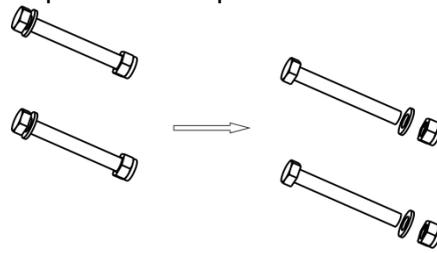


Figure 2-8 Unscrew Assembling Bolts

2. Install the chuck and cover to the boom pole with the bolts as shown in the figure below.

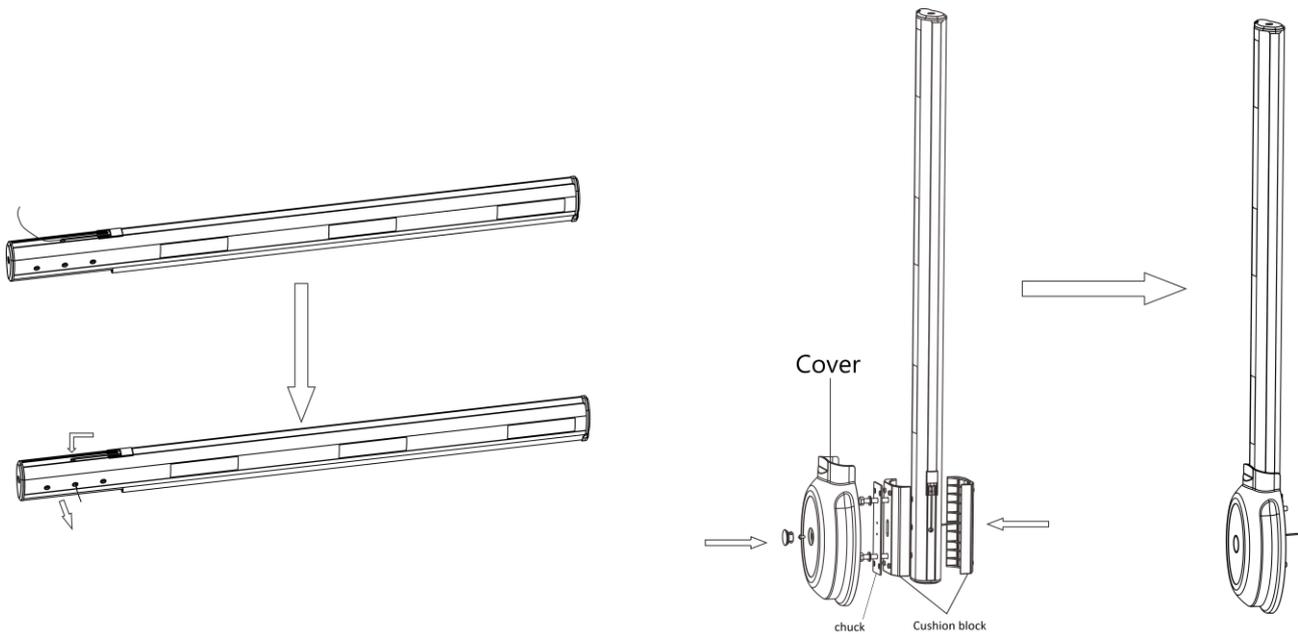


Figure 2-9 Install Chuck and Cover

3. Install the boom pole to the spindle rod and fasten the other ends of the bolts with the disassembled spring washers, flat washers, and cap nuts.

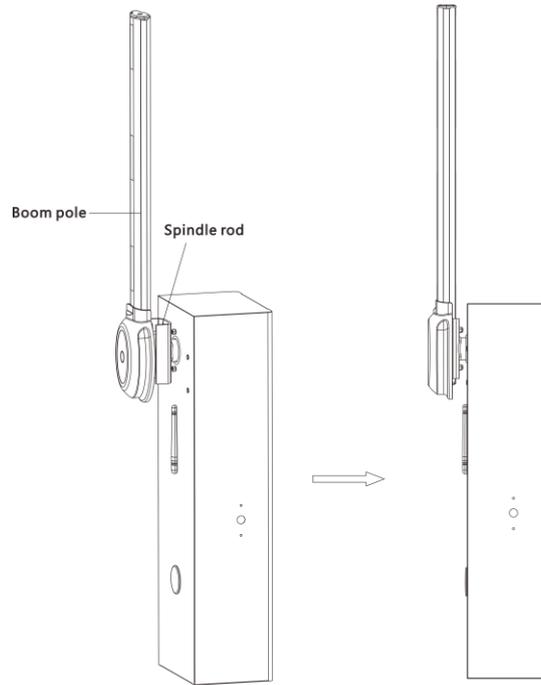


Figure 2-10 Fix Boom Pole with Strip Light

2.3.3 Install Anti-collision Cylinder Boom Pole

Steps

1. Stuff the boom pole in the spindle rod aslant as shown in the figure below. Align the installation hole on the boom pole with that on the spindle rod.

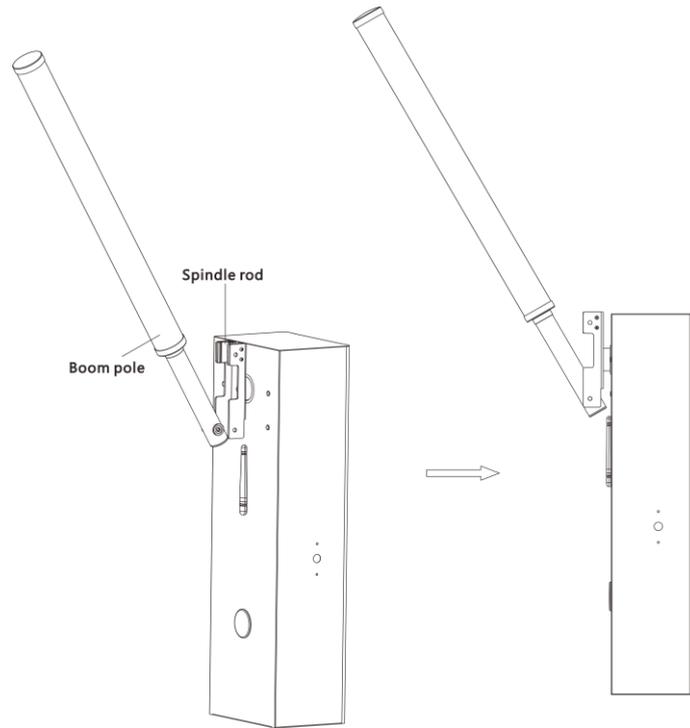


Figure 2-11 Stuff Boom Pole Aslant

2. Insert the M10 × 85 hex socket headcap screw into the installation hole, and push the boom pole into the spindle rod quickly according to the directions as shown in the figure below.

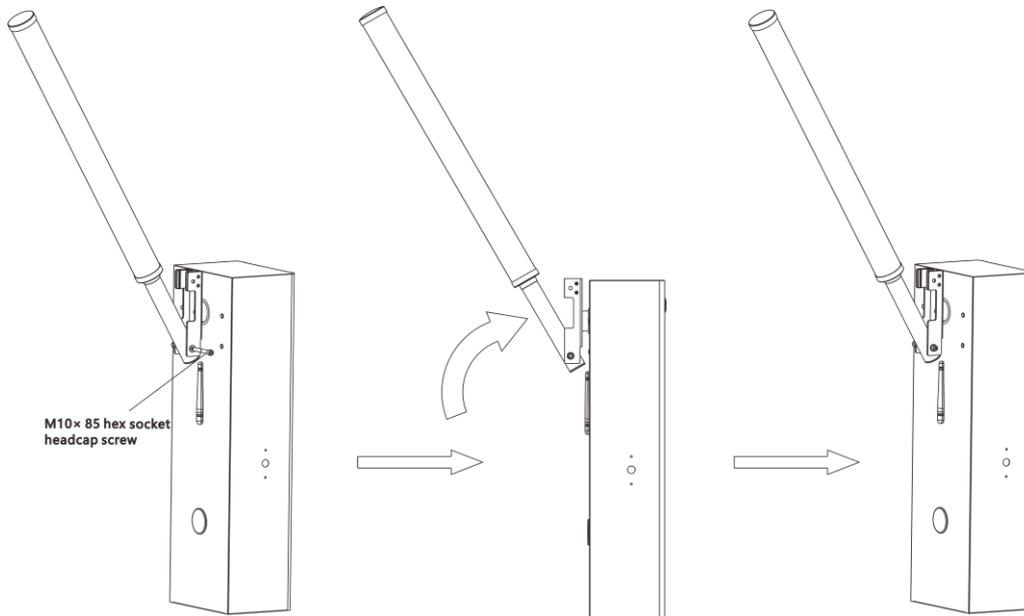


Figure 2-12 Install Anti-collision Cylinder Boom Pole

3. Fix the M10 cap nut to the screw to fix the boom pole.

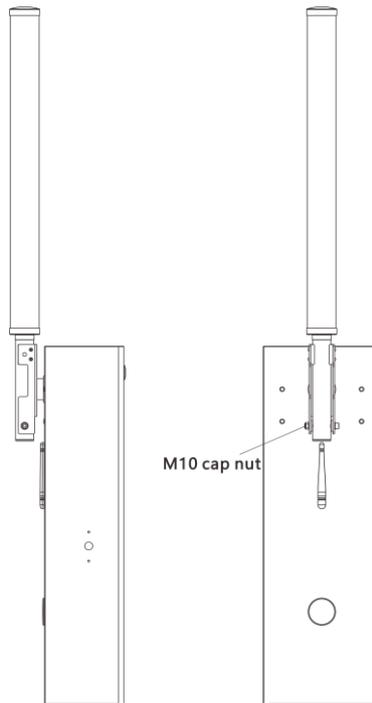


Figure 2-13 Fix Boom Pole

2.3.4 Install Cylinder Boom Pole

Steps

1. Stuff the boom pole in the spindle rod aslant as shown in the figure below. Align the installation hole on the boom pole with that on the spindle rod.

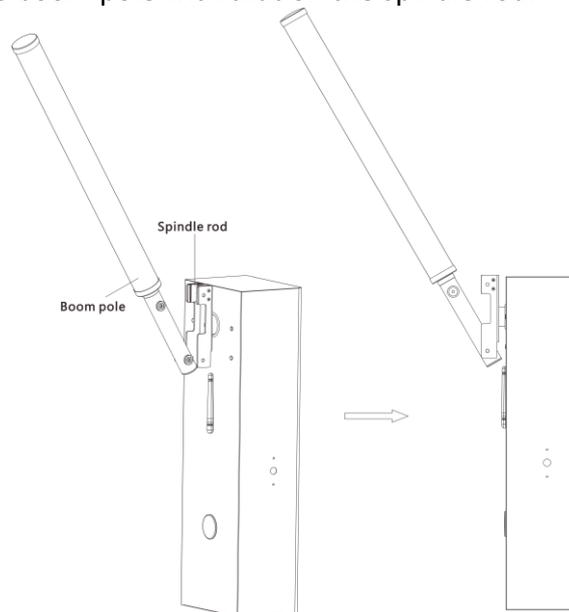


Figure 2-14 Stuff Boom Pole Aslant

2. Insert the M10 × 85 hex socket head cap screw into the installation hole, and push the boom pole into the spindle rod quickly according to the directions as shown in the figure below.

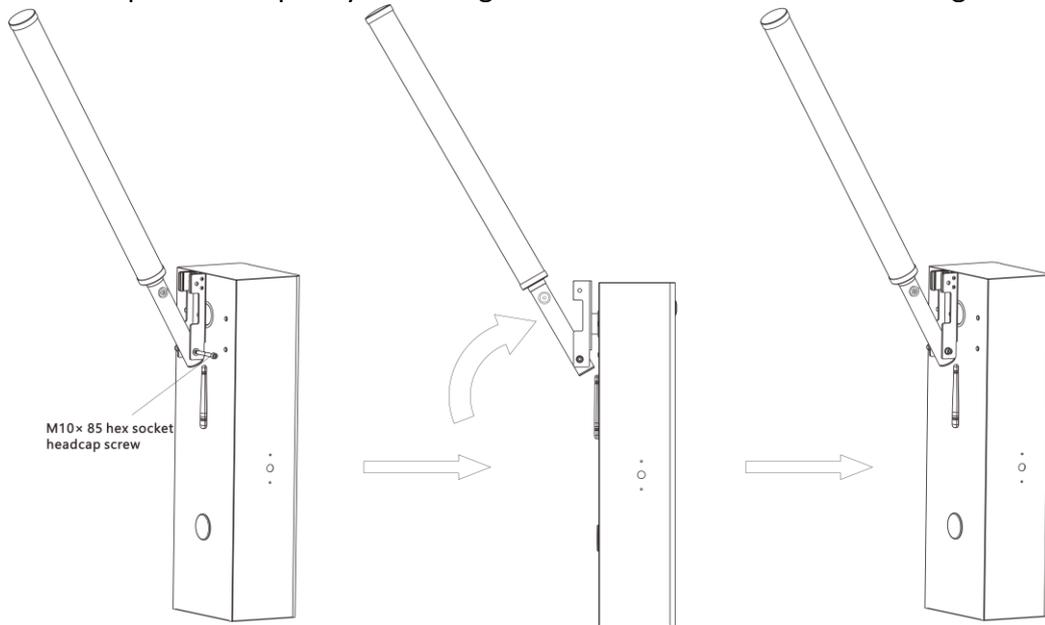


Figure 2-15 Install Cylinder Boom Pole

3. Fix the M10 cap nut to the screw to fix the boom pole.

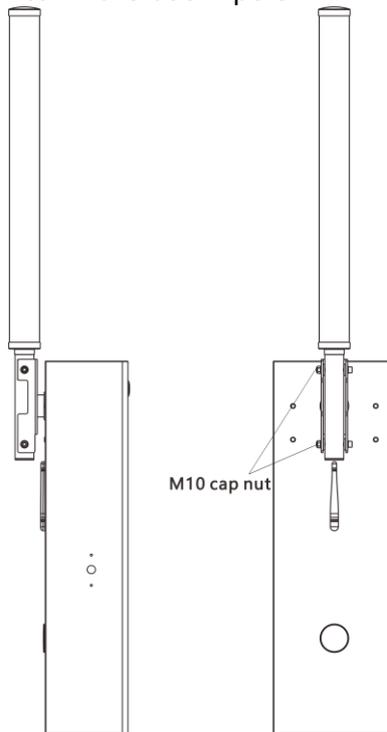


Figure 2-16 Fix Boom pole

2.3.5 Install Octagonal Telescopic Boom Pole

Steps

1. Install the octagonal telescopic boom pole.
 - 1) Pull the sub-boom pole out according to the direction shown in the figure below. Reach the desired length.

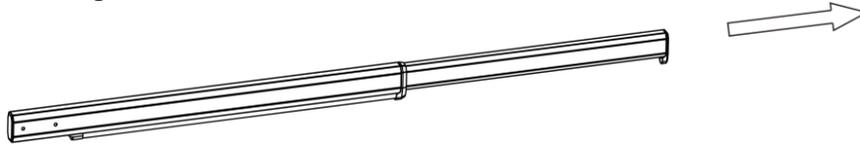


Figure 2-17 Pull Sub-Boom Pole

- 2) Lock the M5 × 10 pan head hex screws.

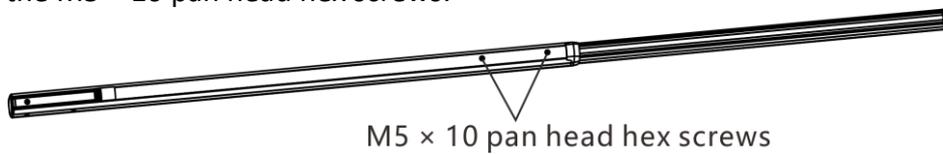


Figure 2-18 Fix Screws

- 3) Remove the end cover of the sub-boom pole. Insert the anti-fall adhesive tape into the sub-boom pole. After the anti-fall adhesive tape is inserted to the limit position, cut the projecting adhesive tape.

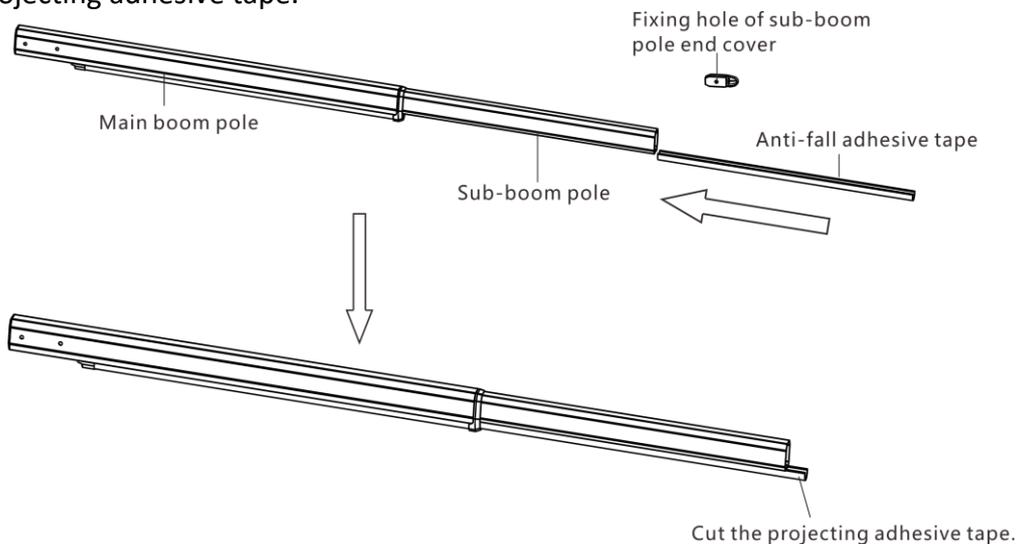


Figure 2-19 Insert Anti-Fall Adhesive Tape

- 4) Install the end cover to the sub-boom pole.

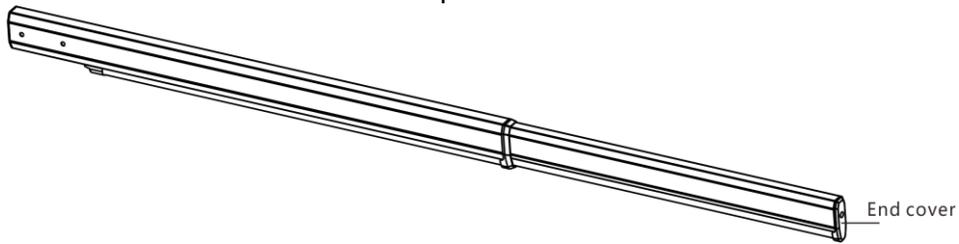


Figure 2-20 Install End Cover

2. Install the octagonal telescopic boom pole to the host.
 - 1) Unscrew the cap nuts, spring washers, and flat washers on the other sides of the four assembling bolts. Save the components and parts for the following installations.

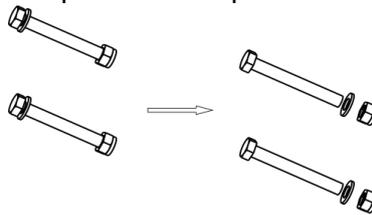


Figure 2-21 Unscrew Assembling Bolts

- 2) Install the chuck to the boom pole with the bolts as shown in the figure below.

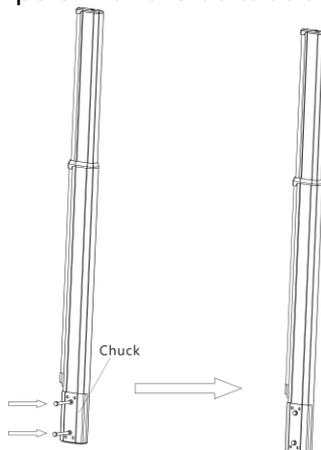


Figure 2-22 Install Chuck

- 3) Install the boom pole to the spindle rod and fasten the other ends of the bolts with the disassembled spring washers, flat washers, and cap nuts.

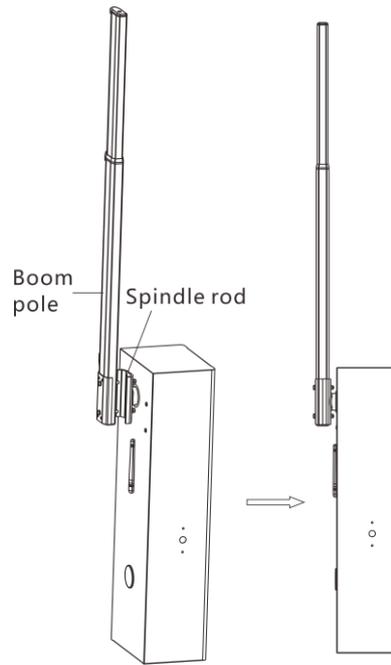


Figure 2-23 Install Octagonal Telescopic Boom Pole

2.3.6 Install Anti-collision Octagonal Telescopic Boom Pole

Steps

1. Install the octagonal telescopic boom pole.

1) Pull the sub-boom pole out according to the direction shown in the figure below. Align the installation holes on the main boom pole and sub-boom pole.

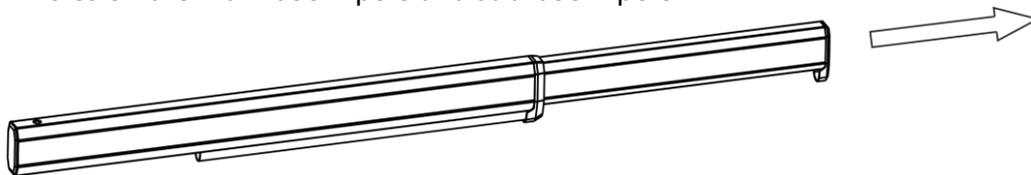


Figure 2-24 Pull Sub-Boom Pole

2) Lock the M5 × 10 pan head hex screws.

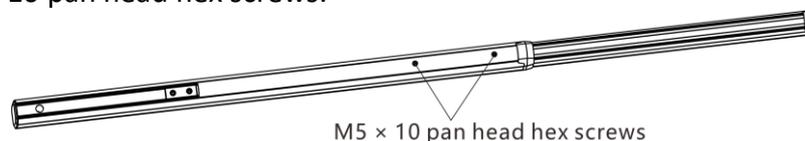


Figure 2-25 Fix Sub-Boom Pole

3) Remove the end cover of the sub-boom pole. Insert the anti-fall adhesive tape into the sub-boom pole. After the anti-fall adhesive tape is inserted to the limit position, cut the projecting adhesive tape.

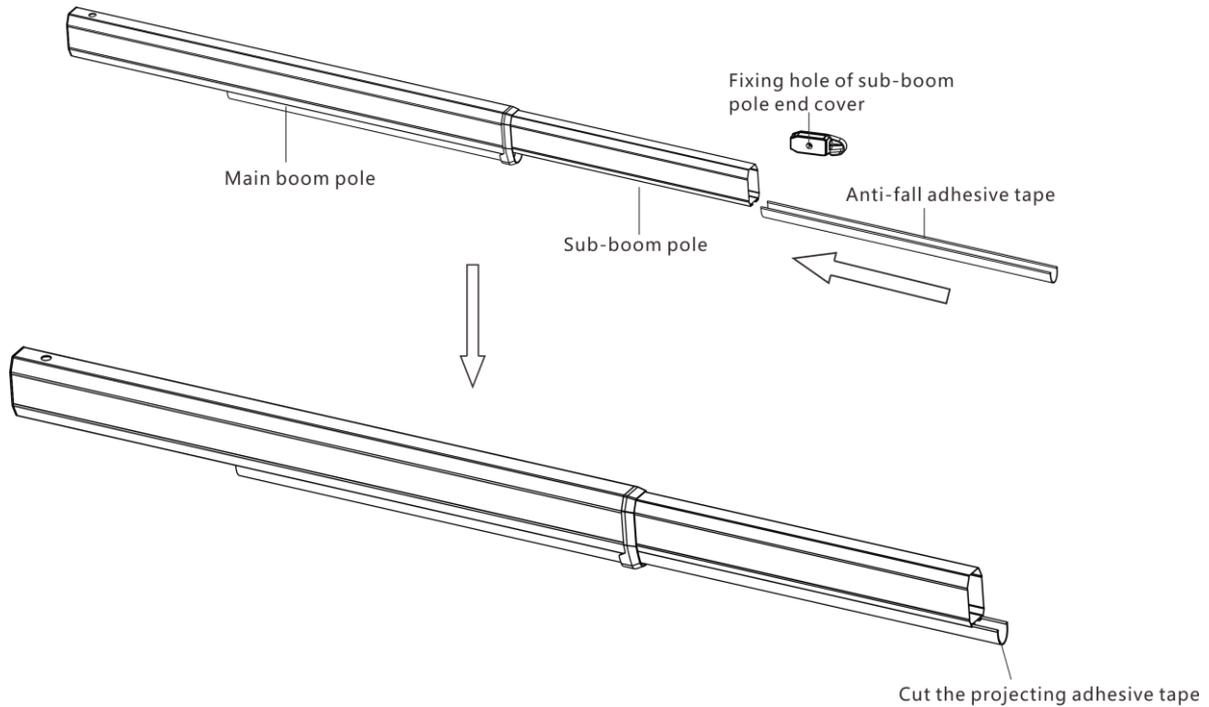


Figure 2-26 Insert Anti-Fall Adhesive Tape

- 4) Install the end cover to the sub-boom pole.

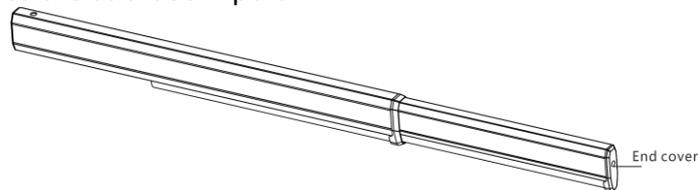


Figure 2-27 Install End Cover

2. Install the Anti-collision octagonal telescopic boom pole to the host.
- 1) Install the chuck to the boom pole with the bolts as shown in the figure below. Unscrew the cap nuts, spring washers, and flat washers on the other sides of the four assembling bolts. Save the components and parts for the following installations.

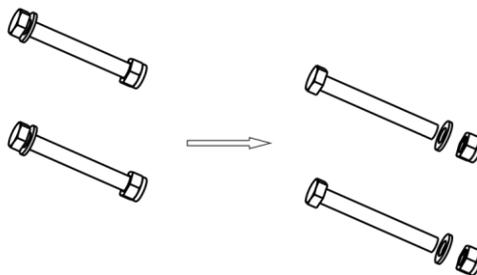


Figure 2-28 Unscrew Assembling Bolts

- 2) Install the anti-collision chuck on the spindle rod handle.

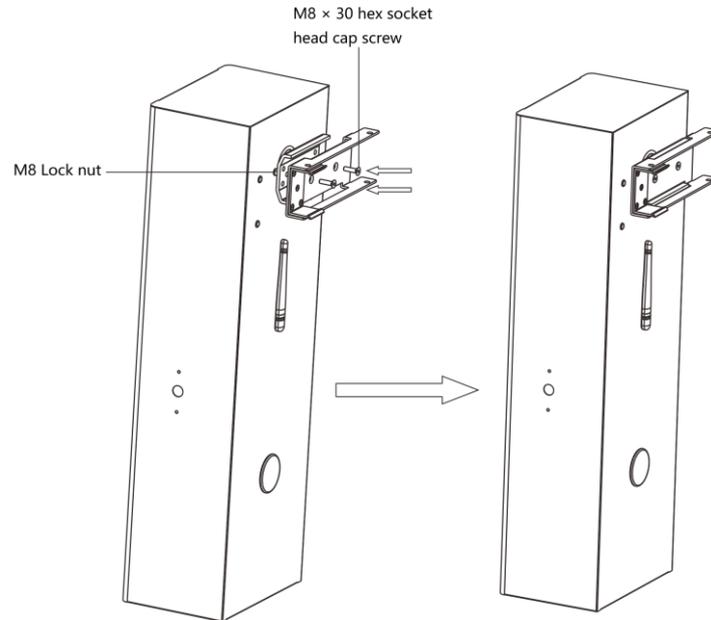


Figure 2-29 Install Anti-collision chuck

3) Install the boom pole to the chuck with the bolts as shown in the figure below.

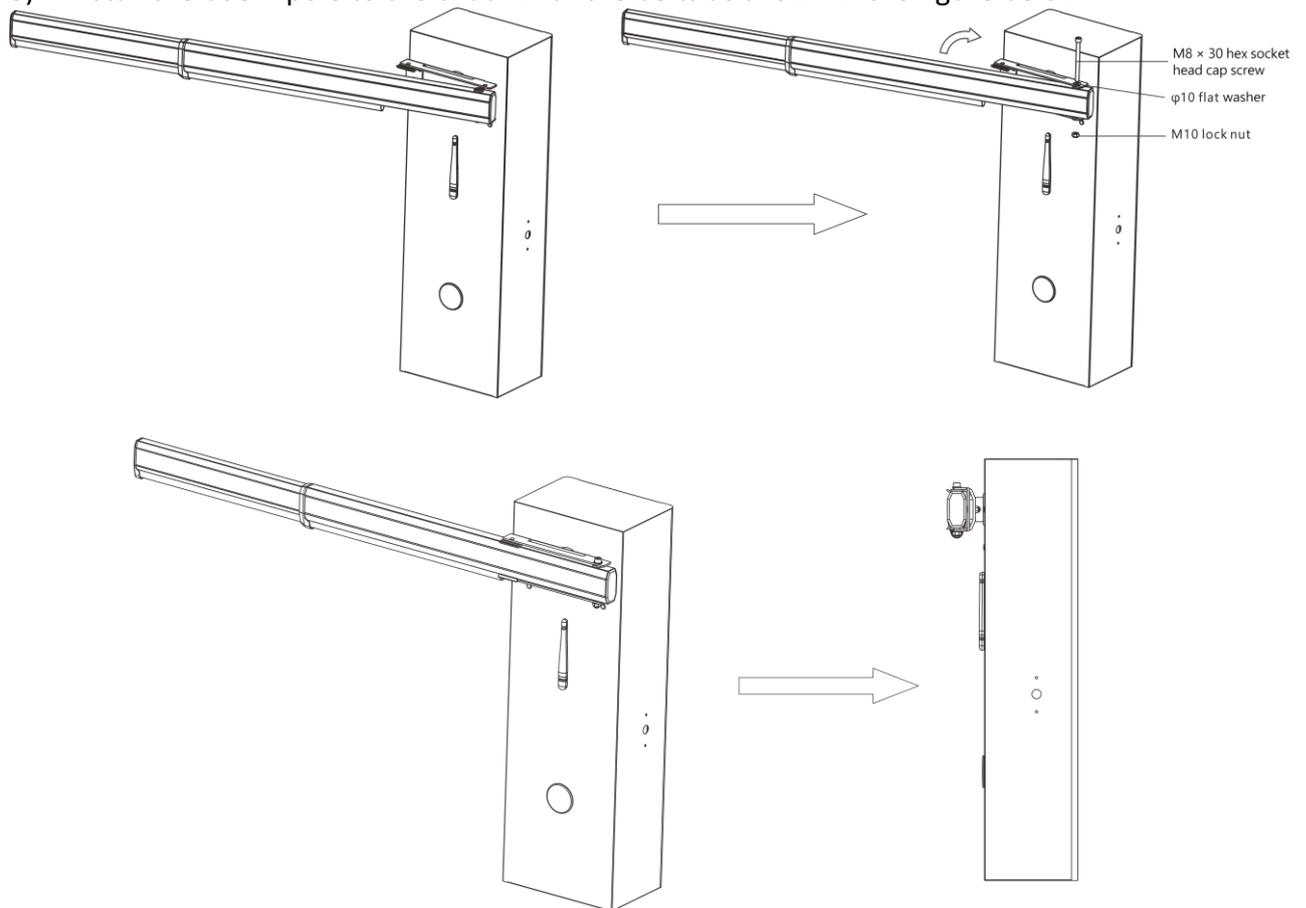


Figure 2-30 Install Anti-collision Octagonal Telescopic Boom Pole

2.3.7 Install Folding Boom Pole

Steps

1. Compose the main boom pole and sub-boom pole.
 - 1) Force apart the sub-boom pole joint boards, and install the main boom pole. Make sure that the installation holes on the joint boards of the sub-boom pole can clip into the black bushing on the main boom pole.

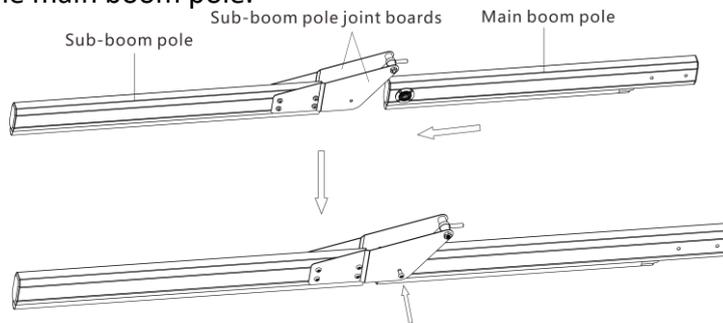


Figure 2-31 Connect Main Boom Pole and Sub-Boom Pole

2. Install the folding boom pole to the host.

Note

Here we take example of the right direction barrier gate.

- 1) Remove the plastic nut on the installation position of the right direction main boom pole pull rod joint.

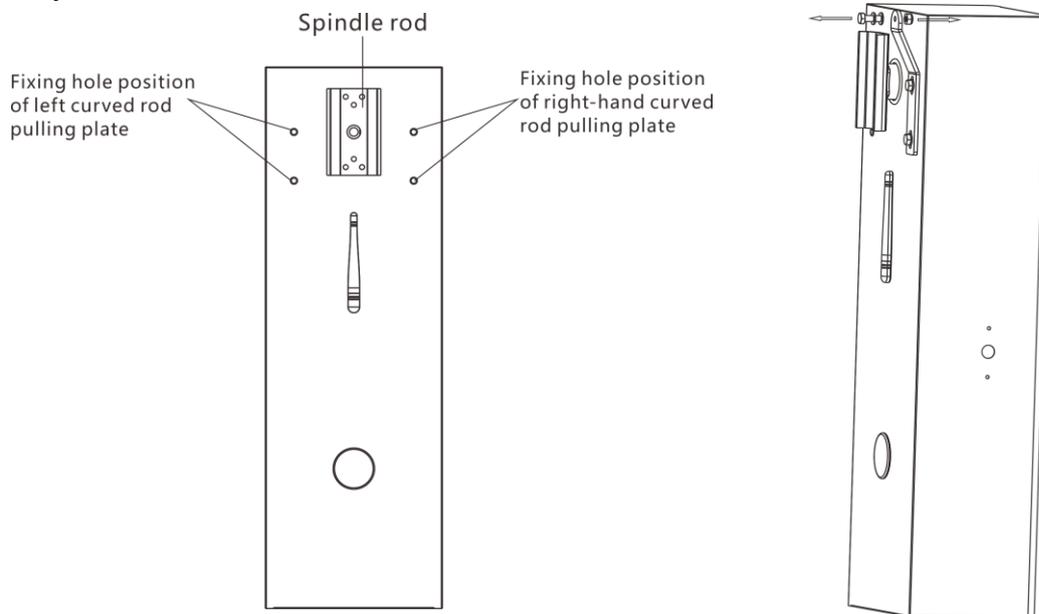


Figure 2-32 Remove Plastic Nut

- 2) Unscrew the cap nuts, spring washers, and flat washers on the other sides of the four assembling bolts. Save the components and parts for the following installations.

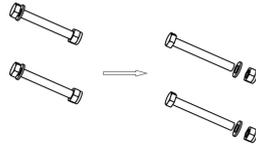


Figure 2-33 Unscrew Assembling Bolts

- 3) Install the chuck to the boom pole with the bolts as shown in the figure below.

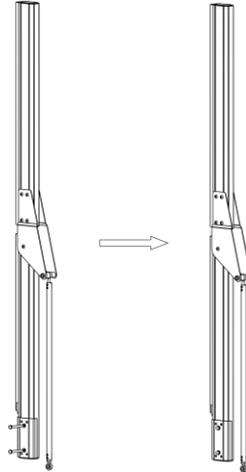


Figure 2-34 Install Chuck

- 4) Install the boom pole to the spindle rod and fasten the other ends of the bolts with the disassembled spring washers, flat washers, and cap nuts.

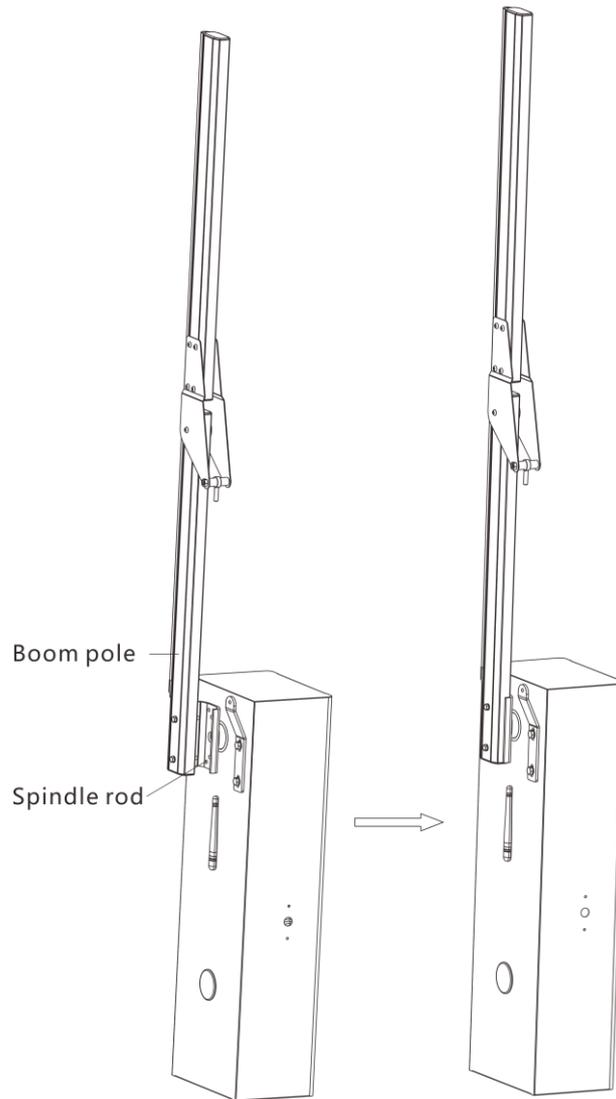


Figure 2-35 Install Folding Boom Pole

- 5) Power off the device. Pull the main boom pole to the horizontal position, and place the sub-boom pole nearly to the horizontal position. Wrest the pull rod between the sub-boom pole pull rod joint and the main boom pole pull rod joint. Wrest the pull rod continuously to keep the main boom pole and sub-boom pole in the horizontal position, and fasten the nuts on

both ends.

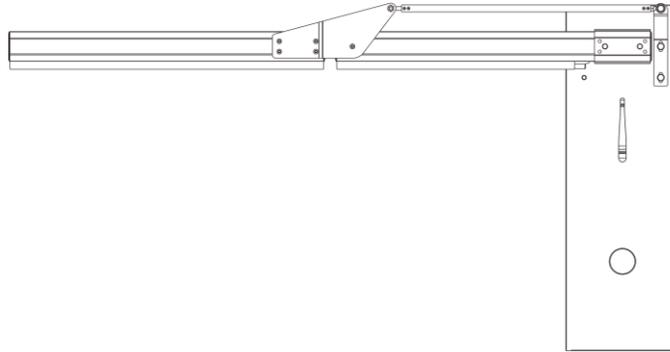


Figure 2-36 Connect Boom Pole to Host via Pull Rod

2.4 Wiring

2.4.1 Connect to Power Supply

Connect the barrier gate to the power supply according to the figure shown below.

 **Note**

There is a Dip switch on the power module, could switch to 115V or 230V, by default it is 230V, before connect the power cable, check the dip switch.

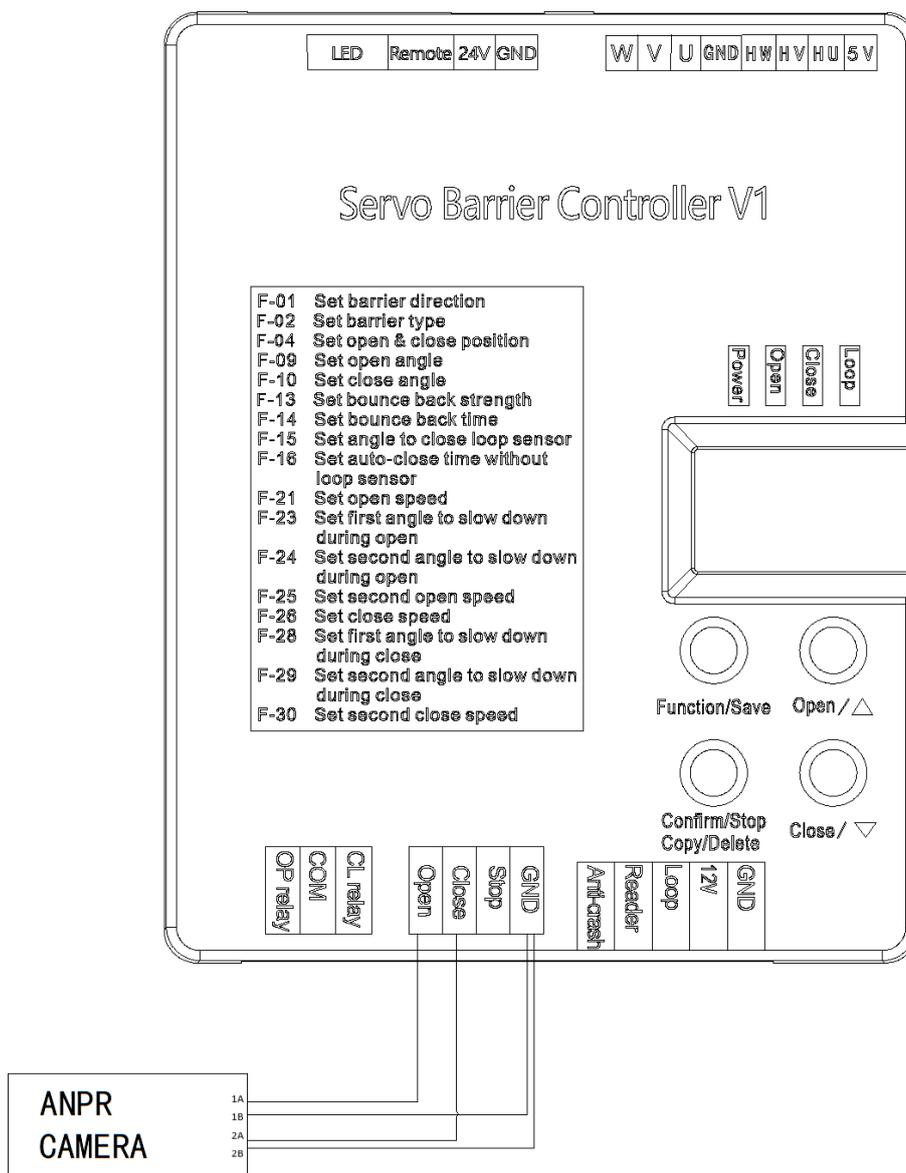


Figure 2-38 Connect to ANPR Camera

2.4.3 Connect to Anti-fall Radar

Anti-fall Radar Wiring

The anti-fall radar needs to be powered by 12 VDC power supply. Connect the 12 VDC interface and GND interface of the barrier gate to the radar. And connect the yellow and brown interface of the radar to the Loop and GND interface of the barrier gate

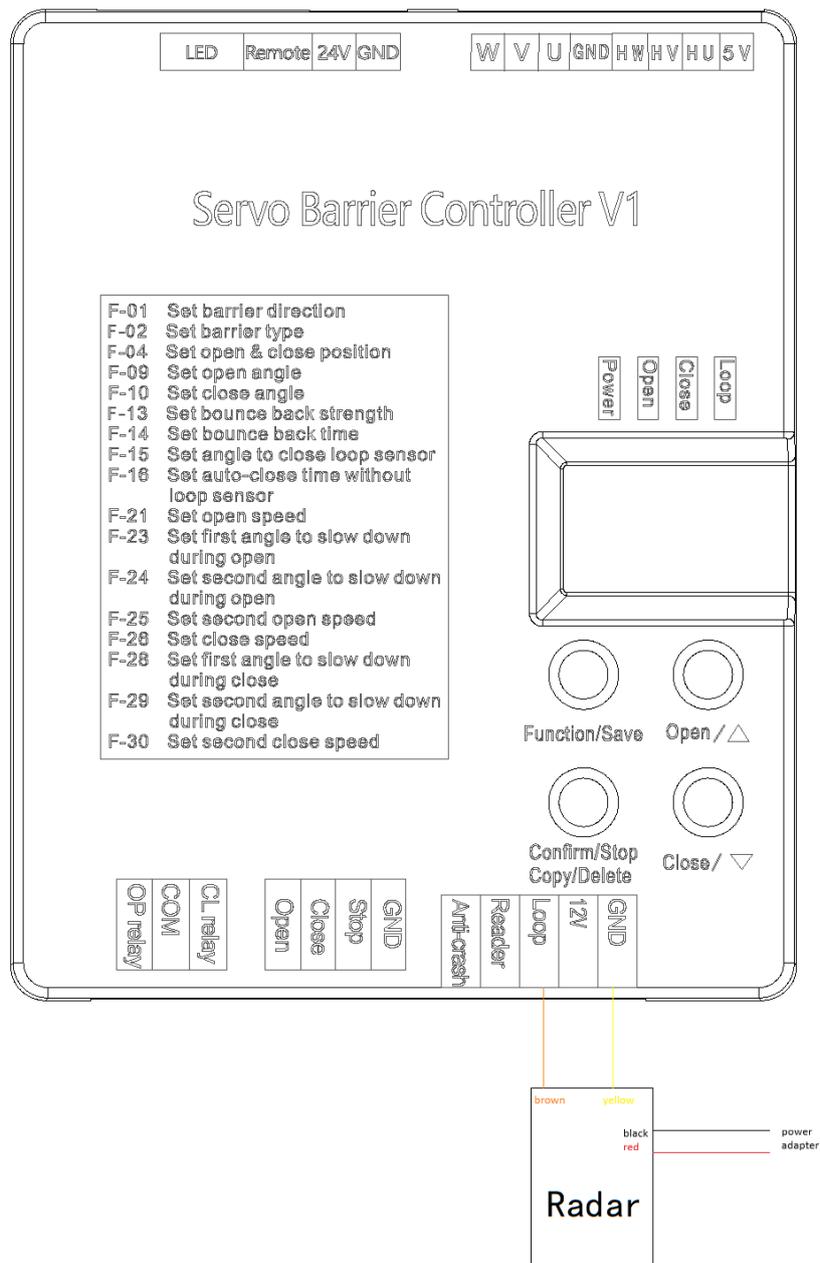


Figure 2-39 Connect to Anti-fall Radar

Radar Installation Instructions

The anti-fall radar should be installed beside the barrier gate. In different scenarios, follow the instructions below to get the best effect.

Scenario 1: Small-Sized Vehicles

For small-sized vehicles, such as the cars and SUVs, install the radar according to the figure shown below.

Small-sized vehicles scenario
Cars, SUVs

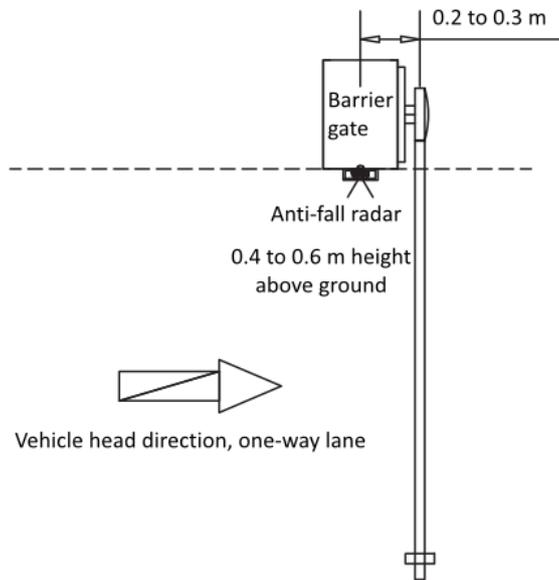


Figure 2-40 Small-Sized Vehicles Scenario

Scenario 2: Large-Sized Vehicles

For large-sized vehicles, such as the oil tank trucks, transport vehicles, trucks, and other vehicles with chassises of higher than 1 m, install the radar according to the figure shown below.

Large-sized vehicles scenario

Oil tank trucks, transport vehicles, trucks, or other vehicles with chassises of higher than 1 m

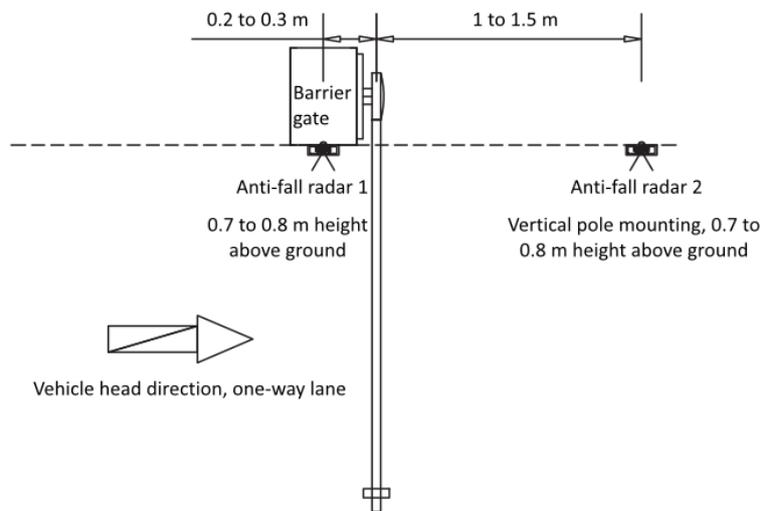


Figure 2-41 Large-Sized Vehicles Scenario

Scenario 3: Mixed Traffic

For mixed traffic scenario, such as the large-sized and small-sized vehicles are mixing, install the radar according to the figure shown below.

Mixed traffic scenario

Large-sized and small-sized vehicles are mixing.

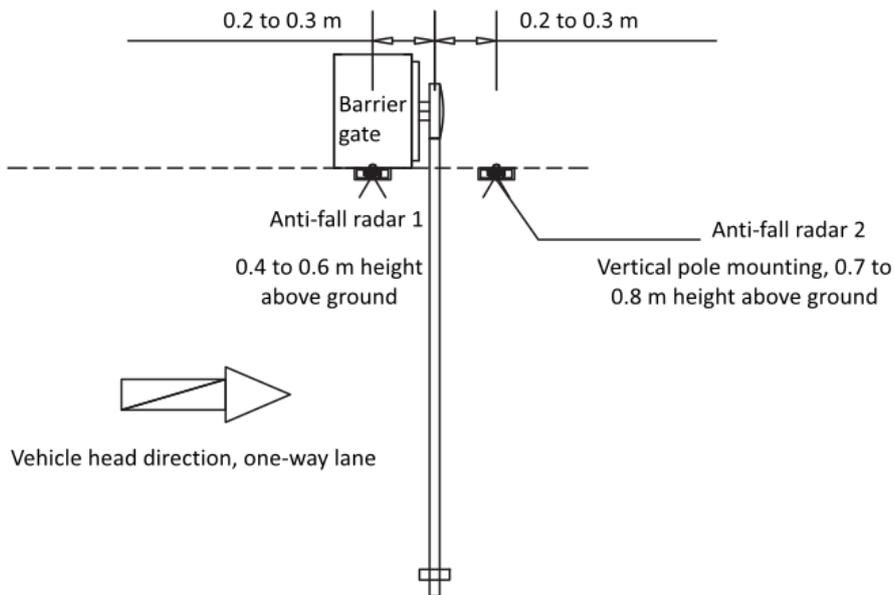


Figure 2-42 Mixed Traffic Scenario

2.4.4 Connect to Vehicle Detector

Vehicle Detector Wiring

Connect the Loop and GND interfaces of the barrier gate to the vehicle detector.

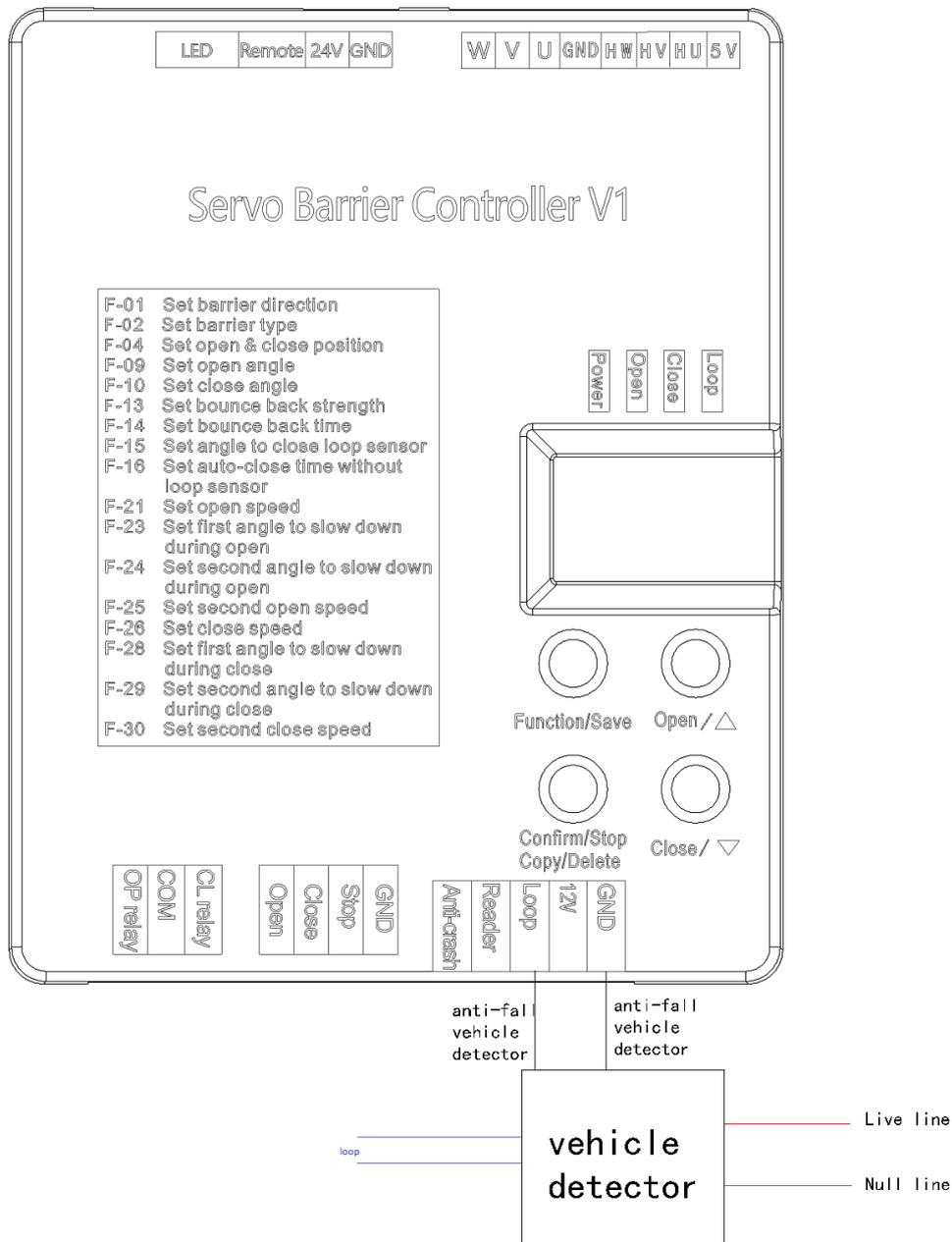


Figure 2-43 Connect to Vehicle Detector

Vehicle Detector Installation Instructions

The general width of the vehicle detector is 1 m. If there are large-sized vehicles passing in the scenario, widen the width to 1.5 m.

The anti-fall vehicle detector should be installed behind the barrier gate to avoid that the boom pole falls down and smashes the vehicle after the vehicle passes the vehicle detector and the signal disappears.

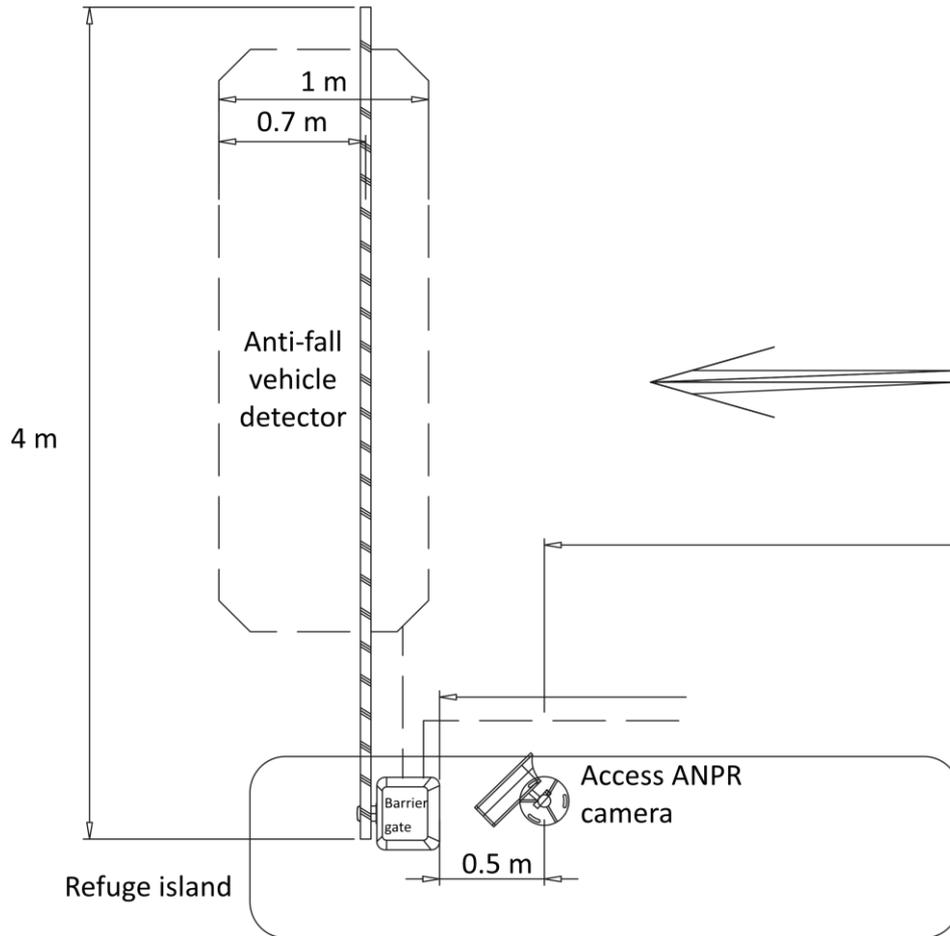


Figure 2-44 Vehicle Detector Installation

2.4.5 Connect to Active Infrared Intrusion Detector

Connect the Loop interface of the barrier gate to the COM interface of the active infrared intrusion detector, and the GND interface of the barrier gate to the OUT interface of the active infrared intrusion detector.

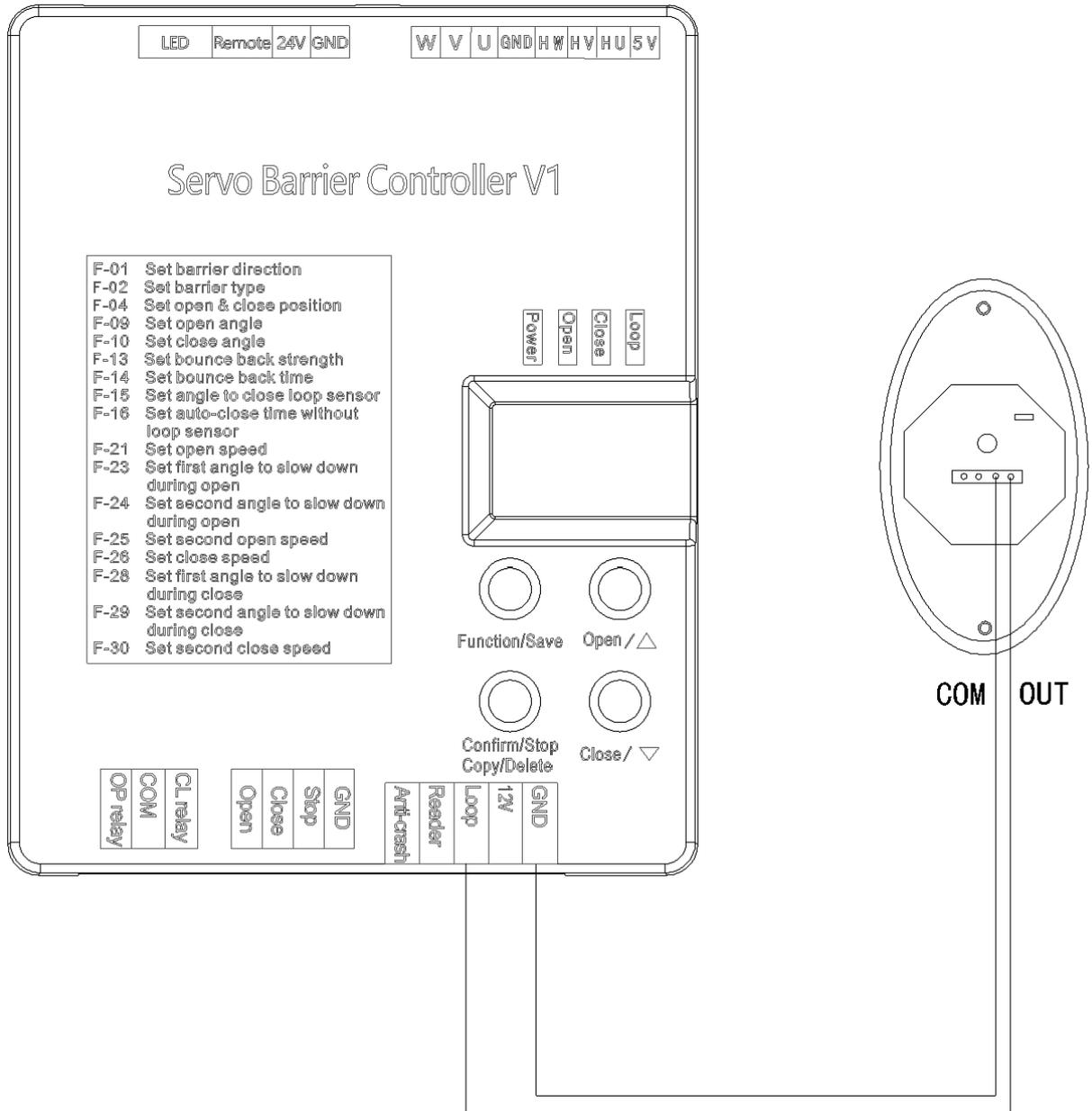


Figure 2-45 Connect to Active Infrared Intrusion Detector

2.4.6 Connect to Arrow Indicator

Connect the arrow indicator to the barrier gate as shown below.

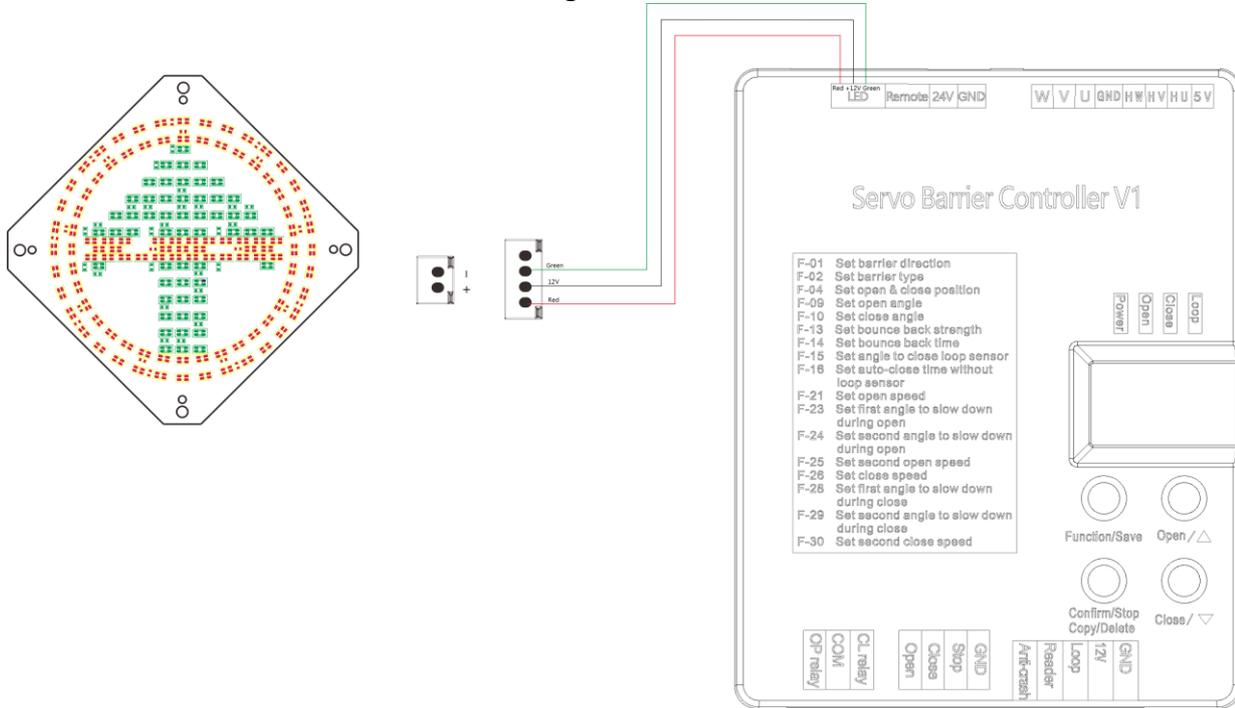


Figure 2-46 Connect to Arrow Indicator

2.4.7 Connect to Strip Light

For the boom pole with strip light, connect the strip light to the barrier gate as shown below.

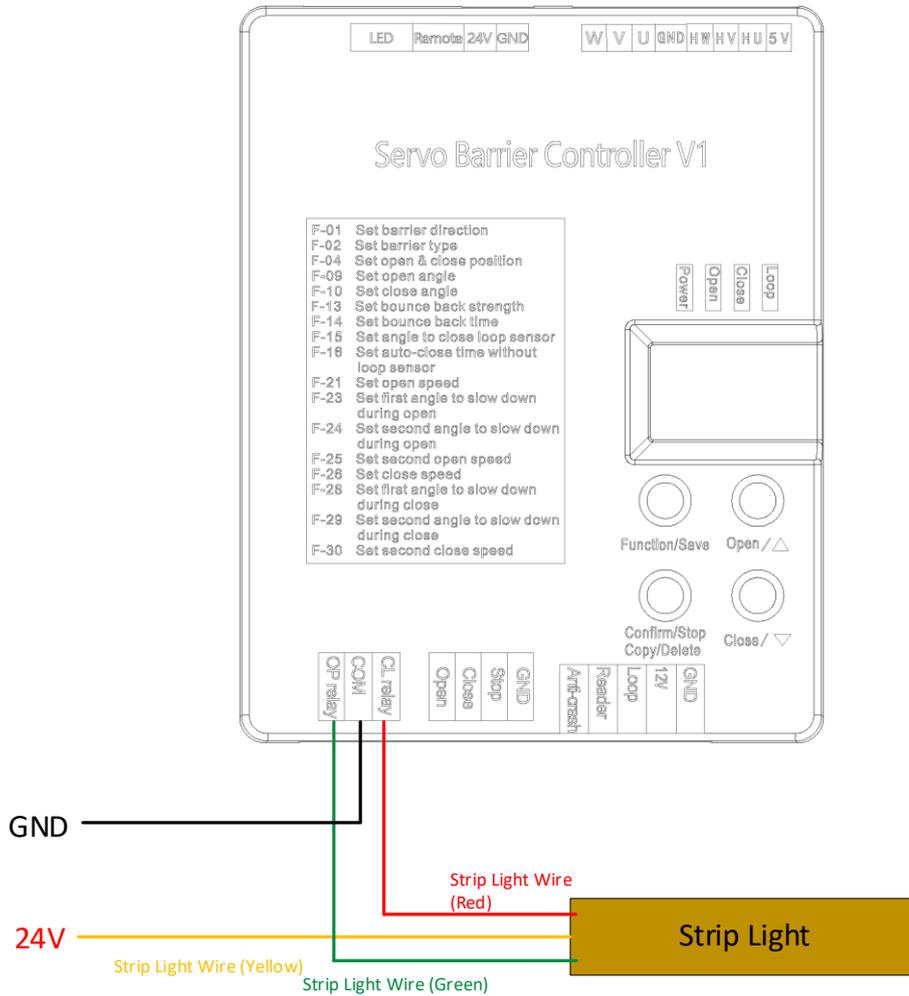


Figure 2-47 Connect to Strip Light

Chapter 3 Parameters Configuration

After the installation completes, power on the barrier gate, and it will operate self-check of opening to limit position. After the self-check completes, you can control the barrier gate via remote controller or buttons.

3.1 Remote Control

After the self-check completes, you can control the boom pole to open, close, and stop via the remote controller leaving factory with the barrier gate.

3.2 Set Parameters via Control Board Buttons

3.2.1 Button Description

Open the front cover of the host, and you can see the control board buttons and nixie tube. You can control the barrier gate via the buttons and judge the status via the nixie tube. There is respective initial status for the rising limit position, falling limit position, and rising speed of the barrier gate. You can adjust them via buttons if the initial status cannot meet the requirements of the installation site.

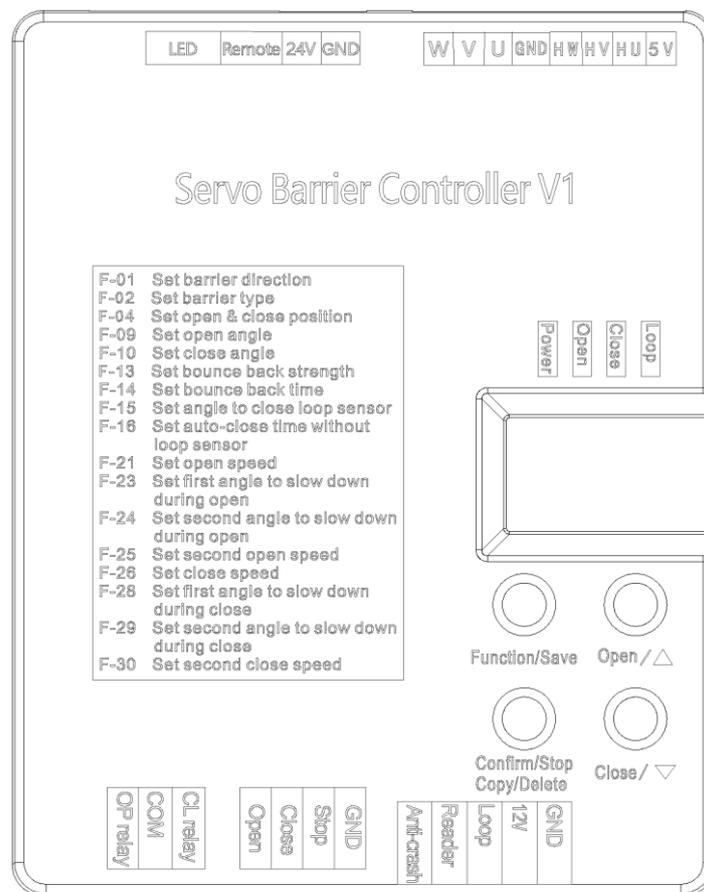


Figure 3-1 Control Buttons

Note

- If you need to hold the buttons to trigger operations, hold for 3 seconds or above.
- The nixie tube shows the status (e.g., F00) and fault codes (hexadecimal characters, e.g., E1). If the fault codes appear on the nixie tube, it means there is operation error. Contact the technical personnel of our company to solve the problems.

3.2.2 Operation Procedure

Refer to the table below for the description of the value on the nixie tube.

Table 3-1 Nixie Tube Value Description

Value	Description
F-01	Set barrier direction
F-02	Set barrier type
F-04	Set open & close position
F-09	Set open angle
F-10	Set close angle
F-13	Set bounce back strength
F-14	Set bounce back time
F-15	Set angle to close loop sensor
F-16	Set auto-close time without loop sensor
F-21	Set open speed
F-23	Set first angle to slow down during open
F-24	Set second angle to slow down during open
F-25	Set second open speed
F-26	Set close speed
F-28	Set first angle to slow down during close
F-29	Set second angle to slow down during close
F-30	Set second close speed

 **Note**

- The equipment has been debugged well before leaving the factory, and the barriers and arms can be installed directly. It is recommended not to modify the factory parameters casually.
-

F-01. Select the direction of the barrier:

Firstly, ensure motor wire is correct, then long press "Function/Confirm" button for 3 seconds, the LED will display F00. Press the "Open" button, when the LED displays F-01, press the "Confirm/Stop /Copy/Delete" button, the LED displays the device direction, " 0-- " represents the right direction, "--0 " represents the left direction, choose the direction according to the actual situation. After selection, press the "Confirm/Stop/Copy/Delete" button, then hold "Function/Confirm" button for 3 seconds to save the data. (After this option, you need to restart the device to take effect the settings.)

F-04. Manual learning Open & Close position:

When the LED displays F-04, press the "Confirm" button, then press the "Close" button to change the value to 02, press the "Confirm" button again, the controller will restart, and then press "Open", LED will display 01, and the barrier will stop after hitting the Open position. Hold "Close" until the boom is vertical, then hold the "Confirm" for 2 seconds and release it, the LED will display 02, start to manually find the Close position, hold "Close" until the boom reaches the Close position, hold the "Confirm" for 2 seconds and release it, wait for the LED displays 00 to indicate the completion of learning. (If there are eaves, etc., you can choose 03 for F04, and manually learn the close position first, and then the open position)

F-09. Set Open angle:

When the LED displays F-09, press "Confirm" to adjust the opening angle, and then press "Open" or "Close" to adjust the opening angle. The larger the value, the larger the opening angle. The smaller the value, the smaller the opening angle. Press "Confirm" to save the data after adjustment.

F-10. Set close angle:

When the LED displays F-10, press "Confirm" to adjust the angle of closing, and then press "Open" or "Close" to adjust the angle of closing. The value of 30 represents the level of the boom. If it is larger than 30, the boom will deviate in the direction of opening. If the value is less than 30, the boom will deviate in the direction of closing. The larger the value, the larger the angle of deviation of the boom in the direction of opening. The smaller the value, the smaller the angle of deviation of the boom in the direction of opening. Press the "Confirm" to save the data.

F-13. Set bounce back strength:

When the LED displays F-13, press "Confirm" to adjust the strength of rebounding when encountering resistance, and then press "Open" or "Close". The larger the value, the larger the strength of rebound when encountering resistance. The smaller the value, the smaller the strength of the rebound when encountering resistance. After adjustment, press "Confirm" to save the data. (Adjusting this parameter may cause misjudgment by the controller, it is not recommended to change the value of this parameter unless necessary)

F-14. Set bounce back time:

When the LED displays F-14, press "Confirm" to adjust the rebound response to resistance, and then press "Open" or "Close" to adjust the reaction time of the rebound when the resistance is encountered. The larger the value, the longer the reaction time of the rebound. The smaller the value, the shorter the rebound reaction time when encountering resistance. After adjustment, press "Confirm" to save the data. (Adjusting this parameter may cause misjudgment by the controller, it is not recommended to change the value of this parameter unless necessary)

F-15. Set angle to close loop sensor:

When the LED displays F-15, press "Confirm" to adjust the rebound reaction when encountering resistance, and then press "Open" or "Close" to adjust the angle value of loop sense shielding. Larger value, the larger the loop sense shielding angle. Smaller value, the smaller the loop sense shielding angle. Press "Confirm" to save the data after adjustment.

F-16. Set auto-close time without loop sensor:

When the LED displays F-16, press "Confirm" to adjust the delayed closing without loop sensor. 00 means that the delay closing function is turned off, and 01-99 represent the delay closing time when there is no loop sense. You can set it according to your needs. After adjustment, press "Confirm" to save the data.

F-40. Delayed closing adjustment with loop sensor:

When the LED displays F-40, press "Confirm" to adjust the delayed closing with loop sensor, 00 means that the delayed closing function is turned off, and 01-99 represent the delayed closing function with loop sense. You can set it according to your needs, and the unit is second. After adjustment, press "Confirm" to save the data.

F-21. Set open speed:

When the LED displays "F-21", press "Confirm" to enter the opening speed adjustment, and then press "Open" or "Close" to adjust the opening speed. The larger the value, the faster the opening speed. The smaller the value, the slower the speed, press "Confirm" to save the data after adjustment.

F-23. Set first angle to slow down during open:

When the LED displays "F-23", press "Confirm" to enter the adjustment of the first deceleration angle of the boom opening, and then press "Open" or "Close". The larger the value, the larger the deceleration angle of the boom opening. The smaller the value, the smaller the opening deceleration angle. After adjustment, press "Confirm" to save the data.

F-25. Set deceleration speed during open:

When the LED displays "F-25", press the "Confirm" button to start setting, and then press "Open" or "Close" button to adjust the opening deceleration speed. The larger the value, the faster the opening deceleration speed, the smaller the value, the slower the opening deceleration speed. After setting, press the "Confirm" button to save the data.

F-26. Set close speed:

When the LED displays "F-26", press the "Confirm" button to start setting, and then press "Open" or "Close" button to adjust closing speed. The larger the value, the faster the speed, the smaller the value, the slower the speed. After setting, press the "Confirm" button to save the data.

F-28. Set first angle to slow down during close:

When the LED displays "F-28", press the "Confirm" button to start setting, and then press "Open" or "Close" button to adjust the first deceleration angle during close. The larger the value, the larger the angle. The smaller the value, the smaller the angle. After setting, press the "Confirm" button to save the data.

F-30. Set deceleration speed during close:

When the LED displays "F-30", press the "Confirm" button to start setting, and then press "Open" or "Close" button to adjust the closing deceleration speed. The larger the value, the faster the closing deceleration speed, the smaller the value, the slower the closing deceleration speed. After setting, press the "Confirm" button to save the data.

00. Learning and deleting remote controller codes:

If you need to learn remote controller codes, first hold "Copy" button the LED will count from "1" to "5", release the "Copy" before the LED displays "5", the LED will back to display "1", then press any button of remote controller.

Back to menu interface after successful registration, and then hold "Copy" button for 5 seconds on the main interface until the LED displays 0000, all the registered remote will be deleted.

Corresponding spring specification

Boom type	Boom length	Spring quantity & type
Octagonal Straight Boom Pole	$L \leq 3M$	1* $\phi 5.0$
Octagonal Telescopic Boom Pole	$L \leq 4.5M$	1* $\phi 5.0$
	$4.5M < L \leq 6M$	1* $\phi 6.5$
Folding Boom Pole	$L \leq 4.5M$	1* $\phi 5.0$
	$4.5M < L \leq 6M$	1* $\phi 6.5$
Boom Pole with Strip Light	$L \leq 4M$	1* $\phi 5.0$
Round boom pole	$L \leq 4M$	1* $\phi 5.0$
	$L \leq 6M$	1* $\phi 6.5$

Chapter 4 Maintenance

4.1 Change Boom Pole

 **Caution**

Contact the professional technical personnel to change the boom pole. You may damage the barrier gate if you change it by yourself.

Before you start

Cut off the power supply, and adjust the boom pole to the closing limit position.

Steps

1. Unscrew the cap nuts, spring washers, and flat washers on the other sides of the four assembling bolts. Save the components and parts for the following installations.
2. Disassemble the boom pole and chuck.
3. Repeat the boom pole installation procedure to install a new boom pole.

4.2 Change Spring

Before you start

Cut off the power supply, and adjust the boom pole to the opening limit position.

Steps

1. Remove the M8 nut above the spring pull rod, then remove the M10 nut on the spring hook, pull out the M10 screw to disassemble the spring, and then change a new spring and install it according to the steps above reversely.

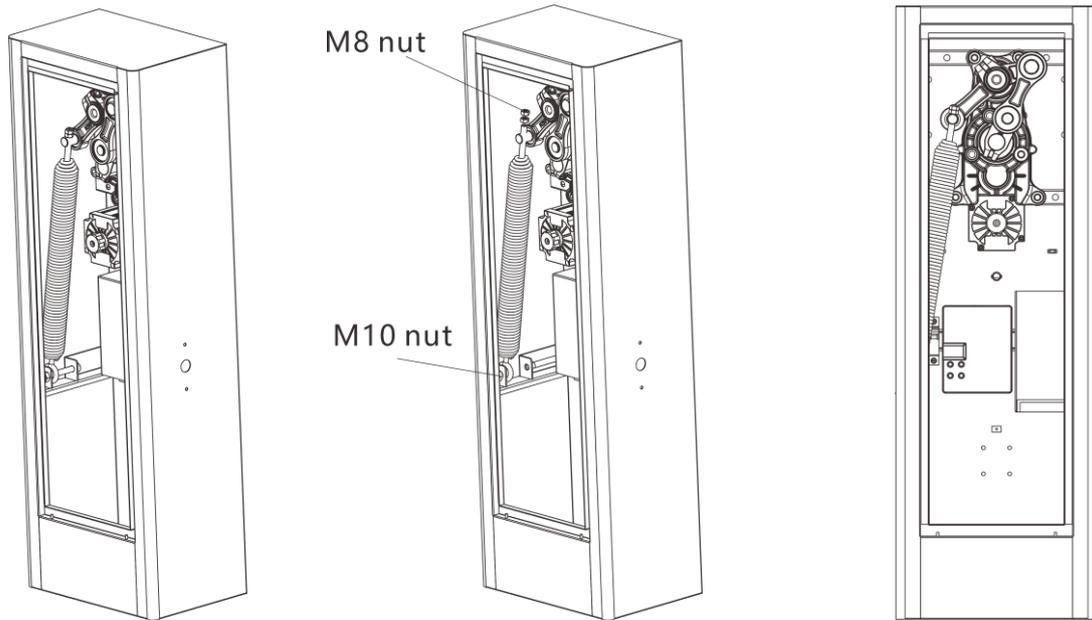


Figure 4-1 Change Spring

Note

For different number of springs, operate according to the figure shown below.

4.3 Change Machine Core

Before you start

Cut off the power supply. Disassemble the boom pole, spindle rod, and spring according to the procedure above.

Steps

1. Remove the four M10 × 40 hex socket head cap screws of the machine core, and then remove the machine core.
2. Install the new machine core into the host, and then fasten the screws.

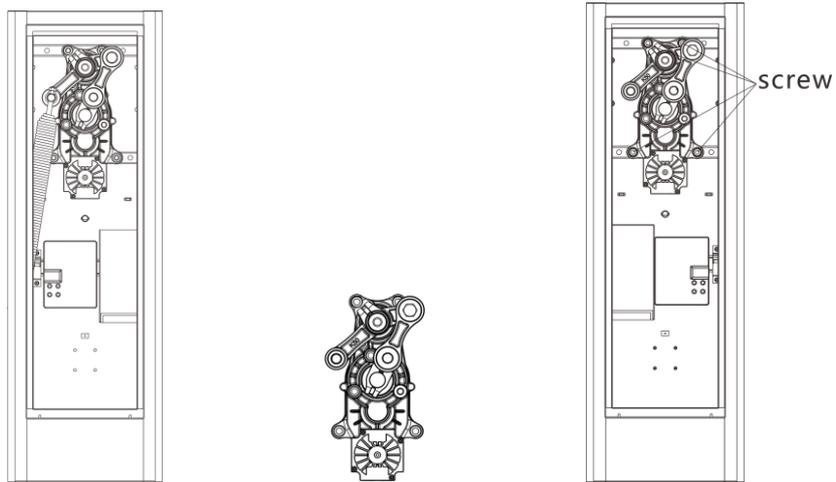


Figure 4-2 Change Machine Core

4.4 Left/Right Direction of Boom Pole

The boom pole direction depends on the driving direction of the vehicle. When you look from the driving direction as shown below, the left boom pole is the one that the boom pole is on the left of the barrier gate host, and the right boom pole is the one that the boom pole is on the right of the barrier gate host.

Barrier Gate User Manual

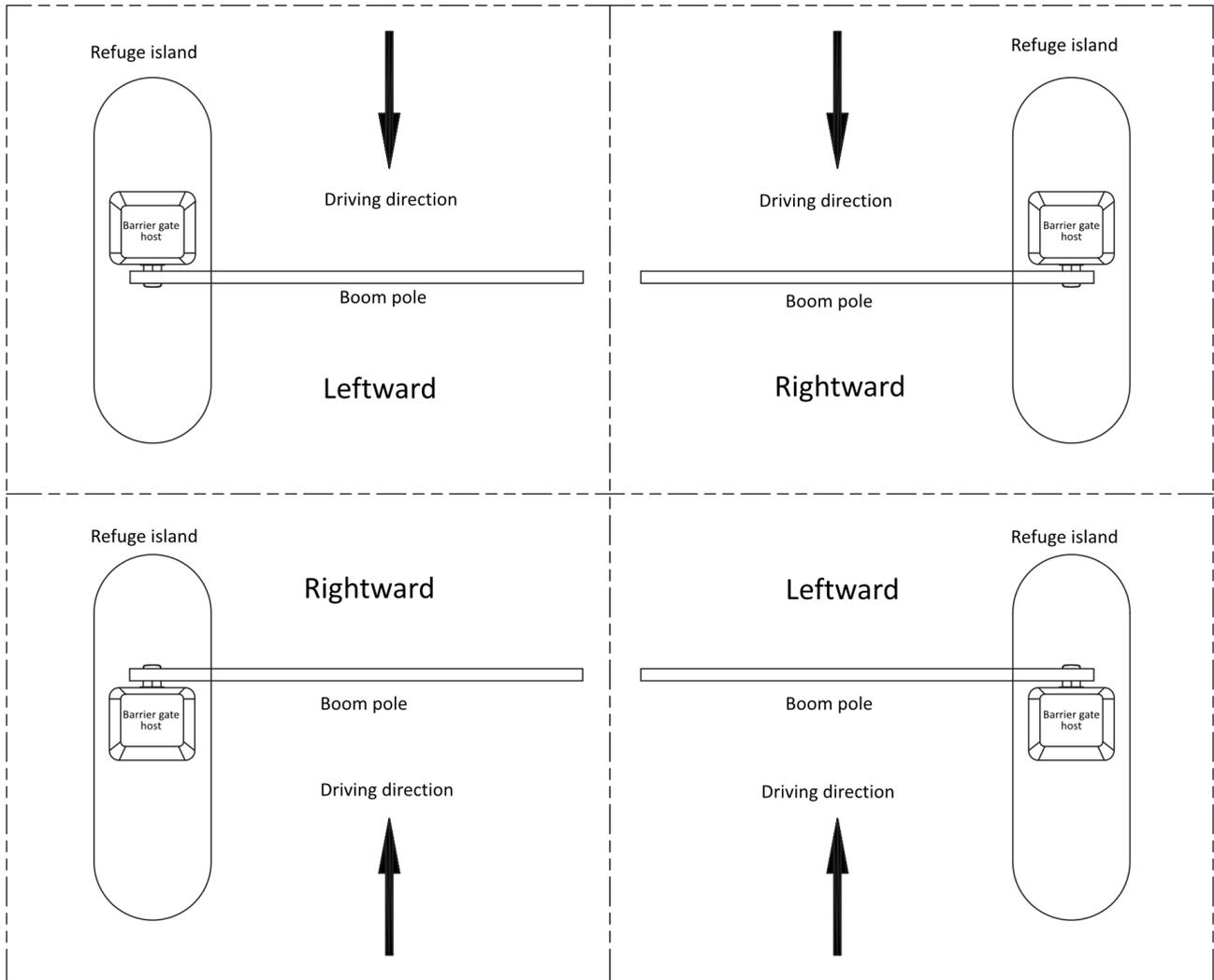


Figure 4-3 Boom Pole Direction Instruction

For some models of the barrier gate, some boom pole direction can be changed, and some cannot be changed. Refer to the figure below for the relationship between barrier gate models and boom pole directions.

4.5 Change Left/Right Direction of Machine Core

Before you start

Cut off the power supply. Disassemble the machine core according to the procedure above.

Steps

1. Disassemble the 2 cap screws to tighten the output shaft, the 2 cap screws to fix the limit positions, and the 1 cap screw to tighten the crank arm in sequence.

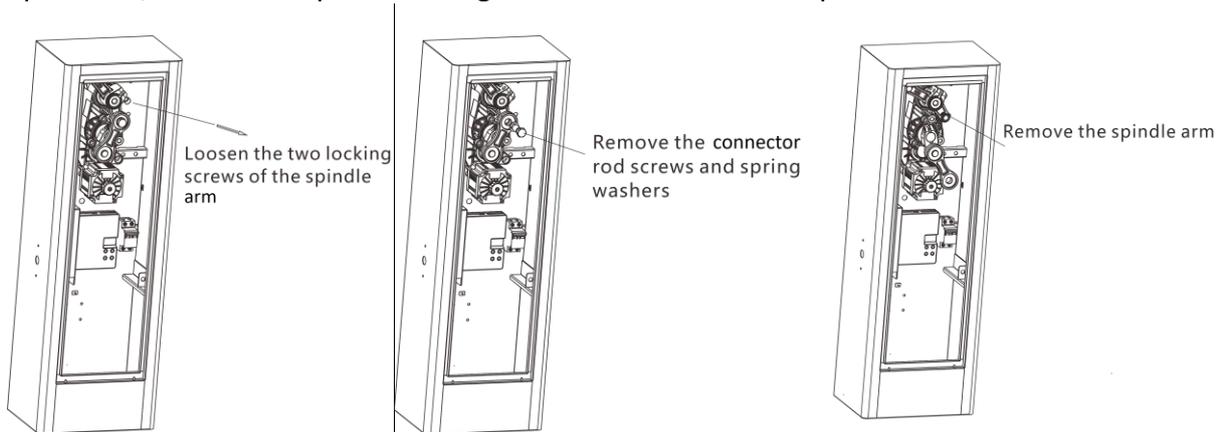


Figure 4-4 Remove the spindle arm

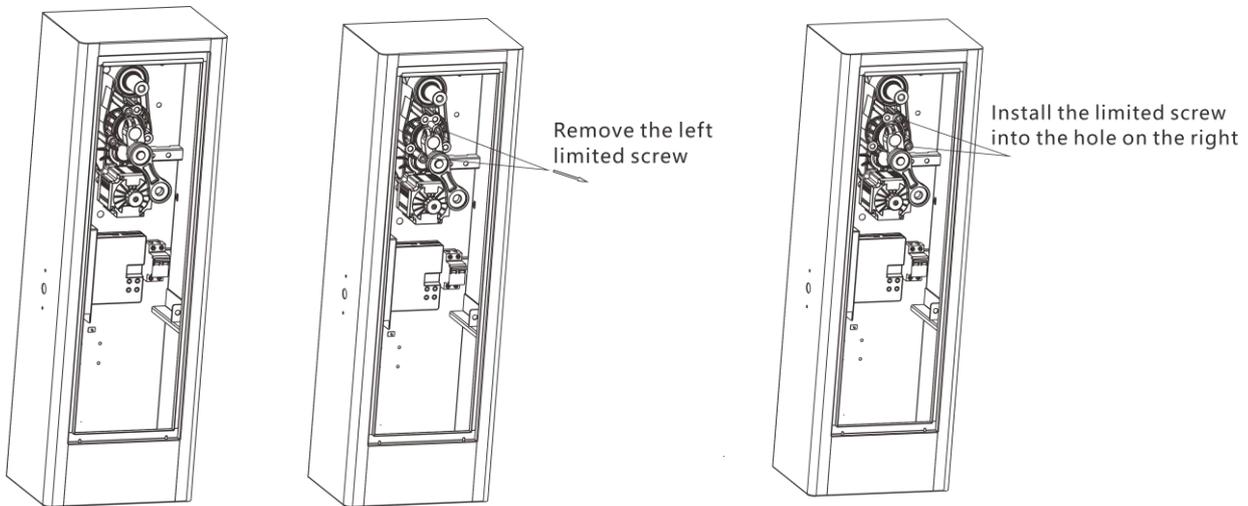


Figure 4-5 Move the limited screw

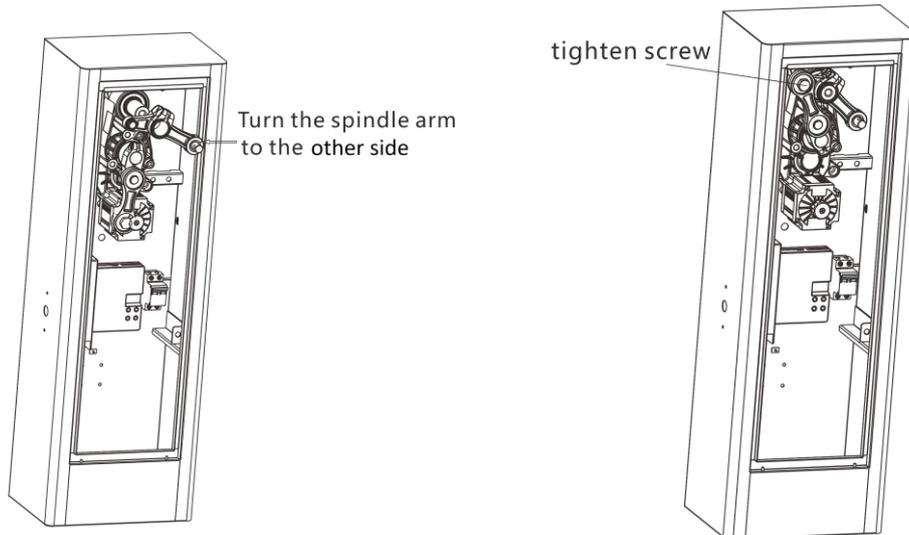


Figure 4-6 Change the direction of spindle arm

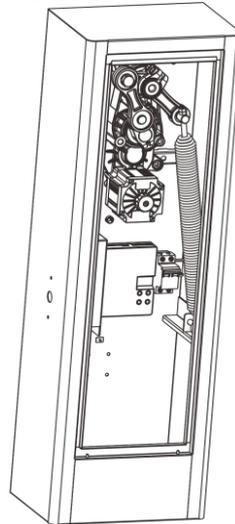


Figure 4-7 Install Spring

Note

During the linkage arm component installation process, operate the hand wheel to adjust the position to guarantee that the spindle rod installation surface of the output shaft is horizontal.

A. FAQ

Fault Code on Nixie Tube	Fault Name	Troubleshooting	Remarks
"E 1"	Motor exception	1、 Check if the motor wire and hall signal line are broken or not connected. 2、 Change motor.	
"E 2"	Encoder exception	1、 Change motor.	
"E 4"	Undervoltage	1、 Check the power supply output voltage. 2、 Change the power supply.	
"E 5"	Overcurrent	1、 Increase the value of F13.	



See Far, Go Further