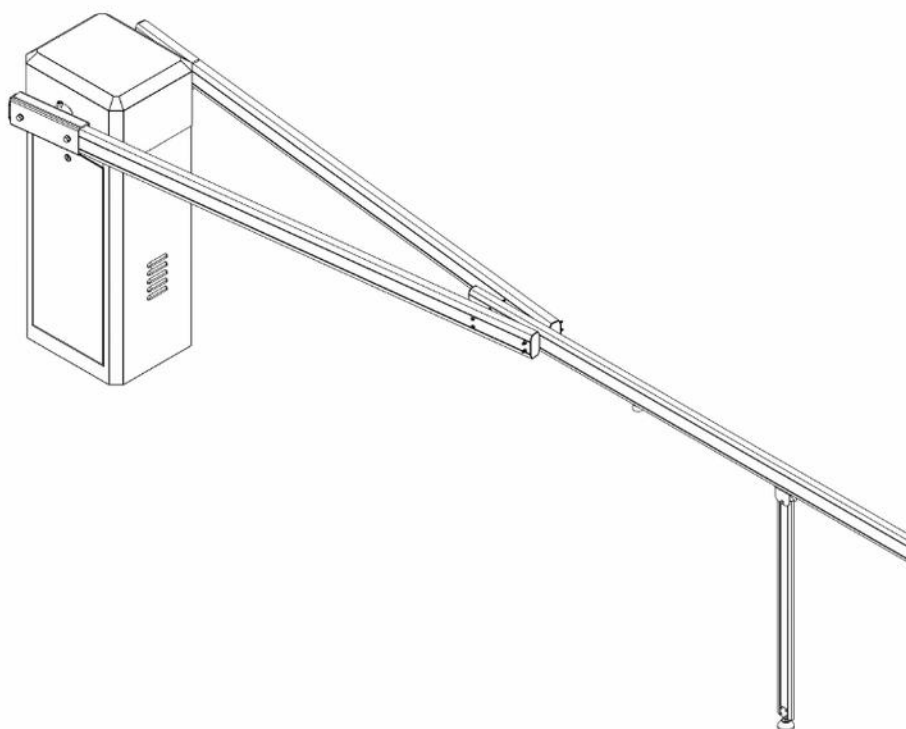


S12 - DOUBLE ARM GATE

Product Specification & Installation Manual

CSTeco Professional Parking Barrier

Model: S12



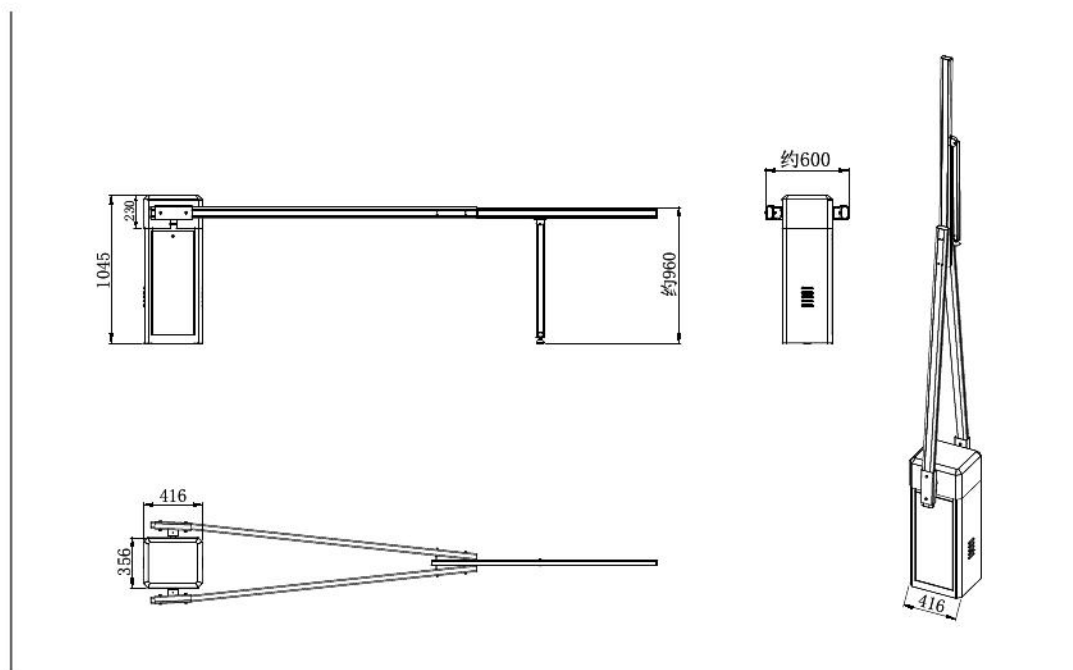
PRODUCT OVERVIEW

The S12 Double Arm Gate is a barrier gate system supplied with a double-arm railing assembly, control cabinet, accessories, and an integrated control system. This manual covers the gate dimensions, components, installation, electrical connection, and external device interfaces.

Website: csteco.com

DIMENSIONS & PACKAGE OVERVIEW

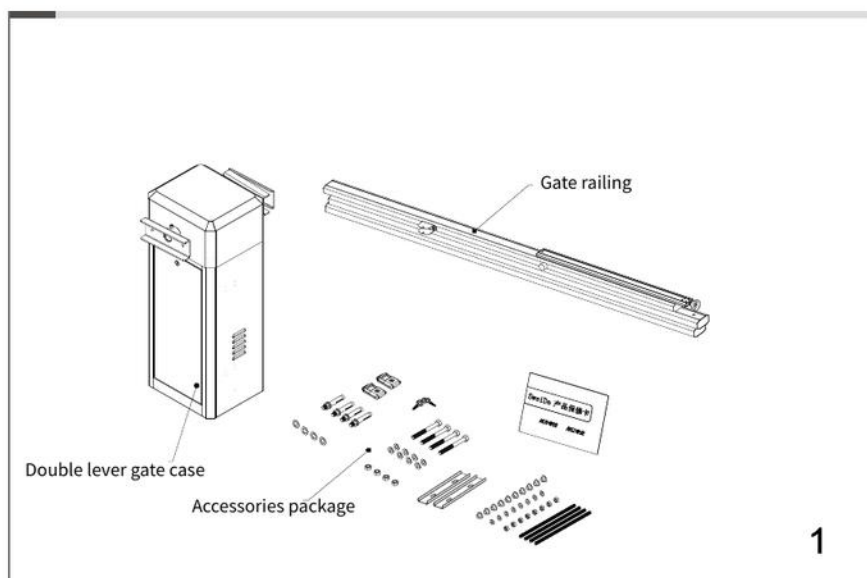
Mechanical dimensions and supplied components



KEY DIMENSIONS

Gate case height: 1045 mm | Case depth: 356 mm | Case width: 416 mm

Approx. lowered-arm height: 960 mm | Approx. upper width reference: 600 mm

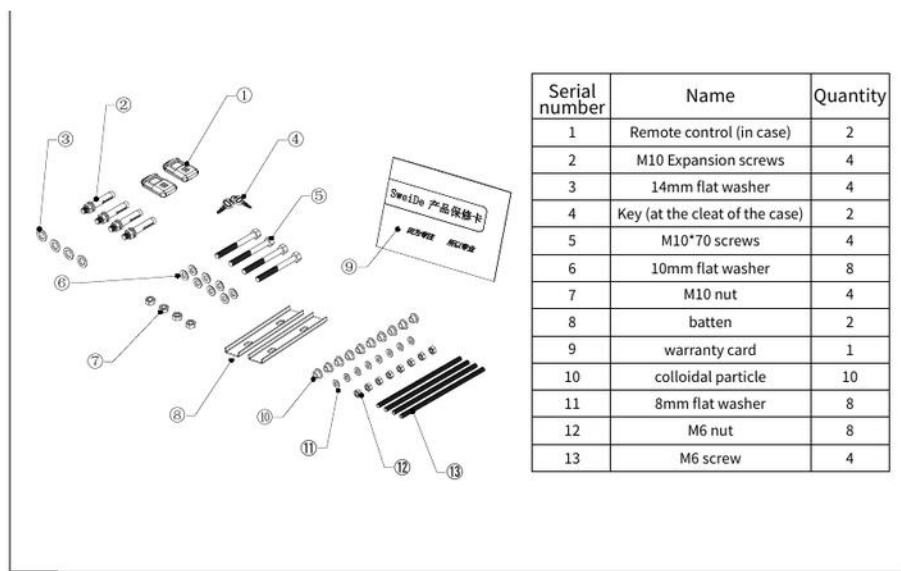


SUPPLIED ASSEMBLY

- Double-arm gate case
- Gate railing assembly
- Accessories package

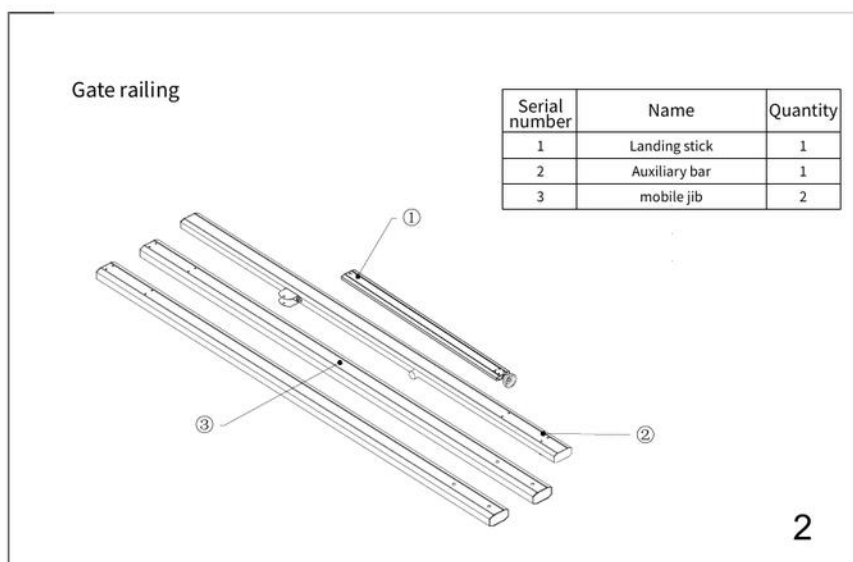
ACCESSORIES & RAILING OVERVIEW

Main accessory list and arm assembly



ACCESSORY LIST

- 01** Remote control - 2 pcs
- 02** M10 expansion screws - 4
- 03** 14 mm flat washers - 4
- 04** Case keys - 2
- 05** M10 x 70 screws - 4
- 06** 10 mm flat washers - 8
- 07** M10 nuts - 4
- 08** Battens - 2
- 09** Warranty card - 1
- 10** Colloidal particles - 10
- 11** 8 mm flat washers - 8
- 12** M6 screws - 4
- 13** M6 nuts - 8

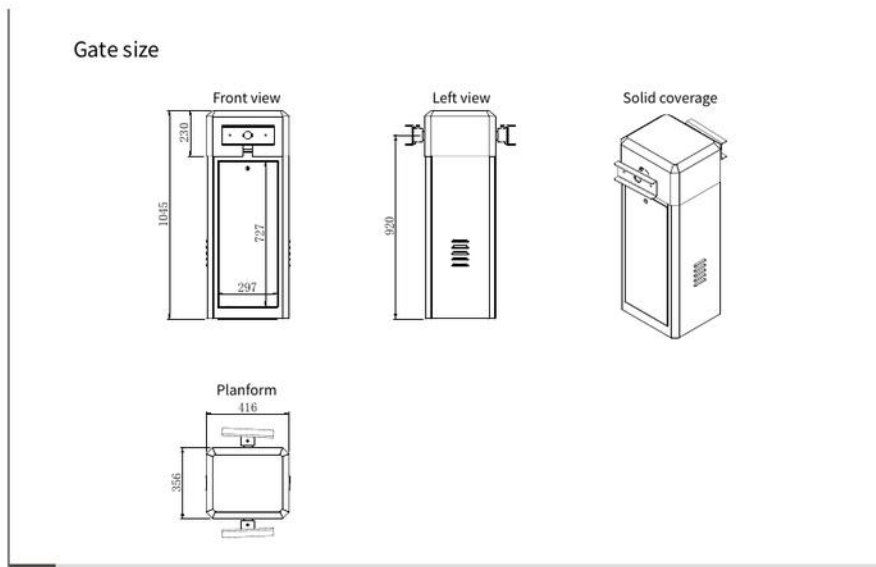


RAILING COMPONENTS

- Landing stick - 1 pc
- Auxiliary bar - 1 pc
- Mobile jib - 2 pcs

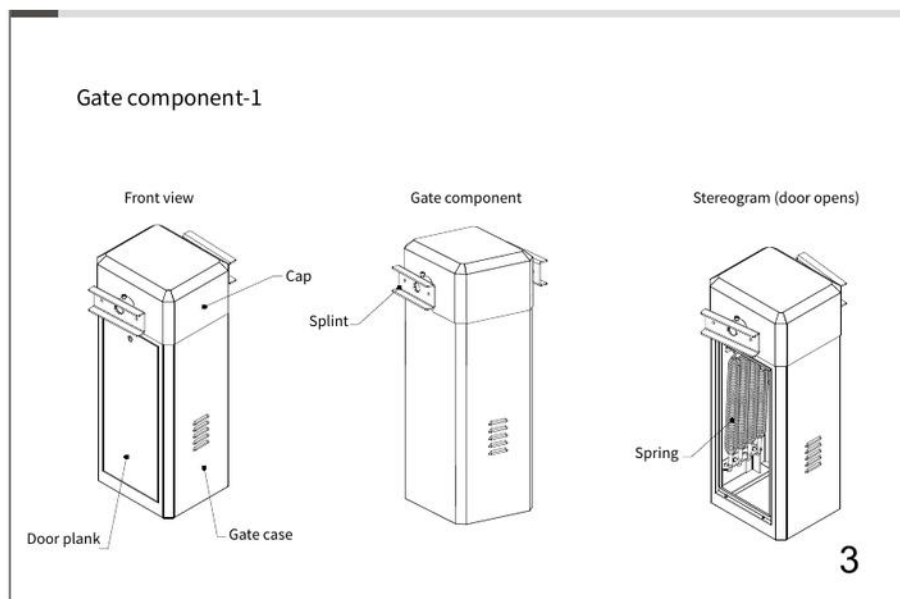
GATE SIZE & COMPONENTS

Cabinet dimensions and first component view



CABINET REFERENCE

- Front, left and plan views
- Cabinet dimensions shown on the drawing
- Solid external cover and door panel
- Spring and splint located inside the gate cabinet



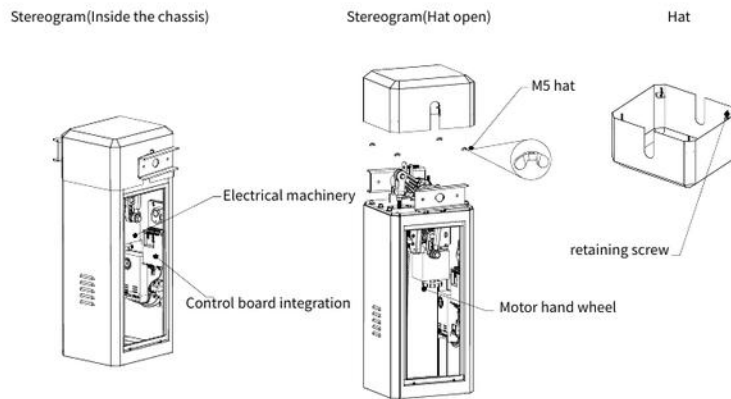
GATE COMPONENT - 1

- Gate case
- Door panel
- Cap
- Splint
- Spring

GATE COMPONENTS

Internal mechanism and railing structure

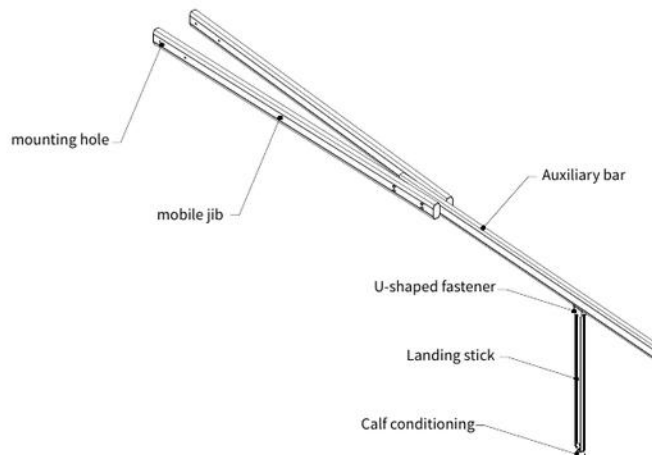
Gate component-2



GATE COMPONENT - 2

- Electrical machinery
- Control board integration
- Motor hand wheel
- Retaining screw
- M5 cap nut
- Gate cover

Railing component



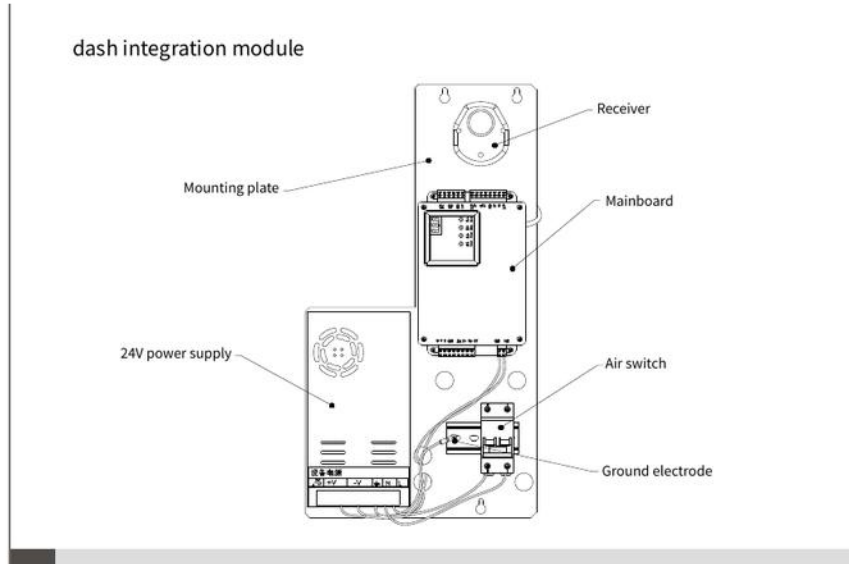
4

RAILING COMPONENT

- Mounting hole
- Mobile jib
- Auxiliary bar
- U-shaped fastener
- Landing stick
- Calf/foot conditioning support

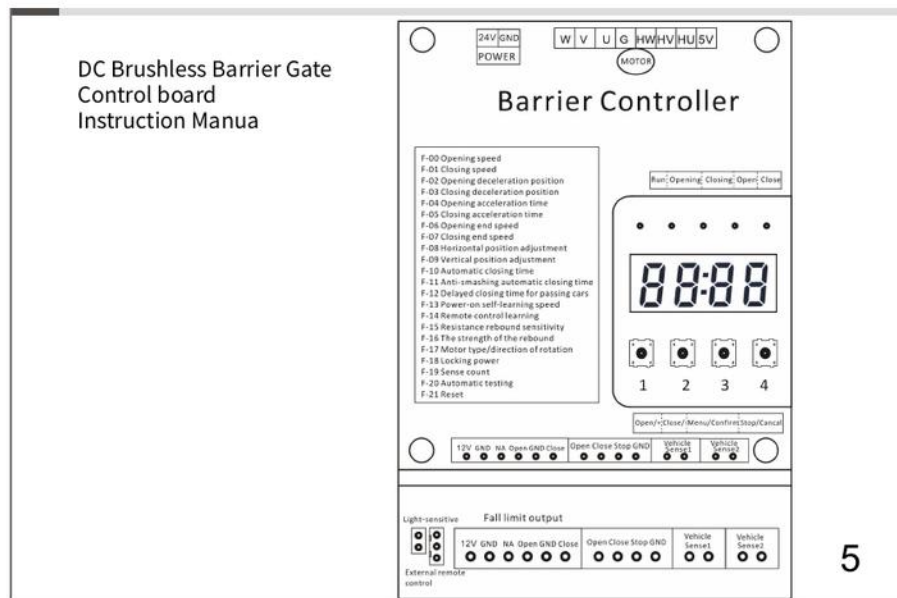
CONTROL BOARD & POWER MODULE

Internal control architecture and barrier controller



CONTROL INTEGRATION

- Mounting plate
- 24V power supply
- Ground electrode
- Air switch
- Mainboard
- Receiver
- Control-board integration module



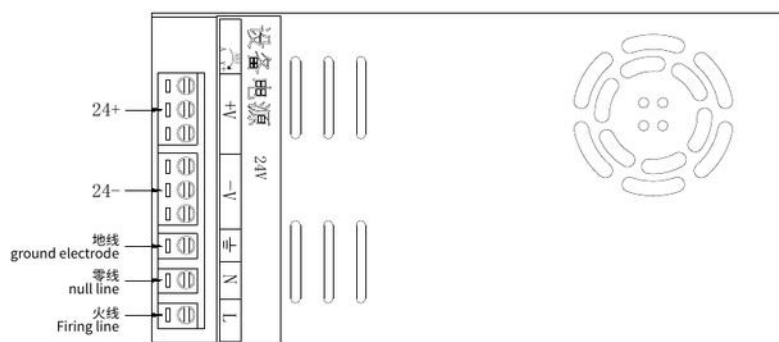
BARRIER CONTROLLER

The controller provides the barrier gate control interface and parameter setting panel. Refer to the controller layout and terminal labels shown in the supplied drawing.

24V POWER & RECEIVER

Power supply and receiver assembly

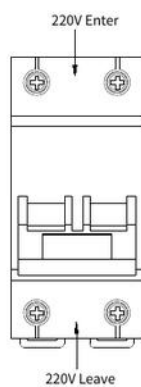
24V power supply



24V POWER SUPPLY

- 24V+ / 24V- outputs
- Ground electrode connection
- Neutral line
- Fire/live line
- Use the supplied air-switch protection

Air switch, receiver



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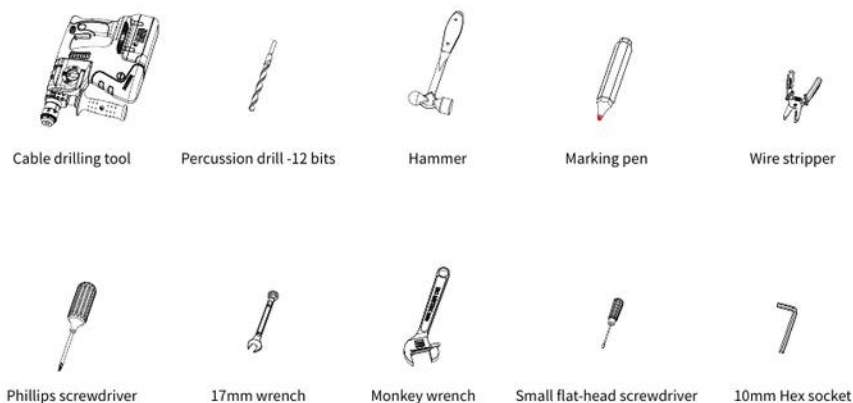
AIR SWITCH & RECEIVER

- 220V input
- 220V output
- Wireless receiver assembly

INSTALLATION TOOLS & RAILING SETUP

Recommended tools and first railing assembly step

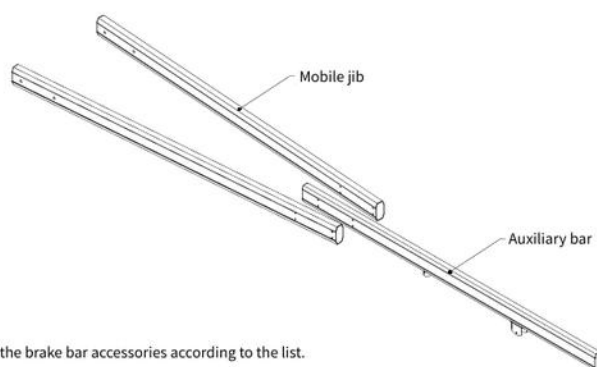
Installation tools (Reference)



TOOLS (REFERENCE)

- Cable drilling tool
- Percussion drill with 12 mm bit
- Hammer
- Marking pen
- Wire stripper
- Phillips screwdriver
- 17 mm wrench
- Adjustable wrench
- Small flat-head screwdriver
- 10 mm hex socket

Figure 1



1. Check the brake bar accessories according to the list.
2. As shown in Figure 1, place two main rods and one auxiliary pole

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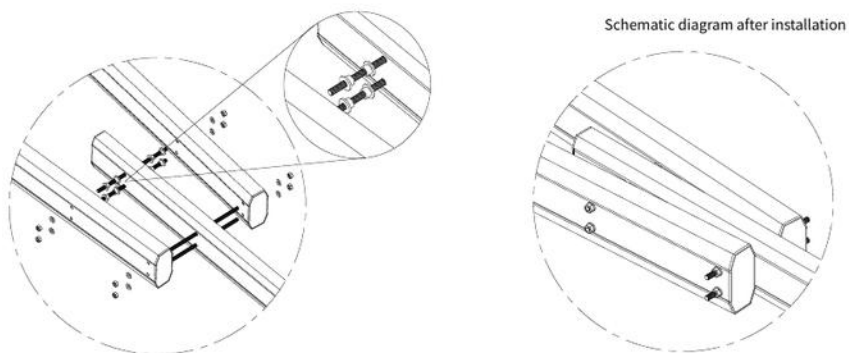
RAILING INSTALLATION - STEP 1

1. Check the barrier-arm accessories against the supplied list.
2. Place the two main rods and one auxiliary rod as shown in Figure 1.

RAILING INSTALLATION

Assembly steps for the arm structure

Figure 2

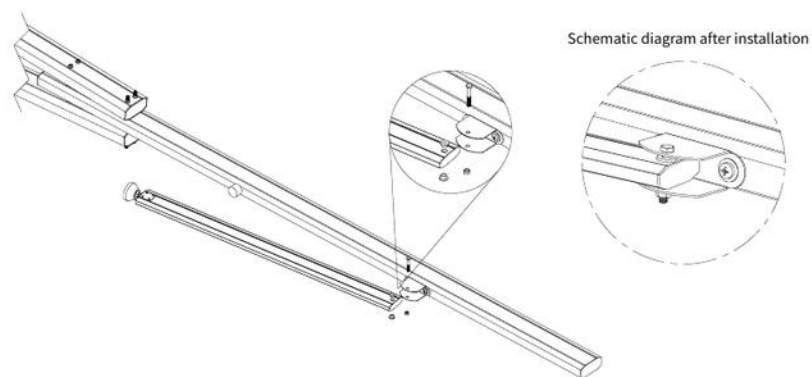


3. As shown in Figure 2, install 4 M6 screws, 8 colloidal particles, 8 6mm flat washers and 8 M6 screws. And twist tightly.

STEP 3

Install 4 M6 screws, 8 colloidal particles, 8 flat washers and 8 M6 nuts. Tighten the assembly securely as shown in Figure 2.

Figure 3



4. Install the landing rod on the U-shaped fastener of the auxiliary rod, as shown in Figure 3.

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STEP 4

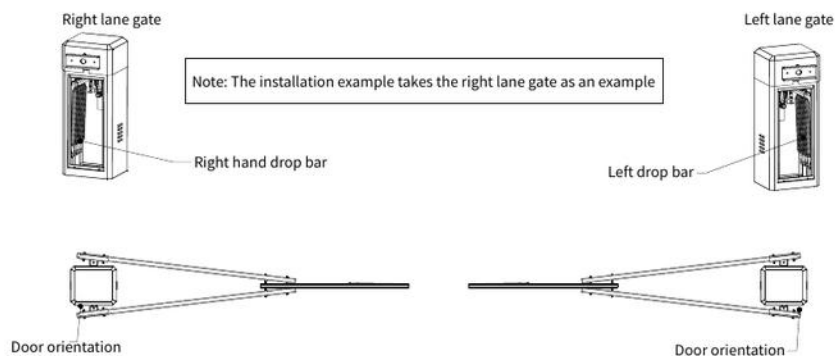
Install the landing rod on the U-shaped fastener of the auxiliary rod, as shown in Figure 3.

Final assembly reference is shown in the drawing.

EQUIPMENT INSTALLATION

Left/right barrier orientation and planform

Figure 4

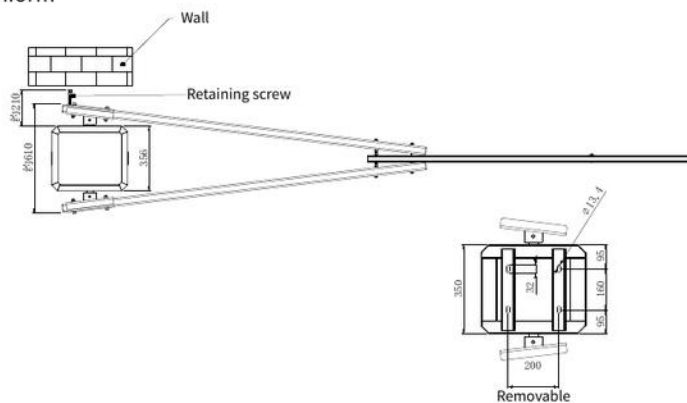


1. Check accessories according to the list.
2. The lane gate is divided into left lane gate and right lane gate (facing the door panel, the drop bar on the right side is the right lane gate, and the drop bar on the left side is the left lane gate), as shown in Figure 4.

LEFT / RIGHT ORIENTATION

The S12 gate is supplied as left-hand or right-hand configuration. Facing the cabinet door, the drop bar on the right indicates the right-hand gate; the drop bar on the left indicates the left-hand gate.

Planform



Note: If the installation is against the wall, it is necessary to reserve the installation space of the railing fixing screws

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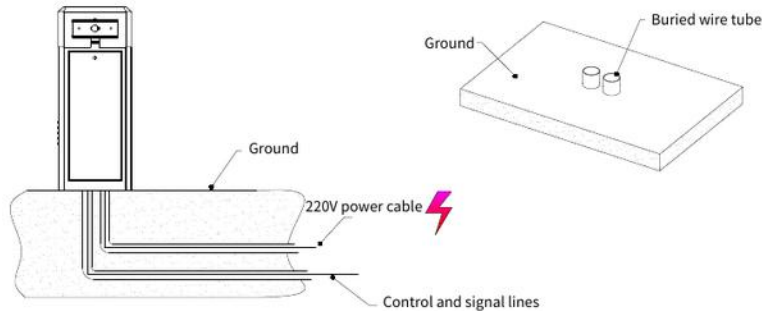
INSTALLATION POSITION

- Planform reference
- Allow space for retaining/fixing screws
- Keep the installation area clear and level
- Reserve service access around the cabinet

EQUIPMENT INSTALLATION

Foundation, conduit and cabinet fixing

Figure 5



3. Determine the installation position of the barrier gate based on the on-site situation (the installation position needs to be free of accumulated water and the ground should be level)
Pre embed or excavate cable trays between the center point of the fixed position of the barrier gate and the control room or booth, bury cable conduits, and thread the power lines used by the equipment (with a power line specification of 3 * 1.52 or larger). After confirming that there are no errors, backfill with concrete as shown in Figure 5.

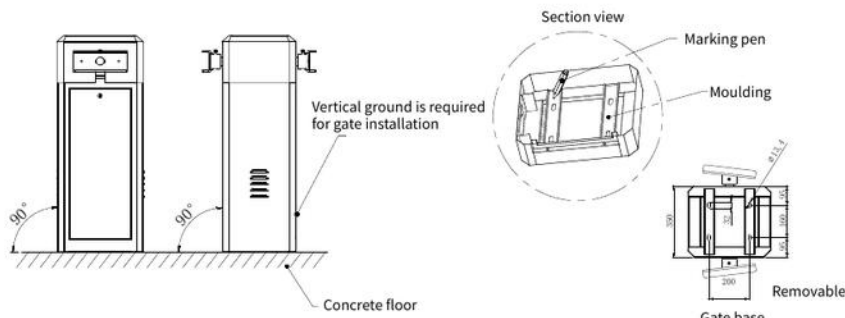


Note: The depth of the buried wire pipe should be greater than 300mm. The power supply must be equipped with air switch and leakage protection device, and connect the PGND cable. Perform the preceding operations when the power is off. Ensure that the PGND cable is properly connected.

SITE & POWER PREPARATION

Determine the gate position on level ground free from standing water. Provide cable conduit between the gate and the control room or booth. The source manual specifies a buried conduit depth greater than 300 mm and a power line of 3 x 1.5 mm² or larger.

Figure 6



4. For non-concrete foundations or installed on slopes, it is recommended to build concrete foundations and ensure that the vertical degree between the sluice box and the horizontal plane is less than 1°.

5. Open the gate plate, place the batten (accessory bag list No. ⑧) at the bottom of the chassis, and then mark the fixing hole of the batten with a marker. Remove the sluice gate, drill four mounting holes on the mark with a $\phi 12$ impact drill bit, drive the M10 expansion bolt (Serial number ④ in the kit list), tighten the nut, and withdraw the nut; 1See (Figure 6).

10

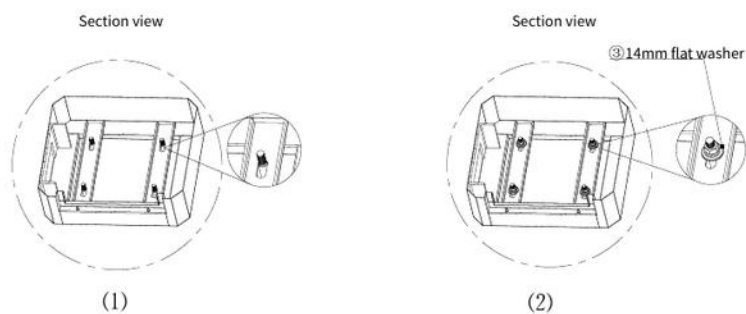
CABINET FIXING

- Use a concrete foundation where needed
- Keep the cabinet vertical; the manual specifies less than 1° deviation
- Mark mounting holes using the batten
- Drill with a 12 mm impact bit
- Secure the cabinet with M10 expansion bolts

BARRIER ARM INSTALLATION

Fixing the barrier arm to the cabinet

Figure 7



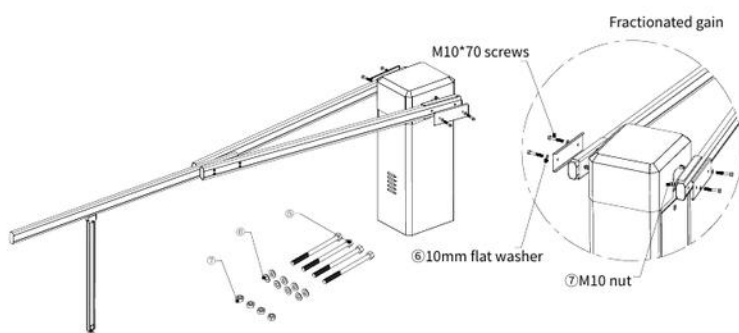
6. Move the slugs to the original position, pass the expansion bolts through the battening holes at the bottom of the slugs box, put 14mm flat washers (No. 1 in the spare parts list) and spring washers and flat washers just pulled out of the expansion bolts in turn, and screw in the nuts, as shown in Figure 7.

7. After adjusting the proper Angle of the sluice gate, tighten the nut of the expansion bolt using a 17mm wrench. (Check whether the gate is fixed firmly after fixing, and the gate should not shake).

STEP 6-7

- Move the gate to its final position
- Pass the expansion bolts through the batten holes
- Fit the specified washers and nuts
- Adjust the gate to the correct angle
- Tighten the expansion-bolt nuts with a 17 mm wrench
- Check that the gate is firmly fixed and does not shake

Figure 8



10. Install the bar on the cleat, and align the bar holes with the cleat holes. Insert four M10*70 screws (kit list number ⑤) to fix the rod, and cover the 10mm flat washer and M10 nut (kit list number ⑥ and ⑦). Tighten the M10*70 screws and nuts using a 17mm wrench and an adjustable wrench. See (Figure 8).

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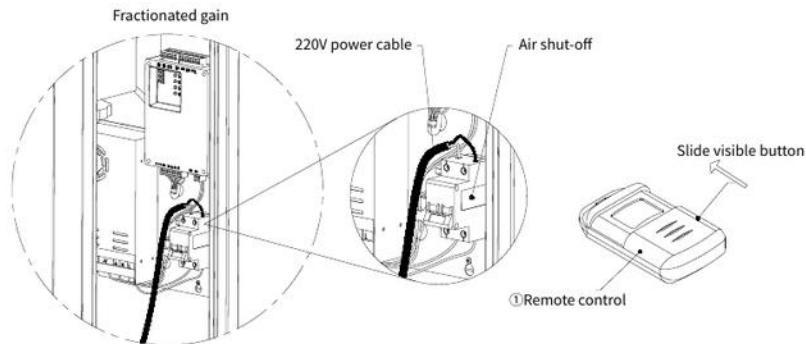
ARM FIXING - STEP 10

Align the arm holes with the gate cleat. Insert four M10 x 70 screws, fit the 10 mm flat washers and M10 nuts, then tighten with a 17 mm wrench and adjustable wrench.

SAFE CONNECTION & EXTERNAL DEVICES

Power connection, remote control and external equipment

Figure 9



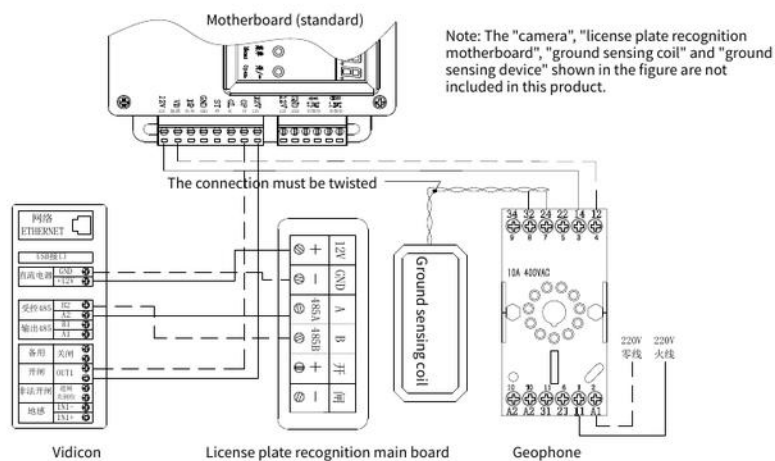
6. Connect the embedded 220V power cable to the air switch on the control board (connect the cable when the power is off). After power supply, use remote control to control the gate landing rod several times, check whether there is any abnormality in the gate, and confirm that no abnormality can be used; See (Figure 9) for details.



Warning: The above operation must be performed in the power off state; No live operation

SAFE POWER CONNECTION

- Connect the embedded 220V power cable to the control-board air switch
- Carry out wiring only with power OFF
- Connect and secure the protective ground
- After power is applied, test the gate movement with the remote control
- Stop operation if abnormal movement is observed



主板详情请查阅第9页

Warning: The device must be connected in the power off state, and the PGND cable is properly connected. No live operation

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EXTERNAL DEVICES

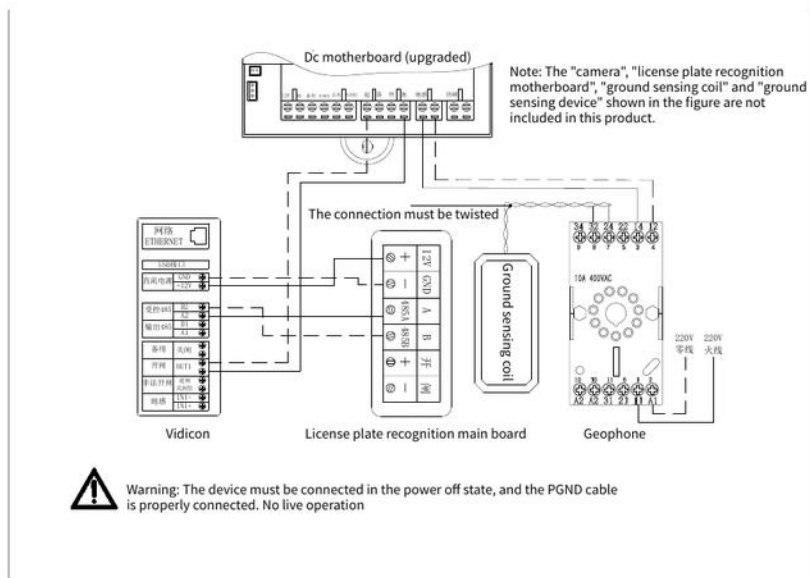
The connection drawing shows interfaces for a camera, license-plate recognition board, ground sensing coil and related I/O. These external devices are not included with the barrier gate; the drawing is provided for connection reference.

WARNING

All external connections must be made with the equipment powered off and the protective ground correctly connected.

EXTERNAL DEVICE CONNECTION

Upgraded DC motherboard interface



INTERFACE NOTES

- Upgraded DC motherboard
- Camera / video interface
- License-plate recognition board
- Ground sensing coil
- Twisted connection cable
- Power and control terminals

IMPORTANT

The source manual states that the camera, license-plate recognition board, ground sensing coil and ground sensing device are not included with the product.

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FINAL SAFETY NOTE

Make all wiring and external-device connections in the power-off state. Ensure the protective ground is correctly connected and secured before operation.