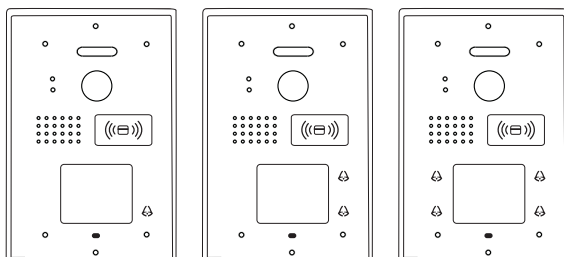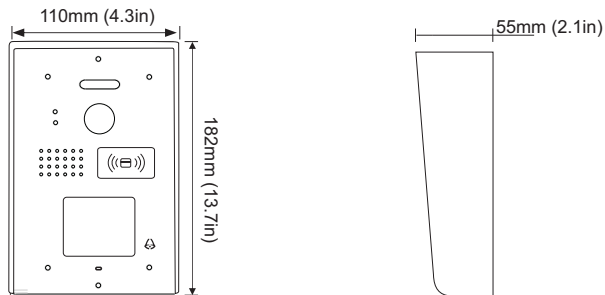# Door Station
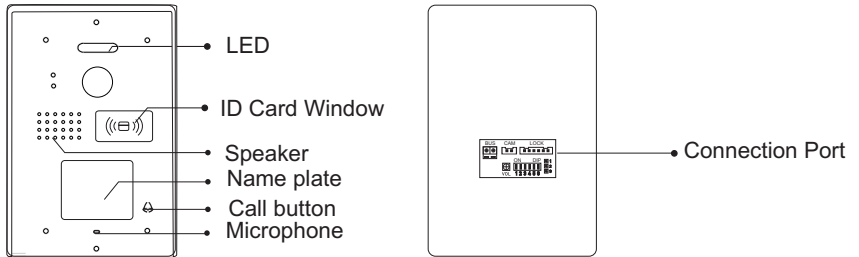## SPD-DS81x

User's Manual
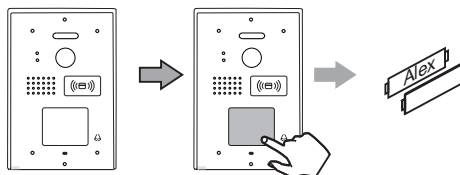

Please read this manual carefully before using the product .

1. Parts and Functions

LED

ID Card Window

Speaker

Name plate

Call button

Microphone

Connection Port
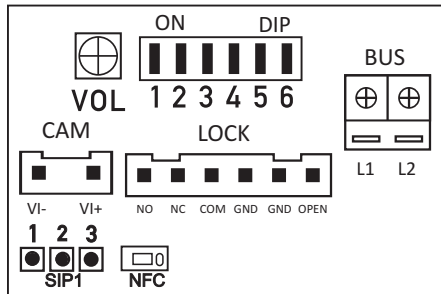
110mm (4.3in)

182mm (13.7in)

55mm (2.1in)

Press down and move left to open the transparent nameplate cover.
Then insert the name paper and put the cover back.

Alex

⚡ Light-sensing touch button: When any object blocks the button, the button can be triggered. (Which solved the problem that the capacitive touch button cannot trigger the button when people wear gloves.)

2. Terminal Description

Connection Port

- **BUS:** (L1, L2) non-polarity bus line.
- **CAM:** Extra camera connection port.
- **LOCK:** Electronic lock connection port.
- **VOL:** Volume adjustor.
- **DIP :** DIP switches for system configurations.
- **SIP1:** Door lock jumper.
- **NPC:** DIP switch, bits 1/ 2/ 3 are used for NFC command selection. Long press the switch for 2 seconds to set.
- **100:** Make a master card.
- **000:** Use IC card encryption mode (password fixed).
- **111:** Use IC card without encryption mode.
- **010:** Delete a IC card or key tag.
- **001:** Format all the IC cards or key tags.

Swipe the IC card to open the door
Swipe a user card to hear a long beep, the door opens. Swipe a non-user card to hear a short ring three times, the door does not open.

Make a master card
Set the DIP switch to 100, then long-press the switch for 2 seconds to hear the beep sound every second, which enter the recording management card mode, swipe a new IC card, and the master card will be successfully make after a long beep sound

Delete a IC card or key tag
Set the DIP switch to 010, then long-press the switch for 2 seconds to hear a beep sound. Swipe a user card or key tag to be cleared within 10 seconds. If you hear three short beeps, the clearing is successful.

Format all the IC cards or key tags
Set the DIP switch to 001, then press the switch for 2 seconds, and then hear a beep sound to start formatting. After 5 seconds, you will hear a beep sound again, all master cards and user cards are cleared, and formatting is completed.

Add or delete a user card
Swipe the master card, will hear a beep every second, and swipe a new user card within 60 seconds, hear a long beep again and enter successfully ; then swipe an old user card, hear a short beep three times, delete it successfully, and finally swipe the master card to exit. It can support up to 2990 user cards.
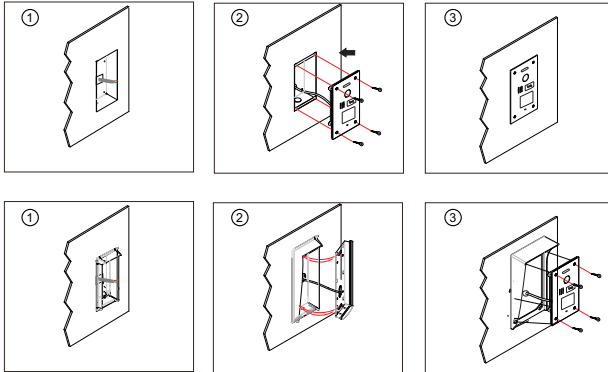
Using IC card encryption mode (password fixed)
The DIP switch is set to 000. Press the DIP switch for 2 seconds and then touch it lightly. After hearing a sound, the setting is completed.Use IC card encryption mode, then when swiping a card to unlock, IC card to have the corresponding password.This function is used to prevent others from copying IC CARDS.

Use IC card without encryption mode
The DIP switch is set to 111. Press the DIP switch for 2 seconds and then touch the switch. After hearing a sound, the setting is completed.Use IC card not to encrypt mode, then when swiping a card to unlock, as long as the corresponding IC card number can unlock. After others can copy IC card by used copy card to unlock.
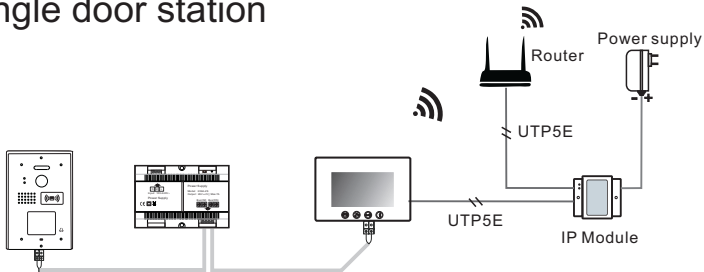
3. Mounting

Drill a hole and attach the rainy cover to it
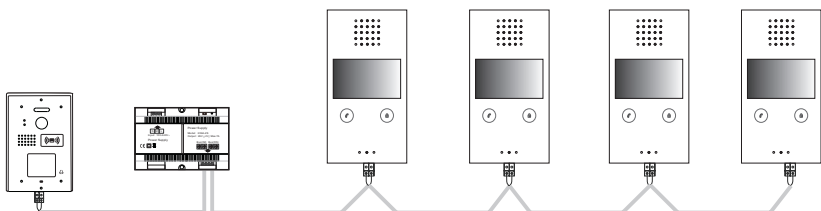
Attach the unit to the rainy cover correctlly

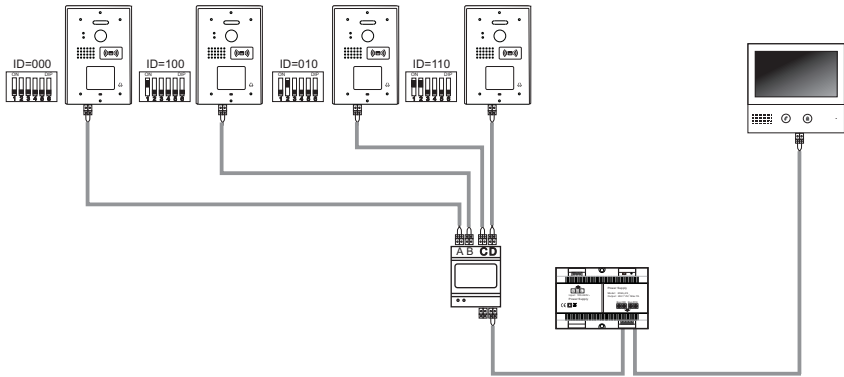The last view for all mounting
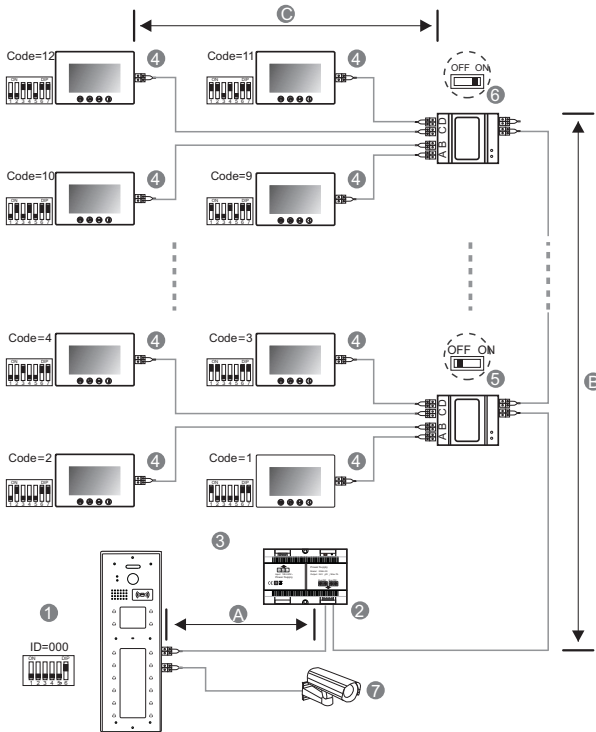
4. System Connection

Single door station

Router

Power supply

UTP5E

UTP5E

IP Module

Multi door station connection

Multi Monitor Connection

Basic star Wiring

When monitor quantity < 20

Cable Usage	A	B	C
Parallel cable 2x0.75mm	60	60	30
Parallel cable 2x1mm	80	80	40

When monitor quantity > 20

Cable Usage	A	B	C
Parallel cable 2x1mm	60	60	30
Parallel cable 2x1.5mm	80	80	40

[1]: Door station, when there is only one Door station, the DIP bit-1, bit-2 and bit-3 should be set to **000**.

[2]: Power supply, MUST be installed side by side with Power Separator.

[3]: Power Separator, MUST be installed side by side with Power supply.

[4]: Monitor, each one with an unique User Code, note that all the bit-6 of the DIP should be set to **1(ON)** in this case.
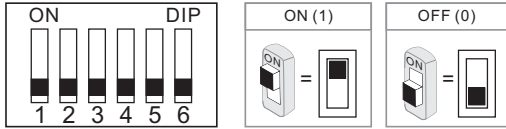
[5]: Video distributor set switch to **OFF** unless at the end of the line.

[6]: Video distributor set switch to **ON** at the end of the line.

[7]: Extra camera.

5. DIP Switches Settings

Total 6 bits in the DIP switches can be configured. The switches can be modified either before or after installation.

Bit-1,Bit-2 and Bit-3 are used for door station ID setting(1=on,0=off).
000 － 100 － 010 － 110 － 001 － 101 － 011 － 111
000 - First door station
100 - Second door station
010 - Third door station
110 - Fourth door station
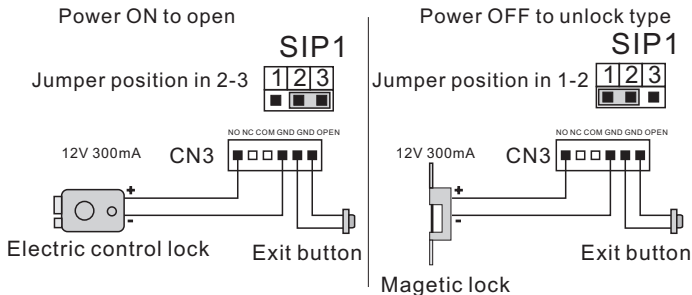Bit-4 and Bit-5 is used for unlock time setting.
00 - 1 second (Default setting)
10 - 5 seconds
01 - 10 seconds
11 - 15 seconds

Bit-6 is used for connecting extra camera.
0 - No extra camera (Default setting)
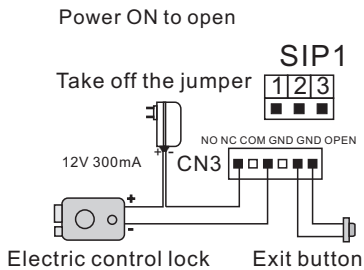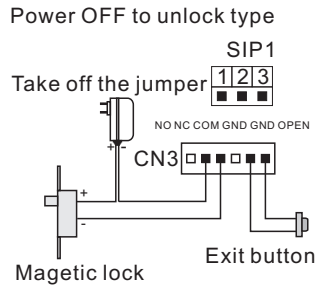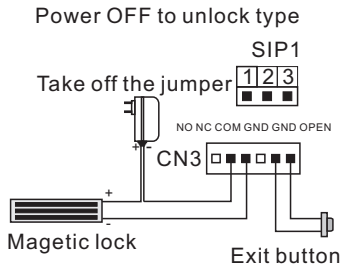1 - Connecting with extra camera

6. Electric Lock Connection

1. The door lock power for a 12v DC strike (max current=250mA).

2. For Electric control lock, setting the jumper SIP1 to 2-3 for a normally open lock (power ON to open);

For electromagnetic lock or magnetic lock,need set SIP1 to 1-2 for a normally closed lock(power OFF to open)

3. Adjust the timer setting with Bit-4 and Bit-5 at the outdoor station

(1=on,0=off)

00-1sec, 01-5sec,10-10sec,11-15sec.

7. Electric Lock Connection

1. The external power supply must be used according to the lock.

2. The jumper must be taken off before connecting.

3. If different unlocking time is needed, change the unlock time on door station by modifying the BIT-4 and BIT-5.

Power OFF to unlock type

SIP1

Take off the jumper | 1 2 3

NO NC COM GND GND OPEN

CN3

Magetic lock

Exit button

Power OFF to unlock type

SIP1

Take off the jumper | 1 2 3

NO NC COM GND GND OPEN

CN3

Magetic lock

Exit button

Power ON to open

SIP1

Take off the jumper | 1 2 3

NO NC COM GND GND OPEN

12V 300mA | CN3

Electric control lock

Exit button

8. Specification

- Power supply: DC 24V
- Power Consumption: 1W in standby, 5W in working
- Unlock Power output: 12Vdc, 250mA
- Unlock timing: 1s, 5s, 10s, 15s
- Working Temperature: -20℃~ +55℃