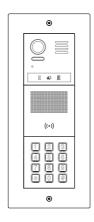
DT821 Door Station

2-wire Fisheye Camera Modularity Outdoor Station

Quick Installation Guide









821-VD



821-AD



821-DR



821-MK





821-TFT



821-LB



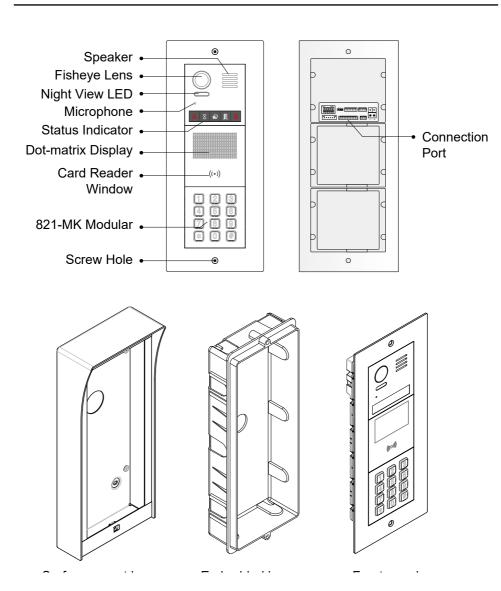
821-BL







1. Parts and Functions

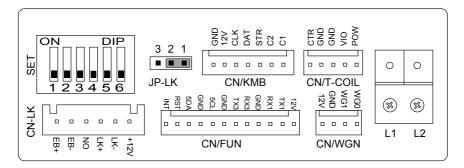


Note:Key A and key B will not be seen on the panel,they are cryptic.About activating key A and key B, please refer to the user manual.





2. Terminal Description



- +12V: 12VDC power output.
- · LK-: power ground.
- · LK+: common contact of the relay.
- NO.: normally open contact of the relay(refer to DT technical guide for Lock connection detail informations).
- EB+: exit button positive connection port.
- EB-: exit button negative connection port.
- JP-LK: for electronic lock safety type setting (refer to door lock connections).
- **SET**: DIP switches for system configurations.
- CN/KMB: call button module connection port.
- CN/T-COIL: reserved.
- CN/FUN: Mechanical keypad module or TFT display module connection port.
- CN/WGN: Card reader module connection port.
- Bus(L1,L2): non-polarity bus line,connect to PC6B(power comb unit).

3. Specification

Power supply: 24Vdc(supplied by PC6B)

Camera: 1/2.7" fisheye camera,170° wide angle

Power Consumption: 1W in standby

5W in working

Card Reader: Support 125KHz and 13.56MHz unencrypted RFID tag

Unlock Power output: 12Vdc,250mA







Unlock timing: 1~99s

Working temperature: - 20°C ~ +55°C

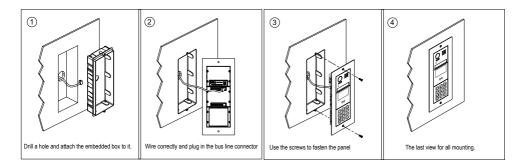
Wiring: 2 wires (non-polarity)

Dimension: 316(H)×133(W)×48(D)mm(3 GANG)

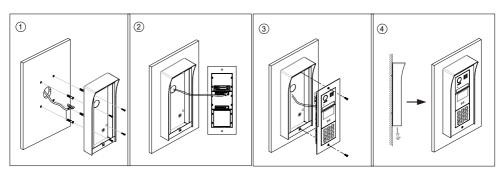
232(H)×133(W)×48(D)mm(2 GANG)

4. Mounting

Flush mounting



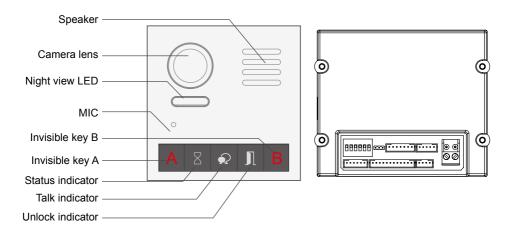
Surface mounting







5. VD Module



Note: Key A and key B can not be seen on the panel, they are cryptic.

(1) DIP Switches Settings

Totally 6 bits can be configured by dip-switch. All switches can be modified either before or after installation, please restarting the power whenever the switches have been modified.







- Bit-1 and Bit 2 are used for door station ID settings. When multi door stations are installed in the system, these two bits must be set correctly, the first door station set to 00, the second one set to 01, the third one set to 10, the fourth one set to 11. If only one door station is installed, set to 00.
- Bit-3 is used for single or double row button door station selection. If the door station is a double row button, set this bit to 0. For single row button door station, set to 1.





- **Bit-4** is used for button code selection. If use the default codes for each button of the door station, set to 0. If use the programmed codes, set to 1.(the code for each button can be programmed by software, detail information refer to DT system technical guide)
- **Bit-5** is used for unlocking time setting. 0 is the default setting, and the default time is 1 second. If set to 1, the unlock time is 5 seconds (the unlock time can be modified by door station or software)
- Bit-6 is used for activating the key A and key B. Normally key A and key B is not activated(about the functions of key A and key B,please refer to DT system technical guide), Just when power up to the module, and the bit-6 is set to 1, the key A and key B is activated.

(2)Settings via touch button

A). Please know that the Bit-6 switch must be set to OFF, then power up to the module, and then the Bit-6 set to ON to carry on the following settings.

Unlocking Mode Setting

When the door station with Camera Module is in standby.

- (1)Press Key A, the **Unlock indicator** turns on with the warning sound of BP+, BP;
- (2)Press Key A again to set the **Unlocking Mode** to **Normally On** or **Normally Closed**. (**Normally On**: the **Status indicator** blinks for one time with the warning sound of BP+; **Normally Closed**:the **Status indicator** blinks for twice with the warning sound of BP+, BP).

If **TFT Module** is connected, the info will be displayed on screen.







Unlocking Time Delay Setting

When the door station with **Camera Module** is in standby.

- (1)Press Key A, the **Unlock indicator** turns on with the warning sound of BP+, BP:
- (2)Press Key B and hold on to enter the **Unlocking Time Delay Setting**, a warning sound of BP will be heard and the **Status indicator** blinks one time per second.

The counting of **Unlocking Time** is the times that **Status indicator** blinks(the units is second). For example,the **Status indicator** blinks for four times,that means the unlocking time is 4 seconds.



· Warning Tune Setting

When the door station with Camera Module is in standby.

- (1)Press Key A and hold on for 3 seconds to enter the **Warning Tune Option Mode**, the **Status indicator** turns on and the current tune is playing;
- (2)Press Key A again to play next tune;
- (3)Press Key B to quit.







Tune Volume Setting

When the door station with Camera Module is in standby.

- (1)Press Key B to enter **Tune Volume Setting**, the **Talk indicator** turns on,at the same time, play the tune at current volume;
- (2)Press Key A to increase/decrease the volume;
- (3)Press B to exit.

If **TFT Module** is connected, the current **Volume** will be displayed on screen.



Talk Volume Setting

- (1)During conversation, press Key B and hold on for 3 seconds to enter the **Talk Volume Setting**, The **Talk indicator** turns on with the warning sound of BP+,BP;
- (2)Press Key A to increase/decrease the volume.
- (3)Press Key B to exit.







B). Please know that the Bit-6 switch must be set to ON, then power up to carry on the following settings.

Camera N / P Standard Switch

When the door station with Camera Module is in standby.

- (1)Press Key A, the **Talk indicator** and **Status indicator** turns on with the warning sound of BP+, BP;
- (2)Press Key A again to enter the **Camera N/P Standard Switch** setting. (**P Standard**: the **Status indicator** blinks for one time with the warning sound of BP+; **N Standard**: the **Status indicator** blinks for twice with the warning sound of BP, BP).



• Enable/Disable Image Zoom Mode

When the door station with **Camera Module** is in standby.

- (1)Press Key A, the **Talk indicator** and **Status indicator** turns on with the warning sound of BP+, BP;
- (2)Press Key B to enter the **Enable/Disable Image Zoom Mode** setting. (**Enable Image Zoom Mode**: the **Talk indicator** blinks for one time with the warning sound of BP+; **Disable Image Zoom Mode**: the **Talk indicator** blinks for twice with the warning sound of BP, BP).

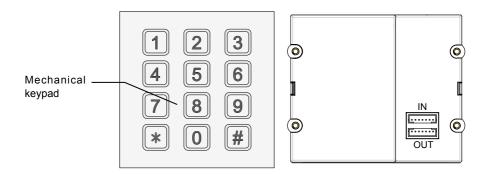


^{*} If enable image zoom mode, when the monitor being called, the image will be displayed on full screen for 5 seconds, then switch to Zoom image.





6. MK Module



Parameters Setting

This section explains the settings of each function, please refer to the following table:

About the setting mode:

Input the master code to switch to the setting mode, and input the corresponding setting code to perform the settings for the function you want. After settings have been made, input the following setting codes to continue the setting operation. Press " * " to exit the setting mode.



- The example is set X as cancel button and # as confirm button, please refer to */#
 function setting for detail information.
- Forbid to slide to touch the digital keypad,it may cause mistaken key,the correct operation is using your finger to press the digital you desired.
- You should press"confirm"button after finish inputting the code number each time,otherwise,the operation will be cancelled automatically in 10s.

Setting items	Setting range	Default value	Setting code
Reset all settings	1,2,3,4	-	00
Setting the master code	1 ~ 12 digits Valid keys:0 ~ 9	1234	01

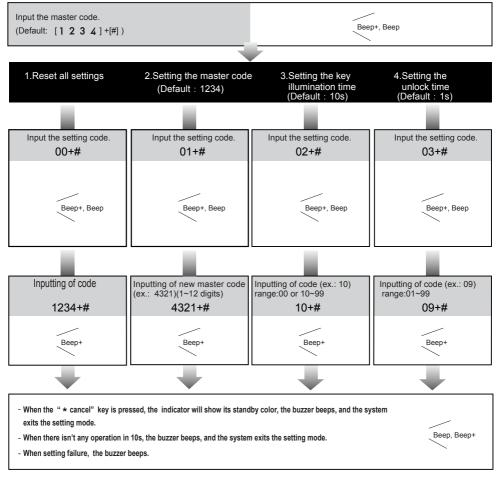




Setting items	Setting range	Default value	Setting code
Setting the key illumination time	10 to 99 seconds/ continually lit	10 seconds	02
Setting the unlock time	01 to 99 seconds	1 seconds	03
Setting the unlock mode	0:opened/1:closed	opened	04
Operation tone settings	0,1,2	on	05
Reset code settings	1,2,3,4	-	06
*&# function settings</td><td>0:Normal/1:Reverse</td><td>Normal</td><td>07</td></tr><tr><td>Call tone settings</td><td>0:Enable/1:Disable</td><td>Enable</td><td>08</td></tr><tr><td>Interference resistant grade settings</td><td>Valid keys:0 ~ 5</td><td>2</td><td>09</td></tr><tr><td>SPK Adjustment</td><td>Valid keys:0~9</td><td>5</td><td>11</td></tr><tr><td>Night light level</td><td>Valid keys:0 ~ 5</td><td>4</td><td>13</td></tr><tr><td>Reserve</td><td>Reserve</td><td>Reserve</td><td>14~17</td></tr><tr><td>Setting the code forTemporary1</td><td>1 ~ 12 digits Valid keys:0~9</td><td>-</td><td>18</td></tr><tr><td>Setting the code forTemporary2</td><td>1 ~ 12 digits Valid keys:0~9</td><td>-</td><td>19</td></tr><tr><td>Setting the code for user group1</td><td>1 ~ 12 digits Number of codes:40 Valid keys:0~9</td><td>-</td><td>20~59</td></tr><tr><td colspan=2>Setting the code for user group2 1 ~ 12 digits Number of codes:40 Valid keys:0~9 60</td><td>60~99</td></tr></tbody></table>			



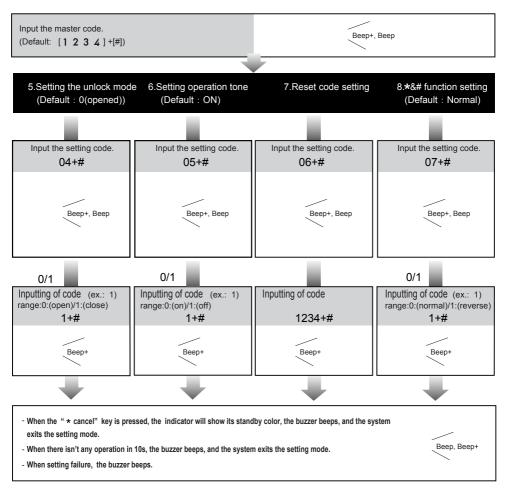




- All settings will restore to their default value.
- When power on or activate the reset all setting item,the keypad checking will carry out, during this time,the key illumination will blink and the touching operation is forbidden, after finish checking,the key illumination will stop blinking and sent out a long sound of beep
- The master code is allowed 1~12 digits, the same code cannot be set for both the user code and the master code, it is recommended that you modify the default master code.
- If the key illumination time is set to 00,the key illumination will light up all the time when power on.
- If the key illumination time is set to 10~99,the key illumination will light up for 10~99 seconds. At this mode, the key illumination lights off in standby mode, touching any digital key can illuminate, but this is the invalid digital.
- The unlock time can be set on both monitor and door station, and the valid value is the number you set last time.



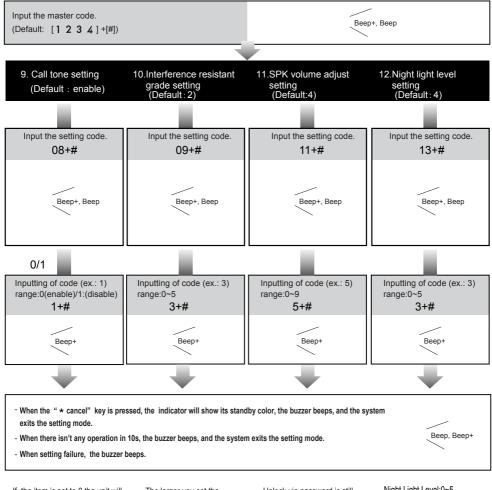




- The unlock mode can be set on both monitor and door station, and the valid value is the number you set last time.
- When the operation tone is set to 0,pressing the digital keypad will sent out a sound of beep.
- When the operation tone is set to 1,pressing the digital keypad will blink one time.
- Cancel all the passwords except the master code.
- Restore the master code to default value(1,2,3,4)
- When the item is set to 0,press the * button to cancel the input, and press the # button to confirm the input.
- When the item is set to 1,press the # button to cancel the input, and press the * button to confirm the input.





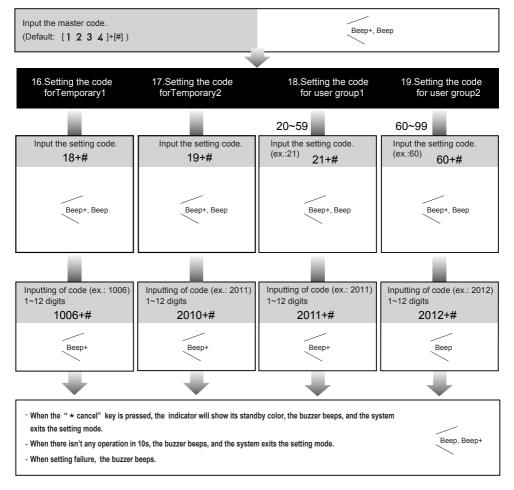


- If the item is set to 0,the unit will respond a call tone when pressing the "CALL" button.
- If the item is set to 1, the unit will have no responds when pressing the "CALL" button.
- The larger you set the interference resistant grade, the stronger it will be, but the sensitivity of the keypad will he more lower
- The interference resistant grade setting also will activate the keypad checking.
- Unlock via password is still available even when the door station is talking.
- When door station is talking, you can enter the Master code (the LED turns white upon that) to activate the volume adjusting function:
- * Speaker adjustment: 3 (up), 6 (down).

- Night Light Level:0~5.
- -The higher the number, the brighter the night lights.







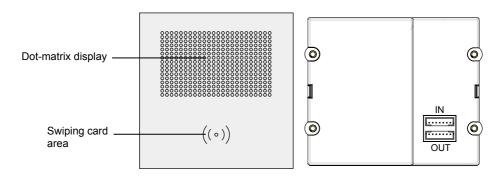
- When input the correct temporary password to release the door, the system will clear the temporary password after 60 seconds automatically. But you should know that the password is valid within 60 seconds after inputing the correct temporary password
- The temporary1 is used to release the first lock,and the temporary 2 is used to release the second lock(the second lock need external device to support).
- If the password length exceeds 12 digits, the system will sent out the sound of "beep,beep,beep,beep",and the digitals you input before will be cleared at the same time.
- The temporary code can not be set the same as the master code and user code.

- The user code group1 is used to release the first lock, and the user code group2 is used to release the second lock (the second lock need external device to support).
- The user code group1 and user code code group2 can contain 40 group passwords
- If the password length exceeds 12 digits, the system will sent out the sound of "beep,beep,beep,beep",and the digitals you input before will be cleared at the same time.
- The user code can not be set the same as the master code and temporary code.





7. DR Module



Features

- Up to 320 user cards can be registered by door station
- · Easy management with indicators and sound hints
- Two Master Cards are available, one is MASTER CARD ADD and the other is MASTER CARD DELETE, when the new Master Cards registered, the old ones are invalid automatically
- The distance of card reading is from 3 to 5 cm
- The **Master Cards** are necessary when you add or delete user cards. Please keep it well for future use

Card Operation

Master Card Setting

Power on and short out EB+,EB-, a sound of "BP+" will be sent out, and the **Unlock indicator** is turned on.



Toggle DIP4 switch for four times, a sound of "BP+,BP" will be sent out, the **Talk indicator** and the **Unlock indicator** will be turned on.



Show the ADD CARD, a sound of "BP+" will be sent out, the Unlock indicator is turned on.





Show the **DELETE CARD**, a sound of "BP+" will be sent out, and all indicators will be turned off. After 10 seconds, it will exit out the **Master Card Setting** automatically.

User Card Setting

Power on and short out EB+,EB-, a sound of "BP+" will be sent out, and the **Unlock indicator** is turned on.



i) Add User Card

In standby mode, show the **MASTER CARD ADD**, it will sound "BP+,BP", the **Talk indicator** is turned on.



Input the room number you need to set (0 is default). Show **User Cards**, it will sound "BP+", and the **Talk indicator** blinks one time. (You can continuously show **User Cards**).



Show the **MASTER CARD ADD** to exit out Add User Card Setting, it will sound "BP,BP+", and all indicators are turned off. (without any operation for 10 seconds, it will return to standby mode)

ii) Delete User Card

In standby mode, show the **MASTER CARD DELETE**, it will sound "BP+,BP", and the **Unlock indicator** is turned on, and the **Delete Card Mode** is activated.







In Delete Card Mode:

- --Delete by room number: Input the room code, it will sound "BP+", and the Unlock indicator blinks one time, all associated cards will be deleted.
- --Delete by User Card: Show the User Cards which you need to delete. It will sound "BP+", and he Unlock indicator blinks one time. (You can continuously show user cards that you need to delete)

Show the **MASTER CARD DELETE** to exit out **Delete Card Mode**. It will sound "BP,BP+", and all indicators are turned off. (without any operation for 10 seconds, it will return to standby mode)

iii) Format Card

In standby mode, show the **MASTER CARD DELETE**, it will sound "BP+,BP", and the **Unlock indicator** is turned on.



Show the **MASTER CARD ADD**, it will sound "BP+,BP", and the **Talk indicator** and the **Unlock indicator** are turned on.



Show the **MASTER CARD ADD**, it will sound "BP", the **Talk indicator** and the **Unlock indicator** will blink, and after 10 seconds, it will return to standby mode and the format is finished.

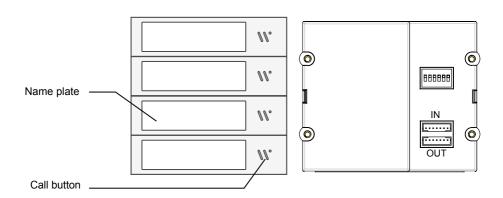
iiii) Card Database

- i) By PC
- ii) By SD Card





8. S4 Module



Call codes

The DT821 automatically assigns the call codes to the connected module's buttons. Regardless of the structure of the call button module, the button numbers are listed from the bottom to top:

* Examples:

• DIP1 switch set to on







• DIP2 switch set to on



∥06

№°05

Address description

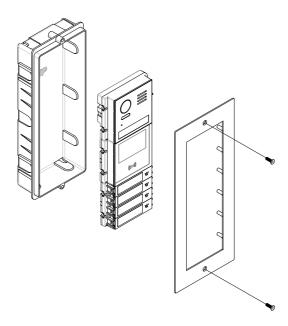
NO.	Functions
01	Call apartment 01
02	Call apartment 02
03	Call apartment 03
04	Call apartment 04
05	Call apartment 05
06	Call apartment 06
07	Call apartment 07
08	Call apartment 08



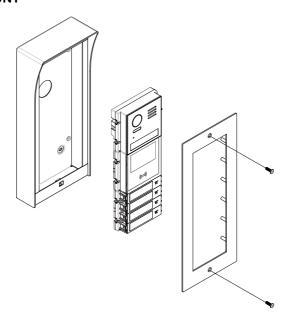


9. Module Mount

FLUSH MOUNT



SURFACE MOUNT

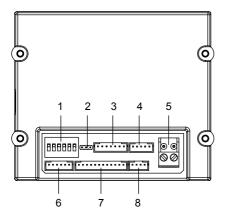






10. Terminal Description

• VD module

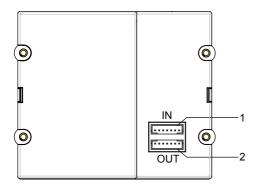


NO.	Name	Descriptions
1	SET	DIP switches for system configurations
2	JP-LK	For electronic lock safety type setting
3	CN/KMB	Call button module connection port
4	CN/T-COIL	Reserved
5	Bus	Non-polarity bus line,connect to power comb unit
6	CN-LK	Electric lock and exit button connection port
7	CN/FUN	Mechanical keypad module or TFT display module connection port
8	CN/WGN	Card reader module connection port



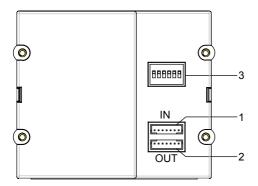


• MK and DR module



NO.	Name	Descriptions
1	CN/FUN_IN	Connect to CN/FUN of video entry module
2	CN/FUN_OUT	Connect to next keypad or TFT module

• S4 module



NO.	Name	Descriptions
1	CN/FUN_IN	Connect to CN/FUN of video entry module
2	CN/FUN_OUT	Connect to next keypad or TFT module
3	SET	DIP switches for system configurations

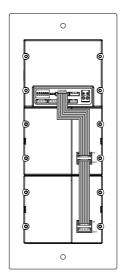




11. Connections

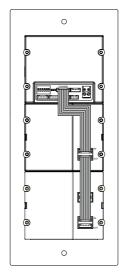
• VD and DR and MK module





VD and DR and S4 module



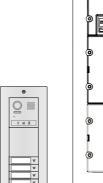


0





VD and BL and S4 module





12. Electric Lock Connection

1) Door Lock Controlled with Internal Power

1. The door lock is limited to 12Vdc, and holding current must be less than 250mA when using internal power supply mode.

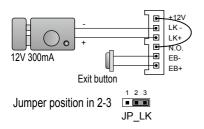
0

- 2. The Unlock Mode Parameter must be set to 0 (by default).
- 3. Jumper set to 1-2 position for power-off-to-unlock safety type(Normally closed mode); set to 2-3 position for power-on-to -unlock type(Normally open mode).
- 4. If different unlocking time is needed, change the unlock time on door station, detail information refer to DT system technical guide .

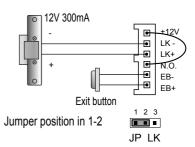




Power-on-to-Unlock type:



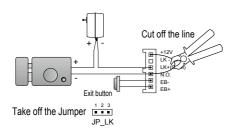
Power-off-to-Unlock type:



2) Door Lock Controlled with External Power

- 1. The external power supply must be used according to the lock.
- 2. The jumper must be taken off before connecting.
- 3. Setup the Unlock Mode Parameter for different lock types
- Power-on-to-unlock type:Unlock Mode=0(by default)
- Power-off-to-unlock type:Unlock Mode=1
- 4. If different unlocking time is needed, change the unlock time on door station, detail information refer to DT system technical guide.

Power-on-to-Unlock type:



Power-off-to-Unlock type:

