# 2 -Wire Intercom System

## DT596(F)/ID User Manual



DT596/ID

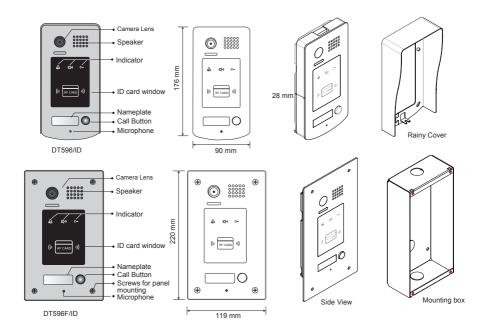


DT596F/ID

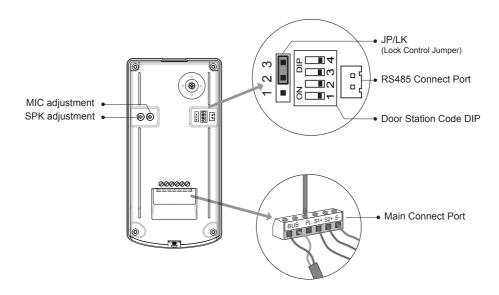
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### 1.Parts and Functions



## 2.Terminal Descriptions

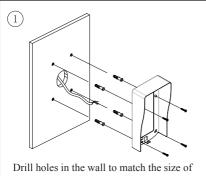


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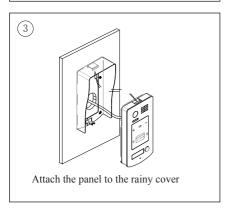
- JP/LK(Lock Control Jumper): To select the lock type: see section 4
- **Doorstation Code DIP:** Total 4 door stations can be supported, see section 5
- RS485:Used to update the program for door station
- MIC: Adjust the volume of Microphone
- SPK: Adjust the volume of Speaker
- Main Connect Port: To connect the bus line and the electronic locks.
- BUS: Connect to the bus line, no polarity.
- PL: External lock power input, connect to the power positive(power +).
- S1+, S2+: Lock power(+) output, to connect 2 locks.
- · S-: Lock power(-) output, connect to the power(-) input of locks(only when using the camera to power the locks, if using the external power supply for the locks, the S- will not be connected).

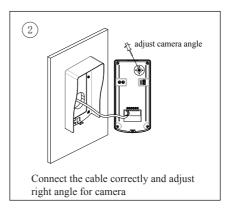
## 3. Door Station Mounting

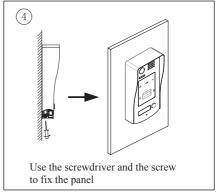
#### DT596/ID Mounting



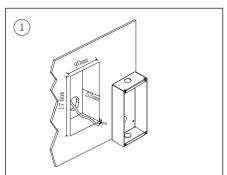
screws and attach the rainy cover to the wall.



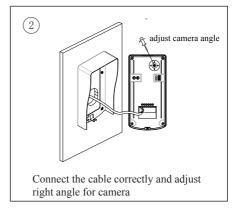


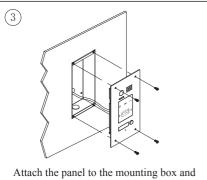


## DT596F/ID Mounting

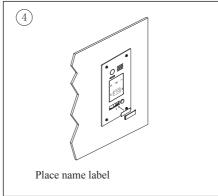


Drill a hole in the wall to match the size of the mounting box and attach to the wall.



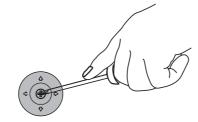


use screws supplied to fix the panel



## Adjusting Camera Angle

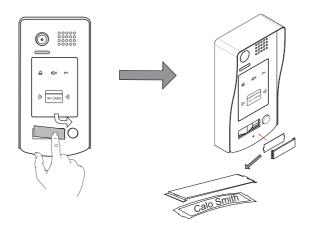




use a screwdriver to loosen the screw, then adjust an appropriate camera angle, after finishing, use the screwdriver to fix the screw.

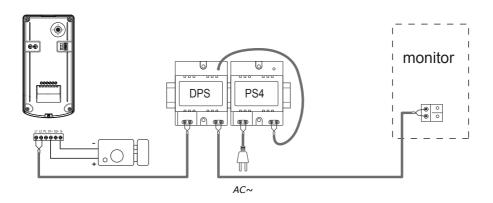
## Placing Name Label

Press the plastic cover on right/left side to move away the cover,insert a name paper,then put the plastic cover back to the panel.



## 4. System Wiring and Electric Lock Connection

#### **Basic Connection**

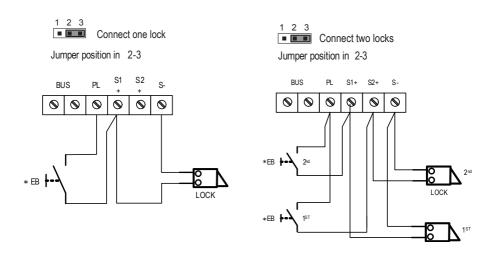


#### **Electric Lock Connection**

#### Door Lock Controlled with Internal Power

#### Note:

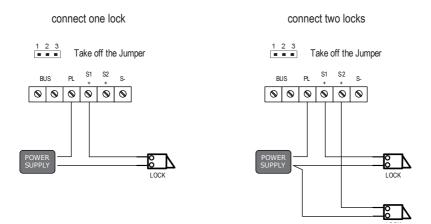
- 1. Electronic lock of Power-on-to-unlock type should be used.
- 2. The door lock is limited to 12V, and holding current must be less than 250mA.
- 3. The door lock control is not timed from Exit Button(EB).
- 4. The **Unlock Mode** Parameter of Monitor must be set to 0 (by default).



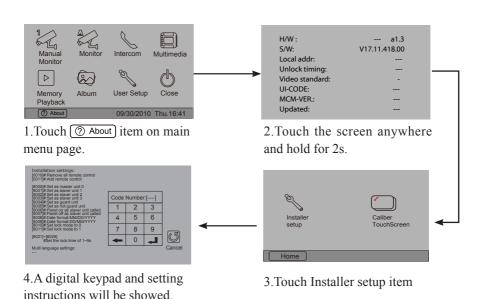
#### Door Lock Controlled with Dry Contact

#### Note:

- 1. The external power supply must be used according to the lock.
- 2. The inside relay contact is restricted to AC or DC 24V/1A.
- 3. The jumper must be taken off before connecting.
- 4. Setup the **Unlock Mode** of Monitor for different lock types.
  - Power-on-to-unlock type:Unlock Mode=0 (by default)
  - Power-off-to-unlock type:Unlock Mode=1



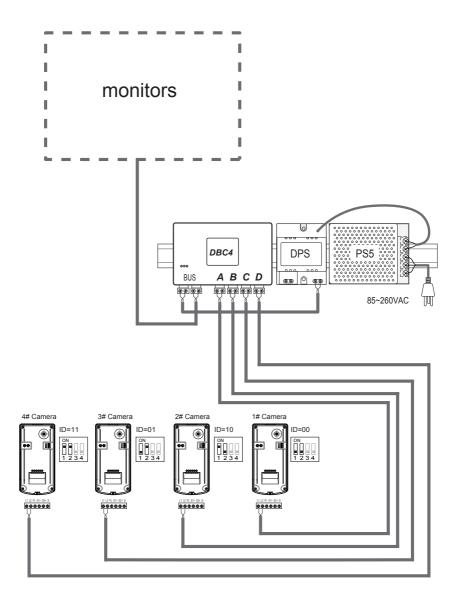
#### Unlock parameter setting(set on monitor)



#### Note:

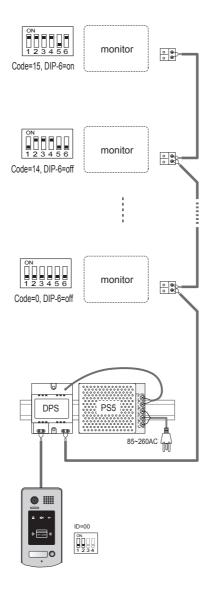
- 1.must connect DT596(F)/ID correctly before setting.
- 2.the parameter will be saved in DT596(F)/ID automatically,so you need only set on one monitor.
- 3.the above diagram is fit for icon menu series monitors only, to text menu series monitors, please refer to the corresponding user manual.

### Multi Door Stations Connection

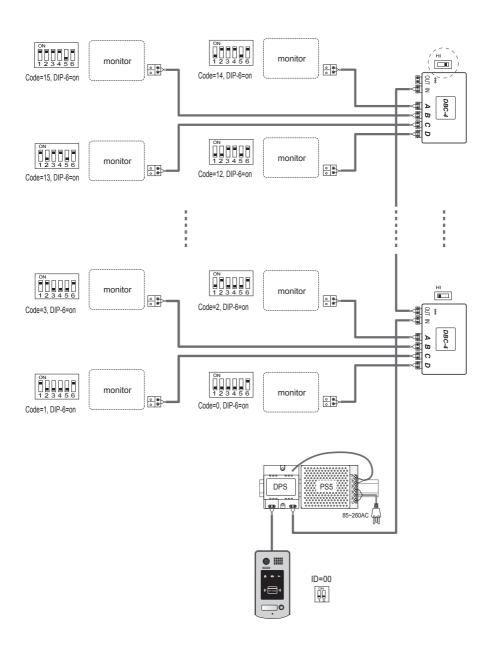


### Multi Monitors Connection

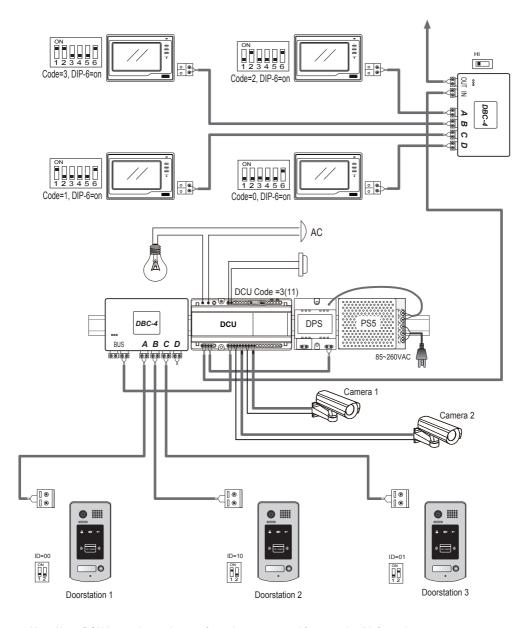
#### Basic IN-OUT Wiring Mode



#### With DBC-4 Wiring Mode

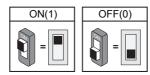


## Extending Connections with DCU unit



Note: About DCU instructions, please refer to the user manual for more detail informations.

## 5.DIP Switches Setting



### **DIP Switches Settings of Door Station**

Total 4 bits on the DIP switches can be configured. The switches can be modified either before or after installation.

Setting Item	Bit state	Descriptions
Bit1 and Bit2 (it is used to set the ID code for door station)	ON 1 2 34	Default setting, ID = 0(00), set to the first Door Station.
	ON 1 2 34	ID = 1(10), set to the second Door Station.
	ON 1 2 34	ID = 2(01), set to the third Door Station.
	ON 1 2 34	ID = 3(11), set to the fourth Door Station.
Bit3	ON 1 2 3 4	The relay 2 doesn't respond the second lock, showing user cards controlled two locks or pressing unlock 2nd on monitor can not release the second lock. During this time, After continuously showing access card 10 times, the relay 2 will be closed for 60 seconds, the blue LED-relay 2 will be illuminated for 60 seconds, and the buzzer will continuously sound, If the system is connected alarm, the alarm function will be activated.
	ON 1 2 3 4	The relay 2 responds the second lock.
Bit4		Used to authorize master card

## **DIP Switches Settings of Monitor**

There are 6 bit switches in total. The DIP switches are used to configure the user code for each Monitor.

Bit-6 is used to match the video impendance, which have to be set to on if the monitor is in the end of the bus, otherwise set to off.

Bit state	Setting	Bit state	Setting
ON 123456	The monitor is not at the end of the bus.	ON 1 2 3 4 5 6	The monitor is at the end of the bus.

Bit-1 to Bit-5 are used to User Code setting. The DT596(F)/ID responds to 0~15.

Bit state	User Code	Bit state	User Code	Bit state	User Code
ON 123456	Code=0	ON 1 2 3 4 5 6	Code=6	ON 1 2 3 4 5 6	Code=11
ON 1 2 3 4 5 6	Code=1	ON 1 2 3 4 5 6	Code=7	ON 1 2 3 4 5 6	Code=12
ON 1 2 3 4 5 6	Code=2	ON 1 2 3 4 5 6	Code=8	ON 1 2 3 4 5 6	Code=13
ON 1 2 3 4 5 6	Code=3	ON 1 2 3 4 5 6	Code=9	ON 1 2 3 4 5 6	Code=14
ON 1 2 3 4 5 6	Code=4	ON 1 2 3 4 5 6	Code=10	ON	Code=15
ON 1 2 3 4 5 6	Code=5				

## 6. ID Card Registration

#### Introduction:

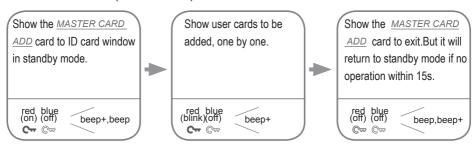
- Up to 1000 user cards can be registered by the door station.
- Easy management with LED status and sound hints.
- There are two master cards, one <u>MASTER CARD ADD</u> card and one <u>MASTER CARD DELETE</u> card, When registered new master cards, the old master cards are invalid automatically.
- · Card reading distance 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.



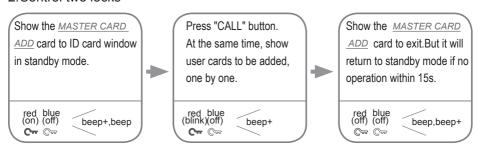


#### Add User Cards:

#### 1.Control one lock(the first lock)



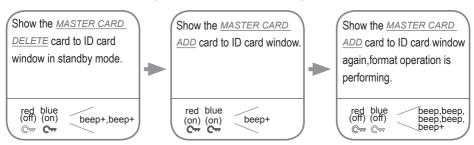
#### 2.Control two locks



#### Delete User Cards:

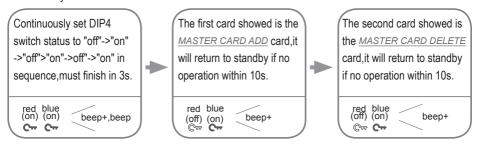


### Access Initialization (delete all user cards):



#### Authorize master cards:

By default, there are two master cards marked <u>MASTER CARD ADD</u> and <u>MASTER CARD DELETE</u>, but you should know that the master card can be authorized by users at any time. That means any two user cards can be authorized to master cards, When registered new master cards, the old master cards are invalid automatically.



## 7. Unlock Operations

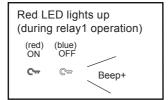
#### Unlocking of ID Card

When the registered user card has been shown to ID card window, the LED indicator (the first lock:red; the second lock:blue) lights up, the buzzer sounds,and the electric door strike is unlocked.

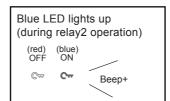
Note1:if the user card control one lock only, show the user card to release the first lock.red indicator lights up.

Note2:if the user card control two locks, show the user card to ID card window in standby mode, the red&blue indicator blink for 1.5s alternately. During this time, press "CALL" button to release the second lock. Otherwise, release the first lock if there isn't any operation within 1.5 seconds.





#### Example:release the second lock



- If 10 times unauthorized access cards are continuously attempted, the release function is forbidden and the showing card operation is disabled for 60 seconds.
- When DIP3 switch is set to 1,the relay 2 doesn't respond the second lock,that's to say,showing user
  cards controlled two locks or pressing unlock 2nd on monitor can not release the second lock.During
  this time,After continuously showing access card 10 times,the relay 2 will be closed for 60 seconds,the
  blue LED-relay 2 will be illuminated for 60 seconds,and the buzzer will continuously sound about 8
  times.If the system is connected alarm,the alarm function will be activated.

You can activate the electric door strike by pressing the request to exit button connected to the unit.
 Pressing request to exit button 1 releases relay 1, and pressing request to exit button 2 releases relay 2. (The unlock function will work when the request to exit button is pushed, even while the proximity access is forbidden.



- 1. If show the authorized user card, the buzzer will sound of beep+, and the LED indicator will light up.
- 2. If show the unauthorized user card, the buzzer will sound of beep, beep, beep.

#### 8. Precaustions

- Please clean the unit with soft cotton cloth, don't use the organic impregnant or chemical clean agent. If
  necessary, please use a little pure water or dilute soap water to clean the dust.
- The unit is weather resistant. However do not spray high pressure water on access control keypad directly. Excessive moisture may cause problems with the unit.
- You must use the right adaptor which is supplied by the manufacture or approved by the manufacture..
- Pay attention to the high voltage inside the products, please refer service only to a trained and qualified professional.

## 9. Specifications

Power Supply: DC 24V (supplied by PS4-24V or PS5-24V);
 Power Consumption: Standby 60mA; Working status 200mA;

Camera: Pinhole Sharp Color CCD; 420 TV Lines;

Lock Power supply: 12Vdc, 300mA(Internal Power);

Number of relay circuits:
2

Mounting: Surface mounting(DT596/ID)
Flush mounting (DT596F/ID)

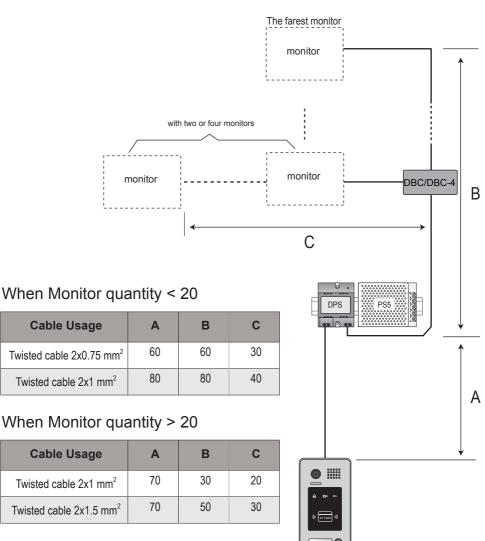
Working temperature:  $-10^{\circ}\text{C} \sim +45^{\circ}\text{C}$ 

Wiring: 2 wires,non-polarity

Dimension: 176(H)×90(W)×28(D)mm(DT596/ID) 220(H)×119(W)×52(D)mm(DT596F/ID)

## 10. Cables Requirements

The maximum distance of the wiring is limited in the DT system. Using different cables may also affect the maximum distance which the system can reach.



Note:If the monitor has been specified the distance, refer to the parameter.

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