DT821 TECHNICAL MANUAL

Apartment Intercom System

2-wire Series

Securevision 5-inch TFT Module







1. Parts and Functions



Surface mount box

Flush mount wall box

Door Station





2. Terminal Description



- +12V: 12VDC power output
- LK-: power ground
- LK+: relay common contact
- NO .: relay normally open contact
- EB+: exit button positive
- EB-: exit button negative
- JP-LK: electronic lock type setting
- SET : DIP switches for system configurations
- · CN/KMB: additional bell button 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): no-polarity bus line, connect to PC7(power supply)

3. Specification

Power supply:	24Vdc(supplied by PC7)
Camera:	1/2.7" fisheye camera,170° wide angle
Power Consumption:	1W standby
	5W working
Card Reader:	Support 125KHz and 13.56MHz unencrypted RFID tag
Unlock Power output:	12Vdc,250mA





Unlock timing: Working temperature: Wiring: Dimension:

1~99s - 20°C ~ +55°C 2 wires (no-polarity) H316×W133×D48mm(3-Modules) H232×W133×D48mm(2-Modules)

4. Mounting

Flush mounting



Surface mounting







5. Connection Diagram







6. VD Module



Note: Key A and key B can not be seen on the panel, they are cryptic. Normally key A and key B are not active. To activate them, flip DIP switch 6 into On position

(1) DIP Switches Settings

There are 6 DIP- switches on the rear of door station. All switches can be modified either before or after installation, but restarting the power is needed whenever the switches have been modified



- DIP-1 and DIP-2 are for door station ID setting. When multiple door stations are
 installed, the first door station is 00 (default); the second door station address is 01: DIP-2
 is On; the third door station address is 10: DIP-1 is On, the fourth door station address is
 11: DIP-1 and DIP-2 are On
- · DIP-3 is obsolete



- Dip-4 is obsolete
- **DIP-5 is for unlocking time setting.** Off (0) is default setting, and the default time is 1 second. If set On (1), the unlock time is 5 seconds
- **DIP-6 is for activating invisible key A and key B.** Power Off the door station and then power it On. Flip DIP-6 into On position and keys A and B will be activated. Remember to flip Off after programming finished

(2)Settings via Invisible Key A and B

Remember to power Off and power On the door station and then flip DIP-6 On to perform following settings:

- Unlocking Mode Setting
- 1. Press Key A, Unlock indicator turns on with double beep sound

2.Press Key A again to set Unlocking Mode to Normally Open or Normally Closed.

Normally Open: Status indicator blinks once with beep sound

Normally Closed: Status indicator blinks twice with double beep sound

If door station has TFT module connected, the info will be visible on the screen







• Unlocking Time Setting

1. Press Key A, the Unlock indicator turns on with double beep sound

2. Press and hold Key B to enter the **Unlocking Time Setting**, single beep sound and the **Status indicator** start blinking one time per second. Every flash of Status Indicator increase unlocking time by 1 second

For example, if **Status indicator** blinked four times, the unlocking time is 4 seconds



• Ringtone Setting

1. Press and hold Key A for 3 seconds to enter the **Ringtone Option Mode**, the **Status indicator** turns on and the current ringtone will be played.

(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.



T5 MODULE



7. T5 Module

• About main menu:



Calling a resident via input room number:

1 Press keypad button to enter keypad page.

2 Input the room number.

3 Press 🕗 to call.

Calling a resident via namelist:

1 Press namelist button to enter namelist page.

2 Select the desired name on the list.





Open the door by entering an unlock password:

1 Press unlock button to enter keypad page.

- 2 Input your unlock password.
- 3 Press Or to open the door.

Open the door by using an access card:

Touch your access card to card reader area of the door station.





Enter installer mode:

Tap **O** and input installer password into setting menu.

Default installer password: 66666666



NOTICE: Installer mode will not exit until you manually exit or power off and restart.

Tap \rightarrow to exit installer mode.

Tap **back** to standard main menu.

02-08-2020 11 : 41am	02-08-2020	11:41am
Welcome	Welc	ome
		C
		?
2 EASY	2 E/	ASY
Exited installer mode	Still in instal	ller mode

While in standard main menu, you could check as below:

If the door station still in installer mode, tap the bule bar on the top to get into installer menu.



T5 MODULE

Installer menu:



1. Language

Select language

2. Date & Time

Setting up date and time

3. Menu style

Select menu style, requires customizing

4. System settings

Settings relates to DT821 Video module

Video format	PAL or NTSC, default is PAL	
Tone prompt	Tone or prompt setup, 0: Mute, 1: Ringtone, 2: Voice Ennunciation	
Sound volume	Tone or prompt volume, beep volume, 1~9	
Unlock mode	Jnlock mode Lock type, "Normally open" or "Normally closed"	
Unlock timing	Unlocking time	





Night LED level	Night LED illumination level	
Night LED mode	Night LED mode, "Auto" (detect each 10min), "Always On" and "Always Off"	
Rain-cover enable	If surface mounted with raincover, enable it to have smaller camera angle	

5. Other settings

Settings related to T5 module

Setting Item	Description					
	Default main menu when in standby:					
Default menu select	Room list: Sort by room number	Name list: Sort by name	Classic menu: 02-09-2020 11 : 41am Welcome Welcome Welcome Welcome Welcome Welcome Welcome			
	Display date and time	on the list calling me	nu			
List displays date time	Enable: 11-05-2030 02:28 PM [5] Hebe [4] Jeff [3] Alan [2] Charlie	Disable	Q. Image: Constraint of the second seco			
	(1) Wilbur	>	(1) Wibur			





Setting Item	Description		
	Display unlock icon on the list calling menu		
List displays unlock	Enable: 11-05-3020 02:28 PM (5) Hebe (4) Jeff (3) Alan (2) Charlie (1) Wilbor (1) Wilbor	Disable: 11-05-2020 02:28 PM (5) Hebe (4) Jeff (3) Alan (2) Charlie (1) Wilbur (3) Wilbur	Tap to swap sort by name and sort by room
List displays name only	Display name only or with a flat num 1: M3 Alan M2 Charlie M5 Hebe M4 Jeff M1 Wilbur C 17 >	mber 0: ¹¹⁻⁰⁵⁻³⁰²⁰ 02:28 PM Alan Charlie Hebe Jeff Wilbur To X V	
Screen mode	"Day mode" (white background), or "Night mode" (black background)		
Screen bright	TFT screen illumination level		
Auto call in timing	The maximum waiting timing to call without tap confirm (keypad calling)		
Auto call min digit	The minimum digit input to call without tap confirm (keypad calling)		
Auto call max digit	The maximum digit input to call straigth (keypad calling)		





6. Installer Code

To change the installer code: Input default or current installer code -> Input new code twice Default installer code: 66666666

7. Unlocking Code

Disable/Enable unlocking with a code To change public unlocking code: Input current public unlocking code -> input new code twice (4digits) Default public unlocking code: 1234

8. Manage Monitors

This setting include:

- Namelist and name change
- · Private unlocking codes
- Call numbers

Go to monitor manage menu







Monitor connected



Monitor not connected

Remove or Enable monitors from Namelist

By default, 32 monitors will be listed. To remove the monitor from the list please follow steps as below:

IM Manag			IM Manage		IM Mana	age	
1-16	17-32		1-16		17-32	1-16	17-32
ol 1	oz 2	0	01 1	0	02 2	ol 1 📀	ol 2
o 03 3	o 04 4	•	03 3	0	04 4	o 03 3	ol 4
A 05 5	A 06 6	<u>A</u> .	05000	A -	06 6	<u> </u>	<u> </u>
д 07 7	A 08 8	<u>A</u> .	07 7	A .	08 8	<u> </u>	<u> </u>
<u>A</u> 09 9	10 10	<u>A</u> .	09 9	A -	10 10	<u>a</u> 0990	1020
A 11 11	A 12 12	<u>A</u> -	11 11	A -	12 12	11(2)	1.(2)
🔥 13 13	14 14	A -	13 13	A	14 14	15(23	1. 1. 24
A 15 15	16 16	<u>A</u> .	15 15	A -	16 16	15(25	1626
• > (စ္ခဲက င		5 ()	S	Ð	0

To enable monitors, follow the same procedure- tap icon and tap 🖉 on the monitor

Manage monitors

Tap on the monitor needs to be configured, setting as below:

IM Manage	9	
1-16	17-32	
○ 01 m	ol 2 02 2	
03 3	ola 4	
A 05 5	A 06 6	
A 07 7	A 08 8	
A 09 9	🔥 10 10	
<u> 11 11</u>	🛕 12 12	
🔥 13 13	14 14	
A 15 15	A 16 16	
5 (0 C	

Call testing	仚
DT addr	
01	
Manage PWD	
0000	
Unlock code	
1234	
Local_Nbr	
Name	
1	
Ð	





DT addr: current DT monitor address, is a read only info

Manage PWD: manage password for this user, each user could get into their's own setting menu by input manage password, input "**Address**" + "**Manage password**" to get into this menu, such as for 01 and manage PWD is 2234, input 12234 to get in to manage page.

Unlock code: input "Address" + "Unlock Code", such as for 16 and unlock code is 3324, input 163324 to unlock.

Local_Nbr: alias dial number to call this monitor.

Name: name display in the name list.

9. Card Manage

Add, delete, back and restore cards.

Add Cards

Add card		
Room		
01		
Name		
-		
Card ID		
-		
Save		
*		

Tap "Add cards",

- 1. Tap "Room" to select Flat number which the card belongs to
- 2. Input card holder's name or keep as default (Flat number)
- 3. Swipe the card or input 10 digits card number
- 4. Tap "Save"
- 5. Repeat 3~4 if need add more cards for this flat
- 6. Repeat 1~5 to add for other flats





View Cards

View card
Room
-
Name
-
Card ID
-
Date
-
Seach
5

Tap "View Cards", and in "View Cards" you could view registered cards:

- · Swipe the card needed to be checked
- · Input or select a room
- · Input card holder's name
- · Input card ID number
- Input Date (YYYYMMDD)

Or tap "Search" to display all registered cards

Delete Cards

In the card display list,

- Tap "bin" icon on the top to delete all
- Tap "bin" icon on single item to delete the card







Card data

Tap "Card data" Backup to SD: Backup card data to a SD card (the card slot in T5 module).

Restore from SD: Restore a backup from SD card

Clear RES Data: Delete all cards

10. Device information

Show information: firmware version, up time (running since power up) and SN number

11. Back & Restore

Backup settings, namelist and cards

Backup

Backup include system settings, other settings, namelist (include private unlocking codes), call records

Restore form backup

Restore form a backup

Restore factory settings

Restore all settings to default

12. Upgrade

Tap to upgrade T5 firmware (core firmware)

Upgrade	仚
Source	
SD card	
Download code	
XXXXXX	
Check	
Ð	





13. Exit installer mode

Exit installer mode

14. RES manage

Uploads customize files (display language, default settings and Logo) RES manage does not manage "Voice prompt"

Backup to SD Backup customized files onto SD card

Restore form SD Restore customized files

Clear customization

Remove customization, roll back to standard version

Specification:

Screen:	5-inch digital color TFT
Display Resolutions:	800*480 resolution
Operating temperature:	-10 to +50 (oC)
Protection:	IP65;
Dimension:	H168×W82×D32mm





14. 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

- 2. The Unlock Mode Parameter must be set to 0 (default)
- 3. Jumper set to 1-2 position for power-off-to-unlock type (Normally closed);

set to 2-3 position for power-on-to-unlock type (Normally open)

4. Default unlocking time is 5 seconds

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 (default)
- Power-off-to-unlock type:Unlock Mode=1
- 4. Default Unlocking time is 5 seconds



Power-on-to-Unlock type:

Power-off-to-Unlock type:



DT-ENG-821-V1

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