

K5 SYSTEM

Technical guide



SYSTEM FEAGUTES

- Large capacity
- Simple installation
- Signal isolation
- Debug online

PRODUCT FEAGUTES



Menu Guide



Intercom



Picture Memory



Multi Channels



CAT-5 wired

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Chapter 1

K5 System Overview

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§ 1.1 System Description

The K5 system is the ideal system for simplifying installation in residential compounds with a high number of users, developed with innovative technology, allows the installation of video intercom systems up to 239 blocks and 512 users per block, applying CAT5 cable only except the power supply to the system.

This system consists of six main components: door station, video monitor, IP converter, distributor, power supply and other accessories. It is a security monitoring system that applies MCU and TCP/IP LAN technologies.

K5 system is designed to perform not only common functions like making call, conversation, monitoring, door lock release, network alarm and message to indoor monitor, but also other advanced functions like lift control, public picture memory, by adding devices to the system, and using the Switchboard(G21) or PC as the management and control centre for the whole system.

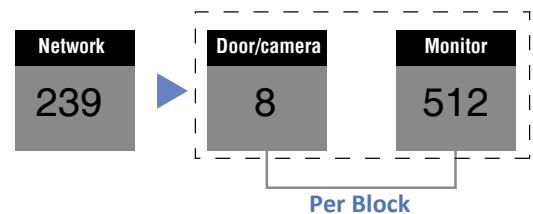
Based on standard CAT5 cable and RJ45 connector, K5 system has achieved significant breakthrough in such traditional bottleneck as SWS wiring, signal transmission wiring difficulty, it makes the installer's job easier and faster by reducing the costs and process for projects and increasing the anti-interference capacity as well. Furthermore, TCP/IP based networking makes the system much more stable for big building community.



§ 1.2 System Features



- Max. 512 apartments per block
- Max.8 door stations per block
- Max 3 monitors in one flat
- Max. 239 blocks in network
- Max. 14 Switchboards per system(6 PC+8 IP-G21)
- **Signal separation technology:** With signal separation technology, each monitor has its own signal channel, to make sure that any malfunction on the monitor side won't shutdown the system
- **Quick and easy installation for new and modernization projects:** Using the CAT5 cables for the whole system, it will be possible to wire the cables through existing network without the need for any masonry work to save the cost.
- **Long distance of signal transmission:** The system automatically equalizes and amplifies the audio and video signal, restoring high quality performance even for long distances using CAT5 cable.
- **Audio and video signals are transmitted separately:** In this way, the system has better performance to avoid electronic disturbance.
- **Different configurations satisfy different requirements:** Using different distributors to meet different conversation requirements; and other extended devices make the system more powerful.
- Powerful management software: IP-AGENT. This software can replace IP-G21 to realize remote control and management.
- **Quick and convenient maintenance:** Software will detect unavailable devices. Update can be carried out online through LAN.



§ 1.3 System Applications



Application

**Large residential compounds
with a high level of users**

Large residential compound

One of the advanced features of K5 intercom system is that it supports 239 blocks in one system; it can satisfy almost any size of residential compounds. Using a standard CAT5 network, each block is able to accommodate hundreds of monitors and multiple outdoor stations. Each building may have up to 8 outdoor stations. Max.14 Switchboards make management of community more convenient. And because of its smart operation and high efficiency, the system can be easily operated and maintained.

The system , being able to stop unknown individuals from getting inside multi entry buildings, keep family safe from unwanted visitors without having to meet them at the door. If family is away, missing a visitor is no longer an issue using this system with automatic recording capability. In this system, conversation can be set up between two apartments just by two monitors. Detector-based Auto-alarm function ensures the security for the house owner.

Commercial building

Protect staff can safely confirm the identity of visitors before granting assess. And internal security can control who enters secured rooms or floors of a building.

Educational security

The system keeps students safe while allowing parents and visitors a convenient way of requesting entry. Equipments, supplies, and records can be kept locked away while offering convenient entry for students and staff.

Healthcare security

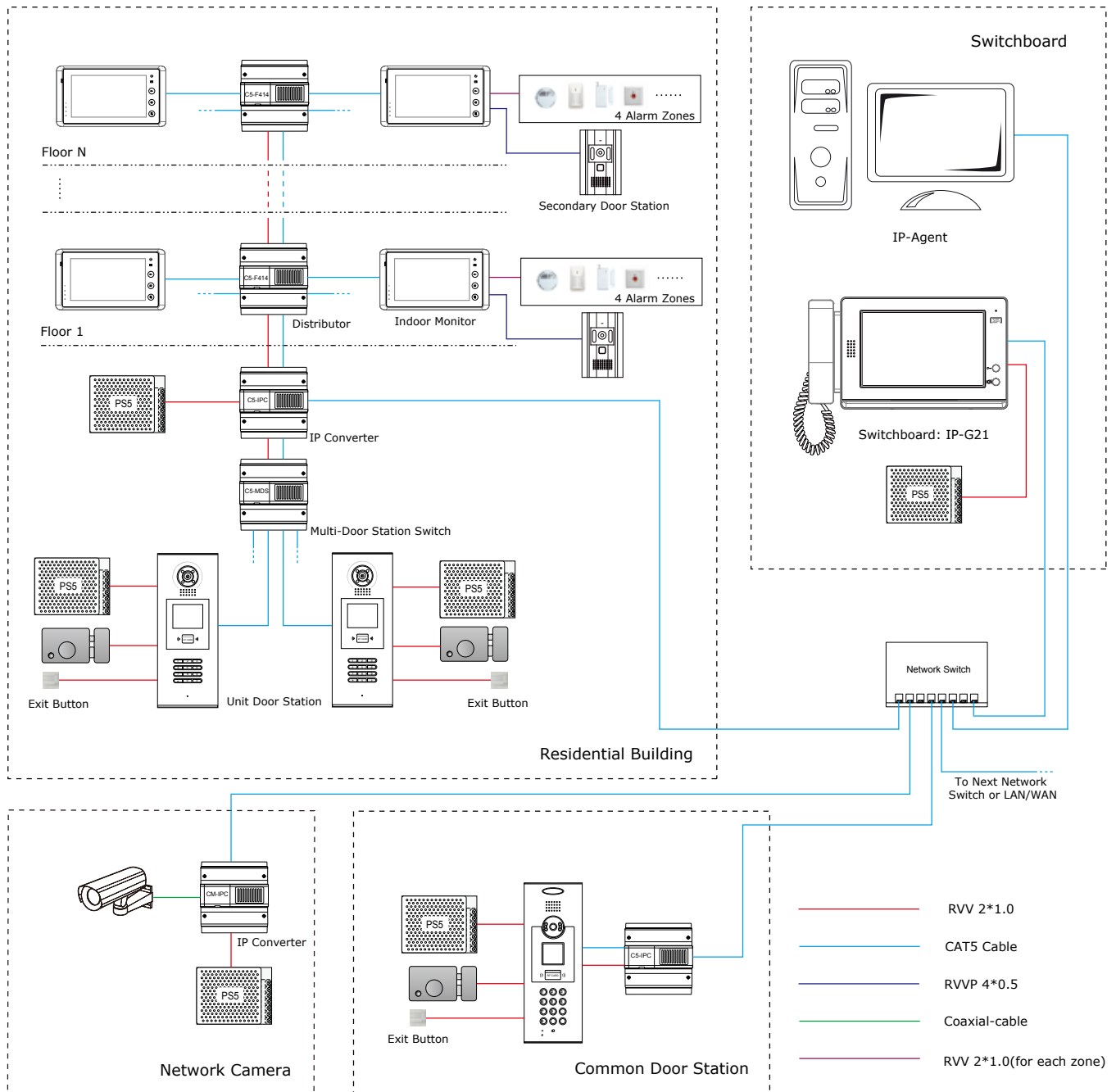
Call for immediate assistance when an emergency occurs. Secure sensitive areas within a building and protect staff and assets.

Chapter 2

K5 System Parts

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§ 2.1 Wiring Diagram



§ 2.2 Product List

Item	Model	Mounting	Dimensions(mm)	Consumption	
				Standby	Working
DOOR STA-TION	IP-MR18	Flush Mount	350*128*46	24V/95mA	24V/205mA
	IP-MR9L	Flush Mount	366*138*48	24V/85mA	24V/190mA
INDOOR MONITOR	C5-AT16	Surface Mount	220*105*20	24V/87mA	24V/280mA
	C5-AT25	Surface Mount	200*135*23	24V/15mA	24V/150mA
	C5-AT27	Surface Mount	125*225*23	24V/40mA	24V/260mA
ACCESSO-RIES	C5-F422	DIN Rail	140*150*60	24V/60mA	24V/120mA
	C5-F414	DIN Rail	140*150*60	24V/60mA	24V/120mA
	C5-F4	DIN Rail	88*140*32	24V/8mA	24V/80mA
	C5-IPC	DIN Rail	140*150*60	24V/185mA	24V/250mA
	C5-MDS	DIN Rail	140*150*60	24V/50mA	24V/65mA
	C5-IMC	DIN Rail	140*150*60	20V/78mA	20V/135mA
	GP-ACS	DIN Rail	140*150*60	24V/45mA	24V/90mA
	PS5-24V	DIN Rail	97*159*37	AC INPUT 100~120V/2.5A 200~240V/1.5A	DC OUTPUT 24V/4.5A
	IP-G21	Surface Mount	203*303*32	16V/390mA	16V/850mA

§ 2.3 System Parts

2.3.1 Door Station: IP-MR18

Full aluminum panel with luxurious and elegant appearance, with 3.5" TFT color display for versatile, innovative and high-performing communication

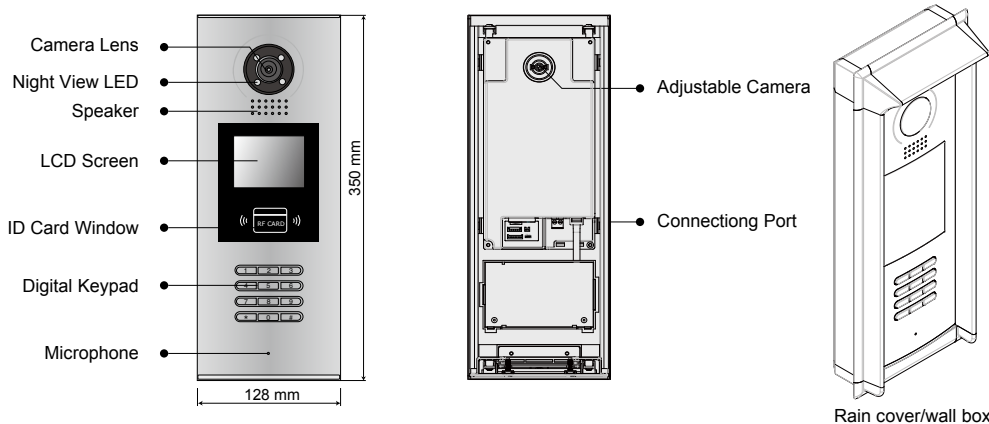
2.3.1.1 Features

Functions such as monitoring, call, conversation and door lock release, etc

- Full anodize aluminum panel;
- CCD camera angle is adjustable;
- 3.5 inch LCD display to guide user operation;
- Access control ID/IC card function;
- The visitors can call indoor monitor and Switchboard;
- The keyboard is designed with automatic backlight;
- CCD super-brightness LED light compensation;
- Door lock release with ID/IC card or password;
- The parameters of door station programmable on door station;
- Volume adjustment;
- Direct connection of electric or magnetic lock;
- Exit button can be connected;
- Change language and UI via SD card



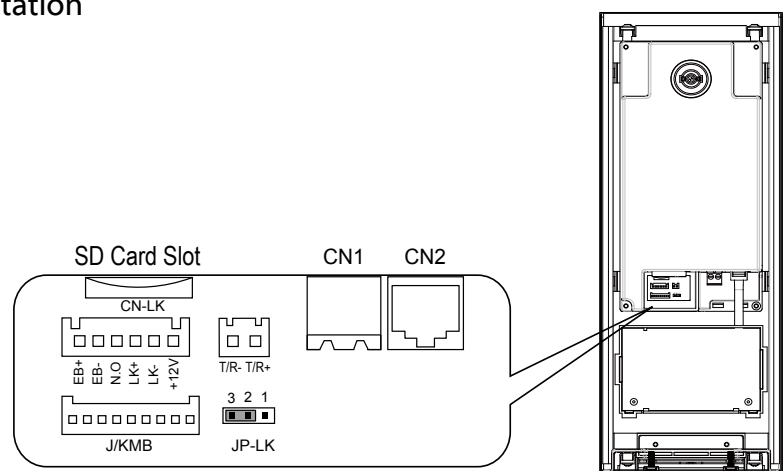
2.3.1.2 Parts and Functions



1. **Camera Lens:** Capture images
2. **Night View LED:** Compensate light
3. **Speaker:** Conversation between visitors and users
4. **LCD Screen:** Scrolling information
5. **Card Window:** Proximity Reader
6. **Digital Keypad:** Make call, unlock via code, programming
7. **Microphone:** Conversation between visitors and users
8. **Adjustable Camera:** Adjust the camera angle
9. **Connecting port:** Connect door station with other devices

2.3.1.3 Terminal Description

- **+12V:** 12VDC power output
- **LK-(GND):** Power ground
- **LK+ (COM):** Common contact of the Relay
- **NO.:** Normally open contact of the Relay (Can be set to normally closed)
- **EB+:** Exit button connection port (Short EB+&EB- to unlock)
- **EB-:** Exit button connection port
- **JP-LK:** For electronic lock safety type setting (refer to Door Station Lock Connections)
- **T/R-:** USB-RS485 communication terminal negative
- **T/R+:** USB-RS485 communication terminal positive
- **JWP (P+, P-):** Power input for door station
- **JWB (OUT):** BUS Output (Including Data, audio and video signal)
- **SD Card Slot:** Update language and UI of door station
- **J/KMB:** Connect to keyboard on door station



2.3.1.4 Door Station Functions

Digital call by visitors

A visitor can input the resident's room number to be shown on the display, As the signal transfer to monitor, the resident can answer to communicate with visitor and release the lock. When necessary, the visitor or resident can dial 0000 to call Switchboard for help. While waiting or during the conversation, the visitor can end conversation by pressing the * key, to end the call.

Resident monitoring

When the door station is standby, resident can press the monitor button to monitor door station and see the image. In monitoring state, talk and unlock functions are still available. When several outdoor stations are installed on the same building, resident can select the image they want to view, or, view all the images one by one automatically.

Set as common door station

Common door station is for the whole resident community entrances. When visitor call resident, block No. must be input at first. Switchboard can call/monitor this door station while Indoor monitor cannot.

Open the locks by password or ID/IC card

As per the prompt on the display, we can input unlock password to open the door, and its format is '#' + 'unlock password', for example, if the password is 1111, you can input #1111 to unlock the door. If the password input is not correct, the display will show "password error" and return to standby after three short beeps. Then press on the # key and re-input the password. When using a ID/IC card to release the lock, show the card in the front of the "RF CARD"; the lock will be released after one long beep.

Support two types of lock connection

One type is Power-on-to-unlock (Normally open mode) connection, suitable for electrical lock. Another is Power-off-to-unlock (Normally closed mode) connection, suitable for electromagnetic lock.

2.3.1.5 Specifications

Power supply:	DC 24V
Camera Lens:	1/4 ACS 4T image sensor with DSP processor
Power consumption:	Standby 2.5W; Working status 5W
Screen:	3.5 inch TFT
Resolution:	320(R, G, B)X240 pixels
Video signal:	CCIR/EIA Optional
Wiring:	Cat5

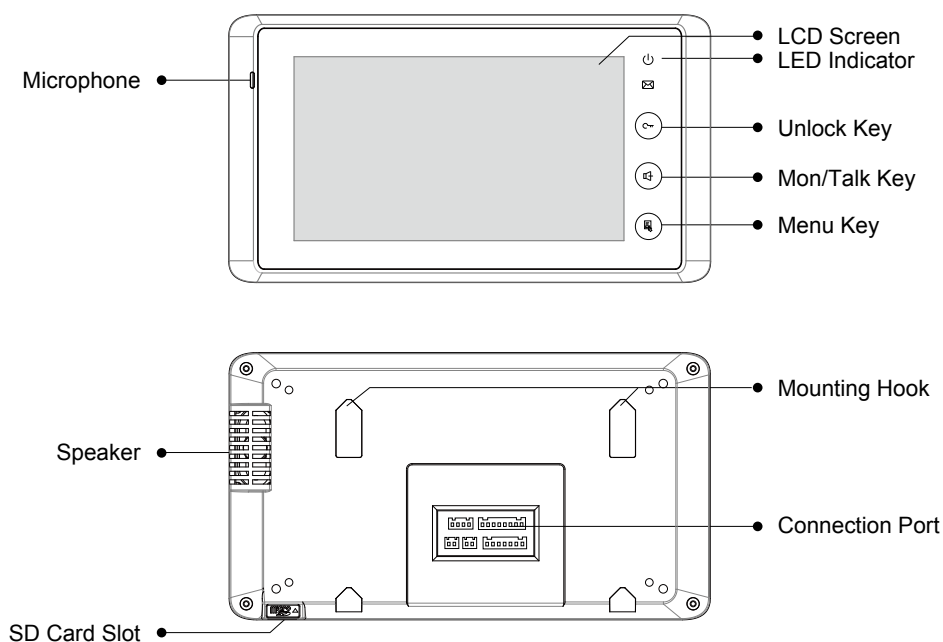
2.3.2 Indoor Monitor: C5-AT27

With 7" digital TFT touch screen and touch sensor button, this monitor is the best choice for modern intelligent life. Three different elegant appearances can satisfy different requirements.

2.3.2.1 Features

- 7 inch wide screen digital TFT LCD;
- Full touch screen and touch sensor button;
- Automatically record picture and max. 800 pieces color pictures memory optional;
- 8 areas alarm for house security which can warn Switchboard;
- Secondary door station connection;
- 2 slave monitors can be set with 1 master monitor;
- No additional power supply needed;
- Hands-free design with wall-mounting;
- Images and voice adjust by OSD menu;
- 12 different ring tones for selection;
- Automatically or manually monitor door station or camera;
- Read SMS from IP-Agent.

2.3.2.2 Parts and Functions



1. **LCD screen:** Display the images from outdoor station. Touch operation
2. **LED indicator:** Normally light on when in use
3. **Unlock key:** Press to release the door for visitors during talking or monitoring
4. **Mon/Talk key:** Press to view the outside condition or to talk with the visitors while receiving a call
5. **Menu key:** Press to open a list of operations available on the current screen
6. **Microphone:** Send voice when talking
7. **Speaker:** receives voice when talking
8. **Mounting hook:** Used to hang up the monitor unit
9. **Connection port:** Includes bus port, outdoor station port, alarm zone and 485 signal port
10. **SD card slot:** Use to insert SD card(for SD card model only)

2.3.2.3 Terminal Description

Outdoor station port

- **1R:** +12V power output for second door station
- **2W:** Power ground
- **3Y:** Video signal from second door station
- **4B:** Audio signal from second door station

Bus port

- **FV+,FV- :** Video signal input
- **D1&D2:** Data input
- **AU:** Audio signal input

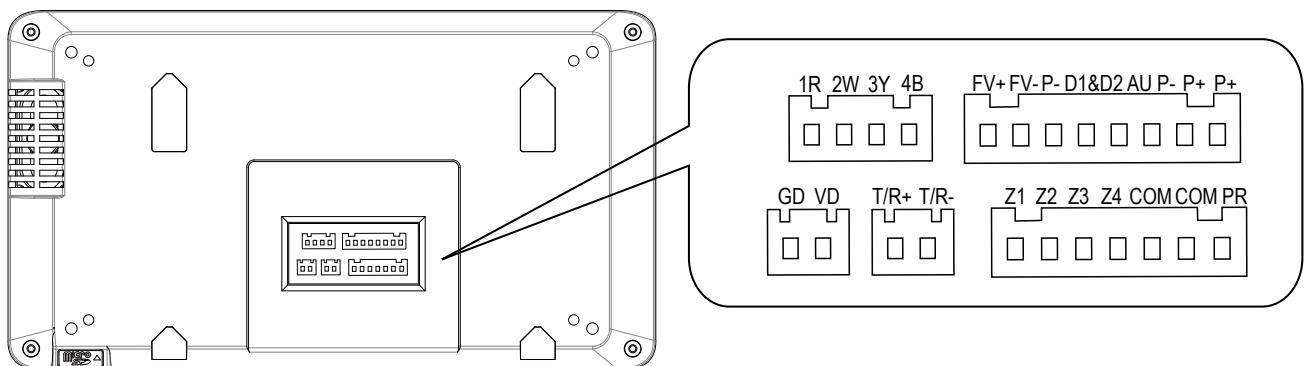
- **P+,P-:** Power input

GD,VD: Video matching

T/R-,T/R+: USB-RS485 communication terminal for monitor update

Alarm Zone

- **Z1, Z2, Z3, Z4:** Connect to 4 zones alarm for house security
- **COM:** Ground
- **PR:** Power output for sensor



2.3.2.4 Indoor Monitor Functions

Receiving calls

Call from door station: When the monitor rings, it means a call is coming. The display will show the video from the door station camera, press the answer button to accept the call and press the answer button again to end the call after finish the conversation
Call from Switchboard: When handset rings, the display can show the video from the Switchboard camera(if the Switchboard is fitted with one camera). Press the answer button to accept the call and press the answer button again to end the call after finish the conversation
call from other monitor: The monitor will ring and show the interface of intercom call. Two icon buttons will be shown on the screen for different operation: pick up or refuse.

Call other devices

Call Switchboard: While in standby, press the directly call Switchboard to call the Switchboard and wait for it to answer the call. Press end button to end the conversation. The device will go back to standby status.
Call other monitor: Press intercom call to enter the intercom call interface, then input the room number to call other monitor.

Monitoring

While in standby, press the monitor button, the display will show the picture video of the door station. If there are several door stations, two ways of monitoring can be run: automatic and manual. In automatic monitoring, the display will show all door stations' pictures one by one; in manual way, the display just show the picture which is selected. During monitoring, talk and unlock functions are available.

2.3.2.5 Specification

Power supply:	DC 24V (supplied by system)
Power consumption:	Standby 1W; Working status 5W
Monitor screen:	7 Inch color LCD
Display Resolutions:	800 x 480 pixels
Video signal:	1Vp-p, 75Ω, CCIR standard
Wiring :	CAT5 cable, polarity
Dimension:	125(H) ×225(W) ×23(D) mm

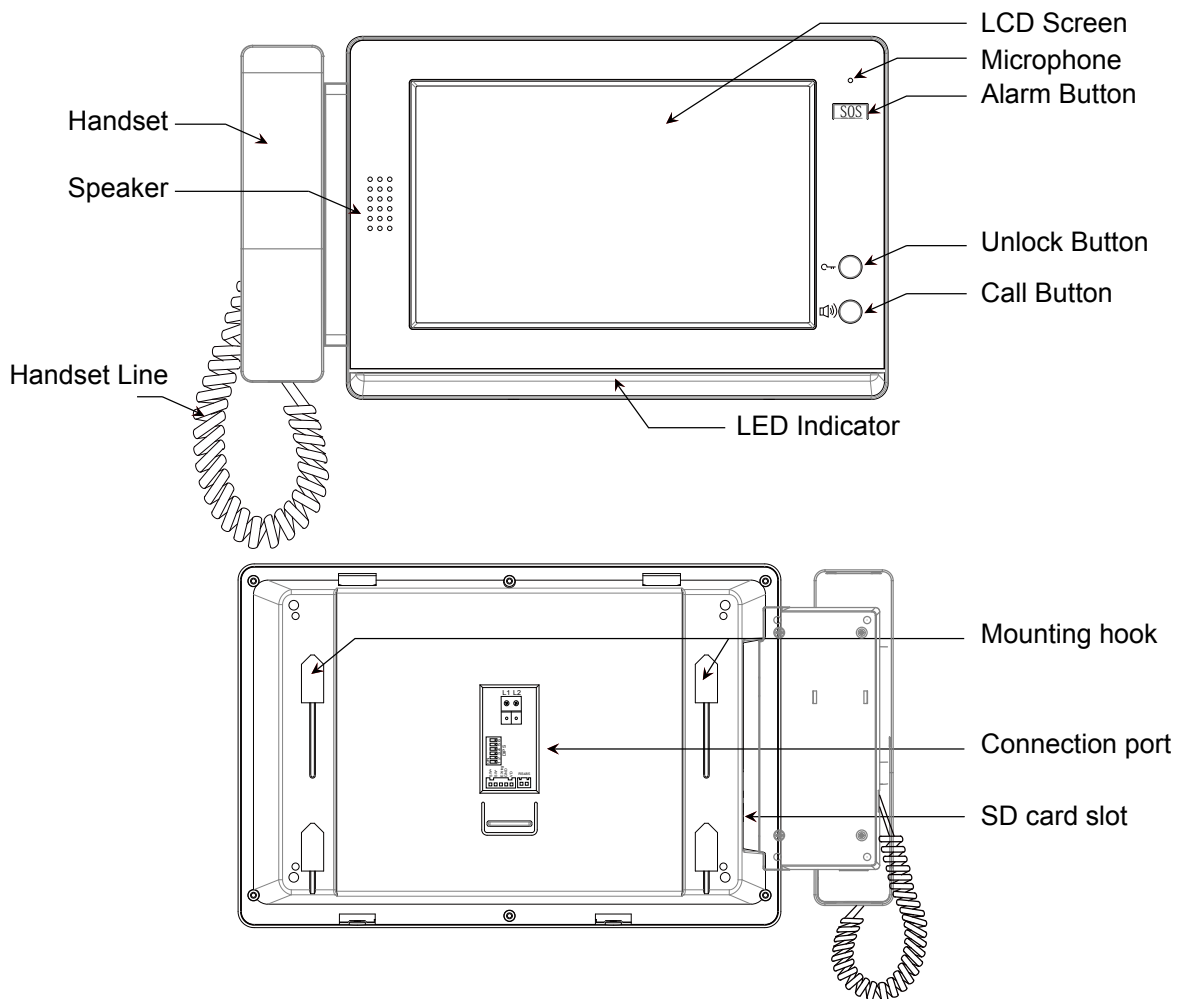
2.3.3 Switchboard: IP-G21

IP-G21 is the advanced Switchboard for K5 system, designed as a dedicated switchboard to support K5 network system. Switchboard is an essential part in K5 system, it makes possible to manage calls from (to) Common Door Station or Door Station, and Indoor Monitor.

Additionally, IP-G21 has other functions, such as alarm receiver, depends on system configuration. Max. 8 IP-G21 can be connected in system.

- 10 inch digital TFT with its resolution of 800x480 pixels
- Touch screen operation
- Handset or hands free answering
- Receive calling information from users
- Make intercom call to common door station, door station, and indoor monitor or other Switchboards

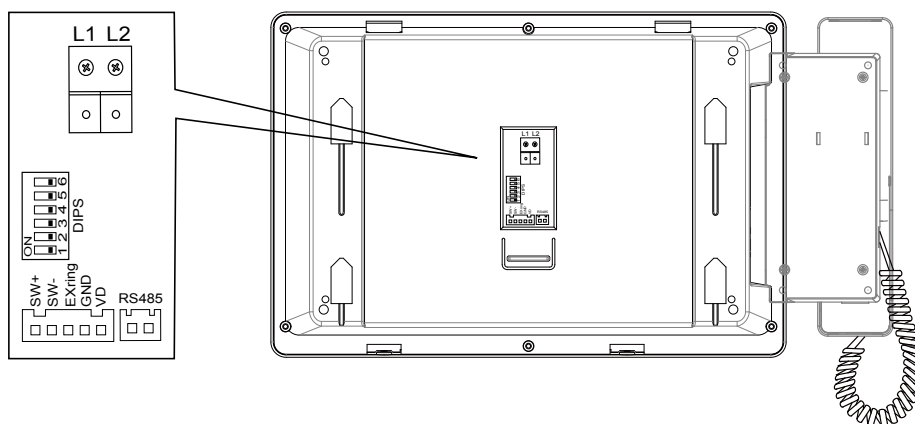
2.3.3.1 Parts and Functions



1. **LCD screen:** Display the icon menu and images ,touch operation
2. **Microphone:** Receives sound from the user
3. **Alarm Button:** Blink when the guard unit receives alarm record
4. **LED Indicator:** (1) Red indicator flash first, green indicator flash later when power on; (2) Blue indicator normally on when work in normal; (3) Blue indicator flash when in calling state; (4) Red indicator flash when in talking state
5. **Unlock Button:** Press to release the door for visitors during talking or monitoring
6. **Call Button:** Press to activate the intercom function page
7. **Handset:** Pick up to talk with the visitors or users
8. **Speaker:** Output sound from the visitors or users
9. **Handset Line:** Connect guard unit with handset.
10. **Mounting hook:** Used to hang up the monitor unit
11. **Connection port:** Bus terminal
12. **SD card slot:** Use to insert SD card

2.3.3.2 Terminal Description

- **L1,L2:** Connect to the bus line
- **SW1:** DIP switch
- **SW+:** Reserve
- **SW-:** Reserve
- **Exring:** Buzzer connection port
- **GND:** Signal ground
- **VD:** Video signal connection port
- **RS485:** USB-RS485 communication terminal



2.3.3.3 Specification

Power input:	DC 24V
Standby Current:	390mA
Working Current:	850mA
Screen:	10 inch digital TFT
Resolution:	800x480pixels
Video Signal:	CCIR, 1Vp-p, 75Ω
Transmission Mode:	TCP/IP
Connection Port:	RJ45
Network Interface:	Standard Ethernet interface
Working temperature:	-10°C ~ +40°C
Dimension:	382 *203 *32mm

2.3.4 Accessories

Using a signal cable, each apartment indoor monitor is connected to the BUS through distributor. And one distributor can be connected to 4 indoor monitors. This device converts the BUS audio and video signals and then distributes them to the connected indoor monitors.

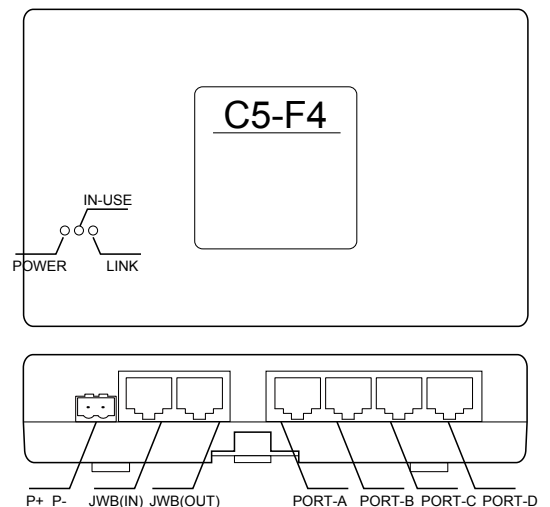
There are three types of distributors: C5-F4, C5-F414 and C5-F422.

2.3.4.1 C5-F4

C5-F4 is a normal distributor. It just supports one audio and one video channel at the same time while working.

Parts and Functions

- **P+, P-:** Power input, DC 24V
- **JWB (IN):** Bus Signal Input. The port is a RJ45 port includes audio, data & video. It can be connected to last distributor or C5-IPC
- **JWB (OUT):** Bus Signal Output. The port is a RJ45 port includes audio, data & video. It can be connected to next distributor
- **PORT-A, PORT-B, PORT-C, PORT-D:** 4 output, it can be connected to indoor monitors
- **VD-SET:** Setting for video matching



- **LINK:** Signal indicator. Flicker means signal is transmitted in bus
- **Power:** Power indicator. Always ON
- **IN-USE:** Status Indicator. ON while working

Specifications

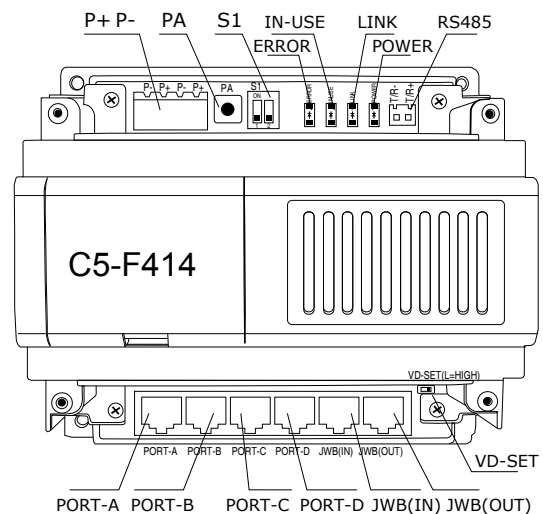
Power supply:	DC24V
Standby current:	8mA
Working current:	80mA
Working temperature:	-10°C~40°C
Connection port:	RJ45
Dimensions:	88*140*32mm

2.3.4.2 C5-F414

C5-F414 can support four audio and one video channels at the same time while working. It means four conversations can take place at the same time. One of the conversations can be between door station and monitor or Switchboard and monitor; other three are intercom calls. Signal separator is built inside to protect the system from shutting when one or some of the monitors gets faulty, to guarantee each monitor in the system work independently.

Parts and Functions

- **P+, P-:** Power input, DC 24V
- **PA:** Test button
- **S1:** DIP Switch
- **Power:** Power indicator. Always ON
- **IN-USE:** Status Indicator. ON while working
- **LINK:** Signal indicator. Flicker means signal is transmitted in bus
- **ERROR:** Error indication. ON when equipment failure
- **RS485:** PC Port. Set parameters update the firmware of C5-IPC by PC RS485-USB convertor
- **JWB (IN):** Bus Signal Input. The port is a RJ45 port includes audio, data & video. It can be connected to last distributor or C5-IPC
- **JWB (OUT):** Bus Signal Output. The port is a RJ45 port includes audio, data & video. It can be



connected to next distributor

- **PORT-A, PORT-B, PORT-C, PORT-D:** 4 output, it can be connected to indoor monitors
- **VD-SET:** Setting for video matching

Specifications

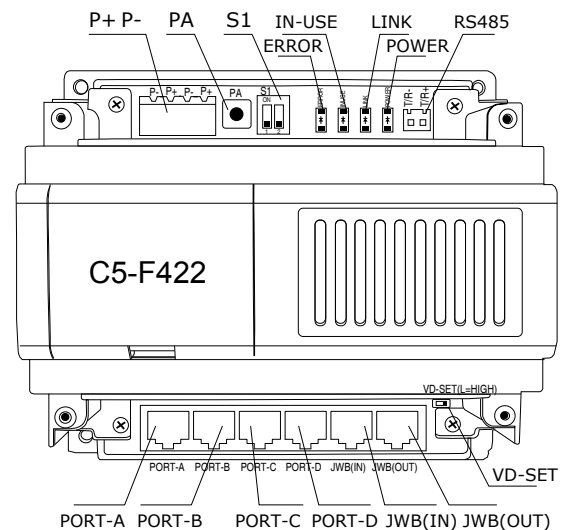
Power supply:	DC24V
Standby current:	60mA
Working current:	120mA
Working temperature:	-10°C~40°C
Connection port:	RJ45
Dimensions:	140*150*60mm

2.3.4.3 C5-F422

C5-F422 is a advanced distributor which can support two audio and video channels at the same time. Two conversations with video are available at one system by using this device.

Parts and Functions

- **P+, P-:** Power input, DC 24V
- **PA:** Test button
- **S1:** DIP Switch
- **Power:** Power indicator. Always ON
- **IN-USE:** Status Indicator. ON while working
- **LINK:** Signal indicator. Flicker means signal is transmitted in bus
- **ERROR:** Error indication. ON when equipment failure
- **RS485:** PC Port. Set parameters update the firmware of C5-IPC by PC RS485-USB convertor
- **JWB (IN):** Bus Signal Input. The port is a RJ45 port includes audio, data & video. It can be connected to last distributor or C5-IPC
- **JWB (OUT):** Bus Signal Output. The port is a RJ45 port includes audio, data & video. It can be connected to next distributor
- **PORT-A, PORT-B, PORT-C, PORT-D:** 4 outputs, it can be connected to indoor monitors
- **VD-SET:** Setting for video matching



Specifications

Power supply:	DC24V
Standby current:	60mA
Working current:	120mA
Working temperature:	-10 ⁰ C~40 ⁰ C
Connection port:	RJ45
Dimensions:	140*150*60mm

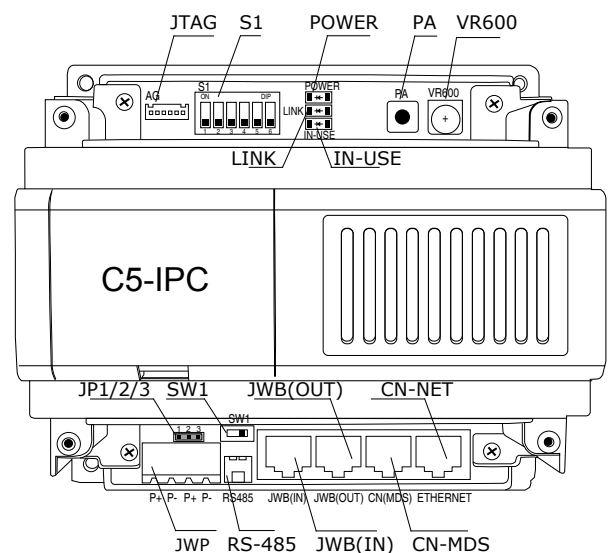
2.3.4.4 IP Converter: C5-IPC

C5-IPC is a network controller. It serves as system controller, manages all the data in the system communication. To sever as a IP converter to effect the network connection.

- Built-in watchdog circuit in case of crash
- LED Indicators to show system status
- RJ45 Standard connection port
- Talking volume adjustable
- Support TCP/IP network and fiber transmission or broadband network access
- Adopt MPEG4 video protocol and G.729 audio protocol
- Include 100Mbit Ethernet LAN and RS485 connection port

Parts and Functions

- **PA:** Reset. Press and hold PA for 3 seconds to initialize C5-IPC; If initialization complete successfully, power off, and re-power C5-IPC, LINK&IN-USE indicators will flicker once simultaneously, then INK indicator will flicker till IN-USE indicator is always ON
- **S1:** DIP Switch. Refer to DIP Switch Setting
- **JTAG:** PC Port. Update C5-IPC program by PC that is connected by RS232 convertor
- **RS485:** PC Port. Set parameters update the firmware of C5-IPC by PC RS485-USB convertor
- **JWP:** Power Input P+: Positive,24V; P-: Negative
- **JWB (IN):** Bus Signal Input. RJ45 port includes audio, data & video. It can be connected to door



station only

- **JWB (OUT):** Bus Signal Output. RJ45 port includes audio, data & video. It can be connected to distributor.
- **CN-MDS:** Bus Signal Input. RJ45 port, connected to MDS only
- **CN-NET:** RJ45 Network Port, connected to LAN
- **JP1/JP2/JP3:** Jumper. Removed if C5-MDS connected
- **SWI:** Distributor Setting. Match different distributor

Specifications

Power input:	DC 24V
Standby Current:	185mA
Working Current:	250mA
Video Signal:	CCIR, 1Vp-p, 75Ω
Audio Signal:	300~3,400 KHz, 0~240 mV
Transmission Mode:	TCP/IP
Connection Port:	RJ45
Network Interface:	Standard Ethernet interface
Working temperature:	-10°C ~ +40°C
Dimension:	140*150*60 mm

2.3.4.5 Multi-Door station Switcher: C5-MDS

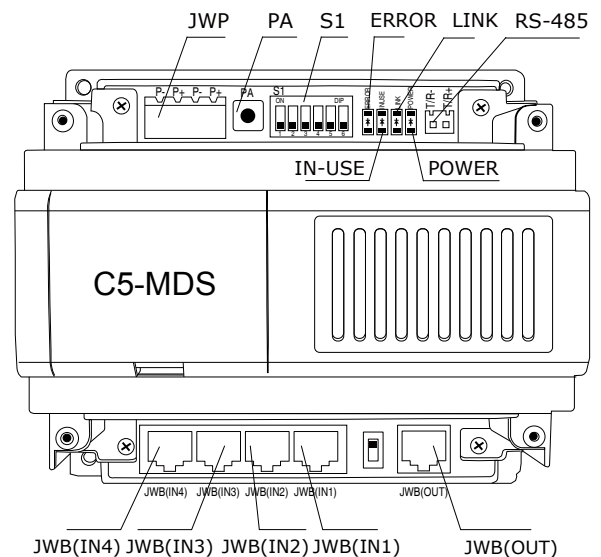
C5-MDS is used when there are more than one door stations in one block. It serves as a door station switcher, to separate video and audio signal for each door station

- 4 door stations can be connected to 1 C5-MDS
- Max. 2 pieces of C5-MDS switchers per block

Parts and Functions

- **POWER:** Power indicator. Always ON while working.
- **LINK:** Signal indicator. Flicker means signal is transmitted in bus, always ON means communication ERROR in bus.
- **IN-USE:** Status Indicator. ON while working.
- **ERROR:** Error indication. ON when equipment failure.
- **JWB (OUT):** Output port. RJ45 port, connected to C5-IPC.

- **JWP:** Power input. P+, positive 24V; P-, negative.
- **JWB (IN1, IN2, IN3, IN4):** Connected to door stations (Max.4).
- **PA:** Test button. Press PA, the IN-USE indicator will light, and then start to monitor door station connected circular with click of relay.
- **S1:** DIP Switch function setting, refer to DIP switch setting.
- **SW1:** Always set to the 2V, 2A position.
- **JTAG:** update port. Connected to PC to update the firmware of C5-MDS
- **RS-485:** PC port. Used to update the firmware of C5-MDS.



Specification

- | | |
|------------------------|---------------|
| • Power input: | DC 24V |
| • Standby Current: | 50mA |
| • Working Current: | 80mA |
| • Connection Port: | RJ45 |
| • Working temperature: | -10°C ~ +40°C |
| • Dimension: | 140*150*60 mm |

2.3.4.6 Picture Memory Controller: C5-IMC

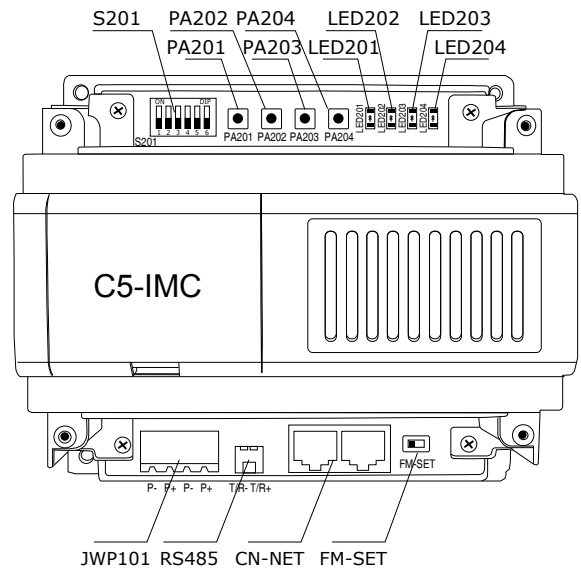
C5-ICM is independent picture memory controller for K5 system. When visitor call the monitor, the C5-IMC will start to capture picture and save it, the resident can view the picture on the indoor monitor.

- Picture playing is continuous and the switch time can be set by DIP switch
- Up to 800 pictures can be saved

Parts and functions

- **S201:** DIP switch
- **PA201:** Capture picture in normal status, for DIP test in test status
- **PA202:** Play picture in normal status, for EEPROM test in test status
- **PA203:** Exit in normal status, for monitor communication in test status

- **PA204:** Reserved in normal status, for door station communication in test status
- **LED201:** Power indicator
- **LED202:** Reserved
- **LED203:** Picture saving indicator
- **LED204:** Picture play indicator
- **JWP101:** Power input, DC 24V
- **RS485:** PC port. To update the firmware
- **CN-NET:** RJ45 Network Port, connected to LAN
- **FM-SET:** Video match switch



Specification

- Power supply: DC24V
- Standby current: 78mA
- Working current: 135mA
- Working temperature: -10°C~40°C
- Connection port: RJ45
- Dimensions: 140*150*60mm

2.3.4.7 Independent Access Controller: GP-ACS

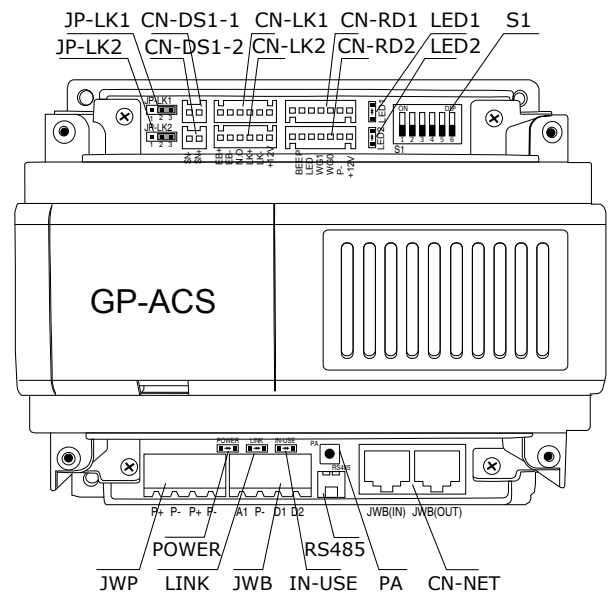
GP-ACS is an independent access controller, used for the entrance without the need for door station. Two locks and card readers can be connected to this device, so it can control two entrances at the same time. GP-ACS can manage cards independently or through the PC in the network.

- Two doors control ports (card reader port, electric lock port and status test)
- Lock release delay time setting
- Lock type setting
- Work status indicator

Parts and functions

- **Power:** Power indicator, always ON while working
- **LINK:** Signal indicator, flicker means signal is transmitted in the bus line
- **IN-USE:** Status indicator, ON while working

- **LED1:** Indicators for first group of card reader
- **LED2:** Indicators for second group of card reader
- **JWP:** Power input, DC 24V
- **RS485:** PC port, to set the parameters of GP-LIFT
- **CN-NET:** Signal input and output, RJ45 port, connected to C5-MDS
- **PA:** Test button, used for card management without connecting to LAN
- **S1:** DIP switch
- **CN-RD1, CN-RD2:** Card reader connection port, connected to independent card reader
- **CN-LK1, CN-LK2:** Lock connection port, connected to lock and outlet button
- **CN-DSI-1, CN-DSI-2:** Door status detection
- **JP_LK1, JP_LK2:** Lock jumper for lock type selection



Specification

- | | |
|------------------------|--------------------------------------|
| • Power supply: | DC24V |
| • Standby current: | 50mA |
| • Working current: | 90mA(not including reader) |
| • Working temperature: | -10 ⁰ C~40 ⁰ C |
| • Connection port: | RJ45 |
| • Dimensions: | 140*150*60mm |

2.3.4.8 Network Camera IP Converter: CM-IPC

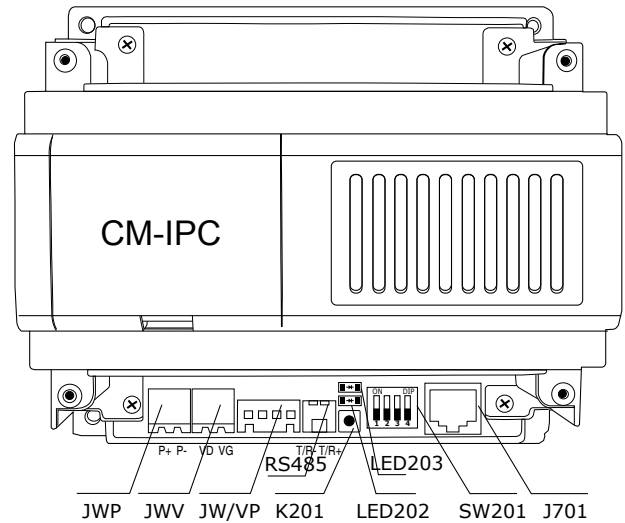
CM-IPC is a device designed for Network camera. Through the CM-IPC, the computer can display the video of the camera connected to the CM-IPC using the software IP-Agent.

- The IP-Agent can display the different cameras; the video can be sent to indoor monitors when guard Ip-agent calls

- Maximum 4 cameras can be connected to the CM-IPC

Parts and functions

- **JWP:** Power input
- **JWV:** Video signal input
- **JW/VP:** Video signal input, connected to VT-QSW
- **RS485:** PC port. To update the firmware
- **LED203:** Working indicator
- **LED202:** Power indicator
- **K201:** Control the switch of QSW output
- **SW201:** DIP switch
- **J701:** Signal output, RJ45 port, connected to LAN



Specification

- Power supply: DC24V
- Standby current: 78mA
- Working current: 135mA
- Working temperature : -10°C~40°C
- Connection port: RJ45
- Dimensions: 140*150*60mm

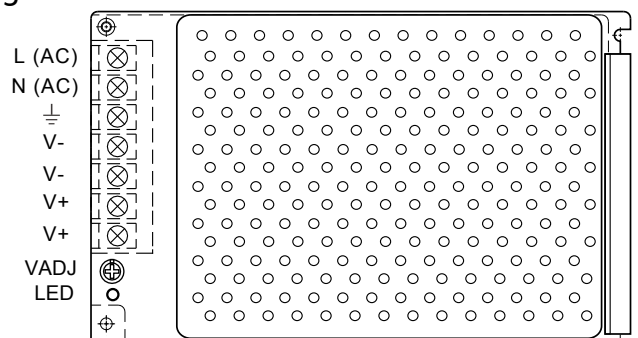
2.3.4.9 System Power Supply: PS5

The PS5 power supply unit is designed for K5 system to supply power for outdoor station, indoor monitor and other accessories.

- Universal AC input/full range
- Multi protection: short circuit, overload, over voltage
- Cooling by free air convection
- DIN rail mounting

Parts and Functions

- **L (AC):** AC input
- **N (AC):** AC input



- \perp : Earth Ground
- **V-**: DC power output, Negative (20~27 adjustable)
- **V+**: DC power output, Positive (20~27 adjustable)
- **VADJ**: Output voltage adjustable
- **LED**: Working state indicator

Specification

- Input Voltage: AC 100~120V (2.5A), 200-240V (1.5A)
- Input Frequency: 50~60Hz
- Rated Voltage: DC 24V
- Rated Current: 4.5A
- Working temperature: -20°C~60°C
- Dimensions: 97*159*37mm

2.3.4.10 K5 System Cables

Type	Cable Specification	Usage	Remark
Bus	RVV2×1.0mm ²	Power cable for distributor	From Door station to IP converter, IP converter to distributor, and distributor to distributor
	CAT5	Data , Audio and Video bus	
	CAT5	Data , Audio and Video bus, Power line for in-door monitor	From distributor to indoor monitor
Lock	RVV2×1.0mm ²	Lock connection	From door station to lock
LAN	CAT5	Digital signal	Establish LAN or use existing LAN

Chapter 3

K5 SYSTEM CONFIGURATION

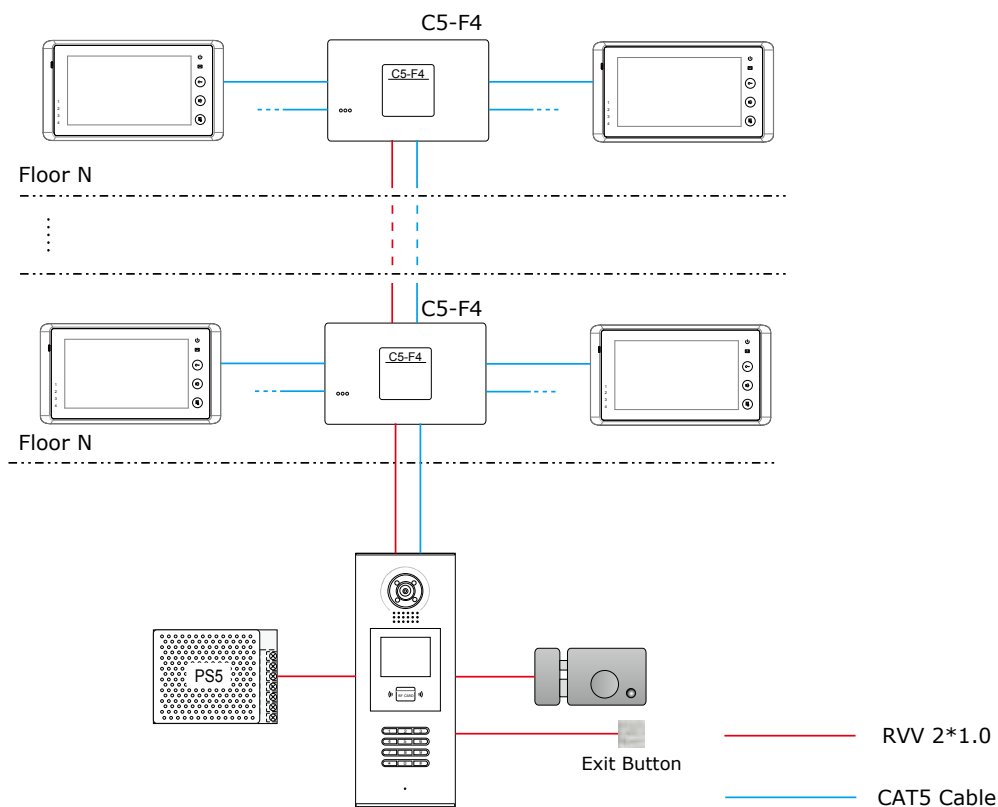
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The K5 system is flexible to meet all kinds of need in different structure; installer can install the system they want according to the requirements. Below are the examples with different combination of the system.

§ 3.1 One Entrance without Network

This is the most basic installation, it applies to buildings where there is only one entrance, without network, so it can be connected without C5-IPC.

3.1.1 Layout



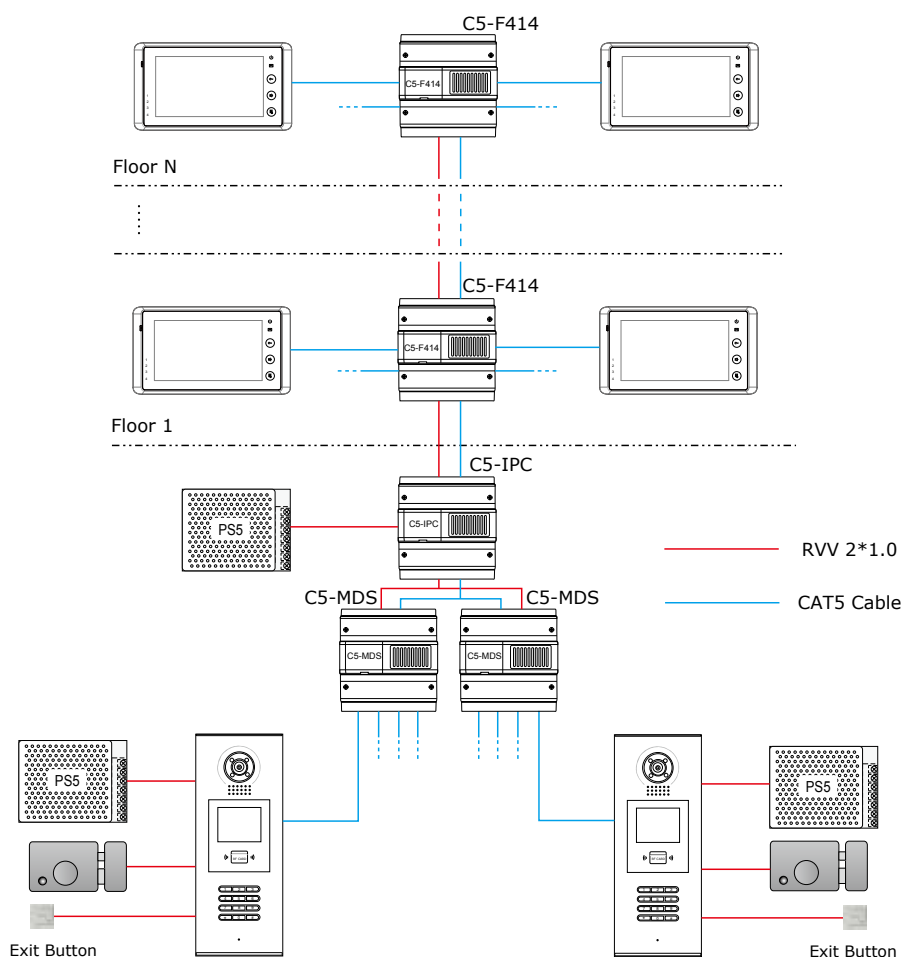
3.1.2 List of Accessories

Model	Description
DS	Outdoor station, call monitor and serves as controlling center in the system
Monitor	User terminal, to communicate with door station or other monitors
Distributor	To Separate Data, Audio, Video signal to each monitor, and power monitor
PS5	Adjustable DC power supply

§ 3.2 Multi Entrances without Network

It applies to the installation where there is more than one entrance in the building, without network. All door stations can call any of the monitors in the building; monitors in the building can view the door stations in turn or a specified door station.

3.2.1 Layout



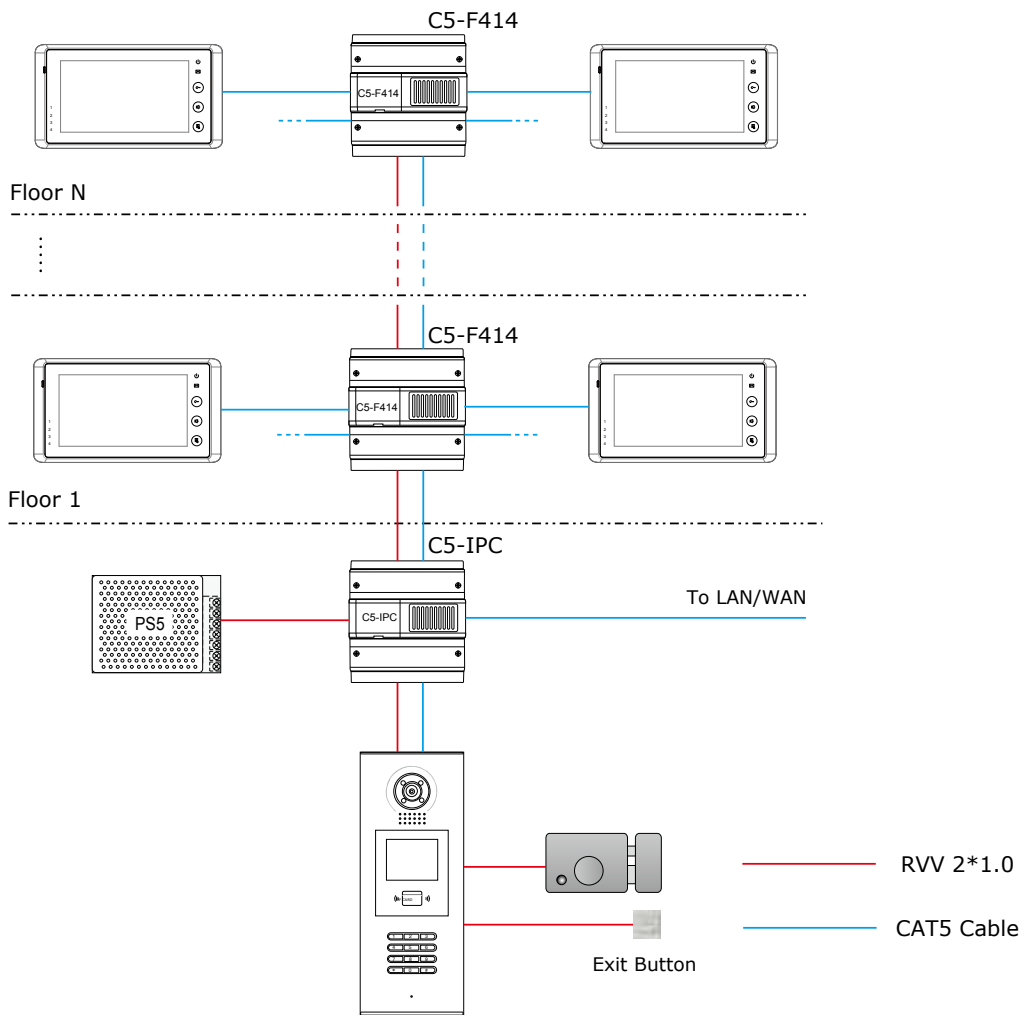
3.2.2 List of Accessories

Model	Description
DS	Outdoor station, call monitor and unlock the door
Monitor	User terminal, to communicate with door station or other monitors
Distributor	To Separate Data, Audio, Video signal to each monitor, and give power to the monitor
PS5	Adjustable DC power supply
C5-IPC	Controlling Center when there is C5-MDS
C5-MDS	Multi-door station switcher, used to separate data, audio and video of different door stations

§ 3.3 One Entrance with Network

Network connection is required when communication between different buildings or between buildings and Switchboard. C5-IPC is needed to effect the network connection.

3.3.1 Layout



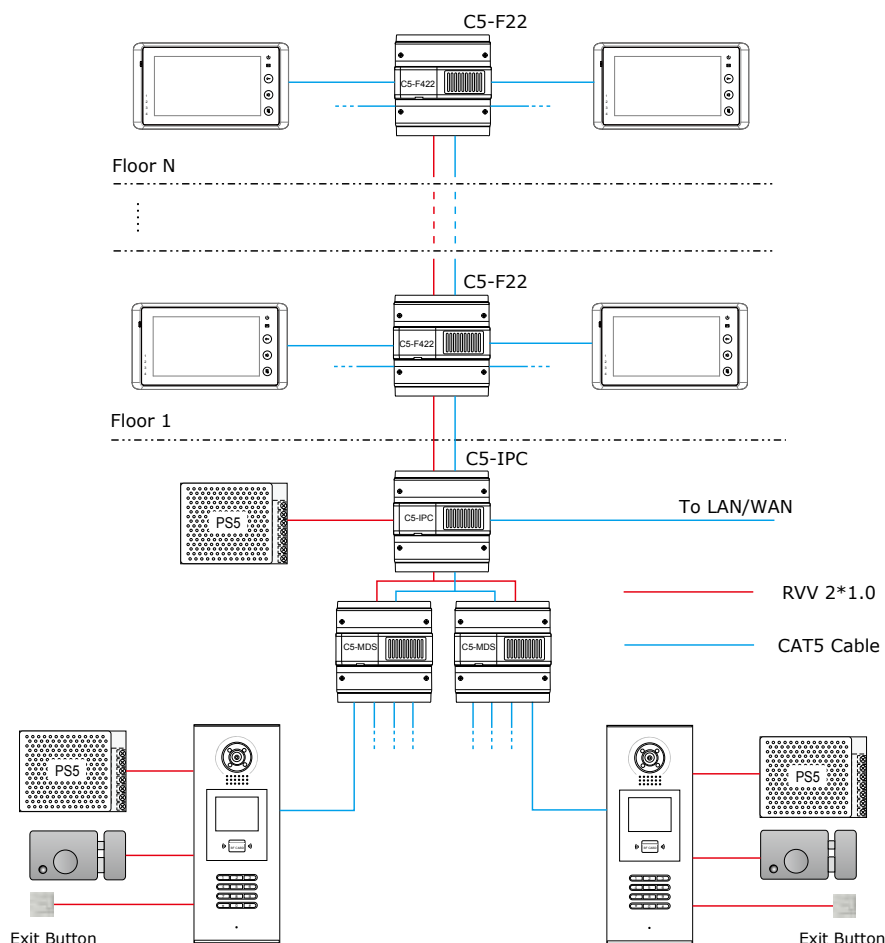
3.3.2 List of Accessories

Model	Description
DS	Outdoor station, call monitor and unlock the door
Monitor	User terminal, to communicate with door station, other monitors and Switchboard
Distributor	To separate data, audio, video signal to each monitor, and power monitor
PS5	Adjustable DC power supply
C5-IPC	Controlling center and IP Converter

§ 3.4 Multi Entrances with Network

It applies to the installation where there is more than one entrance in the building, with network. All door stations can call any of the monitors in the building; monitors in the building can choose to monitor all the door stations in turn or to select a specified door station. Also all door stations will be able to communicate with the Switchboard.

3.4.1 Layout



3.4.2 List of Accessories

Model	Description
DS	Outdoor station, call monitor and unlock the door
Monitor	User terminal, to communicate without door station
Distributor	To separate data, audio, video signal to each monitor, and power monitor
PS5	Adjustable DC power supply
C5-MDS	Multi-door station switcher, used to separate data, audio and video of different door stations
C5-IPC	Controlling center and IP converter

Chapter 4

K5 SYSTEM SETTINGS

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§ 4.1 Door station Setting

4.1.1 Door station working mode

Door station is to be installed in the entrance, to communicate with monitors or with Switchboard. Door station can be set to work under two modes:

1. **Unit door station**

To be installed on the entrance of each separate building, being able to call all the monitors inside the building

2. **Common door station**

To be installed on the common entrance, being able to call all the monitors inside the LAN network

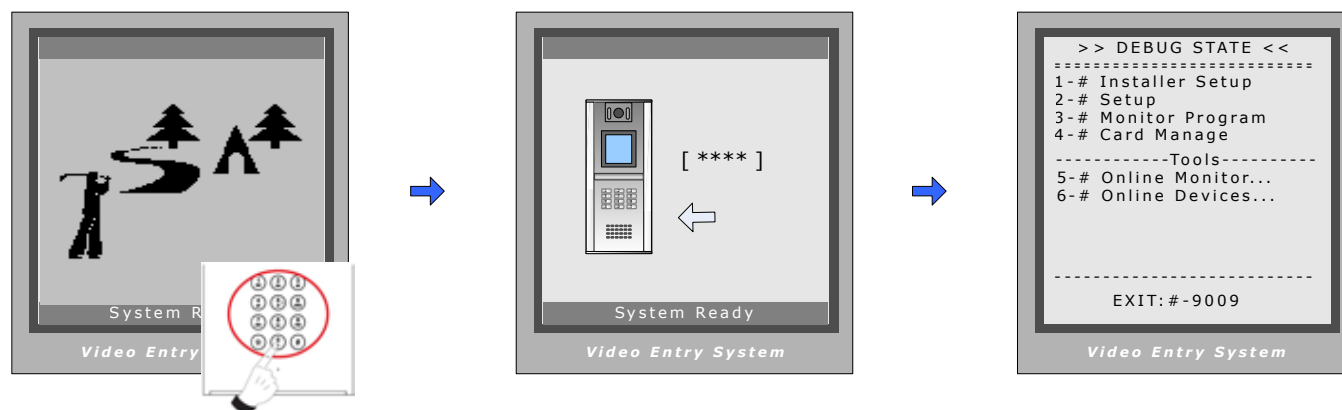
4.1.2 IP-MR9L Configuration

Door stations can work in Normal mode and Debug mode. Normal mode is for daily function for tenants; Debug mode is used for the installer, and debug tool can be activated under this mode.

Working Mode	Function
Normal mode	Daily use for tenants: calling, talking, unlocking
Debug mode	Special mode for installer: quick access to all settings and debug tools

4.1.2.1 How to enter debug mode

Door station is to be installed in the entrance, to communicate with monitors or with Switchboard. Door station can be set to work under two modes:




When Door Station is standby, press “#” key

Input “9008”, then input Admin Code (“66666666” by default)

Debug Mode menu is launched

4.1.2.2 Program Menu overview

- Enter debug mode to over view all the menus and Tools

Debug State Menu	Item	Submenu
	[1] Installer Setup	[1][1]. DS Serial NO. [1][2]. Unlock Timing [1][3]. Unlock Output [1][4]. Card Memory [1][5]. Doorplate Mode... [1][6]. Audio Option... [1][7]. Parameters... [1][8]. Installer Code... [1][9]. Default Set...
	[2] Setup	[2][1]. Language [2][2]. Tone Select [2][3]. Tone Volume [2][4]. Unlock code [2][5]. Code Check... [2][6]. Clock... [2][7]. Setup Code [2][8]. About
	[3] Monitor Program	
	[4] Card Manage	[4][1]. Add Cards [4][2]. Delete By Card [4][3]. Delete By M.Code. [4][4]. Cards Information [4][5]. Format

4.1.2.3 Basic program settings

- Installer Setup (Debug State->1.Installer Setup)

Item	Descriptions	Factory Set
1. DS Serial NO.	0 --- Set as Unit door station. No C5-IPC connected. Set to 0, then input 1/2/3 to select the related distributor type. 1. F411 -----> C5-F4 2. F414 -----> C5-F414 3. F422 -----> C5-F422 1~8 --- Set as Unit door station. C5-IPC connected. Only one door station connected: set to 1. When C5-MDS connected, 1st C5-MDS related to 1 -- 4 2nd C5-MDS related to 5 -- 8 9 ----- Set as Common door station	[0-11] Standalone Used with F411
2. Unlock Timing	To set the time that how long the door keeps open when door is released. Ranging from 1 to 99 seconds.	[01]
3. Unlock Output	To set the relay state for unlock, can be set to be normally open or normally closed	[0] Normally open
4. Card Memory	To choose to use the memory of door station or that of C5-IPC when access cards are in use 0- Store and read cards from the memory of Door station 1- Store and read cards from C5-IPC	[0] Use memory of DS for access
5. Doorplate Mode	To choose the input mode when you call monitor. It can be set to from 1 to 8 digits. totally 8 numbers or 8 letters or mixed are available	4 digits of number
6. Audio Options...	To set the audio match between door station and monitor and that between door station and Switchboard, it can be used when there is audio match problem such as noisy or discontinuous voice.	[0]
7. Parameters	The parameters will take effect only when there is no C5-IPC	See Parameters
8. Installer Code	To change the Installer Code of door station	[66666666]
9. Default	To retrieve the original configuration of Door Station. Note this operation is an irreversible operation. Once restore is done, the parameters including Installer Code and Setup Code will return to Factory default setting	

- Parameters(Debug State->1. Installer Setup->7. Parameters)

Three pages are available inside the parameters, press # to switch between different pages

Table 1

Item	Descriptions	Factory Set
1. Monitor Numbs	To set number of monitors that can monitor the door station at the same time	[2]
2. Monitor Timing	To set the maximum monitoring time on door station	[15]
3. Monitor & Talk	Enable/Disable talk function when monitor is monitoring	[1] Enable
4. Monitor & unlock	Enable/Disable talk function when monitor is monitoring	[1] Enable
5. Call Wait Time	The time that the door station keeps calling when no answer on the monitor	[30]
6. Call Talk Time	The maximum talking time between door station and monitors	[60]
7. Intercom Time	The maximum talking time between different monitors	[90]
8. Call Ring Times	How many times the door station ring when it makes a call	[0]
9. Use # to call	Whether to input # to call after entering the room number	[0]

Table 2

Item	Descriptions	Factory Set
1. Local IM as GU	To set the monitor coded 0099 as local Switchboard, so when the user does "Call Switchboard " on the monitor, the call will be transferred to the 0099 monitor	[0] Not activated
2. Multi IM Mode	To set how multi-monitors in one apartment were coded	[0]
3. Room Table Valid	To use the room table to call the monitor when room table is downloaded to the door station through ST-Config	[0] Not activated
4. Room Table Only	To set how the door station calls the monitor	
5. Unlock code 2	The second unlock code, valid only when the door station is set to use common unlock code	None
6. Unlock Code mode	To choose to use common unlock mode or private unlock mode	[0] Common unlock mode
7. Code Error Alarm	Reserved	
8. Code & Card	Reserved	
9. Code Disable	Reserved	

Table 3

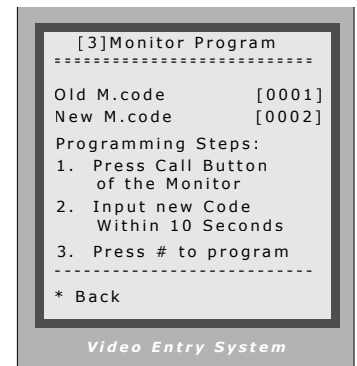
Item	Descriptions	Factory Set
1. Display Mode	Reserved	[0]
2. Camera Power-on	To choose to power the camera always or to power only when door station is activated	[0] Power when activated
3. Enable name list	Enable/Disable namelist function	[0]
4. Door Open Alarm	reserved	
5. Disable Intercom	Enable/Disable intercom function between montiors	[0]
6. Protect Setup	Reserved	
7. Open Card Mode	Reserved	
8. Support ST-NSW	To choose to use with ST-NSW or C5-IPC	[0] Use with C5-IPC

- Setup (Debug State->2. Setup)

Item	Descriptions	Factory Set
1. Language	When Several languages are available, can be set to choose different languages	[1] English
2. Tone Select	12 calling tones are available	[03]
3. Tone Volume	Adjust the volume of calling tone	[03]
4. Unlock Code	The unlock code here serves as Unlock code 1	[1111]
5. Code Check...	To check the unlock code of each room code, when the door station works under private unlock mode	
6. Clock...	To set the date and time of the door station that shows on the screen display	Real time
7. Setup code...	To change the setup code of the Door station	[88888888]
8. About	To show the information of the device	

- Monitor Program (Debug State->3. Monitor Program).

Access Monitor Program in Debug Mode (Also See 1.1, Access Monitor program in normal mode)



When in Debug Mode, press "3#"

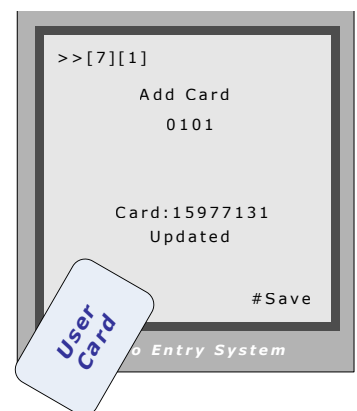
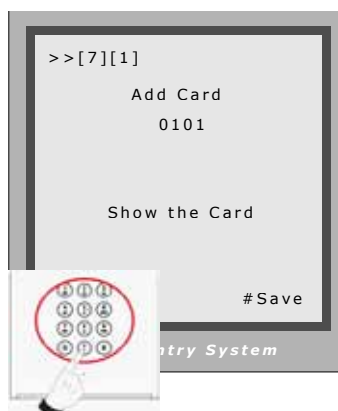
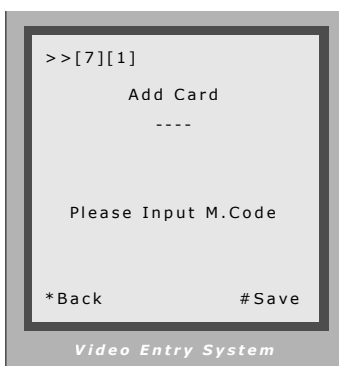
Monitor Program is launched

Program the monitor according to the instruction

- Card Management [Debug State->4. Card Management]

Item	Descriptions	Factory Set
1. Add Card	Input the user code then swipe the card to be added	NONE
2. Delete By Card	Swipe the card to delete it	NONE
3. Delete By M. Code	To delete all the cards attached to the user code	NONE
4. Cards information	To show the amount of cards and counts	NONE
5. Format	To Delete all the card information saved on the door station	

[1] Add Card



Enter Add Card menu, and Room Code is asked.

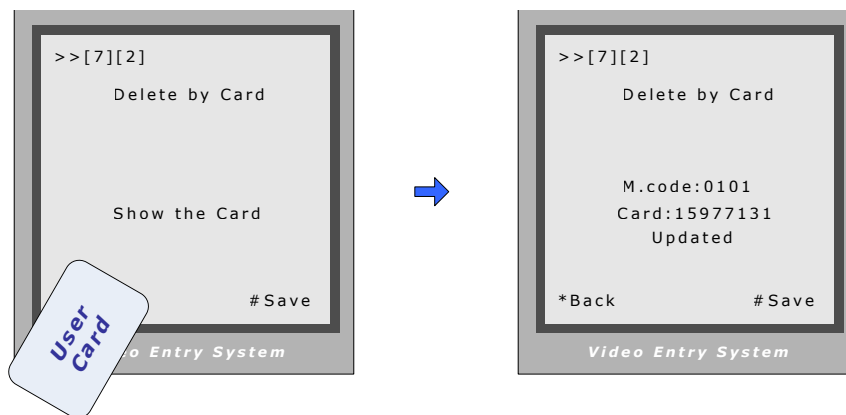
Input Room Code, then press "#" Key.

Swipe the card to be added

[2] Delete Card

Enter **Delete by Card;**

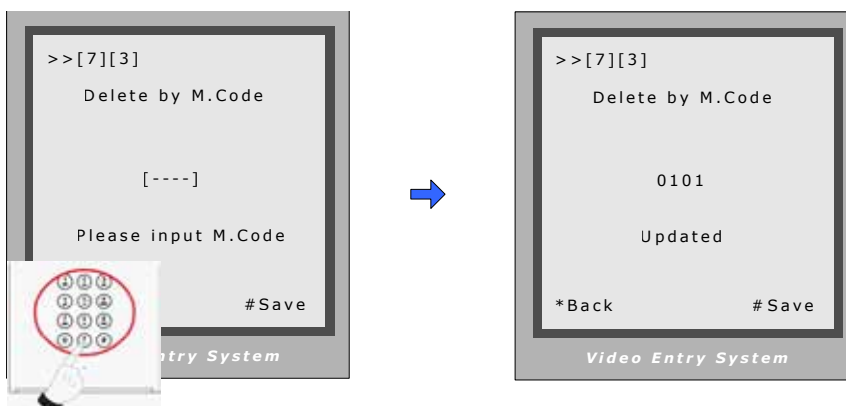
Swipe the card to be deleted, and card number and Room Code will be shown after deleted



[3] Delete by M. Code

Enter **Delete by M. Code;**

Input the Room Code, press “#” to confirm; all the cards attached to the User code will be deleted

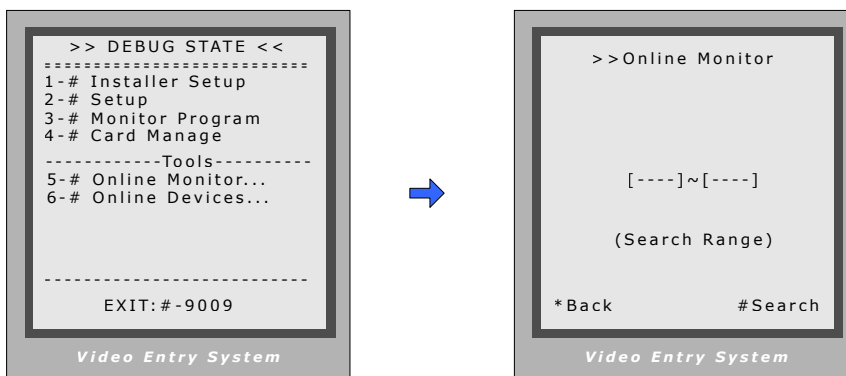


4.1.2.4 Debug Tools

- Entering debug tools

Note:

- Each Debug Option can be activated or de-activated separately
- Each Debug Command is a sub-menu to execute and show result.
- On Debug State menu, the bottom line served as displaying events, logs and debug data.



Press #9008 then Installer code to enter the Debug mode.

Now input the code to activate the corresponding tool

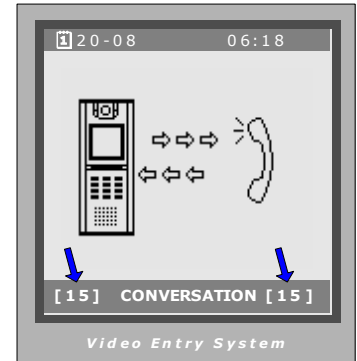
For Example, Press 5# to enter Online Monitor search. Now enter the starting user code and ending user code and # to start searching.

1. Volume Adjust

Door station can adjust its talking volume by keypad. Note that the volume adjusting function is automatically activated in the Debug Mode.

After **Volume-Adjust** is activated, if Door Station calls a Monitor and enters talking state, current volume values are shown on bottom line.

The left value means the **microphone volume** of door station, and the right value means the **speaker volume** of the door station. Each value can be adjusted separately, ranges for 01 to 25, and 15 by default.



Note:

- For installations using hand free Monitors, it's important that volume values in both directions must be adjusted correctly. Otherwise, conversation maybe hard to hear, or discontinuously, or feedback.
- The hand free conversation quality between Monitor and Door Station is related to distance between them. On the back of hand free Monitor, a yellow rheostat (Variable Resistor) serves as adjuster, to adapt to distance.

2. Auto-Dial back

The Auto-Dial-Back option is designed to simplify field debugging, and to realize single person testing. Also, it is always used to get a Monitor's Room Code.

After Auto-Dial-Back is activated, by pressing Monitor's Call Button, the Monitor's Room Code is shown at the Debug Message Area of screen. 3 seconds later, the Door Station will automatically launch calling operation to the Monitor. However, if you don't need calling, just press "*" when Room Code is present. Please note: Auto-Dial-Back is automatically activated when you first enter Debug Mode, and Switchboard doesn't response to Monitor's calling request in this condition.

3. Online monitor

Function: Search the certain range of Monitor which is for checking the information of the online monitor. After startup this operation, the Door Station search and display the present online monitor according to the setup range automatically.

4. Online Device

Door Station can search the devices on-line such as C5-MDS, C5-IPC, C5-IMC. The information will be shown on the display after the searching.

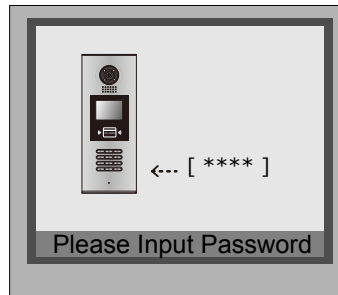
4.1.3 Configuration IP-MR18L

Door stations also can work in Normal mode and Debug mode.

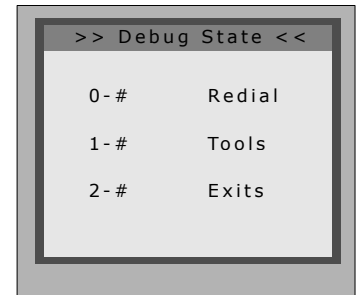
4.1.3.1 How to enter debug mode



When Door Station is standby, press “#” key



Input “9008”, then input Admin Code (“66666666” by default)



Debug Mode menu is launched

4.1.3.2 Program Menu overview

- Enter debug mode to over view all the menus and Tools

Debug State Menu	Item	Submenu
 	[1] Installer Setup	[1][1]. ID Code [1][2]. Unlock Timing [1][3]. Unlock Output [1][4]. Card Memory [1][5]. Doorplate Mode... [1][6]. Audio Option... [1][7]. Parameters... [1][8]. Installer Code... [1][9]. Default Set...
	[2] Setup	[2][1]. Language [2][2]. Tone Select [2][3]. Tone Volume [2][4]. Unlock code [2][5]. Display Mode [2][6]. Clock... [2][7]. Setup Code... [2][8]. About... [2][9]. Default...
	[3] Card Manage	[3][1]. Add Card... [3][2]. Delete by Card [3][3]. Delete by M.Code [3][4]. Cards Information [3][5]. Format
	[4] Online Monitors	
	[5] Online Devices	

4.1.3.3 Basic program settings

- Installer Setup (Debug State->1#->1.Installer Setup)

Item	Descriptions	Factory Set
1. ID Code.	1. When there is only one door station and no C5-IPC, set to 0. And set the type of distributor used with it. When C5-IPC is connected, must not be set to 0. 2. When C5-MDS is connected, be set to from 1~8 according to which port it is connected on the C5-MDS 3. When used as common door station, set to 9	[0-11] Standalone Used with F411
2. Unlock Timing	To set the time that how long the door keeps open when door is released. Ranging from 1 to 99 seconds.	[01]
3. Unlock Output	To set the relay state for unlock, can be set to be normally open or normally closed	[0] Normally open
4. Card Memory	To choose to use the memory of door station or that of C5-IPC when access cards are in use 0-Use memory of DS for access 1-Use C5-IPC for access	[0] Use memory of DS for ac- cess
5. Doorplate Mode	1. To choose the input mode when you call monitor. It can be set to from 1 to 8 digits. totally 8 numbers or 8 letters or mixed are available 2. Set to 0 to activate call directly after entering the number; Set to 1 to activate the call by # following the number	[0] 4 digits of number
6. Audio Options...	To set the audio match between door station and monitor and that between door station and Switchboard, it can be used when there is audio match problem such as feedback or discontinuous voice	[0]
7. Parameters	The preset parameters when ID Code is set to 0.	See Parameters
8. Installer Code	To change the Installer Code of door station	[66666666]
9. Default	To retrieve the original configuration of Door Station. Note this operation is an irreversible operation. Once restore is done, the parameters including Installer Code and Setup Code will return to Factory default	

- Installer Setup (Debug State->1#->1. Installer Setup->7. Parameters)

Three pages are available inside the parameters, press # to switch between different pages

Table 1

Item	Descriptions	Factory Set
1. Monitor Numbs	To set number of monitors that can monitor the door station at the same time	[2]
2. Monitor Timing	The maximum monitoring time	[30]
3. Monitor & Talk	Enable/Disable talk function when monitoring	[1]: Enable
4. Monitor & unlock	Enable/Disable unlock function when monitoring	[1]: Enable
5.Wait Timing	Maximum wait time when making a call	[30]
6. Talk Timing	Maximum talk time available in a call	[90]

Table 2

Item	Descriptions	Factory Set
1. Ring Numbers	To set the monitor coded 0099 as local Switchboard, so when the user does "Call Switchboard " on the monitor, the call will be transferred to the 0099 monitor	[0] Not activated
2. Name List Mode	Reserved	
3. Local IM as GU	To set the monitor coded 0099 as local Switchboard, so when the user does "Call Switchboard " on the monitor, the call will be transferred to the 0099 monitor	[0] Not activated
4. Multi IM Mode	To set the code rule when there are extended monitors in the one apartment	[0] Default rule
5. Room Table Valid	To use the room table to call the monitor when room table is downloaded to the door station through ST-Config	[0] Not activated
6. Room Table Only	Reserved	

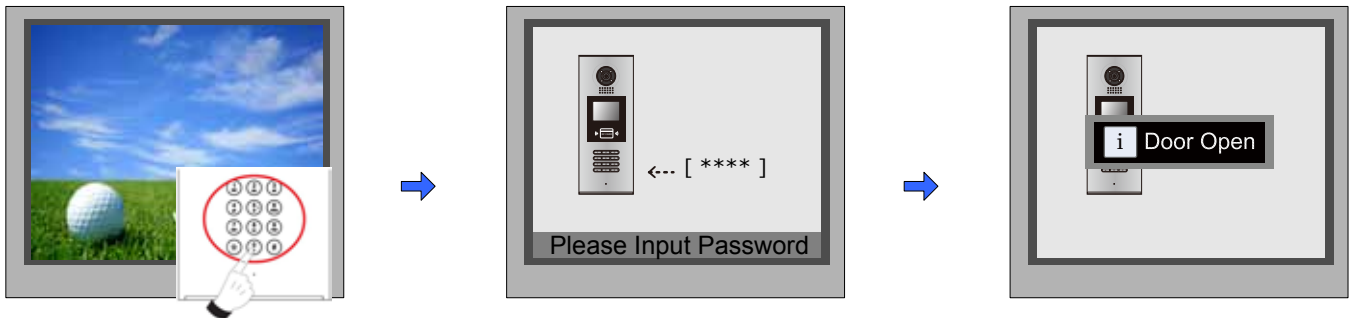
Table 3

Item	Descriptions	Factory Set
1. Unlock Code 2	Reserved	None
2. Unlock Code Mode	Reserved	[0]
3. Camera Power-on	To choose to power the camera always or to power only when door station is activated	[0] Power when activated
4. Reserved	Reserved	
5. Disable Intercom	Disable/Enable intercom function between monitors	[0] Enable

- Setup (Debug State->1#->2. Setup)

Item	Descriptions	Factory Set
1. Language	To choose different languages via SD Card	[01] English
2. Tone Select	12 calling tones are available	[03]
3. Tone Volume	Adjust the volume of calling tone	[03]
4. Unlock Code	To change the unlock code	[1111]
5. Display Mode	Choose to show / not to show the view of visitor when door station is making a call	[0] show
6. Clock...	To set the date and time of the door station that shows on the screen display	Real time
7. Setup code...	To change the setup code of the Door station	[88888888]
8. About	To show the information of the device	

- Unlock by code(Debug State->1#->1. Installer Setup->7. Parameters)



When Door Station is standby, press “#” key

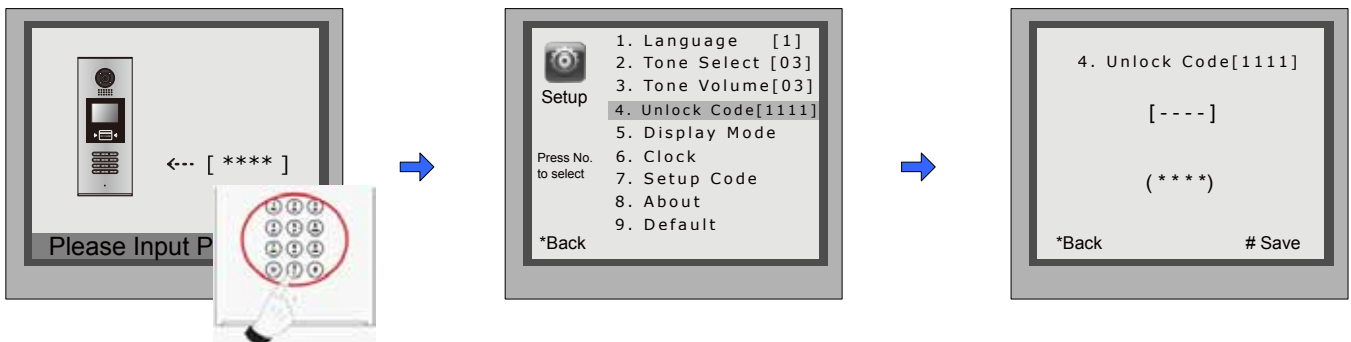
Input 4 digits Unlock Code

If verified correctly, door open

- Unlock code setting (Debug State->1#->2. Setup->4. Unlock code)

If Door Station runs as Debug State, you can press “1#” then “2 ”to enter Setup to make configure unlock setting;

However, if runs as Normal State, follow these steps to enter:



Press “#” key, Input “8002”, then input Setup Code or Admin Code (88888888 or 66666666 by default)

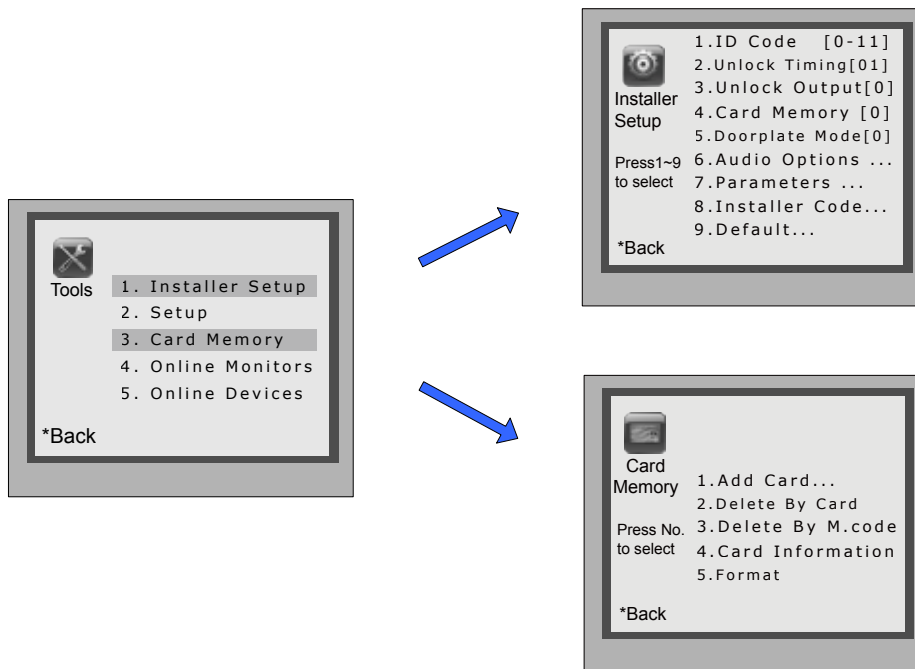
Press “4” to enter unlock code item.

Input 4 digits number, then press “#” to update

- Proximity Cards operation

This part explains how to configure the Proximity card access function, by means of keypad. Please note, to a Door Station without access security, all the related parameters can’t be updated. The capacity for cards in IP-MR6L/IP-MR9L is 1000. If door station is used with C5-IPC, cards can be stored in C5-IPC ,the memory of C5-IPC can be upgraded to 10,000 cards if needed. It is much convenient to manage access security and cards by means of IP-Device software in a networked system. Reading distance is approximately 30mm from the window. There are 2 type of setup, for Access controller and cards authorization.

Door Station should enter Debug State first, and then operate as below:



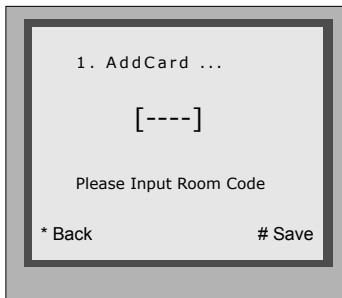
About access Memory

- The access cards can be saved in the door station ,for this , the Card memory in Installer setup, Must be set to 0(It is 0 by default)
- The access cards also can be saved in the C5-IPC connected with the door station. For this, the Card memory in Installer setup should be set to 1.

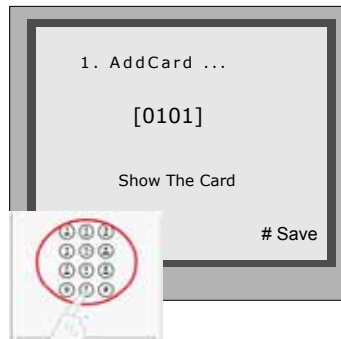
About cards

- User Cards are associated with Room Code; an authorized User Card can open the door at any time.
- Manage Card is restricted to pre-defined access rule, and hold by visitor or service person.
- Please note, Manage Cards can only be saved in C5-IPC and authorized by means of IP-Access software.
- To authorize cards, enter Card Management first (refer Chapter 6.1 to), then select the item.
- Please note that the following operations are irreversible.

[1] Add User Card



Enter Add Card menu, and Room Code is asked.



Input Room Code



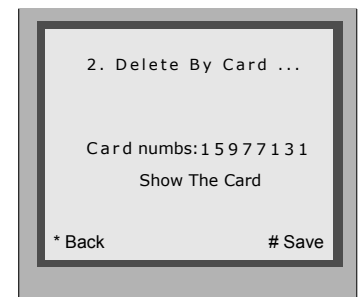
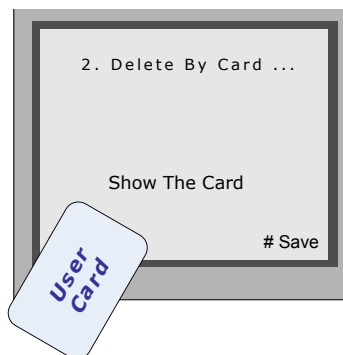
Read the card to be authorized

[2] Delete User Card

- Delete by reading card

Enter **Delete by Card**

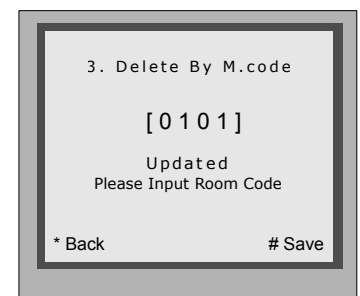
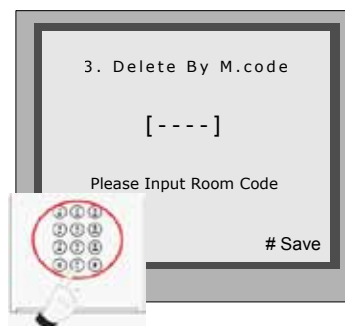
Read the card to be deleted, and card number will be shown on the display



- Delete cards by associated Room Code

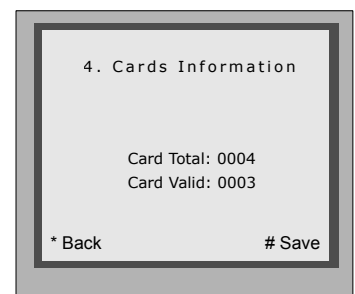
Enter **Delete by M.Code**

Input the Room Code, press "#" to confirm; all associated cards will be deleted.



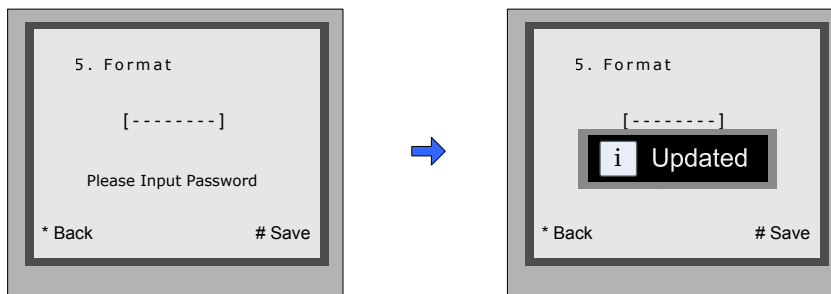
[3] Card Information

Enter **Card Information**, and the screen will display the number of all the once-authorized User Cards and the currently valid cards.

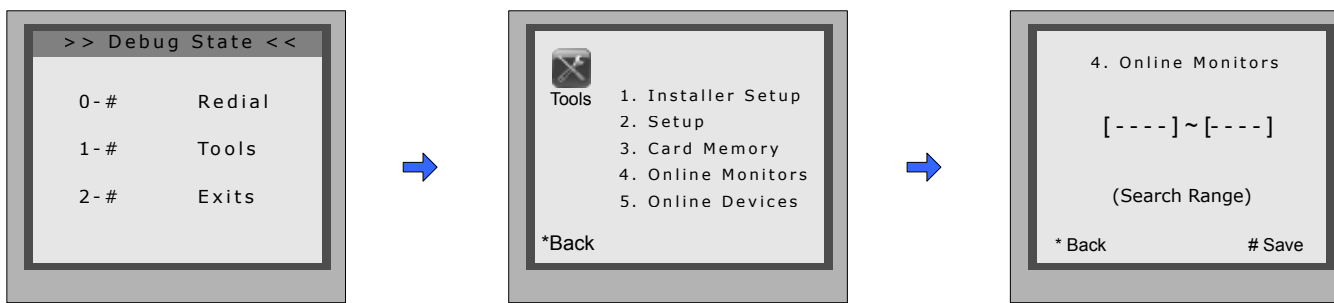


[4] Format

Enter **Format**, input the installer setup password and # key, then all the information will be deleted about cards



4.1.3.4 Debug Tools



Press #9008 then Installer code to enter the Debug mode, then 1# to enter Tools page

Debug Tools menu is shown:
Press 1~4 to select different tools

Enter the starting number and ending starting , and # to start search the monitors on line

Note:

- Here only the Online Monitor is activated at present, the others will be available later.
- Each Debug Option can be activated or de-activated independently, and marked in screen if activated.
- Each Debug Command is a sub-menu to execute and show result.
- The "Switchboard Online" item will be marked or cleared dynamically, according to Switchboard state.
- On Debug State menu, the 2 bottom lines are served as displaying events, logs and debug data.

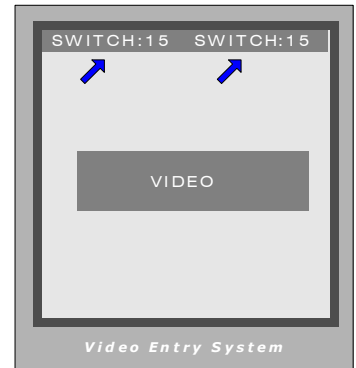
1. Volume Adjust

Door Station has the advanced feature that conversation volume of both directions can be adjusted in digital method.

After Volume-Adjust is activated, if Door Station calls a Monitor and enters talking state, current volume values are shown on bottom line.

The left value means "Door Station talks to Monitor" channel, and the right value means "Monitor talks to Door Station". Each value can be adjusted separately, ranges for 01 to 25, and 15 by default.

Use "1"/"4" key to increase/decrease the value for microphone ; and "3"/"6" for value for speaker. The adjustment is saved automatically.



Important Notes:

- For installations using handfree Monitors, it's important that volume values in both directions must be adjusted correctly. Otherwise, conversation maybe hard to hear, or discontinuously, or feedback.

2. Auto-Dial back

The Auto-Dial-Back option is designed to simplify field debugging, and to realize single person testing. Also, it is always used to get a Monitor's Room Code.

After Auto-Dial-Back is activated, by pressing Monitor's Call Button, the Monitor's Room Code is shown at the Debug Message Area of screen. 3 seconds later, the Door Station will automatically launch calling operation to the Monitor. However, if you don't need calling, just press "*" when Room Code is present. Please note: Auto-Dial-Back is automatically activated when you first enter Debug Mode, and Switchboard doesn't response to Monitor's calling request in this condition.

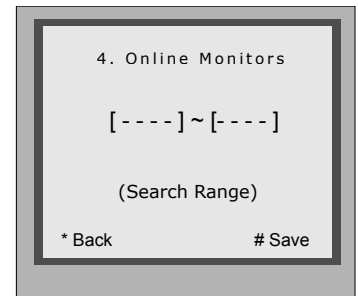
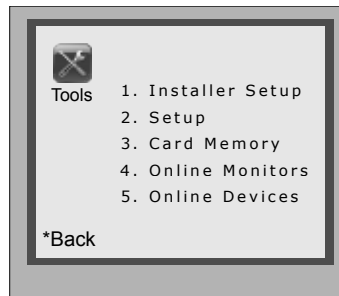
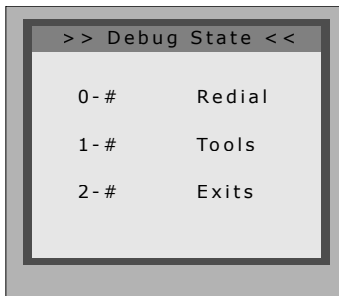
3. Online Distributor Info

When Door station works under debug state, it can bring the information of the distributor and monitors connected to it on the display, by one push of the PA button on the distributor. It shows the address of all the monitors, the distributor type, and the audio & video channel used. Please note that this function is available only on C5-F414 or F422.



4. Online Monitors search

Function: Search the certain range of Monitor which is for checking the information of the online monitor. After startup this operation, the Door Station search and display the present online monitor according to the setup range automatically. Operation steps are show as below:



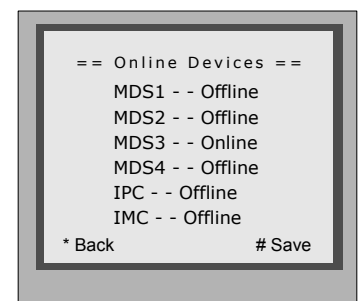
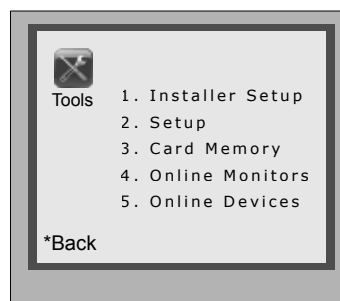
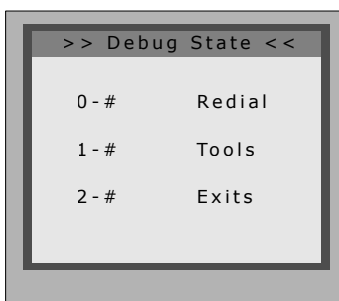
Press #9008 then Installer code to enter the Debug mode, then 1# to enter Tools page

Debug Tools menu is shown:
Press "4" to select

Enter the starting number and ending starting , and # to start search the monitors on line

5. Online Devices

This tool is used to identify whether C5-MDS, C5-IPC and C5-IMC are connected. When it is startup, the connection states come out by turn automatically. If one of these devices is connected, it shows online, otherwise, it shows offline. Usually, this tool is used in project installation and maintenance.



Press #9008 then Installer code to enter the Debug mode, then 1# to enter Tools page

Debug Tools menu is shown:
Press "5" to select

The online devices status will be checked immediately

§ 4.2 Lock Connection

4.2.1 Lock Type

The door station can connect two kinds of lock:

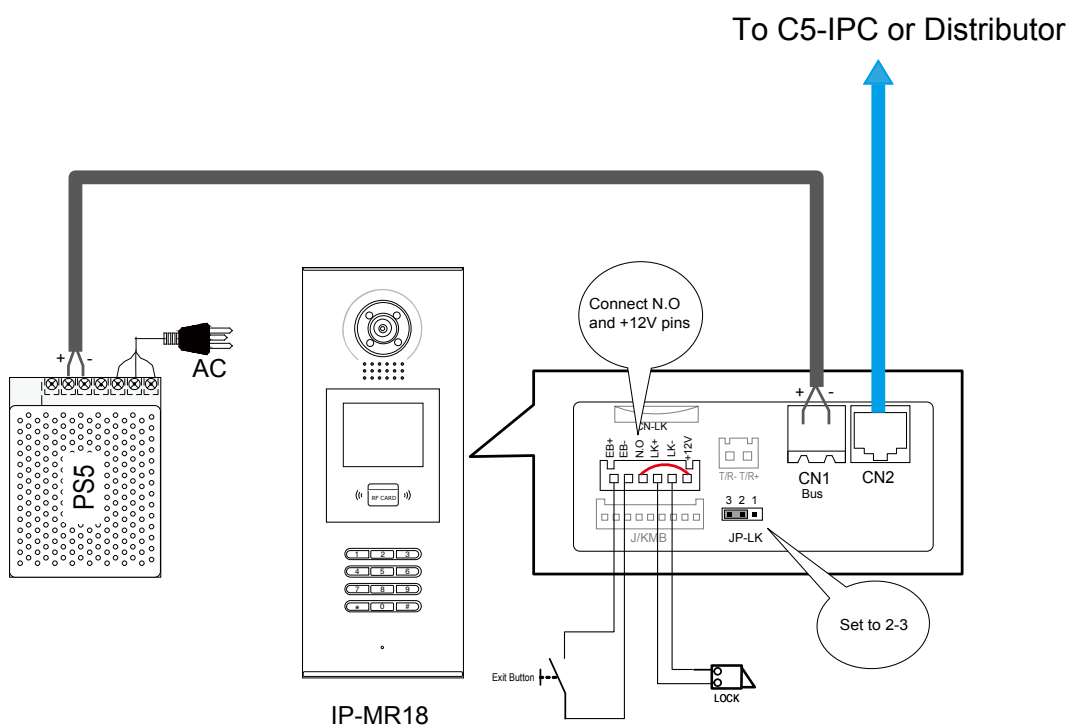
The power-on to unlock type: The lock stays locked when there is no power, and unlocks once it gets the power from the power supply.

The power-off to unlock type: The lock stays locked when there is power feeding it, and unlocks once the power is cut off.

4.2.2 Connection Diagram

The lock can get power from the door station directly or from the additional power supply, we call these two internal power supply and external power supply separately.

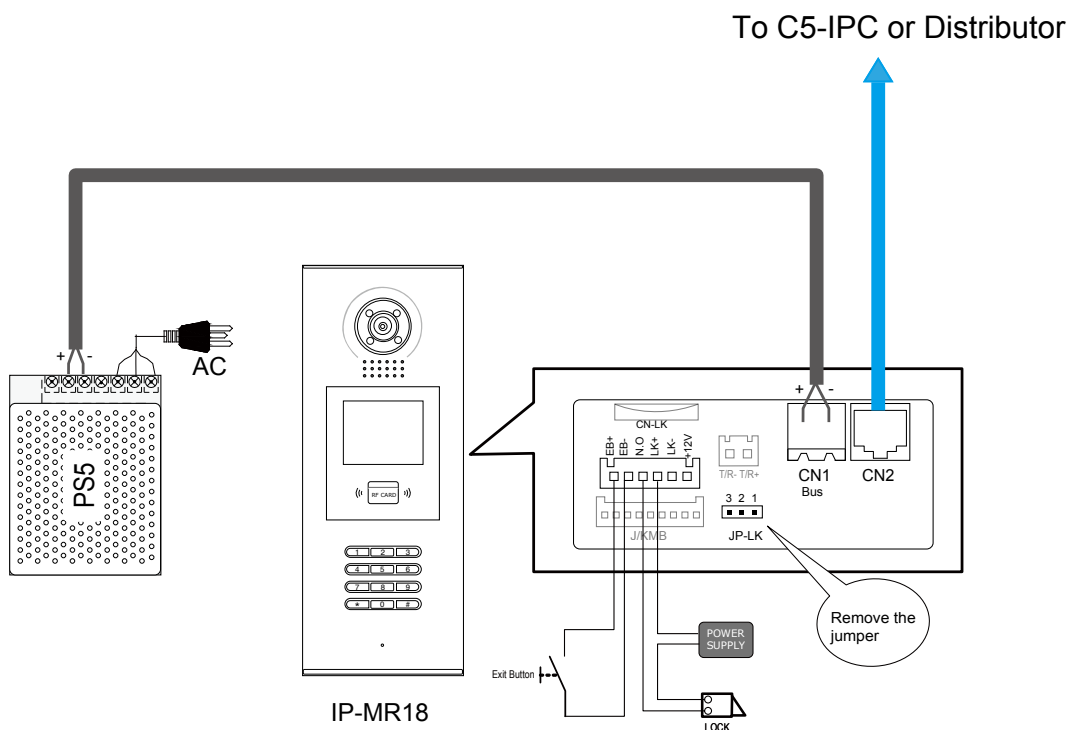
4.2.2.1 Door Lock Controlled with Internal Power



Note:

1. Electronic lock of Power-on-to-unlock type should be used.
2. Working current of lock must be less than 250mA, and working voltage must be DC12V
3. JP-LK must be set to 2-3 position, N.O. and 12V pins of CN-LK must be connected together.
4. Unlock Output(unlock mode) must be set to 0(By default)

4.2.2.2 Door Lock Controlled with External Power



Note:

1. Please use DC lock and the related DC power supply
2. Remove the JP-LK jumper
3. Set Unlock Output(unlock mode) for different lock types(#8001-3: Unlock Output)
 - Power-on-to-unlock type:Unlock Output=0 (by default)
 - Power-off-to-unlock type:Unlock Output=1

§ 4.3 Monitor Setting

4.3.1 Concept of Address

Address codes are the numbers/letters used by residents, visitors and Switchboard operators to identify the apartments or villas in the installation. Inside the unit/riser each apartment can be addressed with a 4 digit code(ABCD),of these 4 digits, the first 2 digits are meant to be the floor number, while the last 2 digits serves as the monitor code of each floor. There are 2 calling types when there is call made to the monitor: Inside call and Outside call.

Inside call

A call made from the unit door station is the inside call, the inside call can only call the monitor inside the building. Visitors input the address of monitor (4 digits: ABCD), the door station will call the monitor right away

Outside Call

Calls from the Switchboard or common door station are outside call. When making this call, 7 digits address is required: XXX-ABCD.

XXX- represents the IP address of C5-IPC of the building

ABCD-represents the address of the monitor


4.3.2 Address setting on Monitor

The address of monitor can be changed to whatever 4-digit number as long as there is no repeated number in the system. Here we have 3 types of monitor, see the following section.

- **C5-AT27**

1) In standby mode, touch the screen to enter main menu interface.



2) Touch the User Setup icon to enter setup interface, password will be required, Input 2412 +  to get access to the setup.

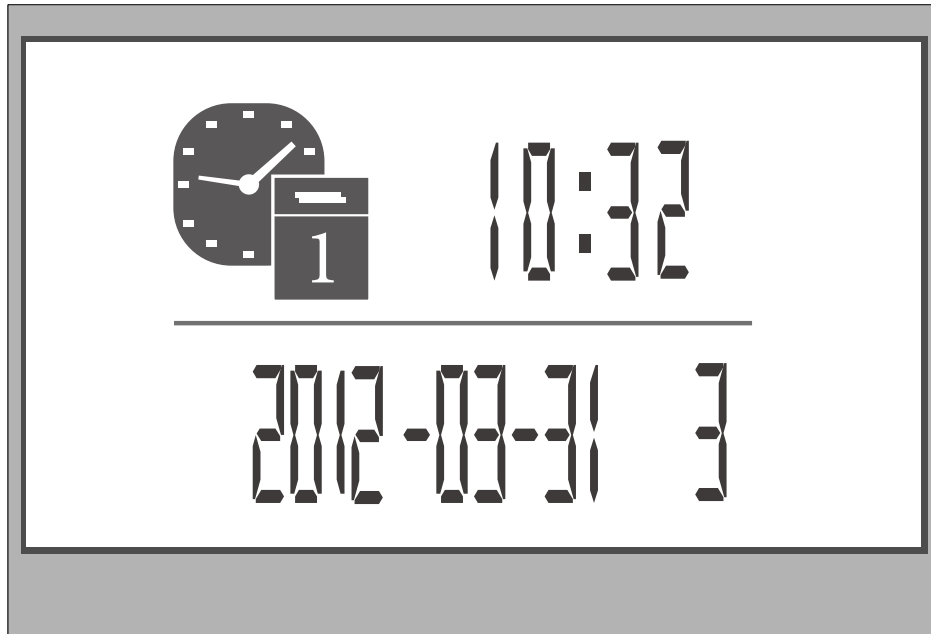


3) Now touch the User Code and input the new user code to be the address of the monitor.

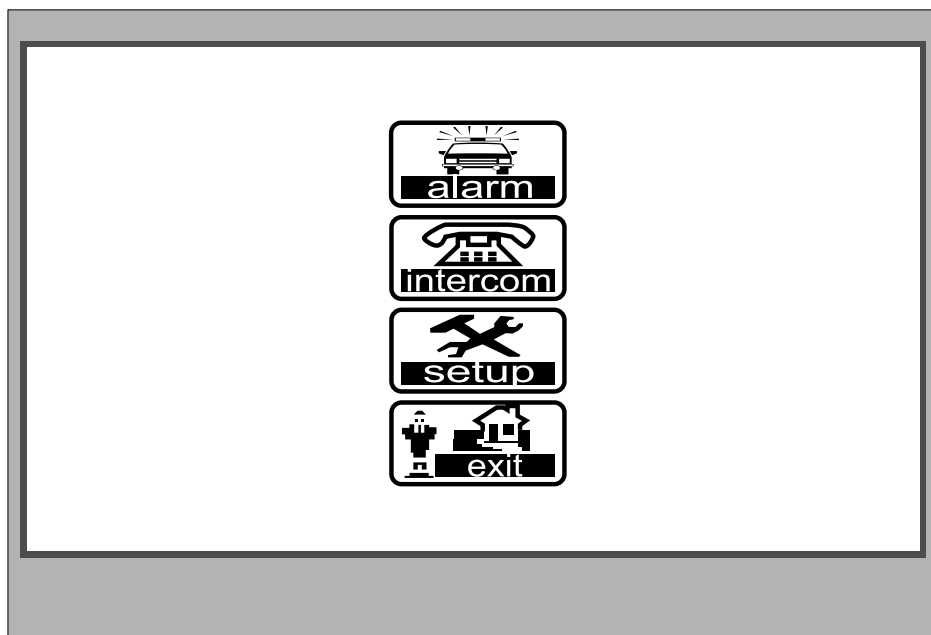


- **C5-AT16**

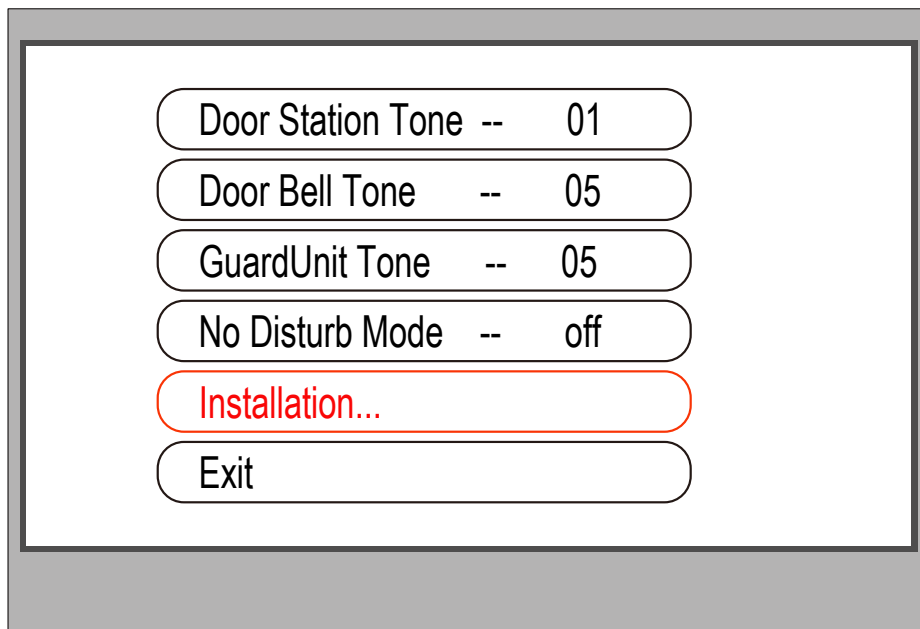
1) In Standby Mode, Press the menu button on the surface of the front panel.



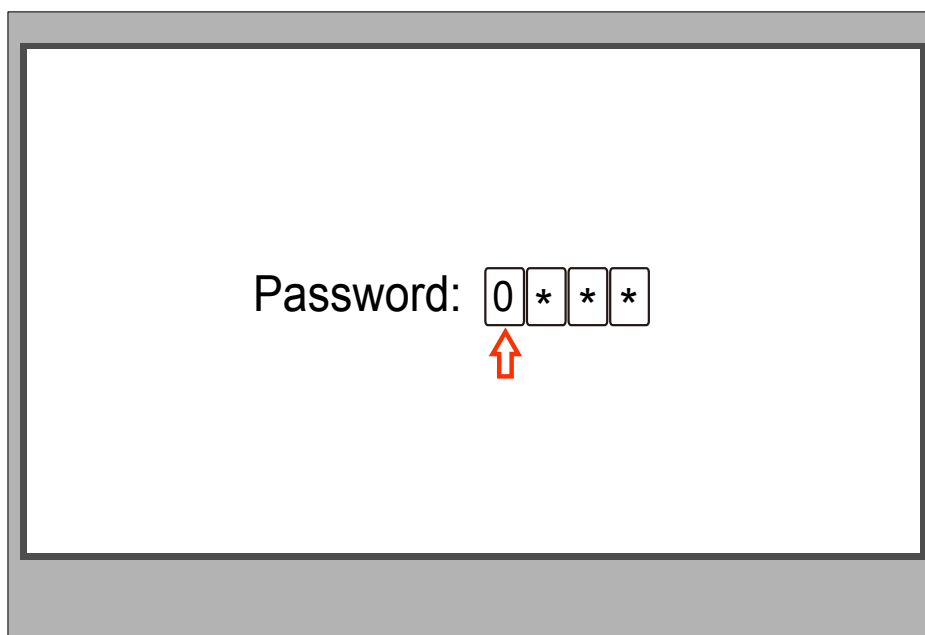
2) When it shows the calendar, press the menu button again



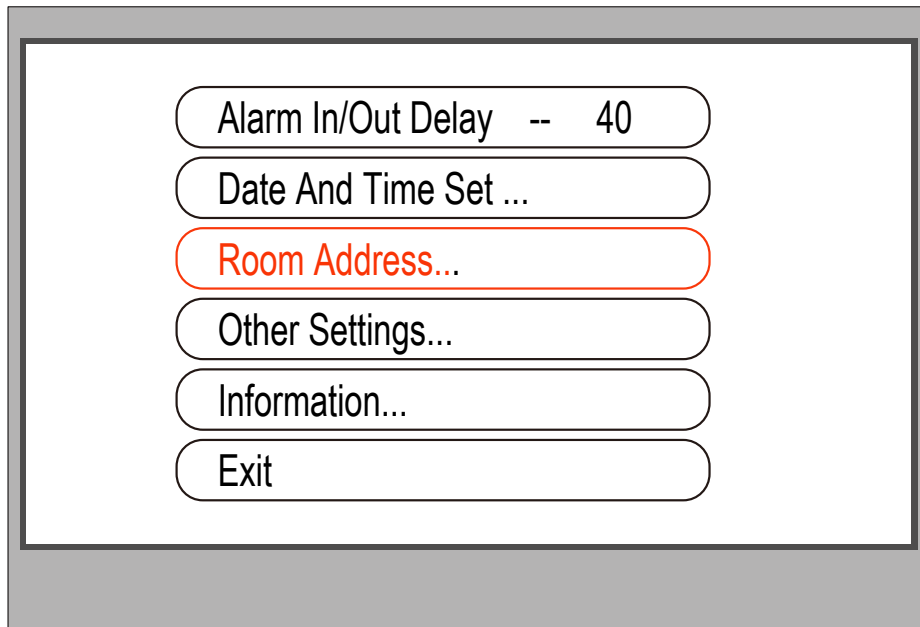
3) Now navigate to the Setup and press menu button to enter setup page



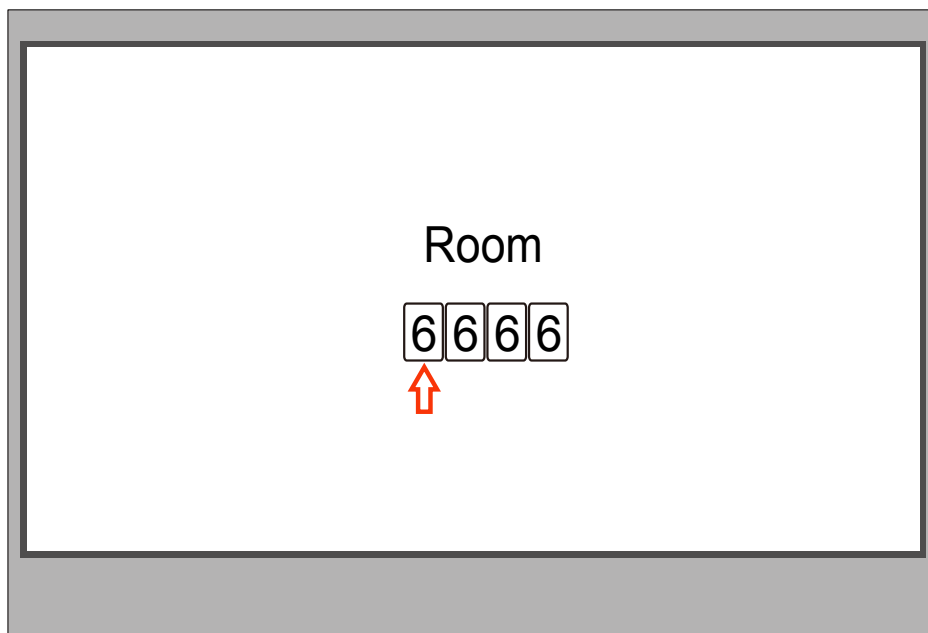
4) Go to Installation and input password(2412), then press menu to confirm



5) Go to Room Address...

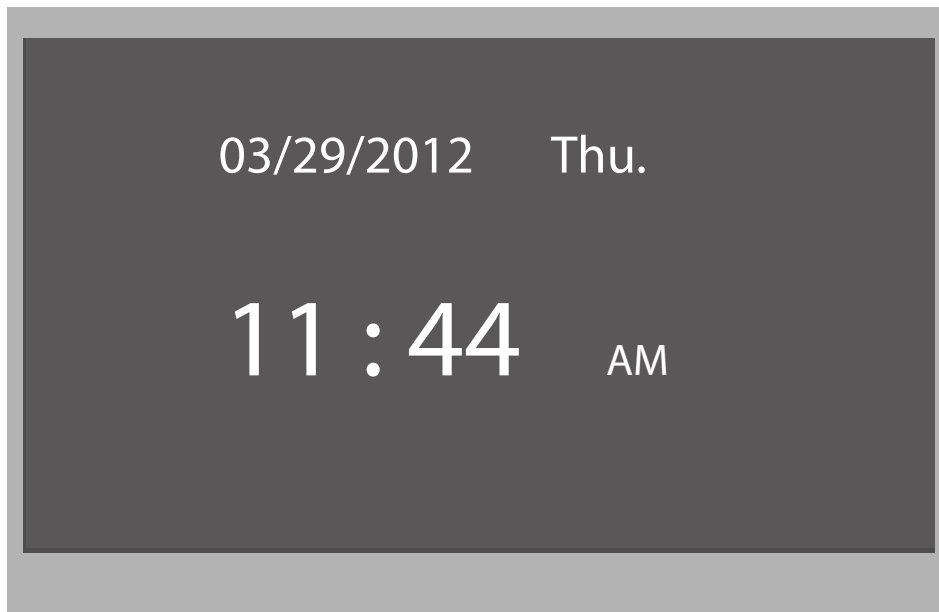


6) Enter the new Room address via navigation button and press Menu to save

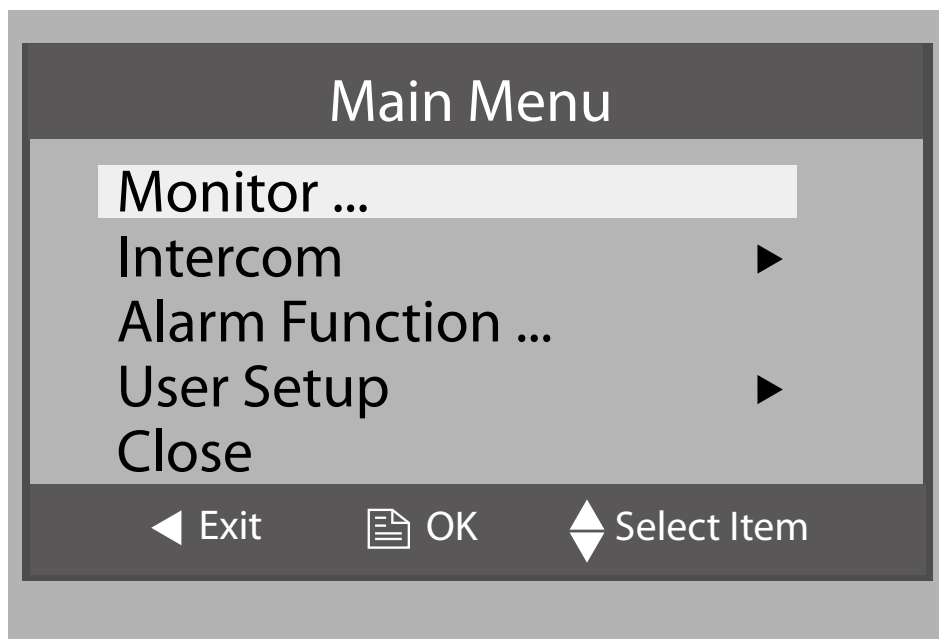


• **C5-AT25**

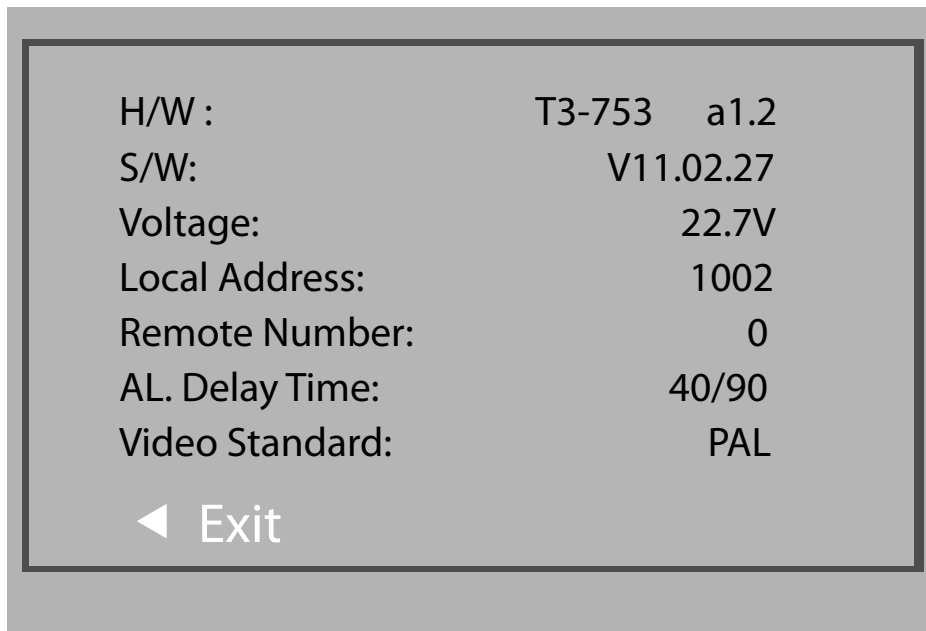
1) In standby mode, press the Menu button



2) In the Calendar page, press the menu again to enter main menu

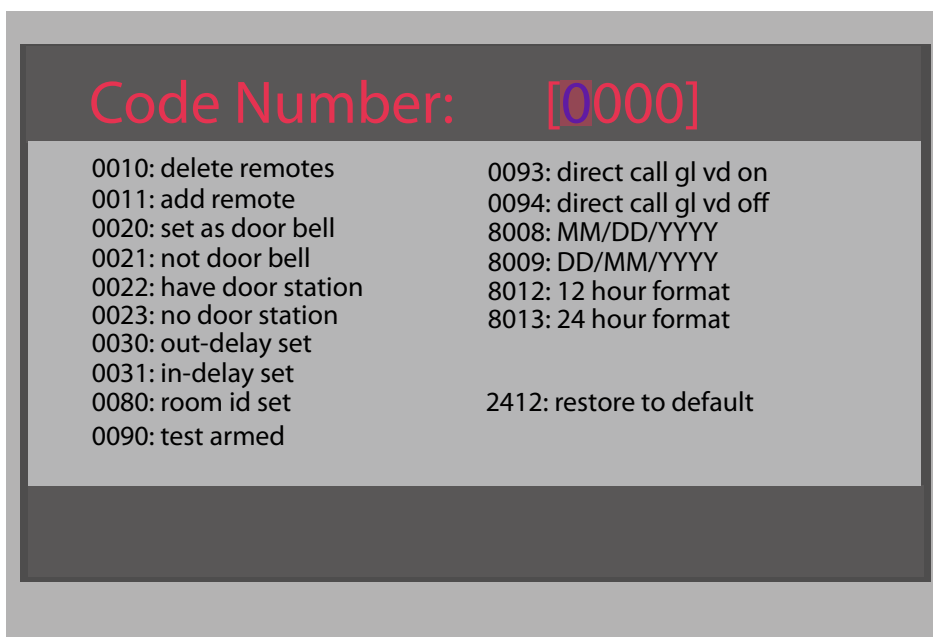


3) Press the ◀ button to entry About page

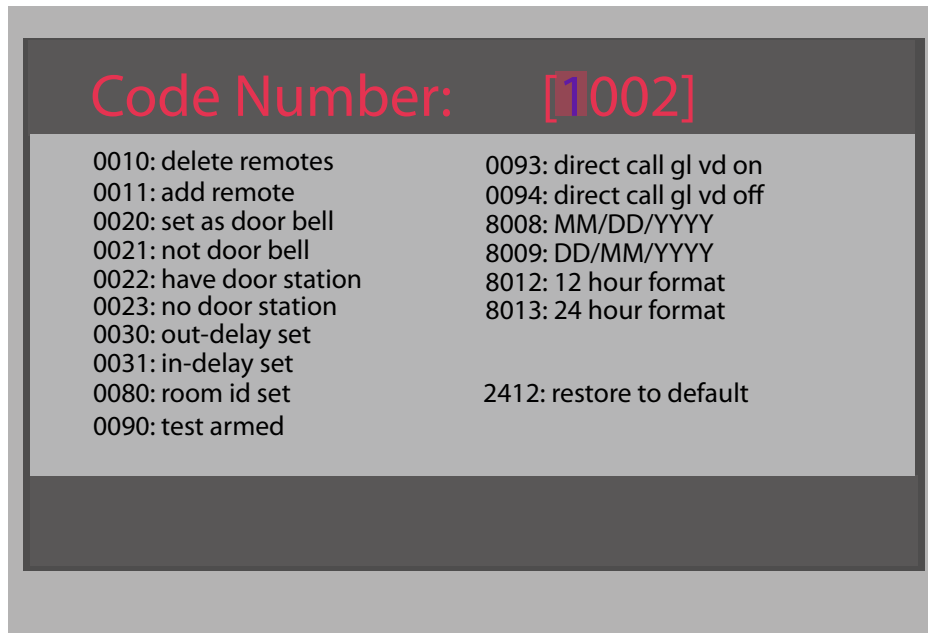


4) Press the unlock button and hold for 3s when entry about page, then entry Installer Setup page, just like the following picture shows.

Input 0080 then press Menu button to confirm, then entry room code setting status.



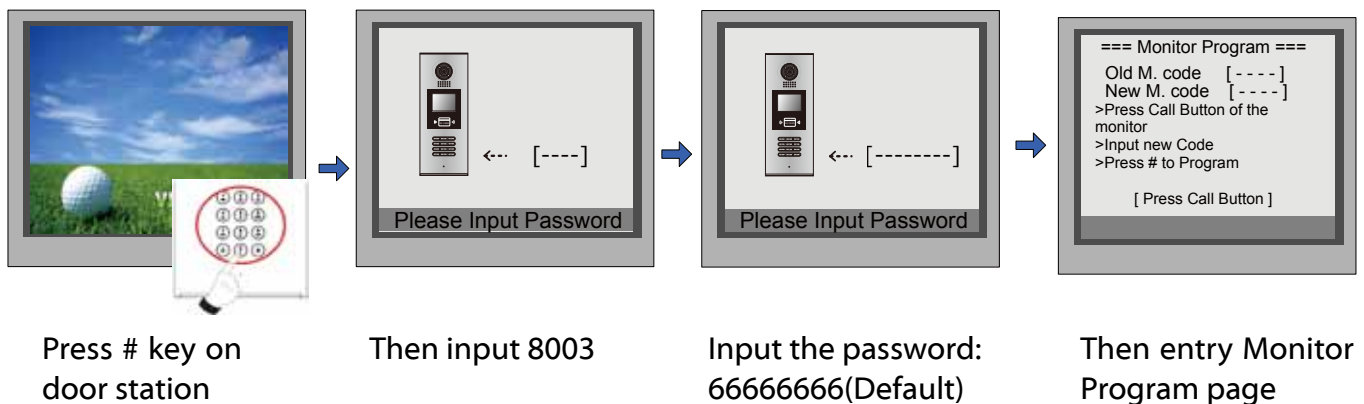
5) Now Set the new room address for the monitor navigation button, and press menu button to save the setting



4.3.3 Address Setting with door station

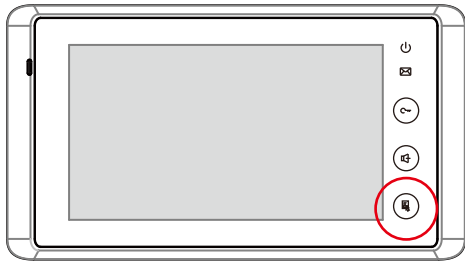
Monitor address also can be set via door station. The steps as follows, take IP-MR18 as an example:

Step1: Entry Monitor Program Page

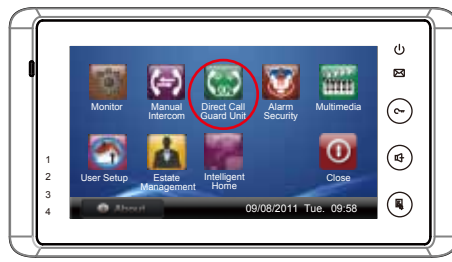


Step2: Activate call function on monitor

• C5-ATT27

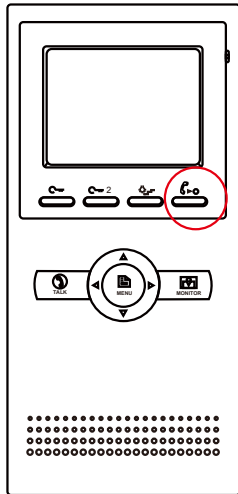


Press Menu button twice to entry main page

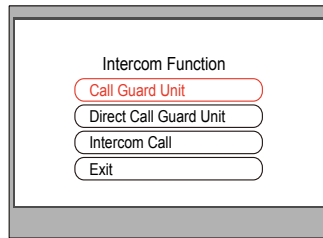


Press Direct Call Guard Unit icon

• C5-AT16

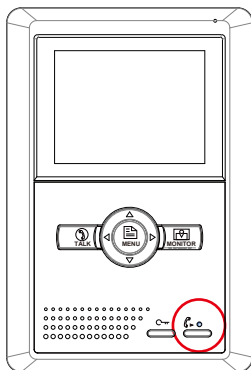


Press Call button to entry Intercom Function page

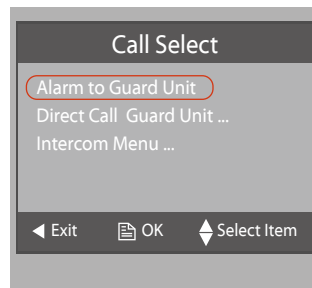


Select Call Guard Unit. Then press Menu button to confirm

• C5-AT25

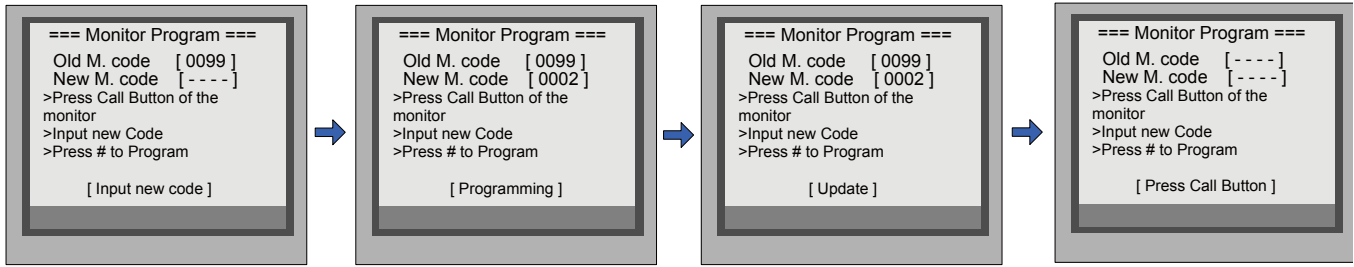


Press Call button to entry Intercom Function page



Select Alarm to Guard Unit. Then press Menu button to confirm

Step3: Upload Monitor Address(Monitor Code)



The MR18 screen will show the old monitor code

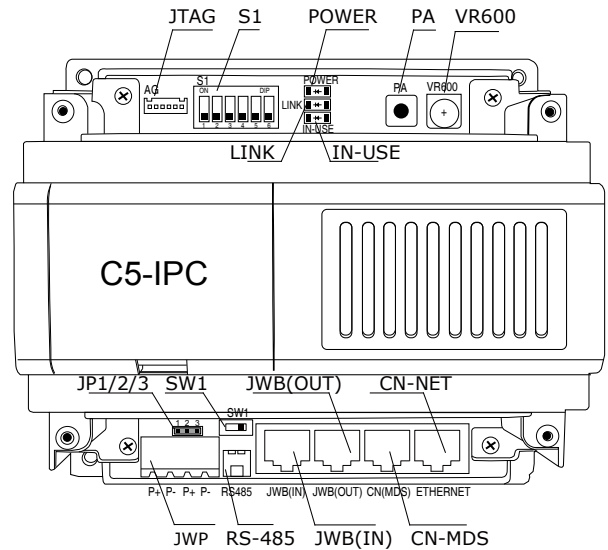
Input new code, eg, input 0002, then press # to confirm, it'll show Programming

It'll Update if the programming succeeds

Then back to normal status, you can repeat the similar operation to program next monitor

§ 4.4 C5-IPC Setting

C5-IPC is a controlling and network enabling unit. Wherever network is required, there must be C5-IPC; wherever C5-IPC is connected, it must be the only controller. Also, C5-IPC must be used wherever C5-MDS is applied in the system.



4.4.1 Port Description

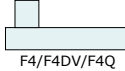
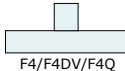
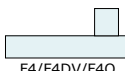
Please refer to 2.3.4.4 (IP Converter: C5-IPC) for more details.

4.4.2 Settings

4.4.2.1 Level Switch setting

SW1 is level switch to match with different distributors. In this system, three types of distributors are available: C5-F4, C5-F422, C5-F414. Default position is F4DV.

The SW1 setting with different distributor is as below table:

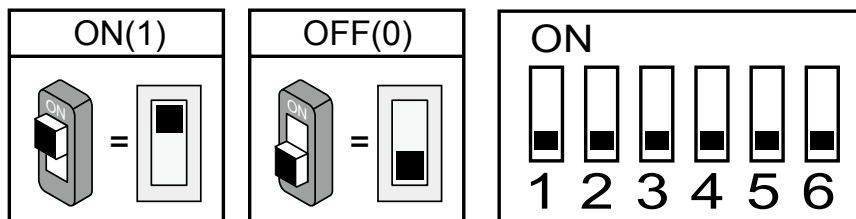
Distributor type	SW1 setting
C5-F4	 F4/F4DV/F4Q
C5-F422	 F4/F4DV/F4Q
C5-F414	 F4/F4DV/F4Q

4.4.2.2 DIP switch setting

S1 is a 6-bit DIP switch; each of them is designed to have a specified function.

- DIP status**

Each bit can be set to be ON or OFF, shows below:



- Description of DIP switch**

Bit NO.	Function	Status	Description
DIP1	MDS selection	ON	C5-MDS connected
		OFF	No C5-MDS connected
DIP2	Audio Channel	ON	Apply C5-F414
		OFF	Apply C5-F4 or C5-F422
DIP3	Video Channel	ON	Apply C5-F422
		OFF	Apply C5-F4 or C5-F414
DIP4	Door station mode selection	ON	Door station works as common door station
		OFF	Door station works as unit door station
DIP5	Guard Monitor	ON	Press call button of monitor to call Guard Monitor whose address is 0099
		OFF	Press call button of monitor to call Switchboard
DIP6	Network video controlling	ON	Indoor monitor shows the network video when answering call from Switchboard
		OFF	Indoor monitor doesn't display video when answering call from Switchboard

4.4.2.3 IP Address Setting

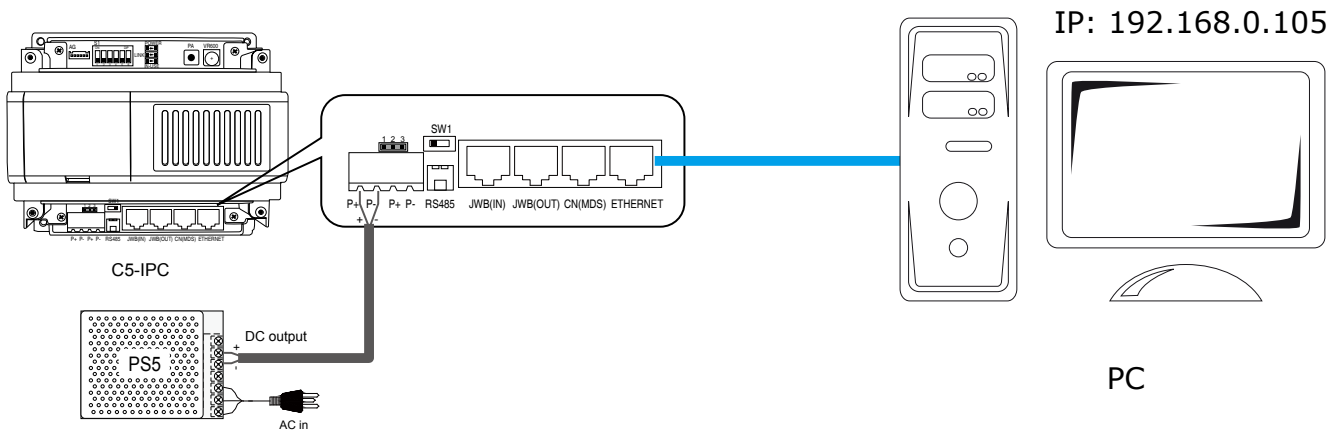
C5-IPC must be specified an IP address in the network system. And every specified IP address must be unique. You can use **IP8210Config** software to set IP.

NOTE: The default IP address of C5-IPC is 192.168.0.2

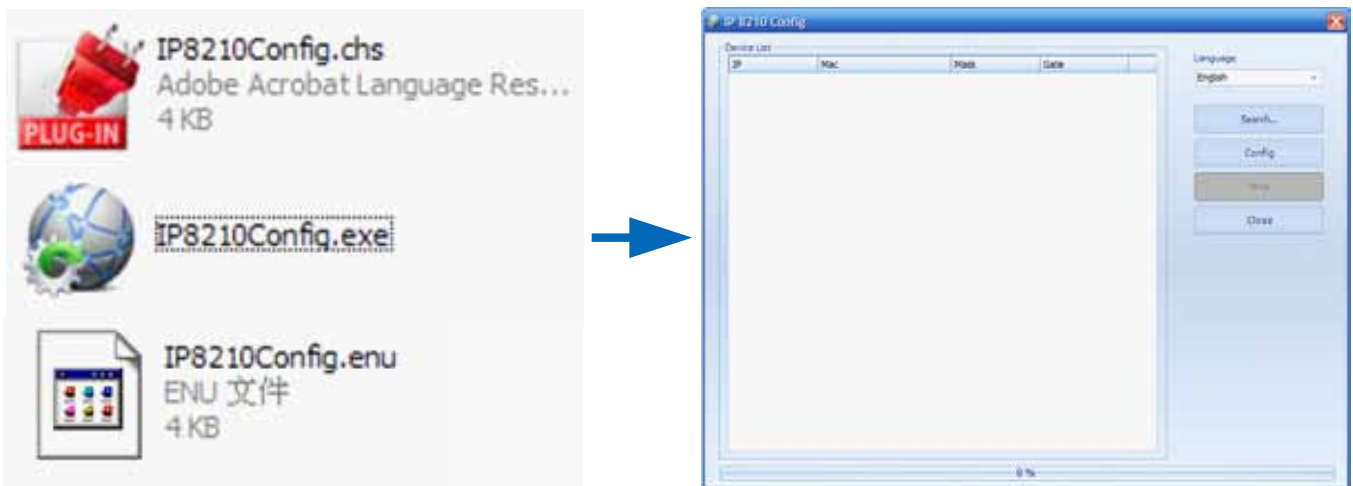
Setting steps as follows:

1. Connect C5-IPC and PC, and set IP address of PC to 192.168.0.X

Assume that PC IP is 192.168.0.105



2. Launch IP8210Config.exe



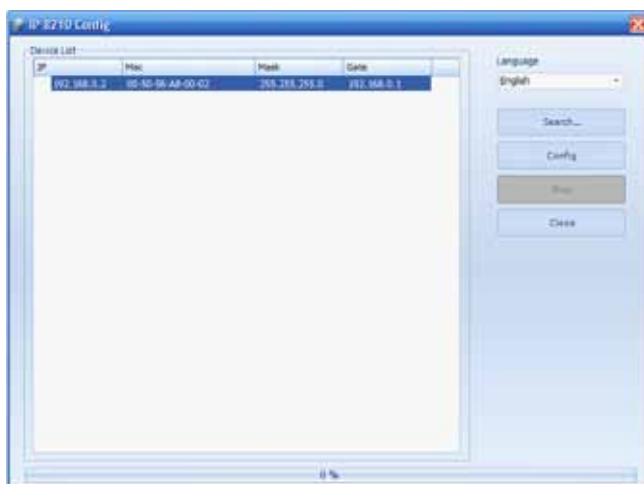
3. Search the connected C5-IPC

Click **Search...** to start searching the connected C5-IPC



4. Config IP address

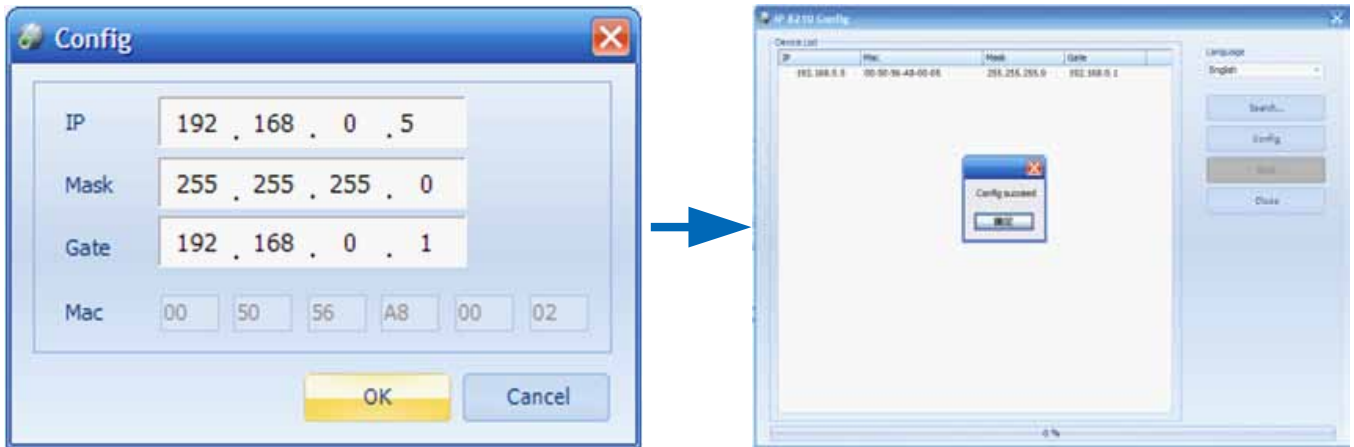
Select the Device in the Device List Frame



5. Click on **Config** to config IP

Assume it's set to 192.168.0.5, don't change Mask & Gate info, then press **OK** to confirm, then **Mac** will be automatically changed with **IP**



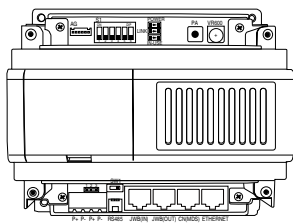


NOTE:

192.168.0.1 & 192.168.0.255 cannot be used by any device in the network.

- ✘ 192.168.0.1
- ✘ 192.168.0.255

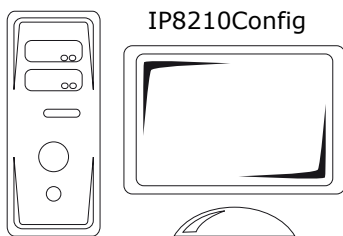
- IP address range of C5-IPC



C5-IPC

- ✔ 192.168.0.2 ---- 192.168.0.239

- PC IP address



- ✘ 192.168.0.2
- ✔ 192.168.0.3 ---- 192.168.0.254

Because default IP address of C5-IPC is 192.168.0.2, it'll make a conflict if PC is set to 192.168.0.2, then PC cannot search the C5-IPC. That's why PC should not be set to 192.168.0.2.

4.4.2.4 Parameters Settings

All the parameters of C5-IPC can be set through IP-Device. See IP-Device manual for detail.

4.4.2.5 Controller Concept

Controller in the system serves as the controlling center, it controls data communicating, audio and video distribution. Of all the devices, Door station and C5-IPC can be set to be the controller. Rules must be followed as below:

- 1) There must be one and only one controller in the system.
- 2) C5-IPC is designed to be the controller by default, and cannot be set to be non-controller
- 3) Door station must be set to be non-controller when working with C5-IPC.

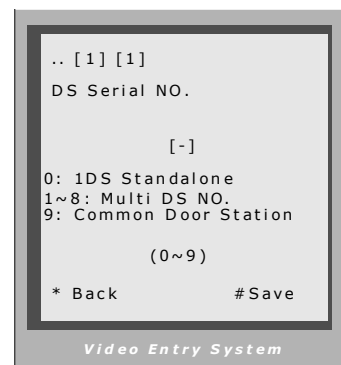
How to set Controller on door station:



In standby mode, input #9008+password (66666666, by default)



On the keypad, input 1 to enter DS Serial NO.



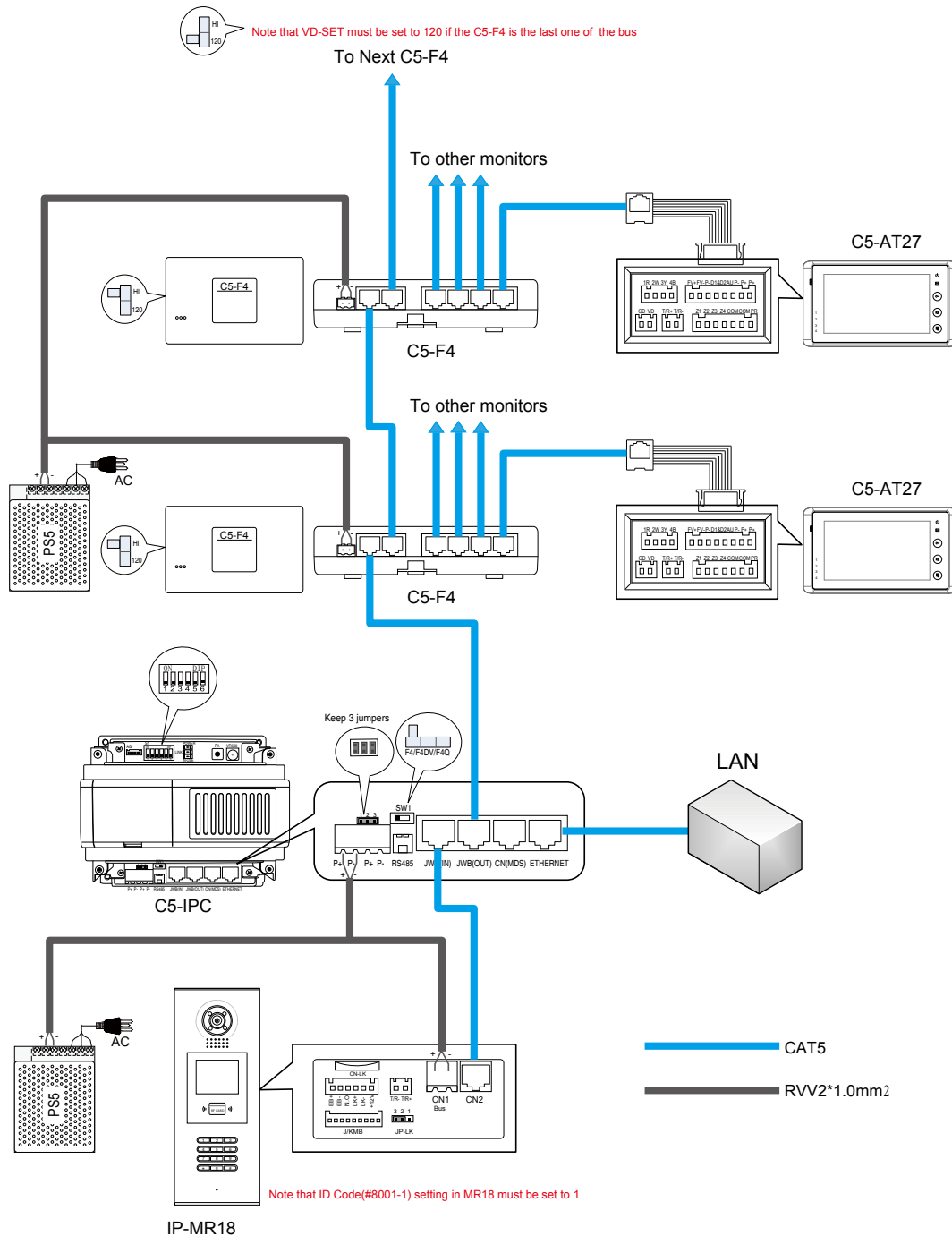
Input the number according to the information, then # to save the parameter

Notes:

1. DS Serial NO. set to be 0, the door station serves as the controller
2. DS Serial set to be from 1~8 to be non-controller, if there is no C5-MDS(only one door station), the door station must be set to 1
3. DS Serial NO. set to 9 to work as common door station

4.4.2.6 Examples:

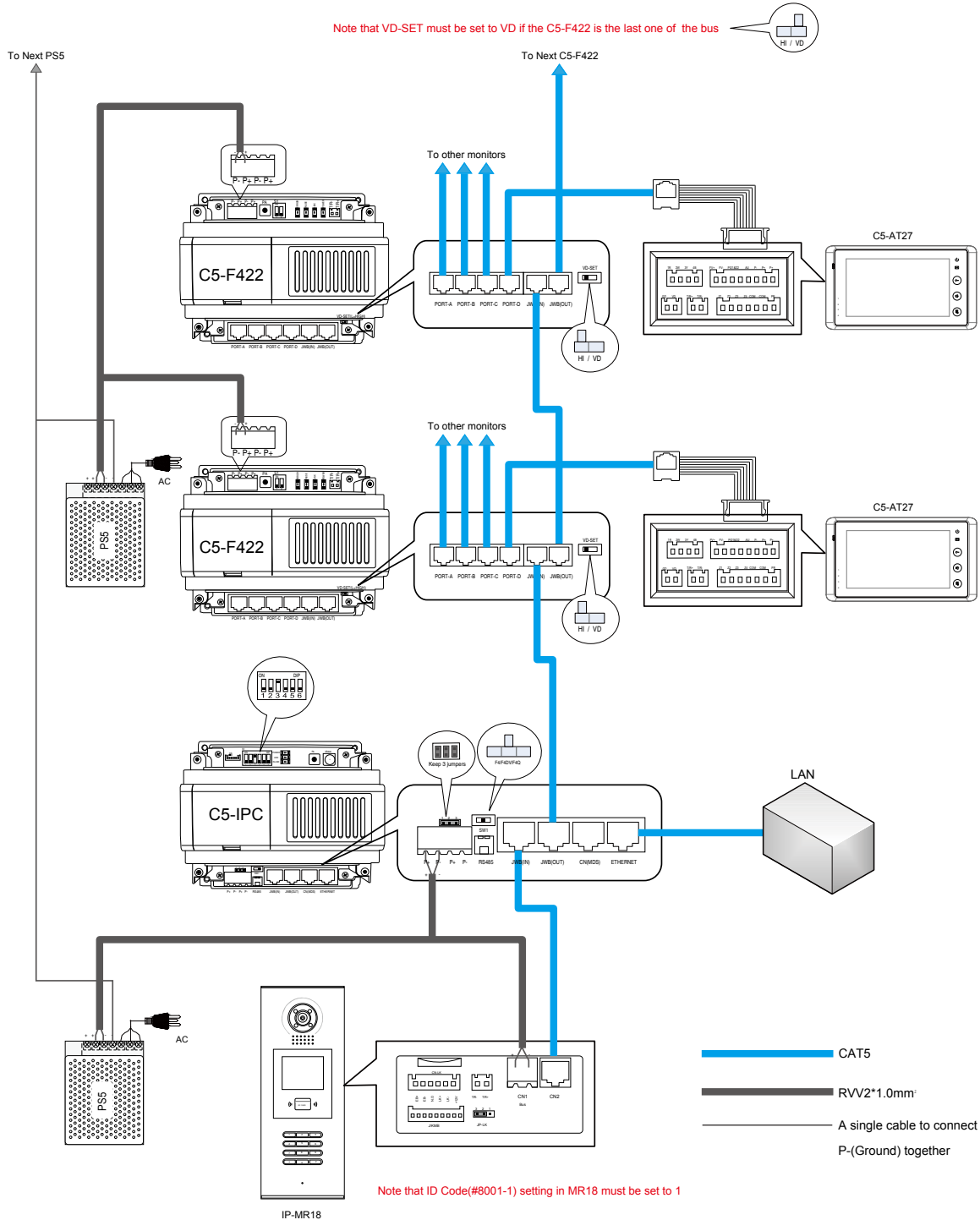
Work with C5-F4



Note:

1. SW1 need to be set to F4 position to match with C5-F4.
2. S1 need to be set correctly, all to OFF.
3. Door station need to be connected to the JWB (IN) port of C5-IPC.
4. DS Serial NO. must not be set to 0(while 0 to be the controller)

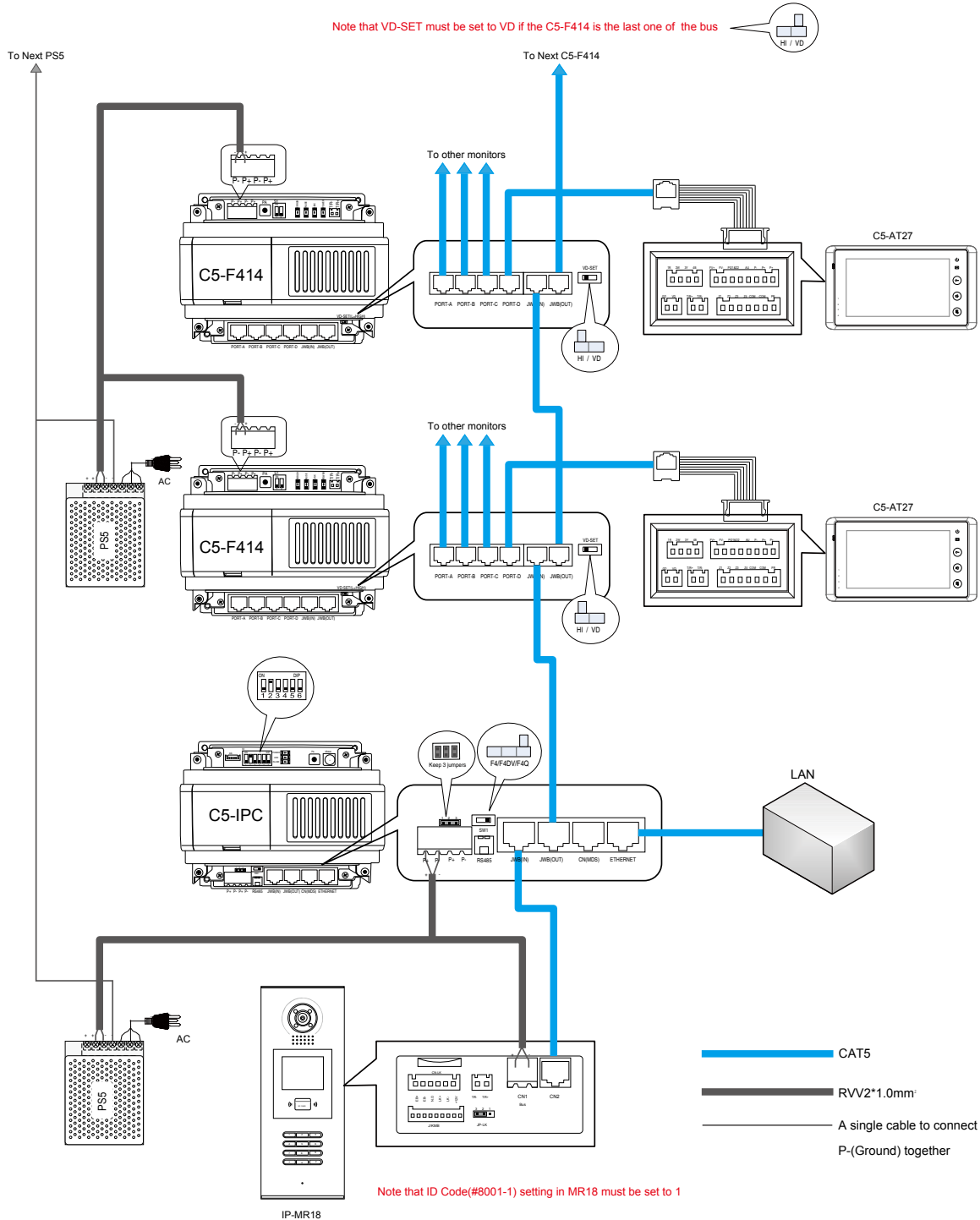
Work with C5-F422



Note:

1. SW1 need to be set to F4DV position to match with C5-F422.
2. S1 need to be set correctly, Bit3 to ON, the rest to OFF.
3. Door station need to be connected to the JWB (IN) port of C5-IPC.
4. DS Serial NO. must not be set to 0(while 0 to be the controller)

Work with C5-F414



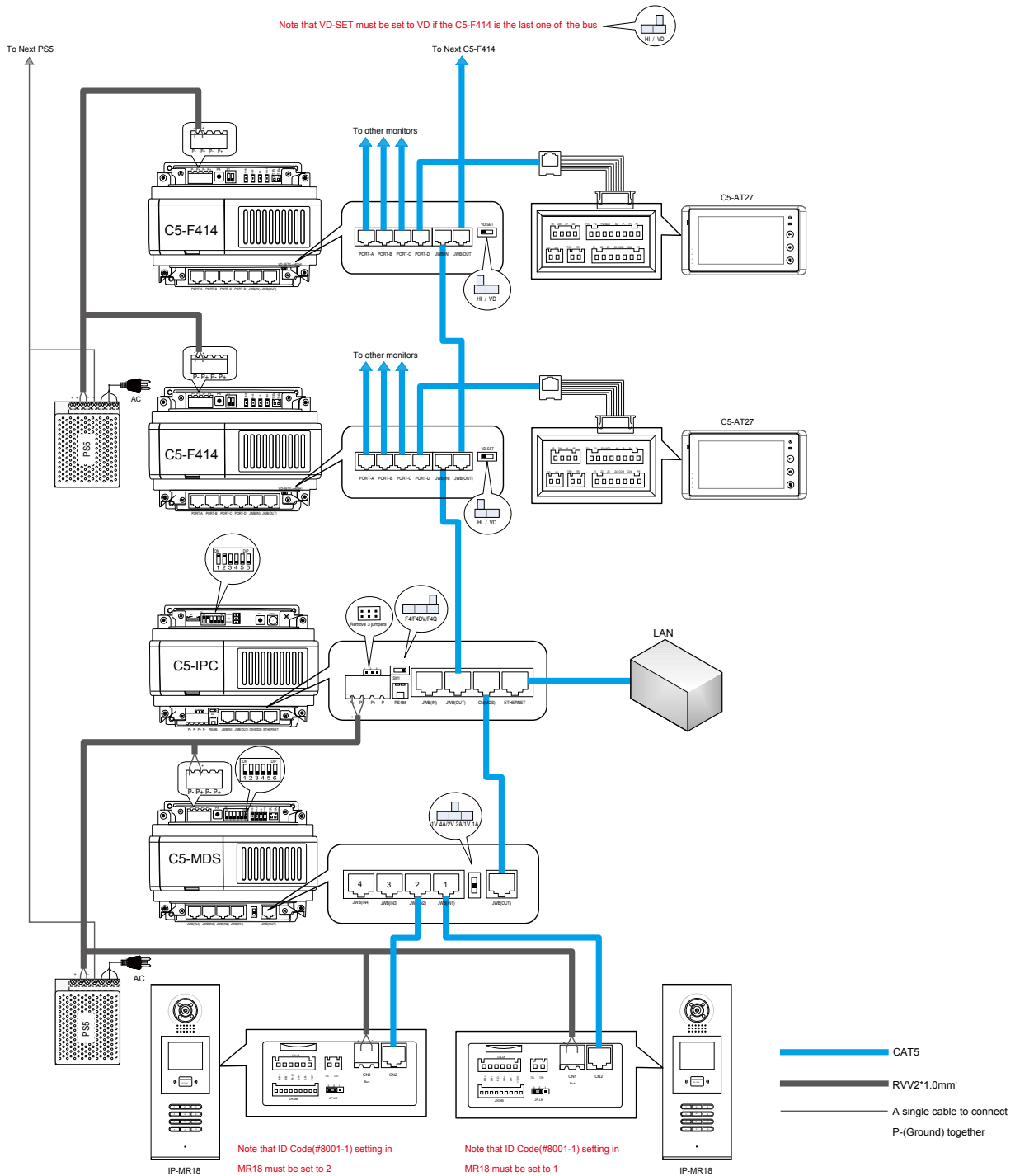
Note:

1. SW1 need to be set to F4Q position to match with C5-F414.
2. S1 need to be set correctly, Bit2 to ON, the rest to OFF.
3. Door station need to be connected to the JWB (IN) port of C5-IPC.
4. DS Serial NO. must not be set to 0(while 0 to be the controller).

Work with C5-MDS

This example contains the full function available in the system:

Multi entrances with C5-MDS; Monitor display network video; and one of the monitor serves as Guard Monitor.

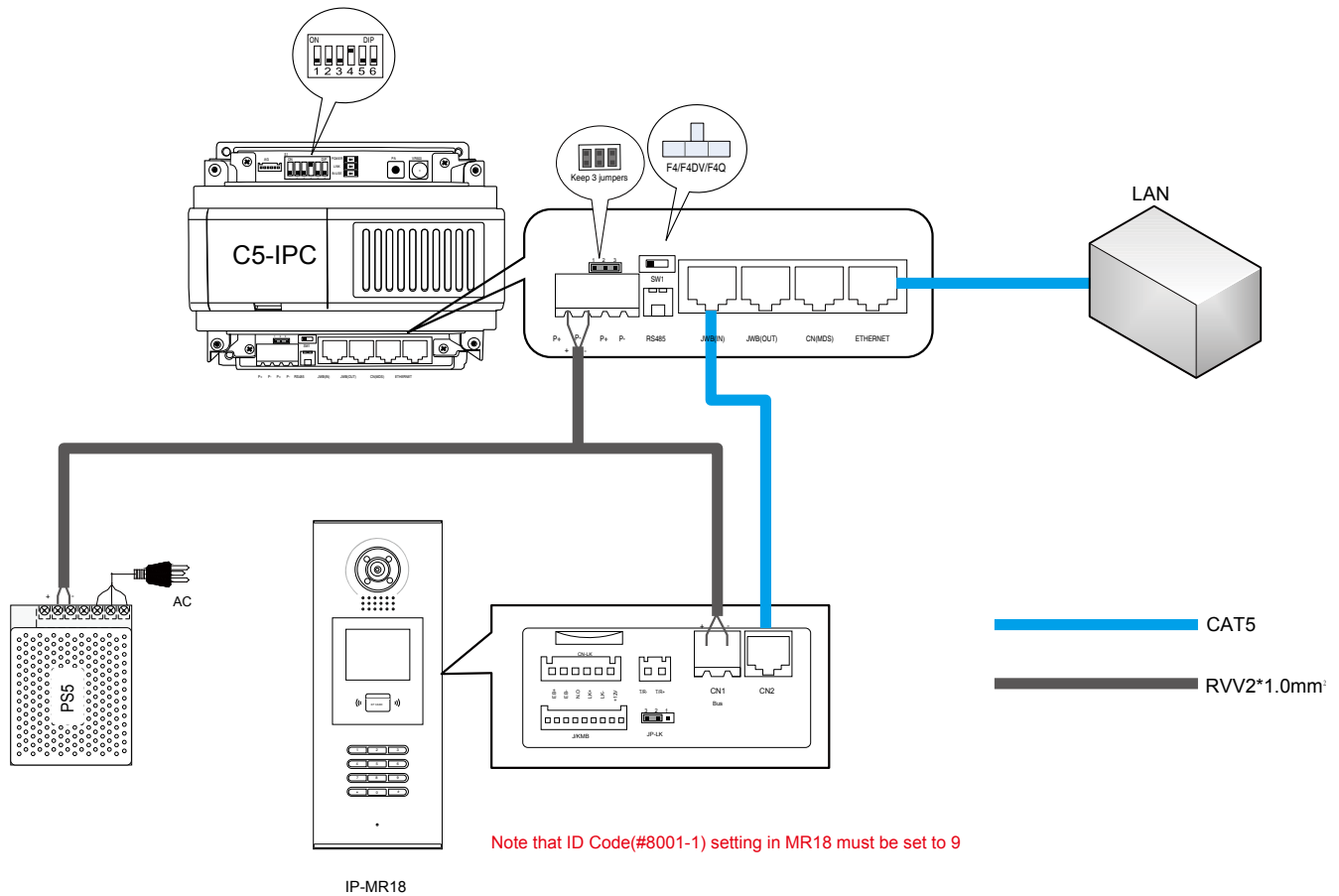


Note:

1. C5-MDS needed to be connected to the CN-MDS port of C5-IPC
2. The 3 jumpers on C5-IPC must be removed.

Work with Common Door Station

Door station can be set to function as common door station, being able to call all the monitors in the network system, while unit door station can only call the monitors of its own building.

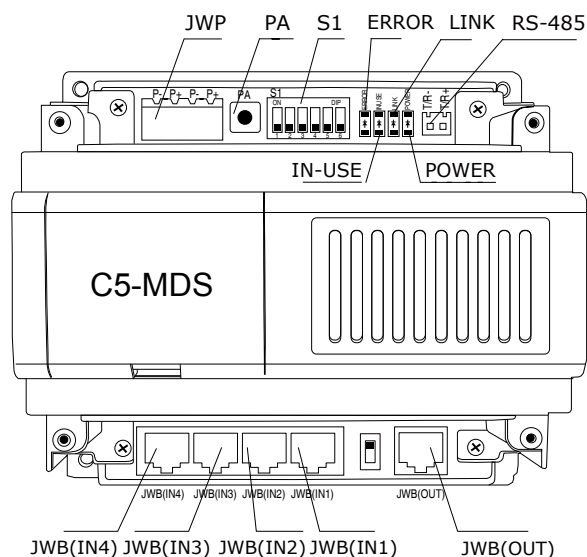


Note:

1. SW1 be set as default.
2. S1 need to be set correctly, Bit4 to ON, the rest to OFF.
3. Door station need to be connected to the JWB (IN) port of C5-IPC.
4. DS Serial NO. must be set to 9 (work as common door station).

§ 4.5 C5-MDS Setting

C5-MDS is used where there are more than one door stations in one block, to serve as door station switch, to separate Audio, video signal form or to different door station.



4.5.1 Port Description

Please refer to 2.3.4.5(Multi-Door station Switcher: C5-MDS) for more details.

4.5.2 Settings

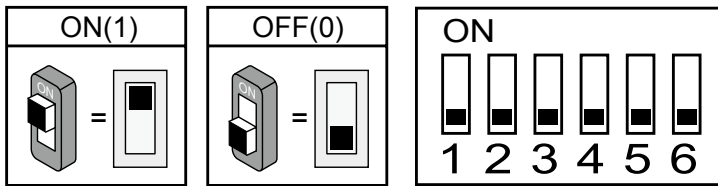
4.5.2.1 Level Switch setting

The C5-MDS will always be used together with C5-IPC, the level switch must be set to be in the middle position at all times, otherwise there will be video and audio problem between door station and Switchboard when communicating.

	<p>1V 4A</p> <p>2V 2A</p> <p>1V 1A</p>	<p>Note:</p> <p>Level Switch must be set to the middle position: 2V 2A position. (Default position: 2V 2A)</p>
--	--	---

4.5.2.2 Address Setting

In case there are more than one C5-MDS connected to the C5-IPC, the C5-MDS need to be coded according to the system combination; the first 2 bits of S1 are for address purpose.



Note:

Bit1 and Bit2 are for address purpose, the rest are reserved for late use.

DIP1	DIP2	C5-MDS Address
OFF	OFF	The first C5-MDS
ON	OFF	The second C5-MDS
OFF	ON	The third C5-MDS
ON	ON	The fourth C5-MDS

4.5.2.3 The input number of C5-MDS

Each C5-MDS has 4 inputs from the door station, for C5-MDS with different address, Input number is unique and different, see below table:

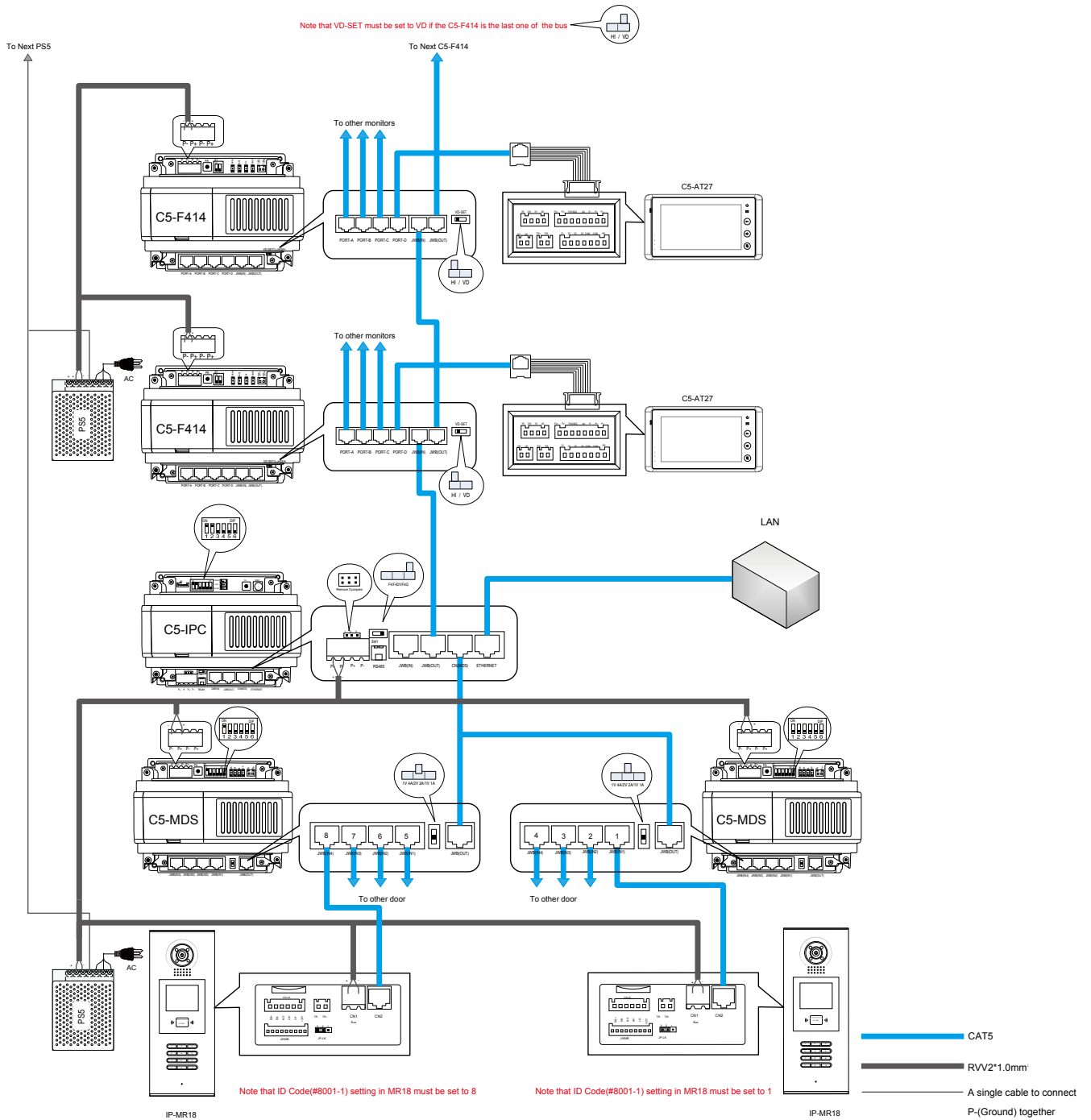
Address	Input Description	Input number
First C5-MDS	JWB(IN1)	1
	JWB(IN2)	2
	JWB(IN3)	3
	JWB(IN4)	4
Second C5-MDS	JWB(IN1)	5
	JWB(IN2)	6
	JWB(IN3)	7
	JWB(IN4)	8

Note:

Each input of C5-MDS can be connected to only one door station, and the DS Serial NO. On the door station must be exactly the same with the input number it is connected to; otherwise there will be no video and no audio.

4.5.3 Connection Schematic

With two C5-MDS in the system



§ 4.6 Accessory Parts

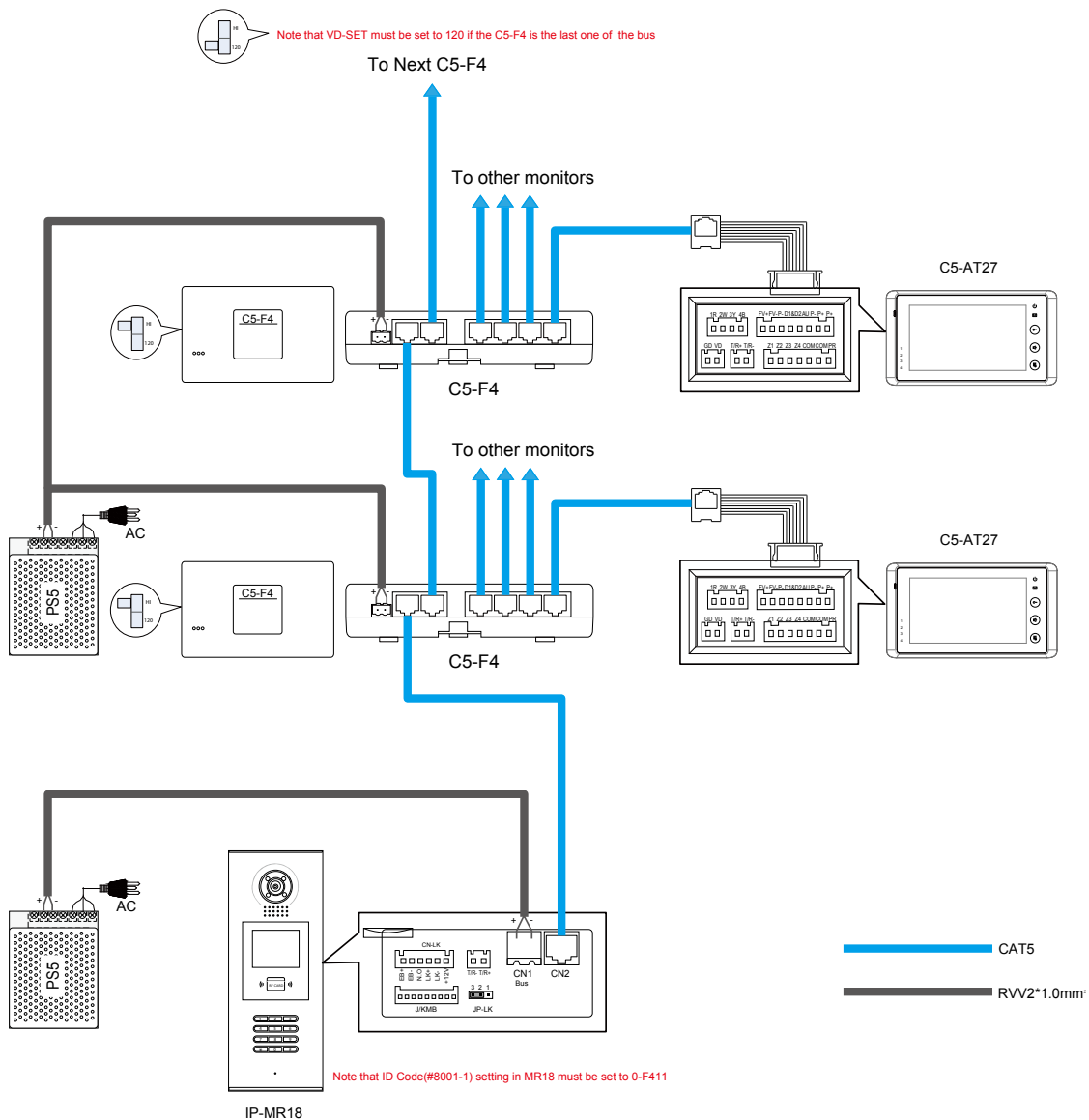
4.6.1 Distributor

Distributors serve as a branch; they are connected in hand-in-hand-out style in the BUS (BUS comes out from the door station or from C5-IPC), and function to separate the audio and video signal from the bus to the monitors, and also power the monitors. Each Distributor has 4 outputs for the monitors. There are 3 types of distributor available in the system.

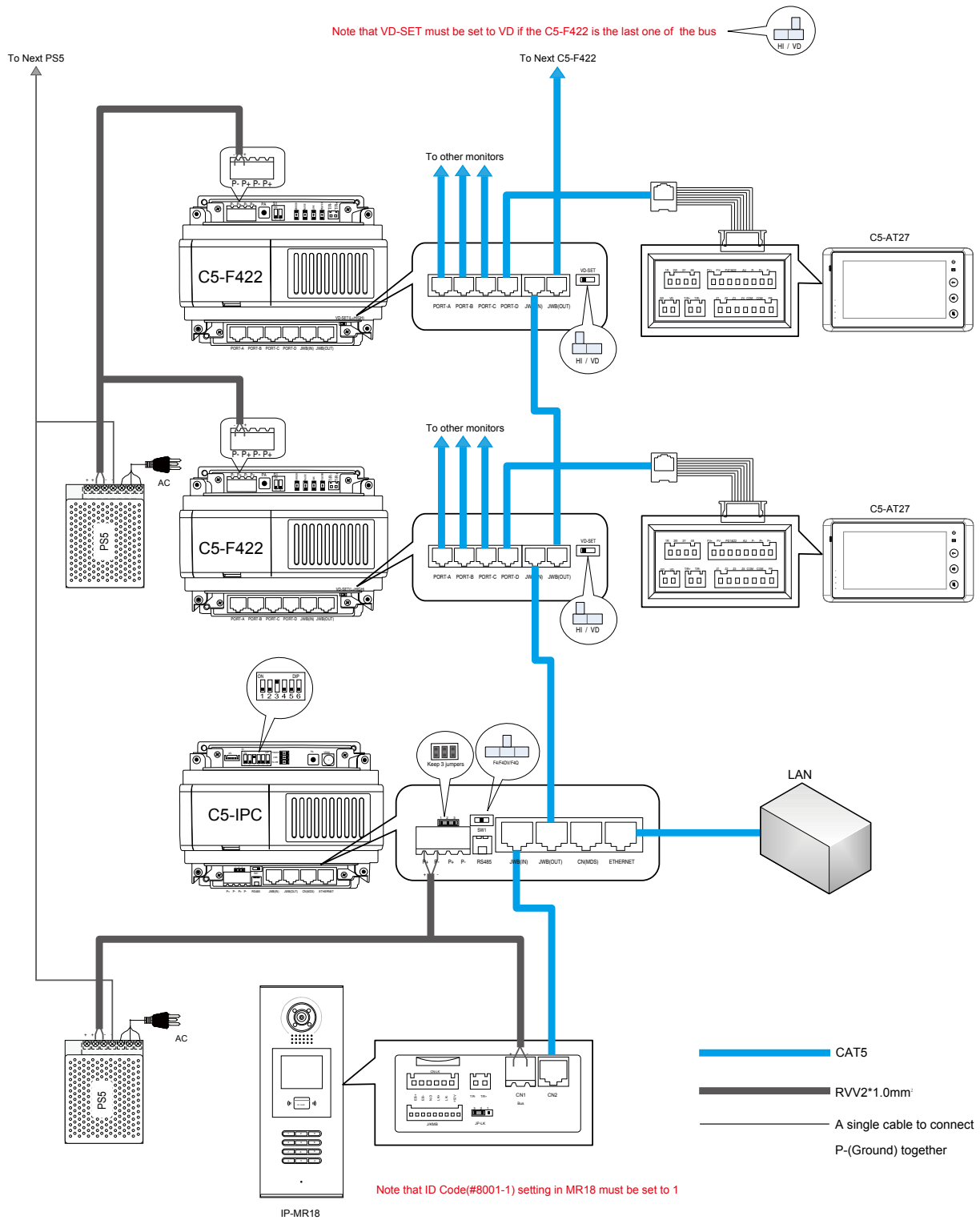
4.6.1.1 Connection Schematic

The input of distributor can come from Door station or C5-IPC.

- **Distributor to Door Station**



• **Distributor to C5-IPC**



4.6.1.2 Distributor Types

There are 3 types of distributors in the system: C5-F411, C5-F422 and C5-F414.

C5-F411

Power the monitor

4 outputs for monitor

One audio and one video channel available at a time

C5-F422

Power the monitor

4 outputs for monitor

Two audio and two video channels are available at a time

Two door stations can have their separate conversations at the same time

C5-F414

Power the monitor

4 outputs for monitors

One video channel and four audio channels are available at a time,

Maximum four conversations can take place at the same time. One is between door station and Monitor; the other three are between monitors.

4.6.1.3 Video Match

Each Distributor must be matched for video. Each distributor was equipped with video match switch and it has two states: HIGH and VD SET. In one block, only one of the distributors is set to VD SET, the rest all to be set to HIGH.

The distributor that is at the end of the BUS be set to VD-SET position. The end means the farthest from the door station or from C5-IPC.

The other distributors are set to HIGH position.

Note:

- 1) Choose different distributor according to the system function
- 2) Video match must be set correctly. Otherwise the picture will become too white or too dark.

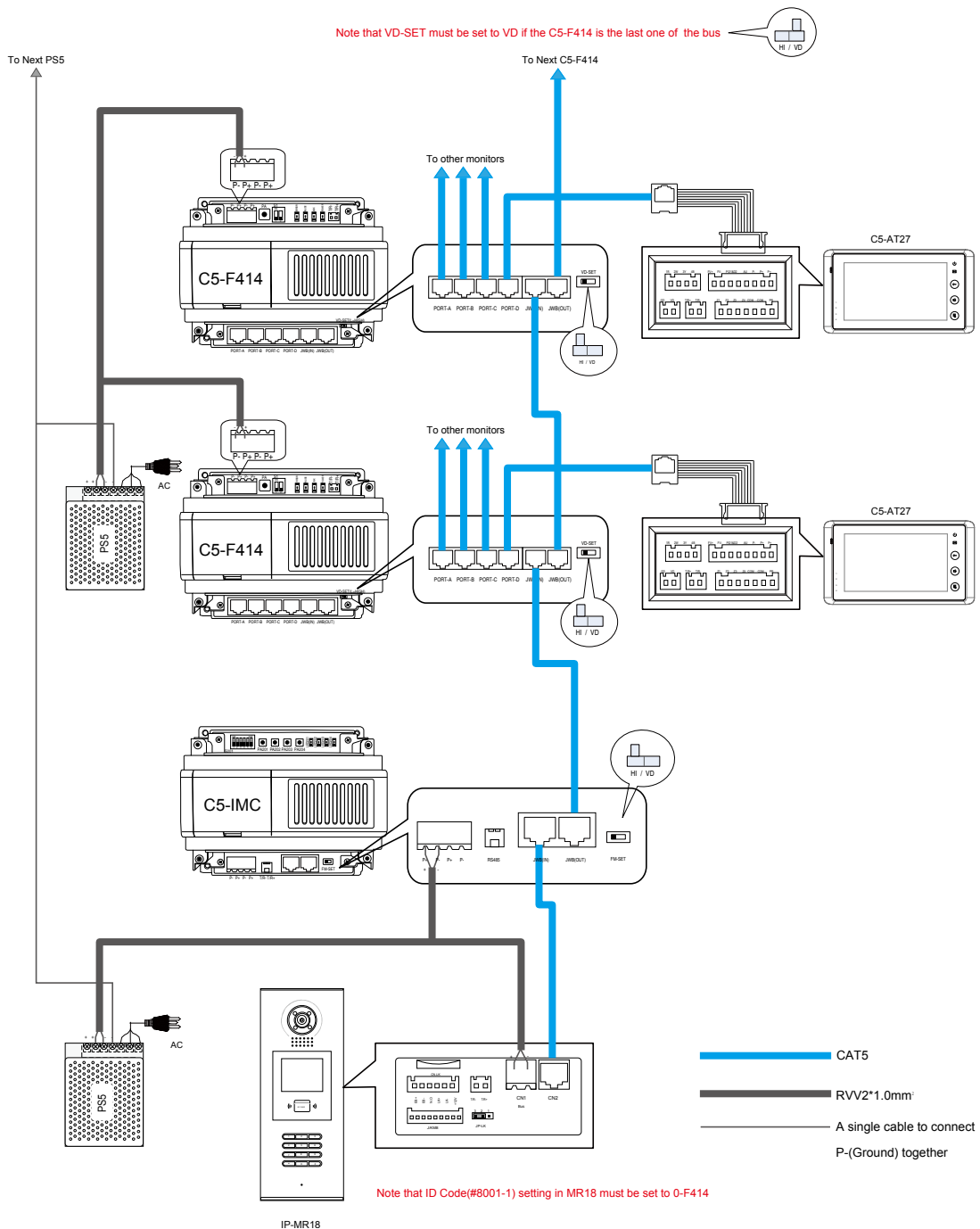
4.6.2 Picture-Memory-C5-IMC

C5-IMC is a public picture memory. When visitor make a call to the monitor, the C5-IMC will take a photo of the visitor and saved it. The called monitor and browse the picture taken, but only the picture which is taken when door station calls the monitor. The other monitors cannot get access to the pictures saved for other monitors.

- **Large Capacity:** The C5-IMC can save up to 800 pieces of pictures
- **Flexible time setting:** When browsing the pictures on the monitor, the switching time between different pictures can be changed on the C5-IMC
- **Automatic room releasing:** When the memory is full, the earliest pictures will be deleted to make room for the new pictures .Also users can delete the pictures by themselves on the monitor.

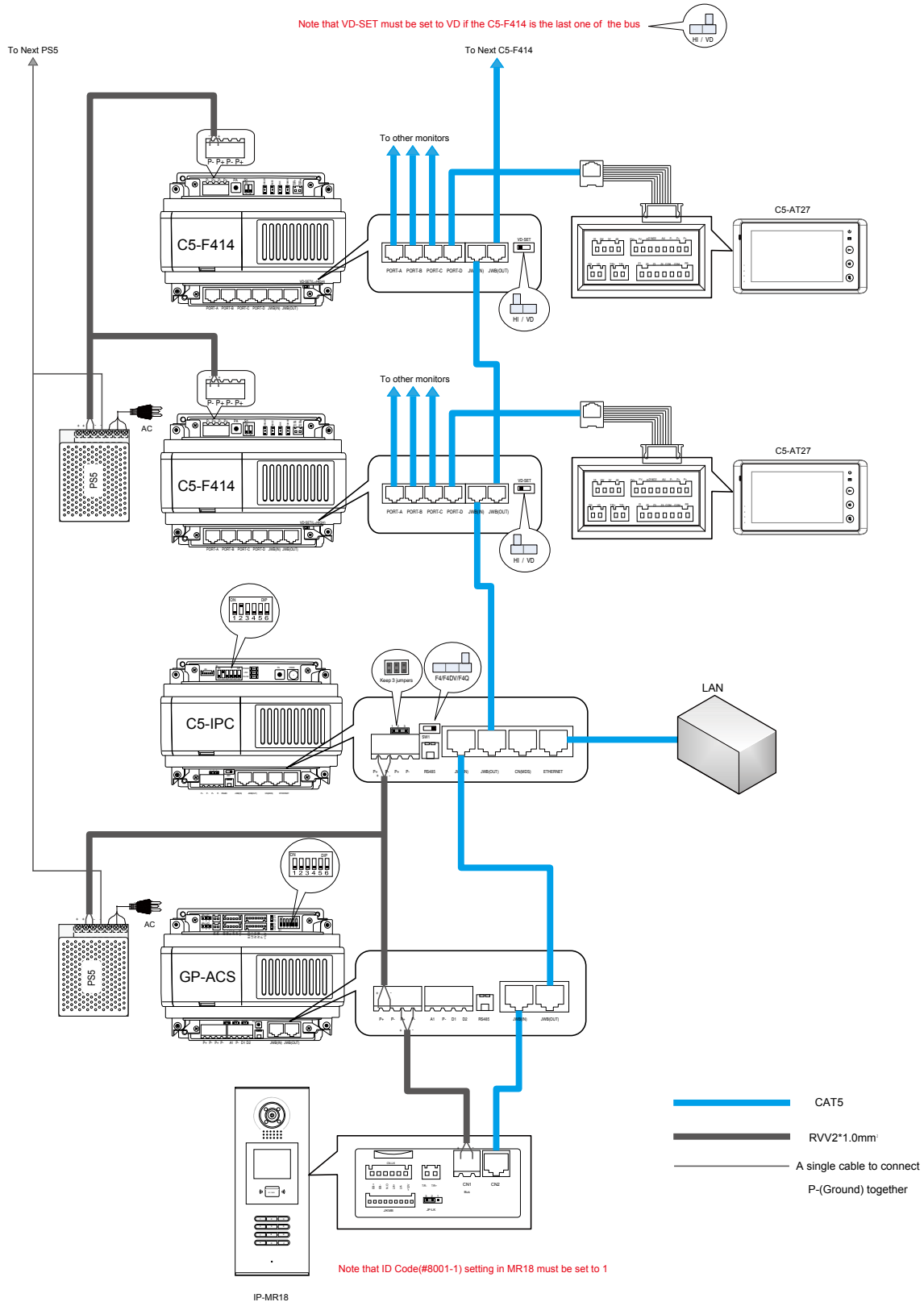
4.6.2.1 Connection Schematic

Connect the C5-IMC as you do a distributor. And one C5-IMC can be connected to the system.



4.6.3 Access control-GP-ACS

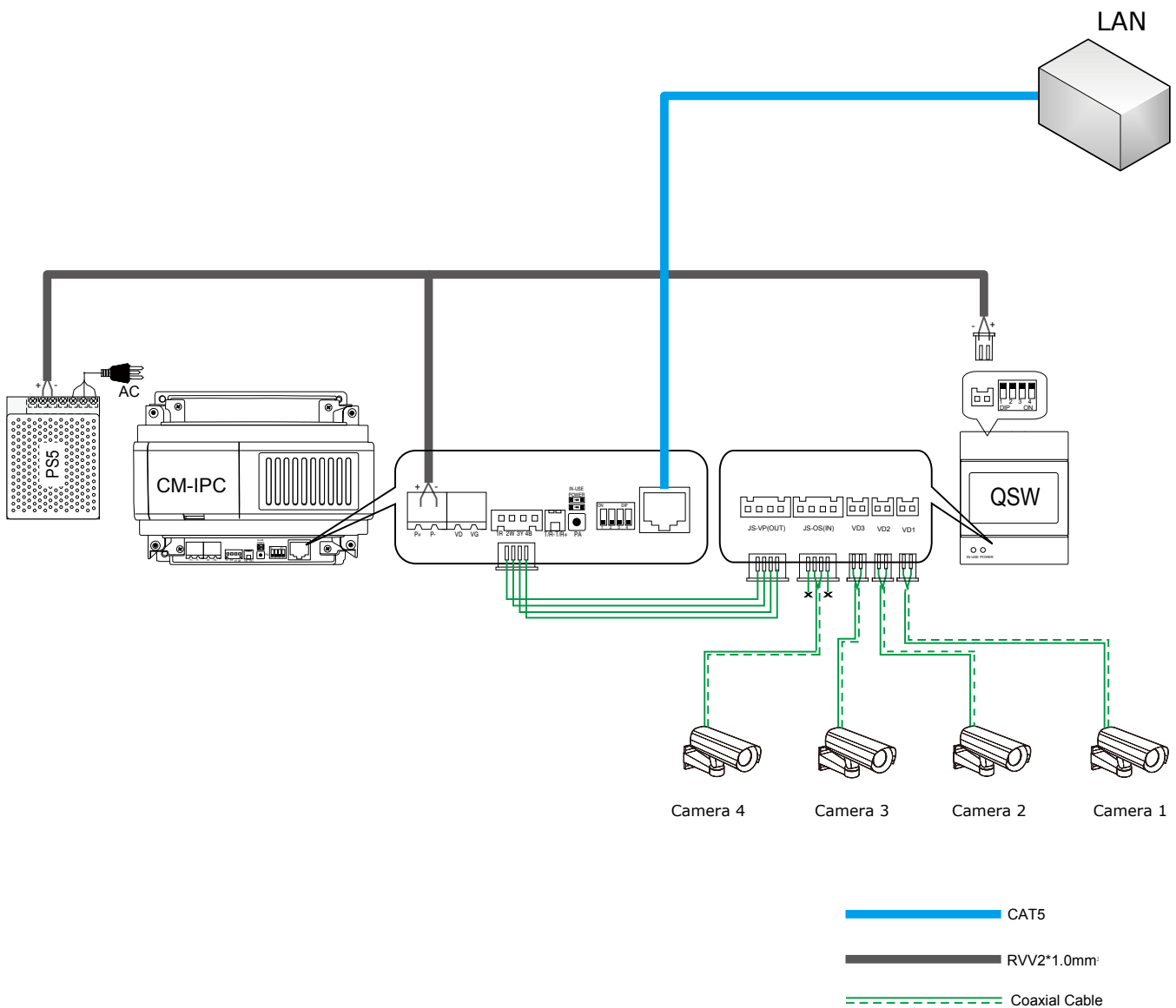
GP-ACS is access controller. It can work as a standalone access controller or work with C5-IPC to be connected to the network.



4.6.4 Camera control-CM-IPC

CM-IPC is a device designed for Network camera. Through the CM-IPC, the computer can display the video of the camera connected to the CM-IPC using the software IP-Agent.

- **Auto Switching:** The IP-Agent can display the different cameras by itself; the video also can be set to show different cameras by turn.
- **Multi-camera:** Maximum 4 cameras can be connected to the CM-IPC by applying VT-QSW.



Chapter 5

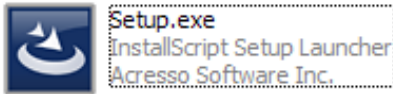
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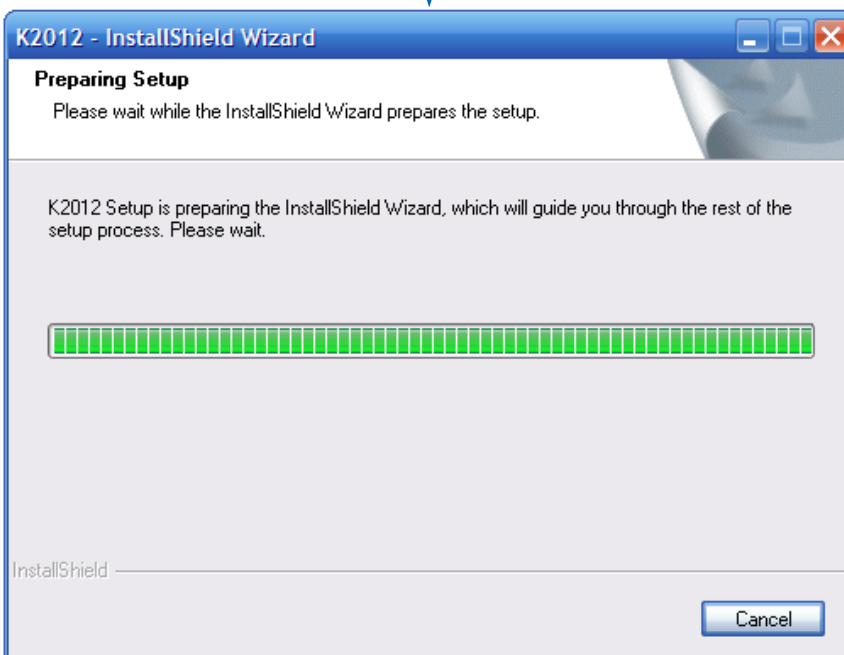
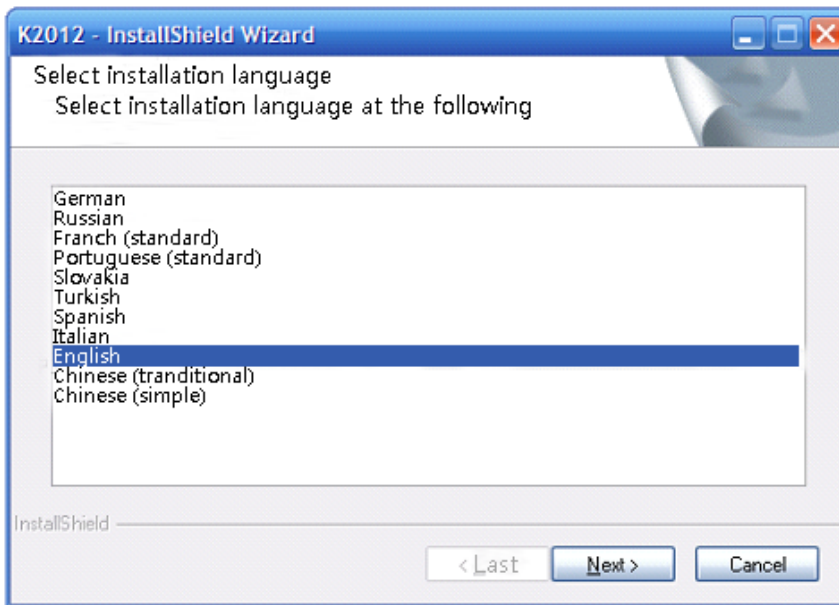
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§ 5.1 PC Station Installation

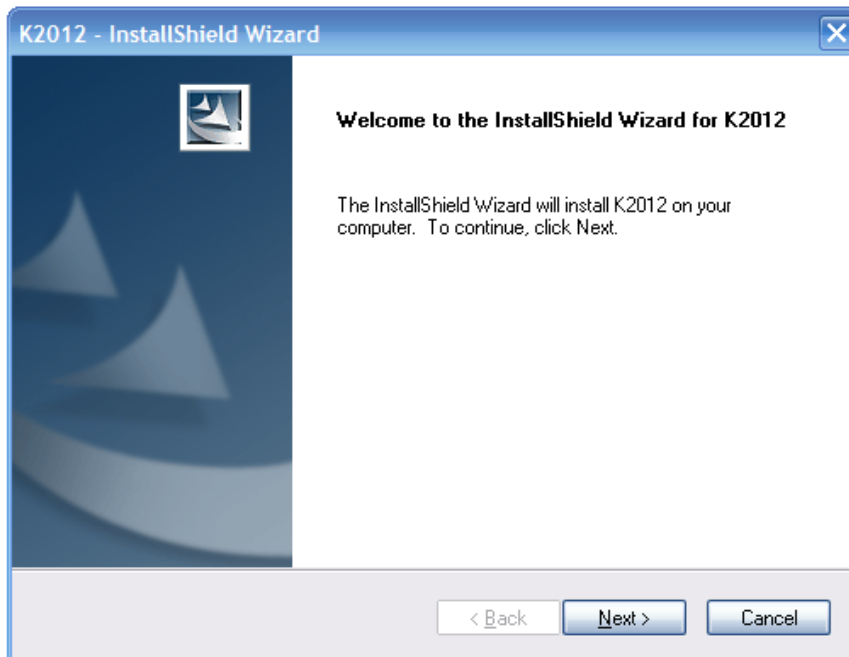
1. Double Click **Setup.exe**. Start to install PC Station.



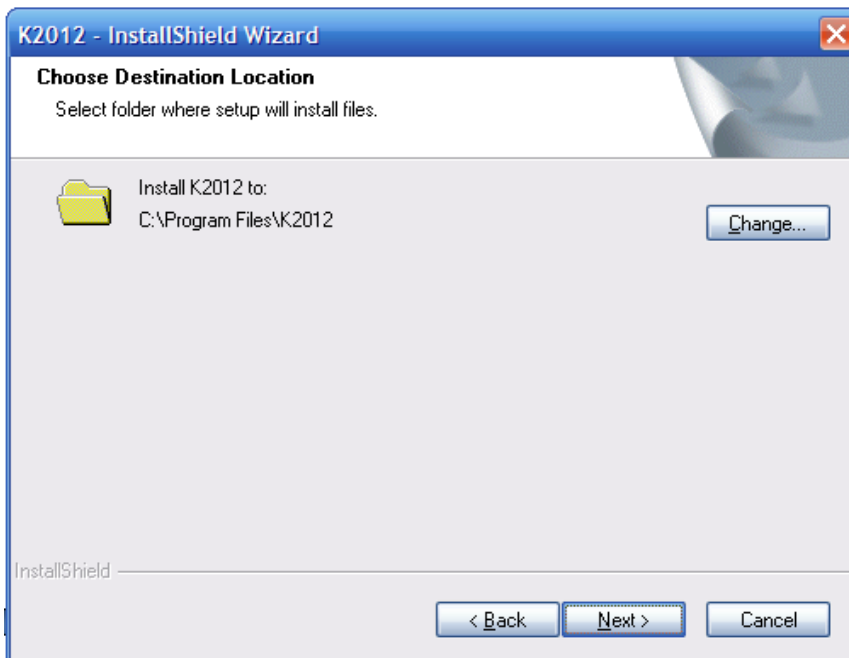
2. Select language, and then click next.



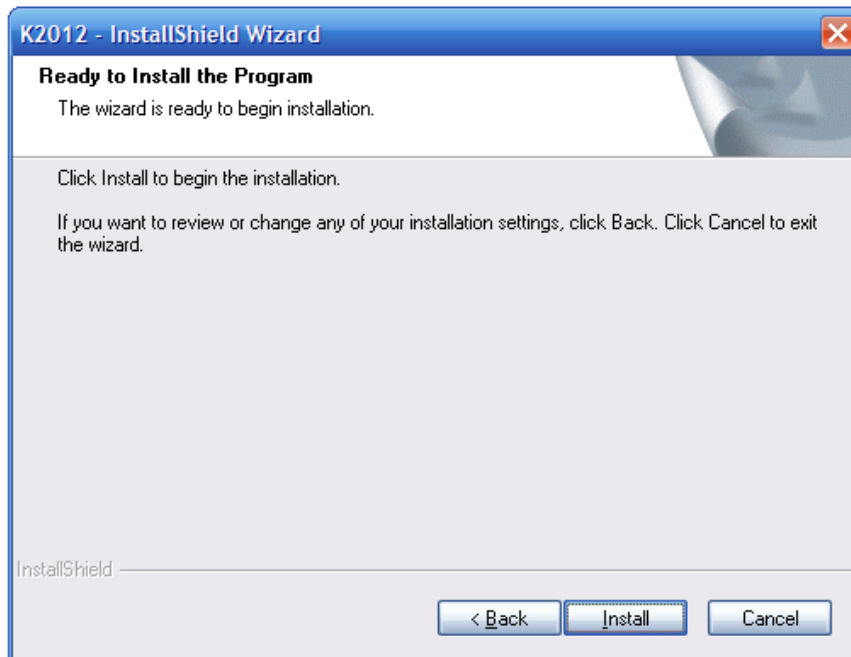
3. Click Next



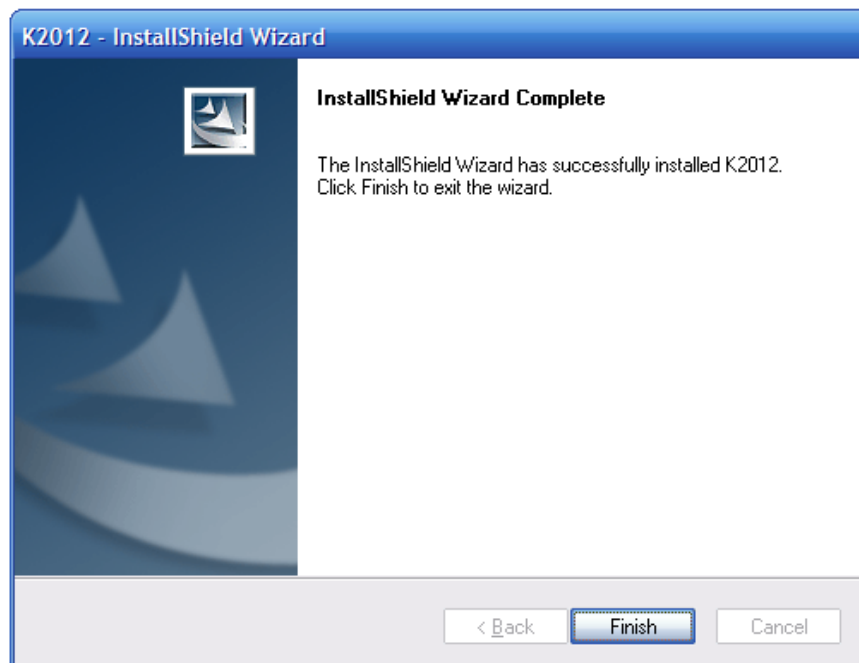
4. Select folder for installation, then click next



5. Click Install button to begin the installation, then waiting till installation finishes.



6. Then click Finish button to confirm it



7. Please note the default login info:

ID: Device

Password: 123456

Server Name: Machine Name + '\K2012'

Database Name: K2012

Customers need to enter the Server name and Database name.



§ 5.2 IP Address Setup

For constructing a DEDICATED LAN for IP system, all network devices must be set to different IP Address.

- Network device model includes C5-IPC, IP-G21 and CM-IPC and PC Station.
- All network devices can be detected by IP8210 Config and IP-Device, but only C5-IPC and IP-G21 and CM-IPC can be set by these two software. PC Station is set by Windows IP setup.

5.2.1 General Rules for IP Address Setup

All the devices must be in the same IP Segment.(We use the segment: 192.168.0.X in this manual)

1. 192.168.0.1 is used as a network gateway. Devices can't be set to this address
2. All devices must be set a unique IP address & MAC address
3. If more than one device have the same IP address, only one of them can be available by IP8210-config or IP-Device.
4. If PC & the device to be set to have the same IP, the device can't be detected by IP8210 Config or IP-Device software
5. Here are the table for range of device IP address

Range	Device
192.168.0. 2 – 192.168.0. 240	C5-IPC
192.168.0.241– 192.168.0.246	PC Station(IP-Agent)
192.168.0.247 – 192.168.0.254	Guard Station(IP-G21)

5.2.2 IP Address Setup by IP8210-Config


The IP8210-config is a tool to set the IP address of C5-IPC. For new C5-IPC, IP address of devices are initialized to the same address(192.168.0.2) ,so it's recommended that the IP address of devices be set one by one. It's easily fulfilled via IP8210-Config software.

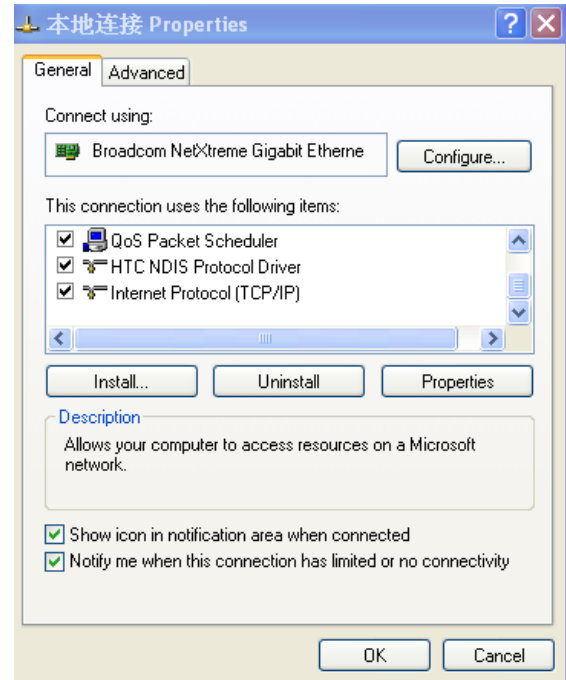
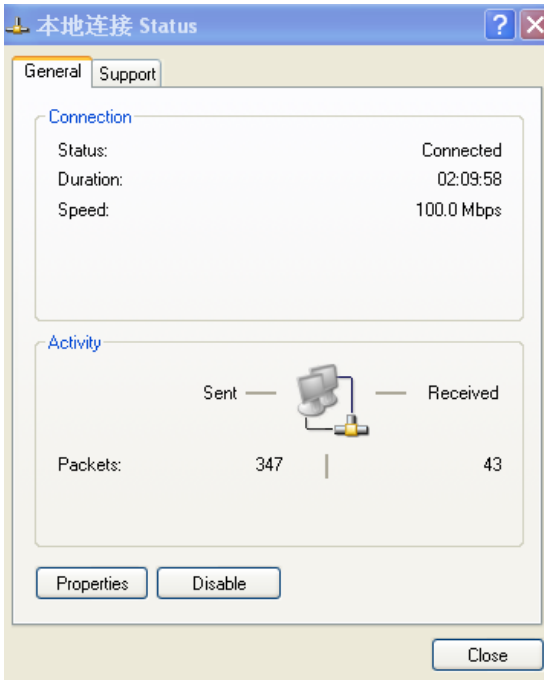
5.2.2.1 Set PC IP address

Assume that IP of PC is set to 192.168.0. 242

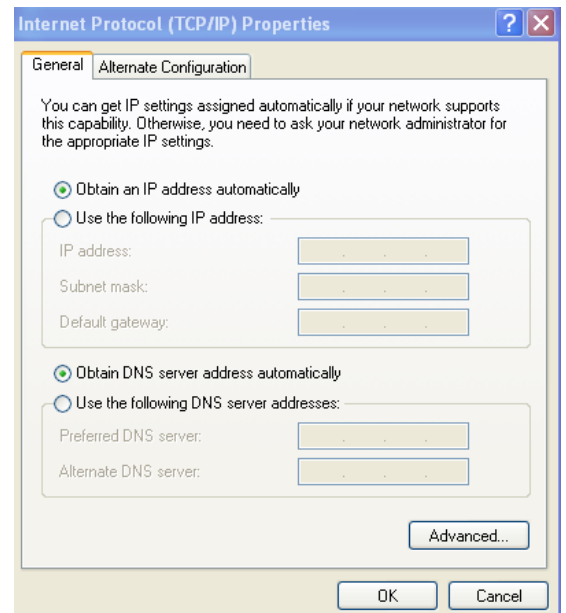
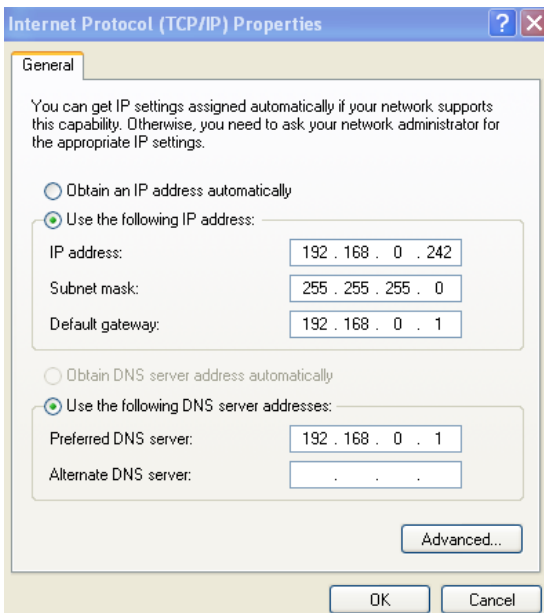
1. See the notification area in the right lower corner of windows desktop



2. Press  icon in the notification area. It will pop up a window for setting network.
3. Press **Properties** button in the Local Network Status window
4. Select **Internet Protocol(TCP/IP)** item in the Networking tab of Local Network Properties window

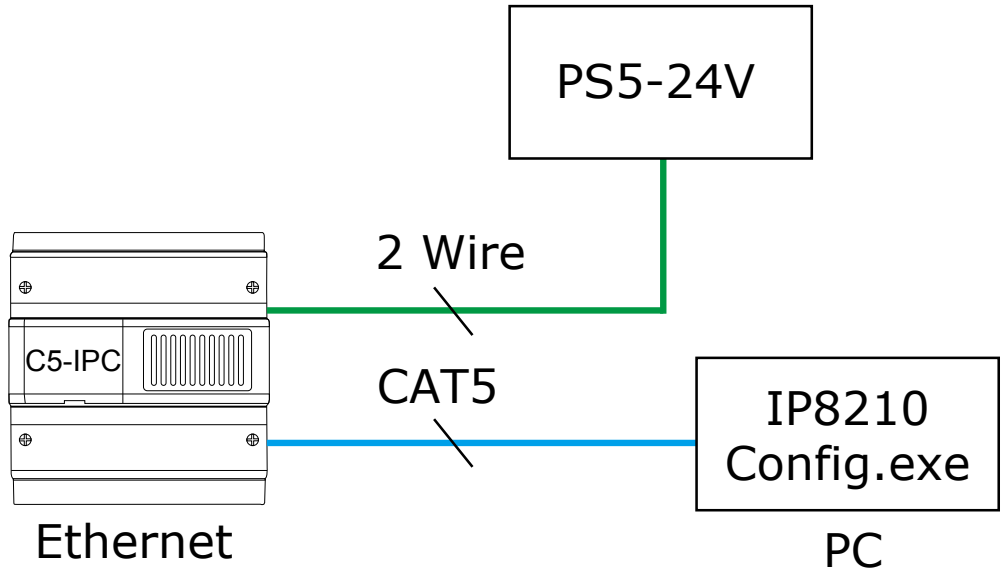


5. Select **Use the following IP address** option in the General tab of **Inter Protocol Version (TCP/IP) Properties** window
6. Input **IP address, Subnet mask** and **Default gateway** as following picture shows, then Press **OK** button to finish setup



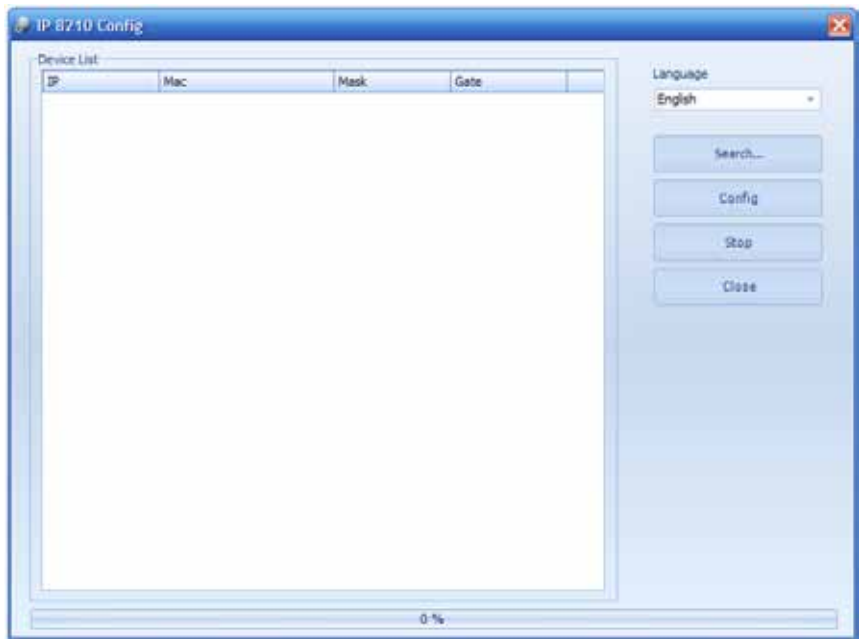
5.2.2.2 Connect device to PC directly or network

The following is a diagram of direct connection:

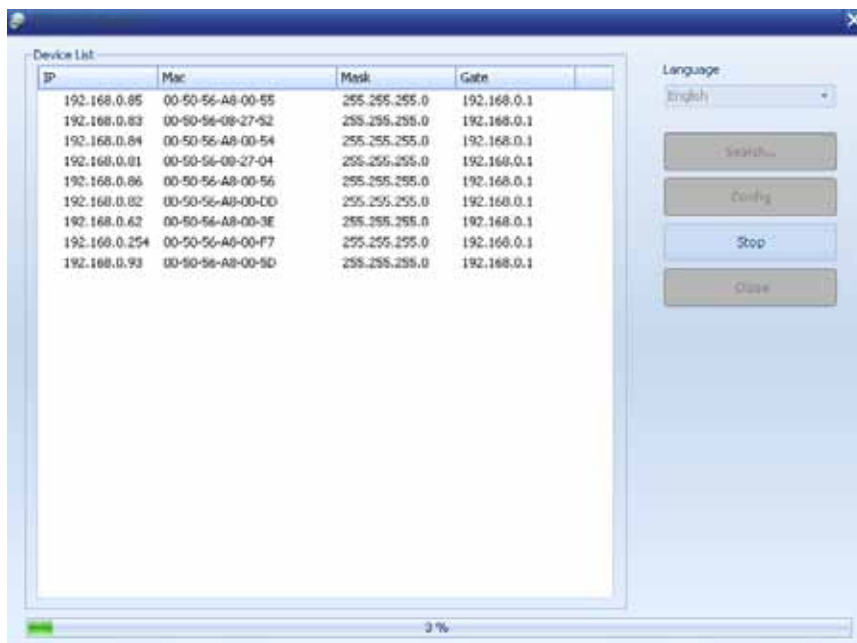


5.2.2.3 IP8210 Config Software

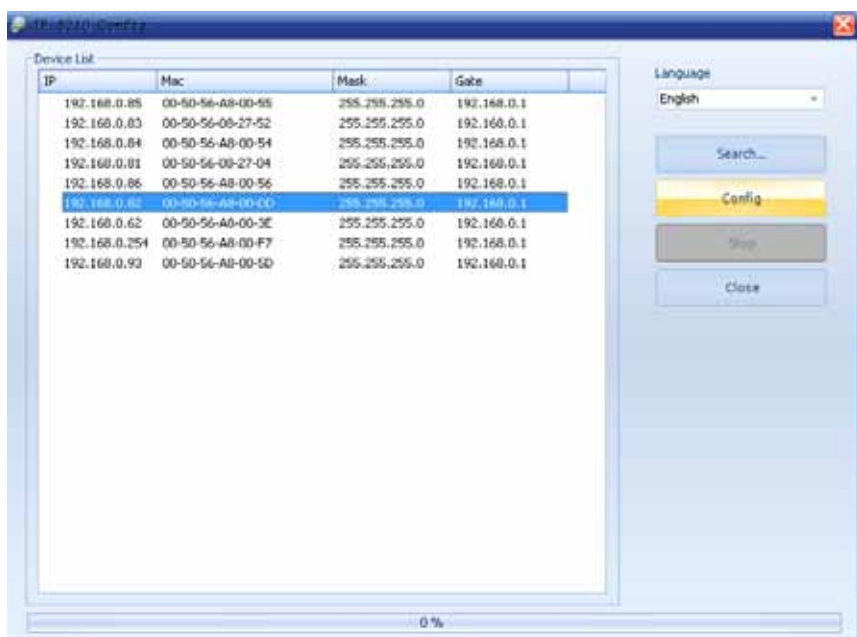
Run the IP8210-config



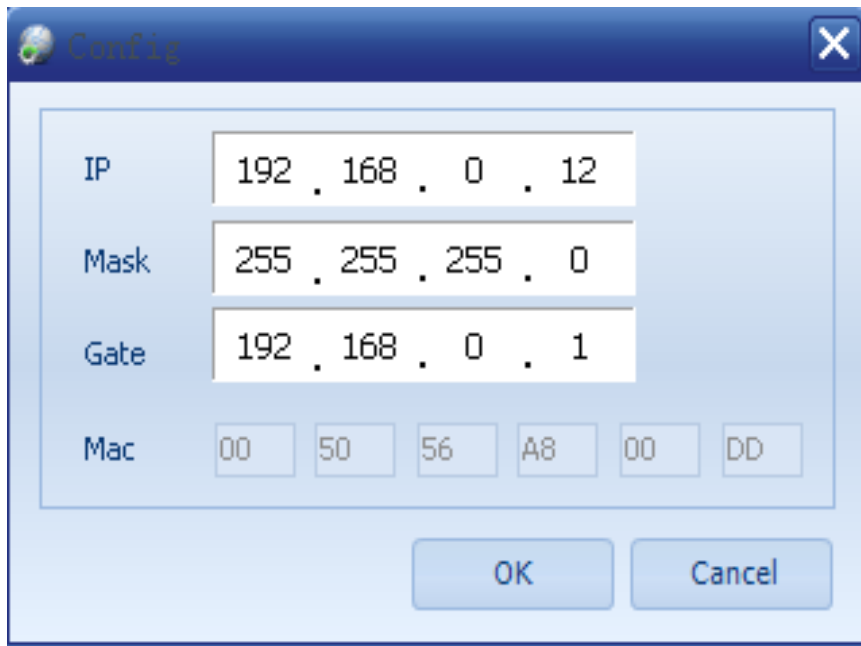
1. Press Search... button to search the device. You can press Stop button to end the search after the device has been detected. Just like the following picture shows.



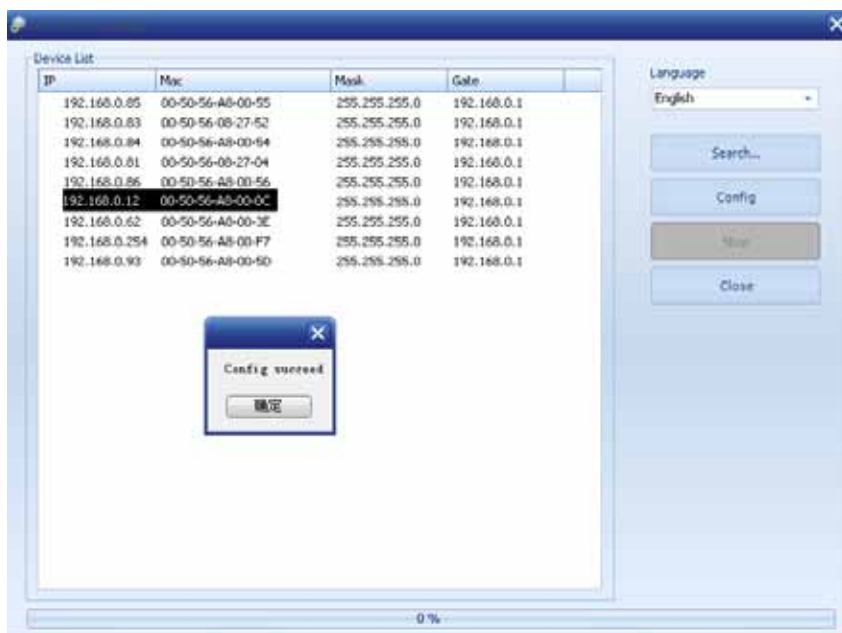
2. Select the device in the Device List frame, then press Config button.



3. A window will pop up for IP address setting. Modify IP address, but remember to leave the Mask and Gate as it is, and then press OK button to confirm. Its Mac address will be automatically modified simultaneously.



4. If setup is successful, it will pop up a window to inform you. Press OK to confirm.



5.2.3 IP Address Setup by IP Device Software

An IP setup tool has been inserted in IP Device software. The function is the same as IP8210-config software. Install PC Station package software. And IP Device software shortcut will be created automatically in the desktop.

5.2.3.1 Set PC Station IP

Assume using the following IP address

IP address: 192.168.0.246

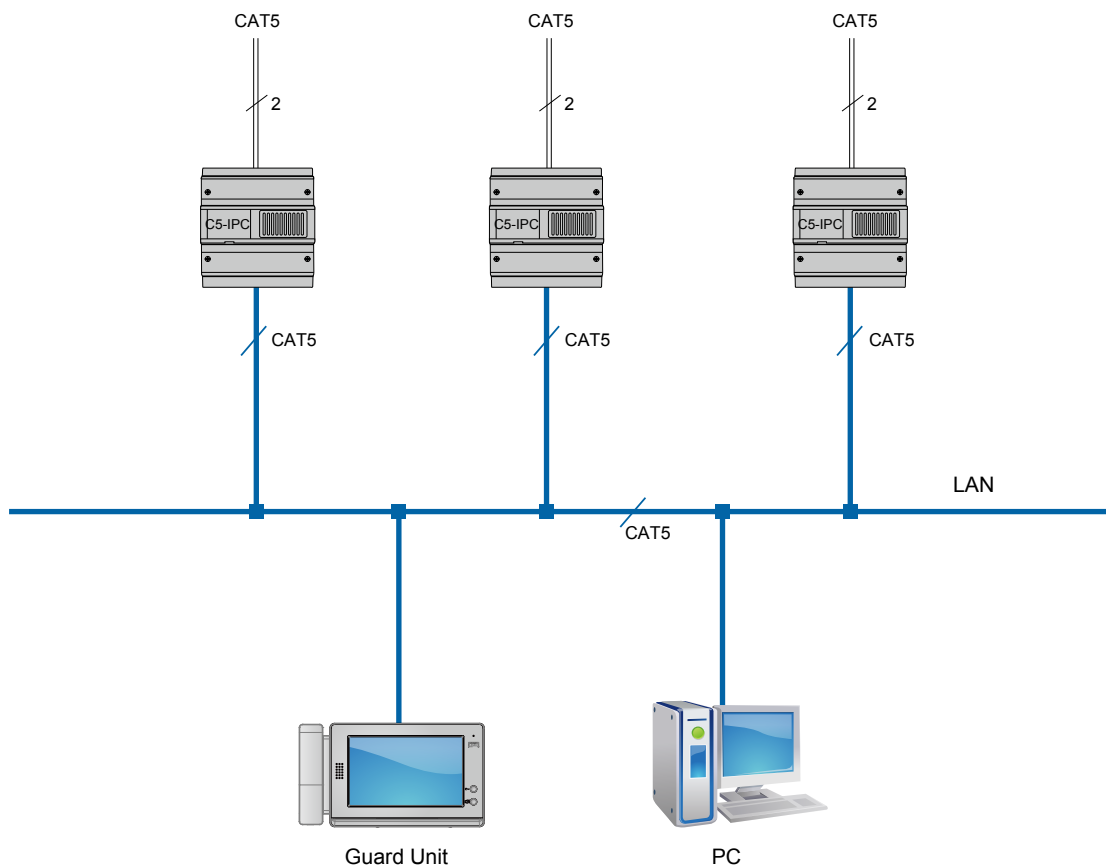
Subnet mask: 255.255.255.0

Default gateway: 192.168.0.1

Note: IP address range of PC station must be from 192.168.X.241 to 192.168.X.246. X is the specific segment number that is configured by IP Device. Assume that 0 segment has been specified.

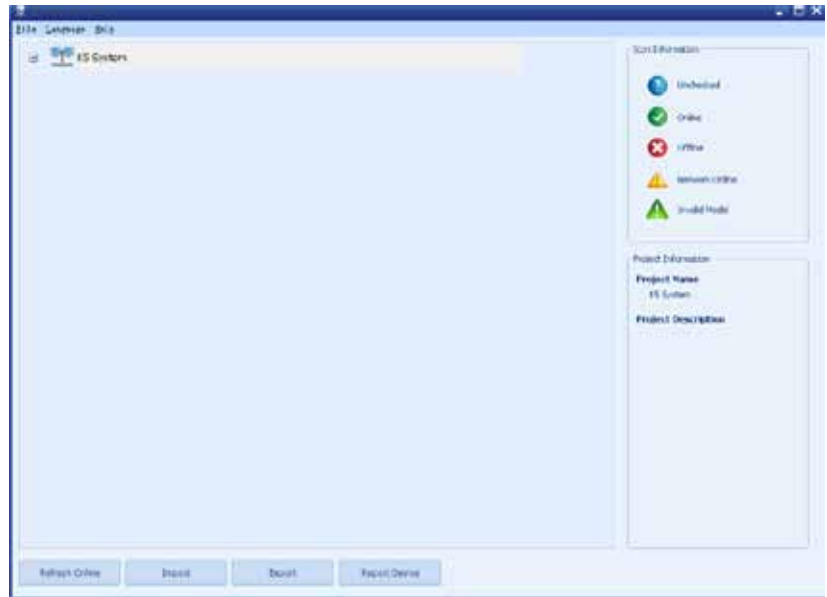
5.2.3.2 Connect device to PC directly or network

The following is a diagram of network connection:

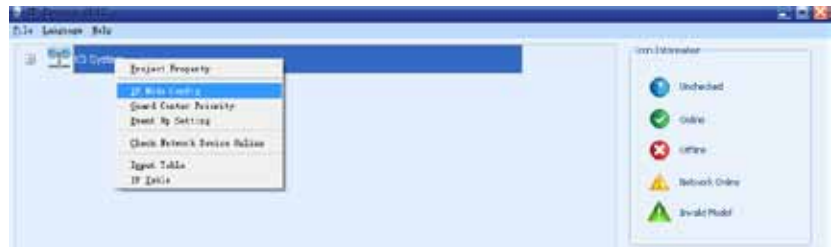


5.2.3.3 Set IP Address

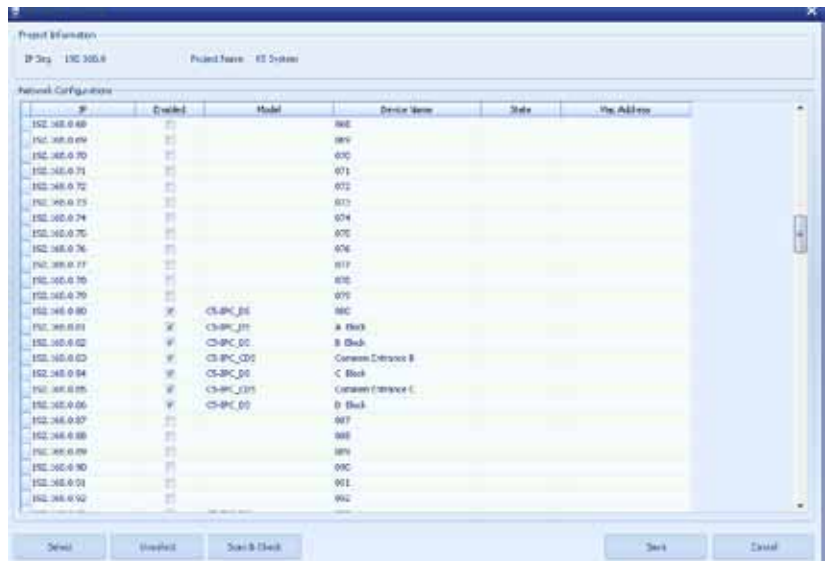
1. Start IP Device software



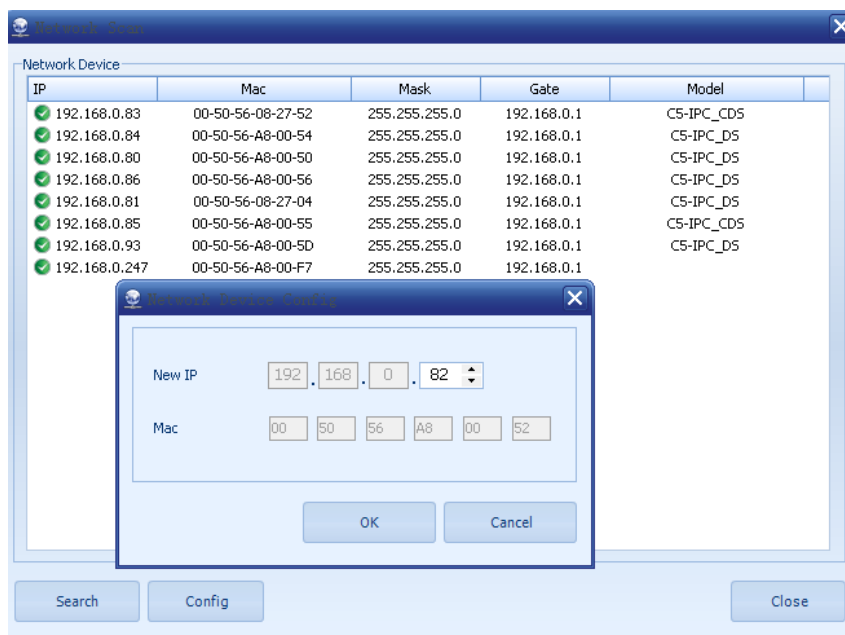
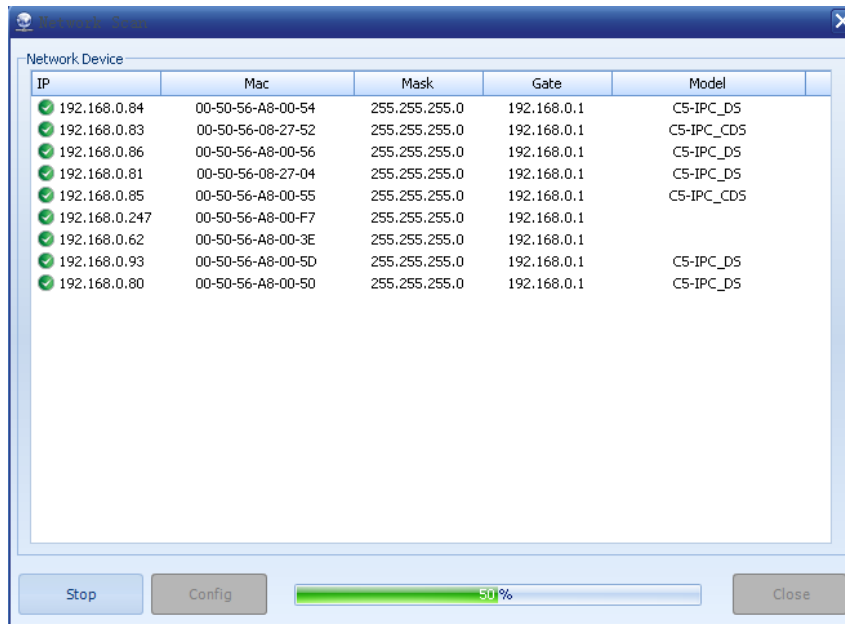
2. Right click on K5 System, then select IP Node Config in the pop-up menu



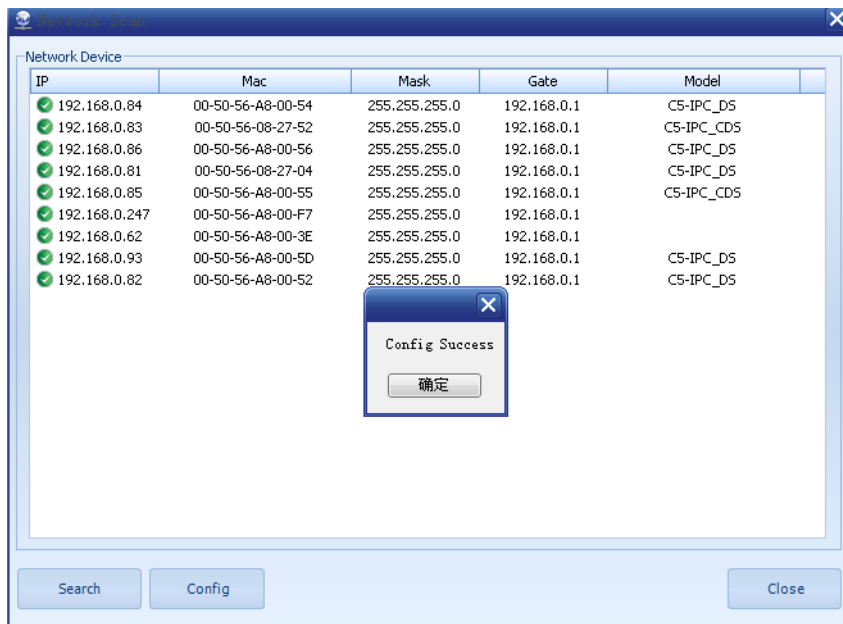
3. In IP Node Config page, press Scan & Check button



- Then it will pop up a window to show devices that are detected. Assume that 192.168.0.80 is the device that is supposed to be set to 192.168.0.82
- Double click 192.168.0.80, then a window pops up for modifying IP, input 82 then Mac address will be automatically modified. Press OK button to confirm modification.



6. A window will be pop up to inform you if config succeed, just like the following picture shows. Press 'OK' to confirm




§ 5.3 IP Device 2012

5.3.1 Introduction

IP Device is used to construct a new project and save project information to a database for IP-Agent whose information is based on the database. It can set the parameters of C5-IPC on-line.

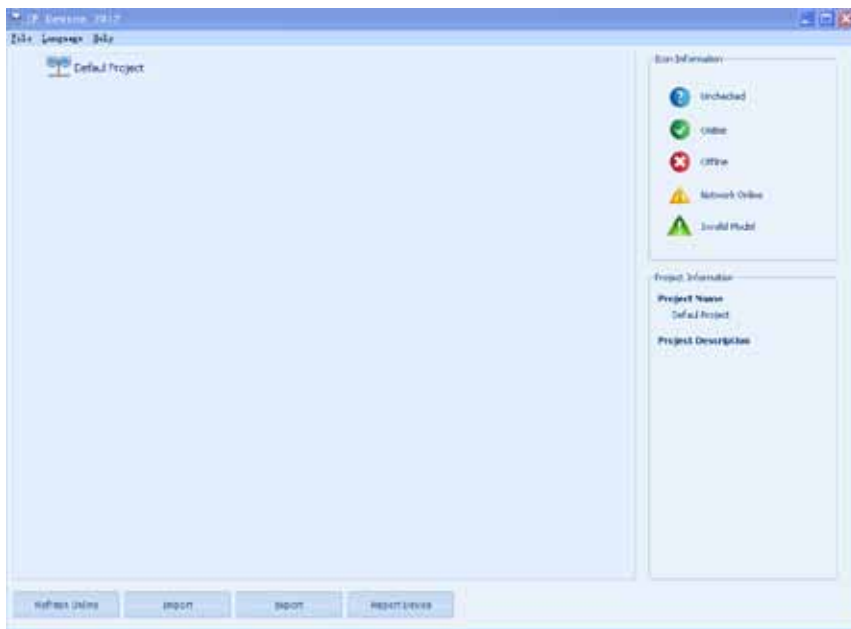
5.3.2 Login

- Start the IP Device 2012 Software

On your desktop, click  icon that has been created automatically. IP Device gets starts. It will pop up a window of the login interface



- Check the information, then Click Login to access IP Device.



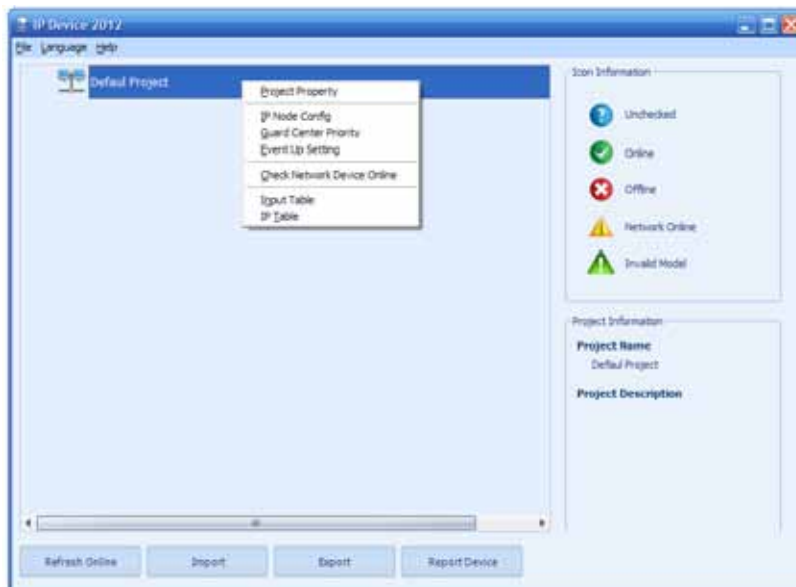
File: Include Change and Password and Exit.

Language: Include English and Chinese (Simplified).

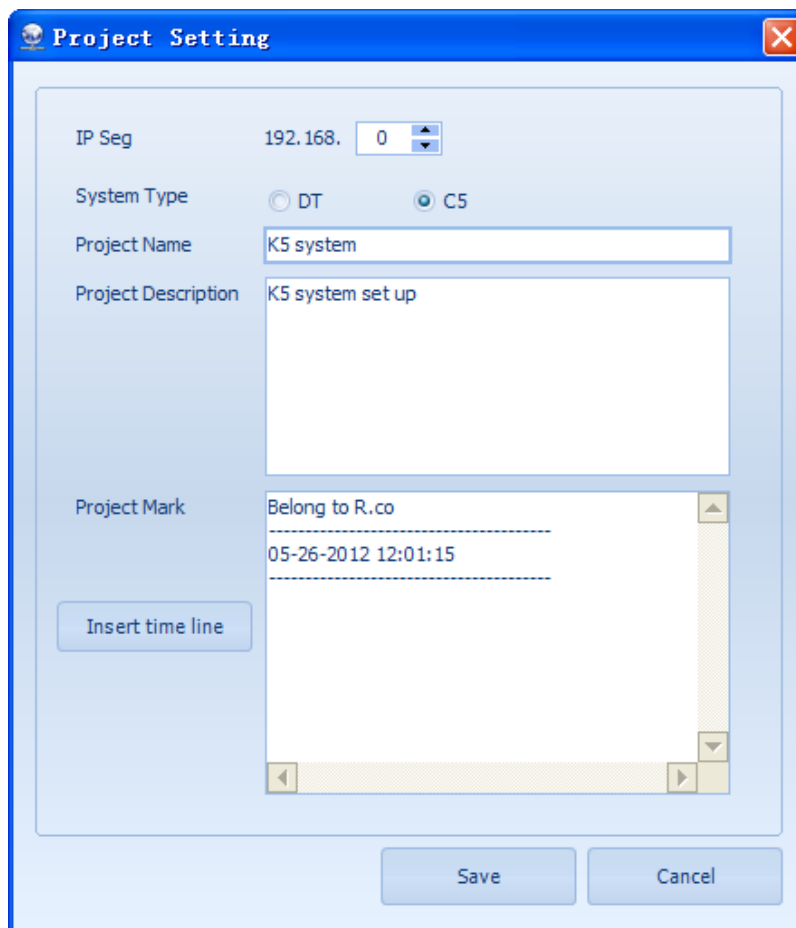
Help: Include Content and About

5.3.3 Project Property

- Right click on Default Project, then it will pop up a menu. Select Project Property



- It will pop up a window for setting project property.



IP Seg: Select a IP Segment for the new project. Note that all the IP address must be in the same segment. We will take 192.168.0.X as an example in this manual

System Type: IP-device can be used in DT or C5 system, here we choose C5.

Project Name: Name of the new project; we will name K5 System as an example in this manual

Project Description: Can input some info about project

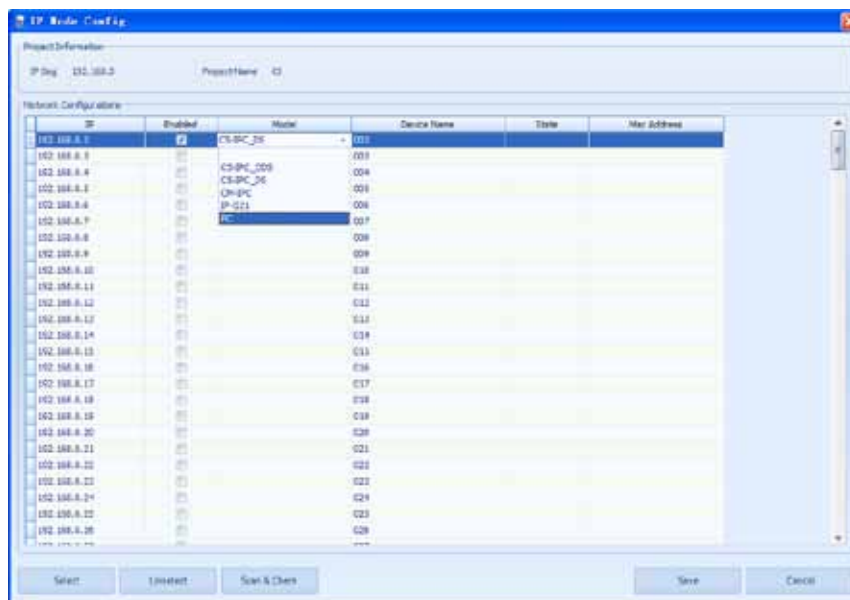
Project Mark: Can input some info about project

Insert time line: Insert the created time in K5 System frame.

When finish the basic setting, click on Save to save the project information.

5.3.4 IP Node Config

Now when the project property is finished, we can begin to add all the devices to the project. Right click on K5 System, and then select IP Node Config. Select IP nodes which will be adopted in this project and then select its model and name of the device.



IP Nodes Description

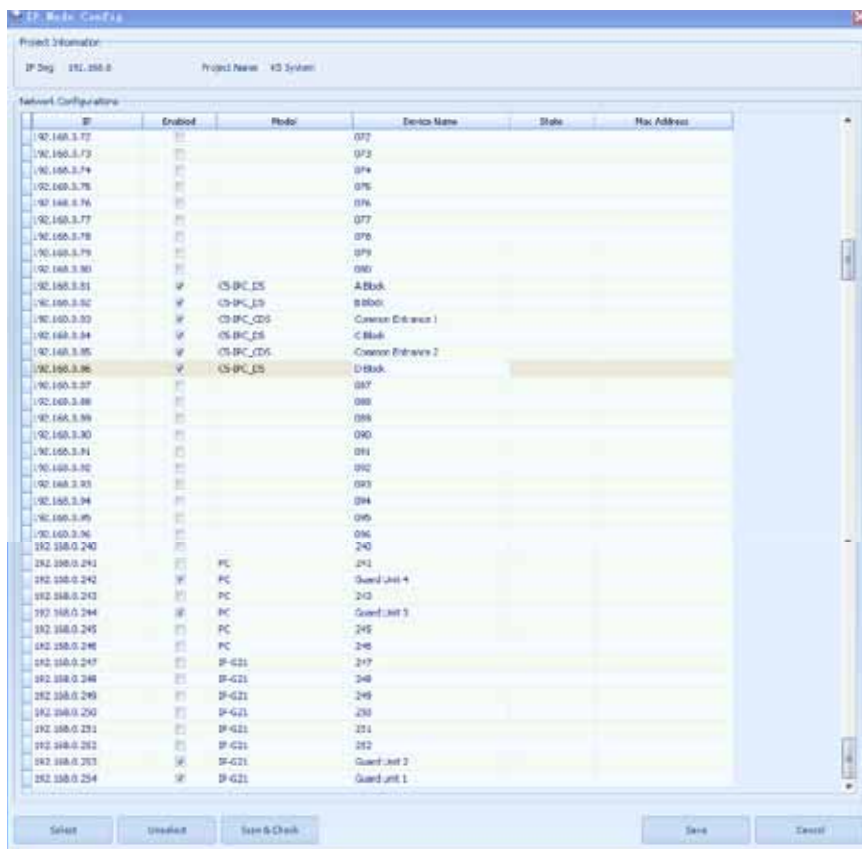
IP Nodes	Description
192.168.0.(2 to 240)	Door Station/ Common Door Station/ Camera
192.168.0.(241 to 246)	Switchboard (IP-Agent)
192.168.0.(247 to 254)	Switchboard (IP-G21)

Model Description

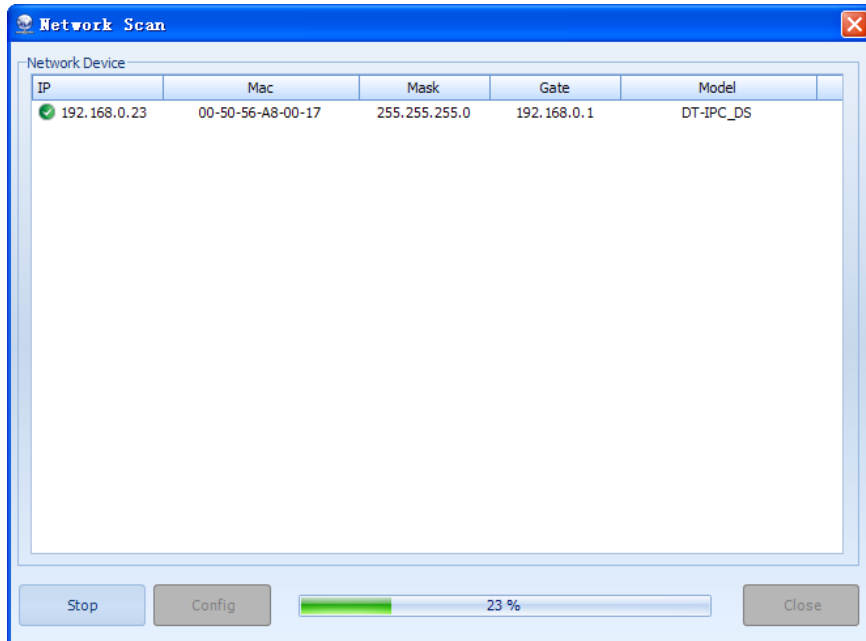
Model Name	Model Description
C5-IPC_CDS	C5-IPC for Common Door Station
C5-IPC_DS	C5-IPC for Door Station
CM-IPC	IPC for CCTV Camera
IP-G21	Guard Unit
PC	PC Station(IP-Agent)

For example, in K5 System, see the table, IP Nodes can be configured like the following picture

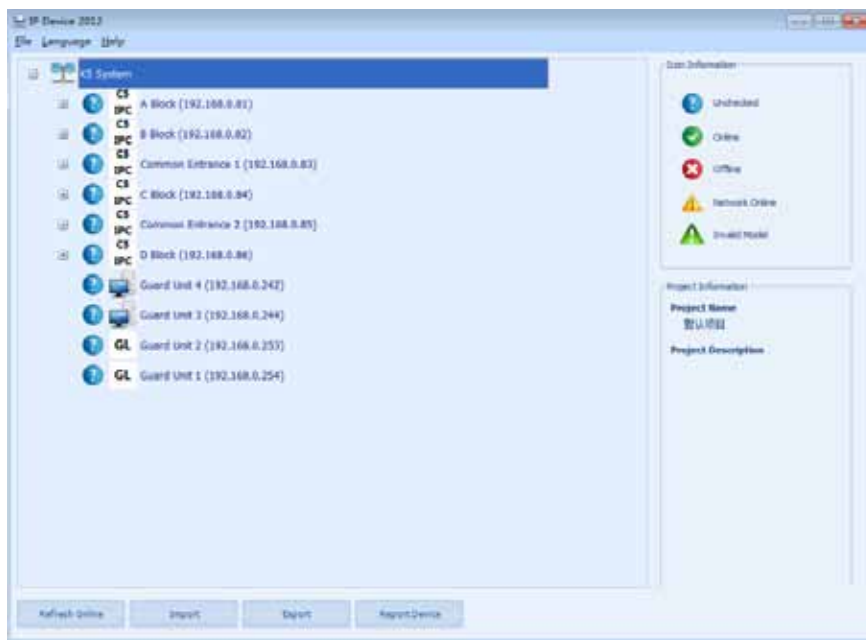
IP	Device
192.168.0.(81/82/84/86)	Door Station: A Block/B Block /C Block /D Block
192.168.0.(83/85)	Common Door Station: Common Entrance 1/Common Entrance 2
192.168.0.(253/254)	Guard Unit(IP-G21)
192.168.0.(242/244)	PC Station(IP-Agent)






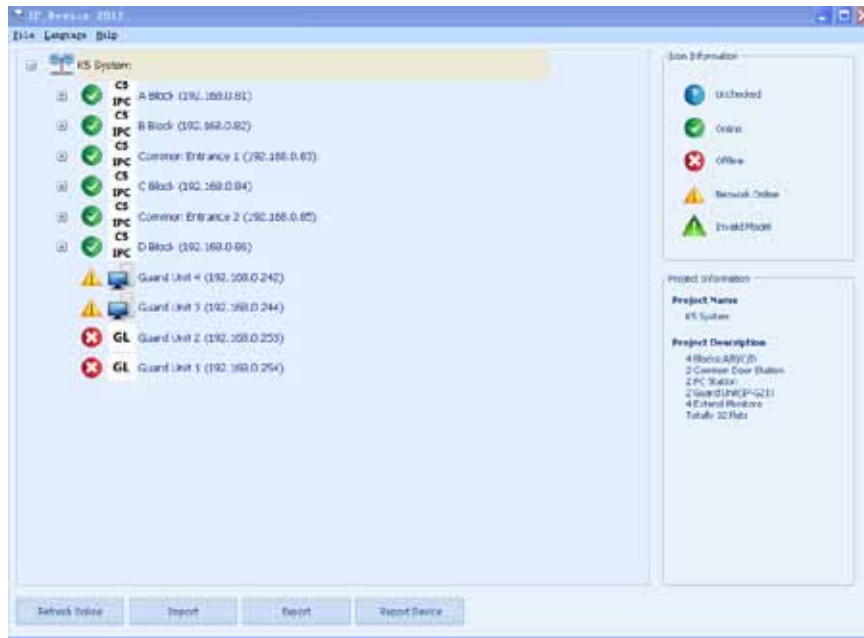
After adding the devices to the project, Click on Save to exit. Also, if all the devices are installed in the system, we can click on Scan&Check to search the devices on-line, and then added them to the project. See below:



Now go back to the main interface, and here we can see the project and all the devices added to it.



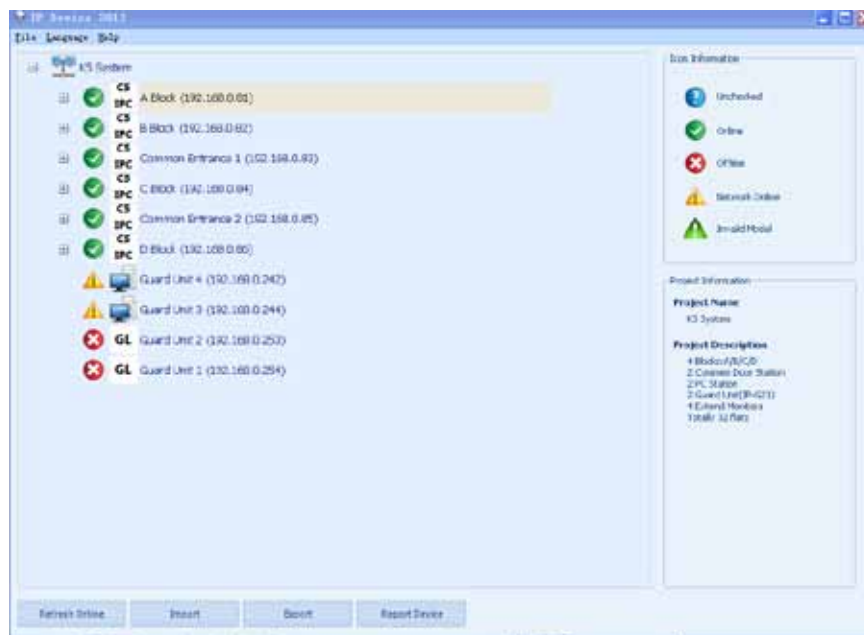
If you want to check if the devices are online, you can press **Refresh Online** button or click right mouse button on **K5 System** then select Check **Network Device Online**. See the following picture,  means device offline, and  means PC is online, but IP-Agent isn't opened,  indicates the model of IP Node is wrong selected, or wrong DIP switch setting of C5- IPC. Note that, the **Refresh Online** checks only the IP-Node, such as C5-IPC, PC station and IP-G21.



5.3.5 Block Config

Here an IP node is considered as one block, or we can say one C5-IPC represents one block.

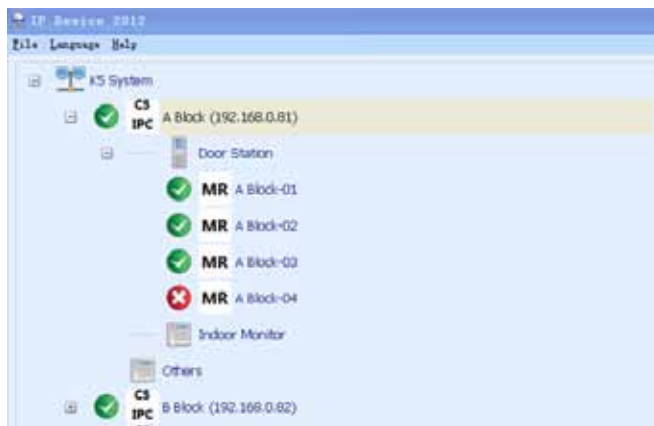
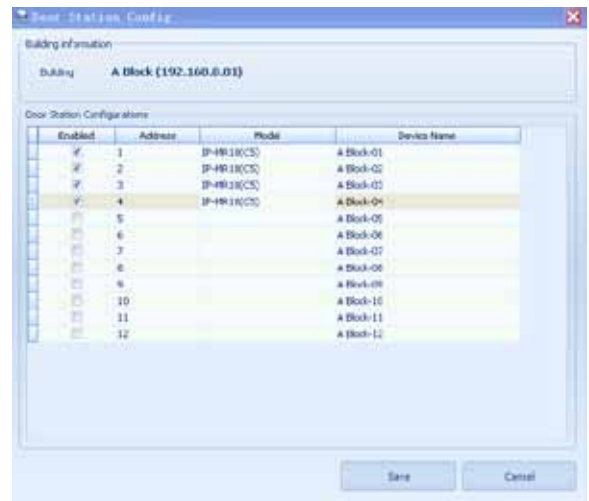
Double Click on IP-Node, say A Block here, it will unfold, and we can see the 2 sub-menu: door station and indoor monitor. Both devices needed to be added by hand.



Assuming that we have that 4 door stations and 8 monitors in each block. And door stations coded from 1~4; monitors coded from 0021~0024 and 0031~0034.

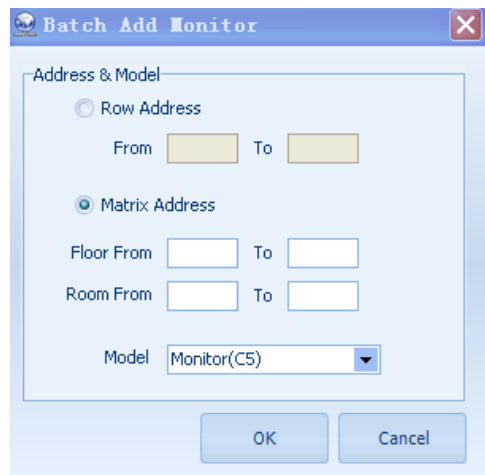
• **Door station Configuration**

DS Config: Right click on A Block -> Select DS Config on the pop-up window -> Config just like the following picture -> Click Save button to confirm -> Then the software will check if the door stations just added are on line or not.

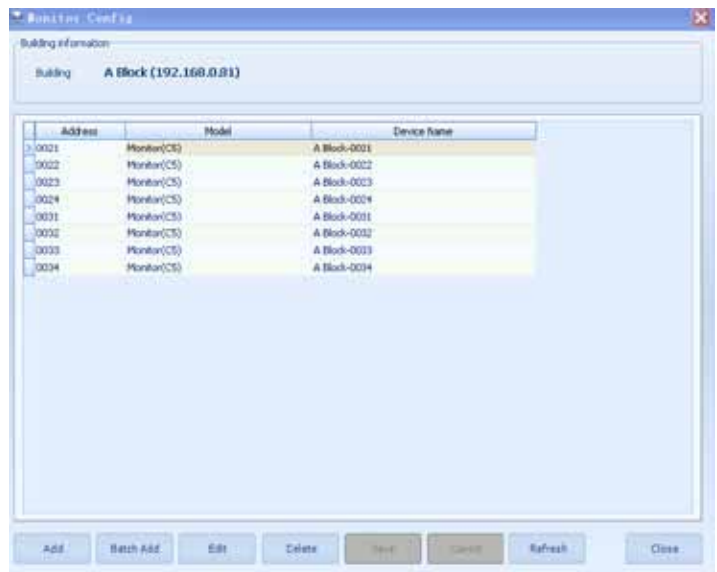
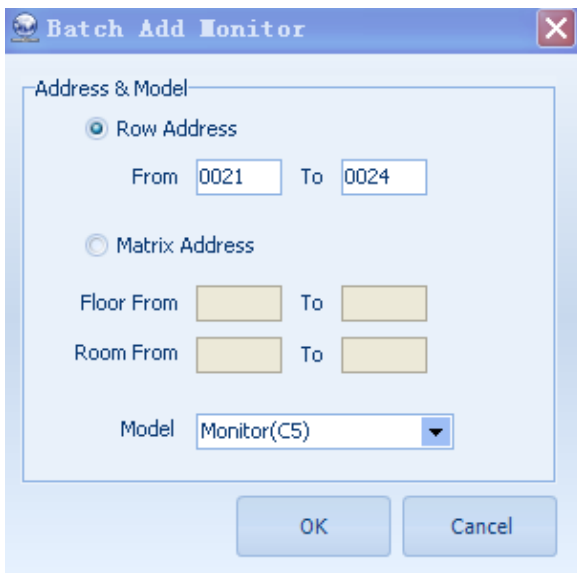


• **Monitor Configuration**

Right click on A Block -> Select Monitor Config ,then we will see the pop up window.

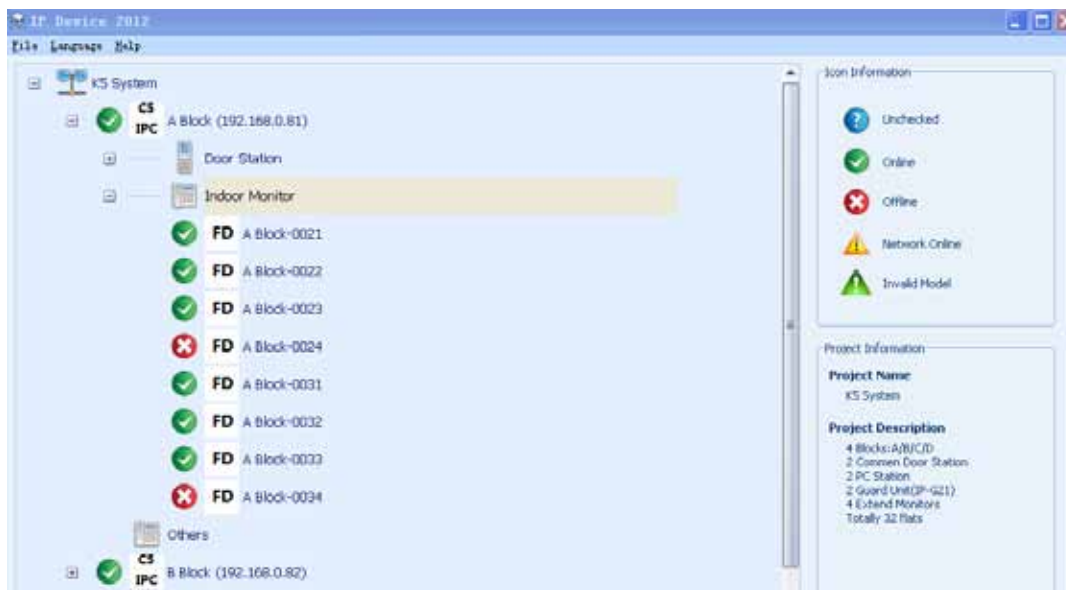


We can use Add or Batch Add to add monitors. Add is to add monitors one by one, while Batch Add enables you to add monitors in batches.



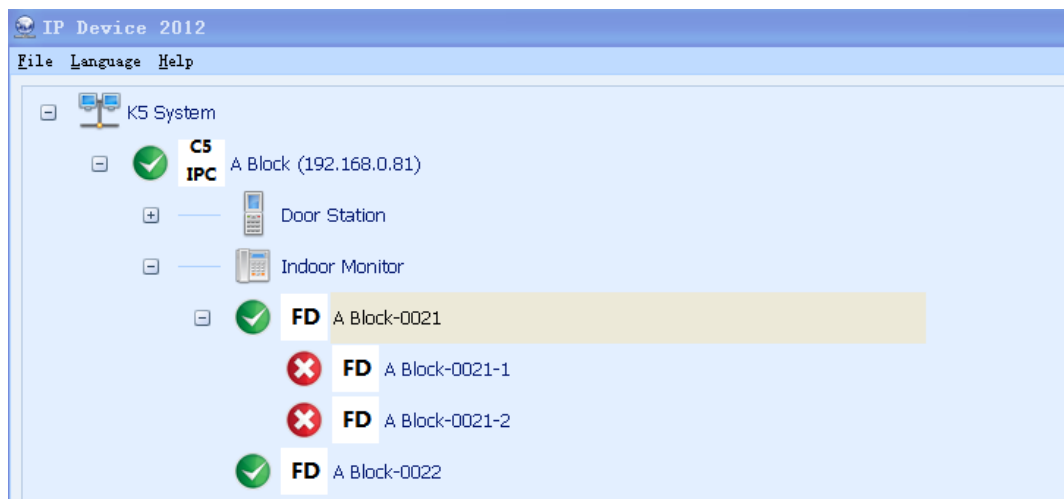
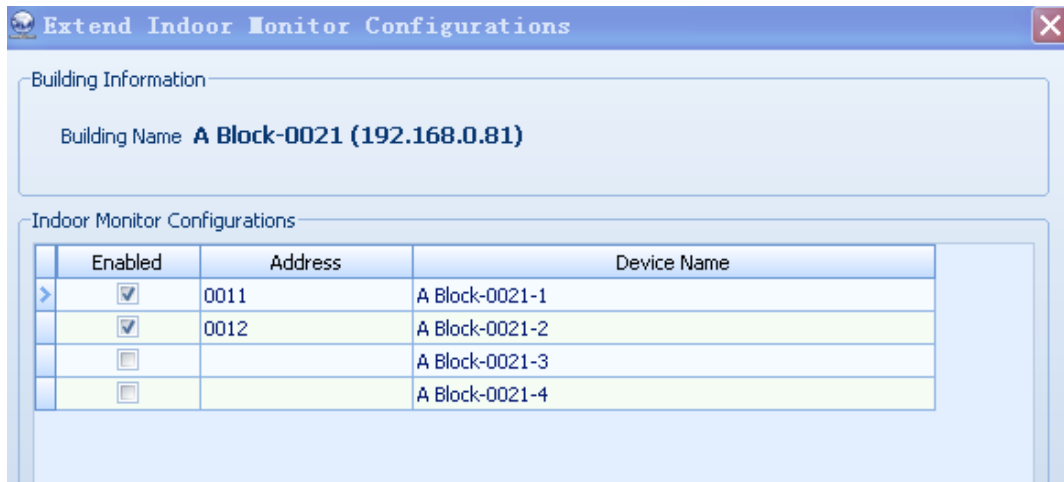
When all the monitors are added. Click close to save and exit.

Now go back to the block interface, and right click on A Block -> Select Check IM Online on the pop-up window-> Software will check if the monitors are online automatically. Just like the following picture shows.



- **Extended Monitor Configuration**

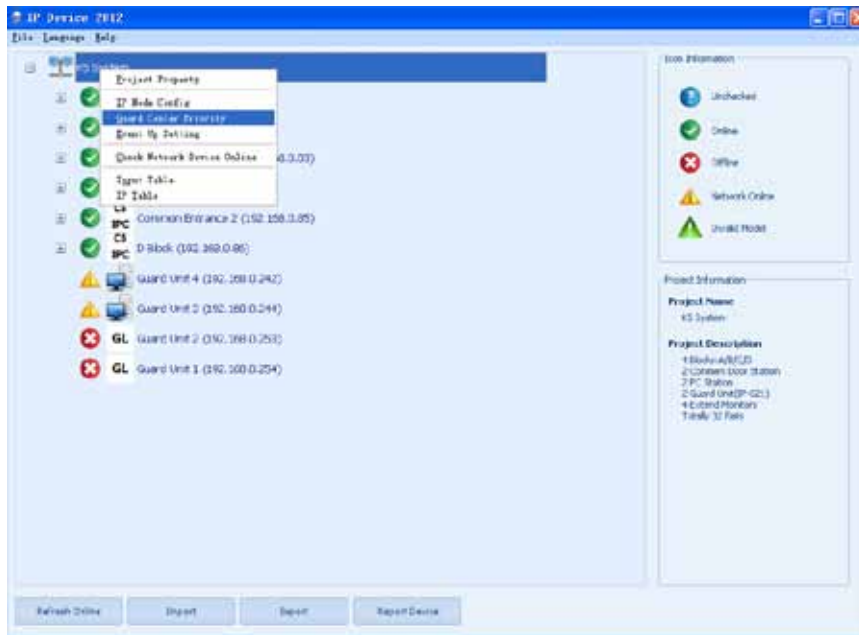
Maximum 3 monitors can be set in one apartment. One of them is Master and the other 2 slave monitors. Now assume that we want to add slave monitors to the A block 0021 monitor, right click on A Block-0021 ->Select Extend Monitor Config on the pop-up window ->Config just like the following picture-> Click Save button to finish. -> Software will check if the monitors are online automatically. Note that only 2 extended monitors are valid in the system. Refer to latter chapters about how to activate the extended monitors.



We can configure other blocks with the same method.

5.3.6 Default project parameters

The Default project parameters can apply to all the blocks(C5-IPC) in the system. And each of the C5-IPC can choose to run under the default project parameters or its own parameters shown in later chapter. By right click on the Project name, we can get to the menu for default general parameters. And we will go through 4 parameters on this menu:



Guard Center Priority: When block gives out call, to set how the call is transferred to different switch boards

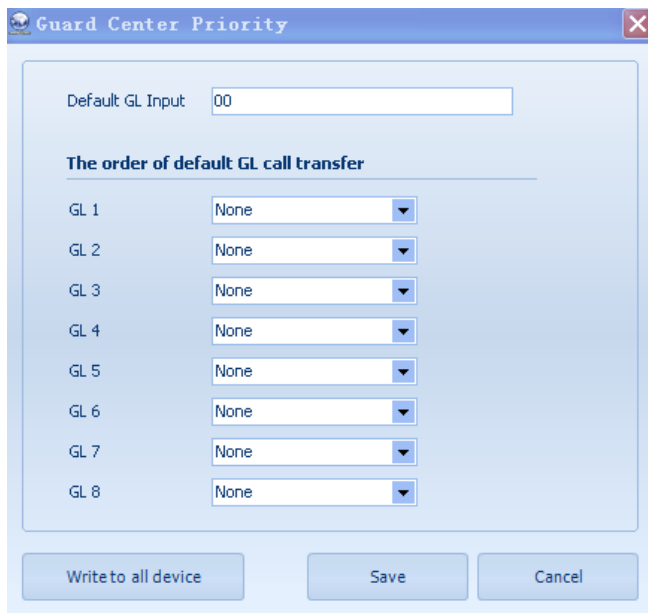
Even UP Setting: When block gives out alarm signal, to set how many guard centers it will go to

Input Table: To make a name list for all door stations and monitors and switch boards

IP Table: To make a name list for all block(C5-IPC) and switch boards(IP address list)

5.3.6.1 Guard center priority

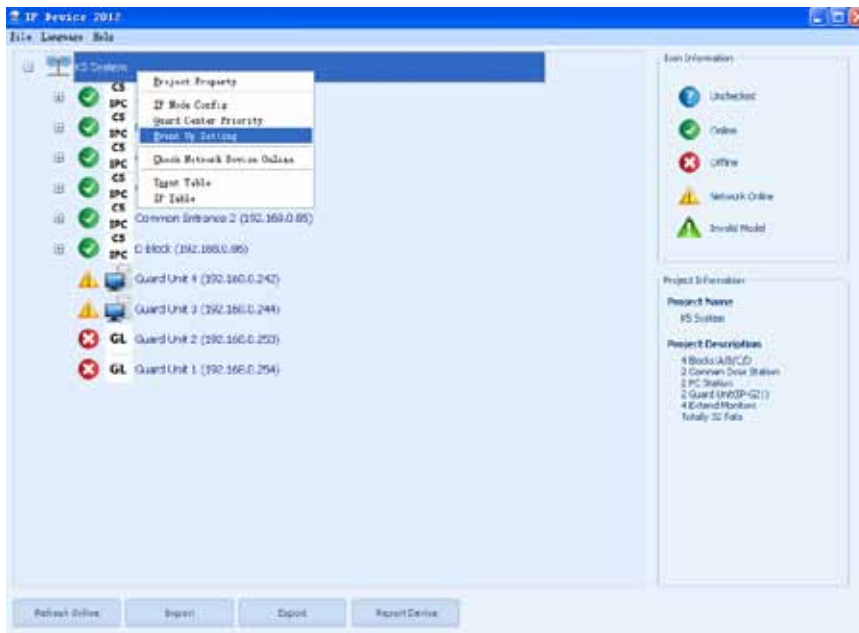
The calls from the blocks can be transferred to maximum 8 guard centers in turn. When the first guard center is off line or busy or no answer for some certain time, the call will be transferred to the next guard center



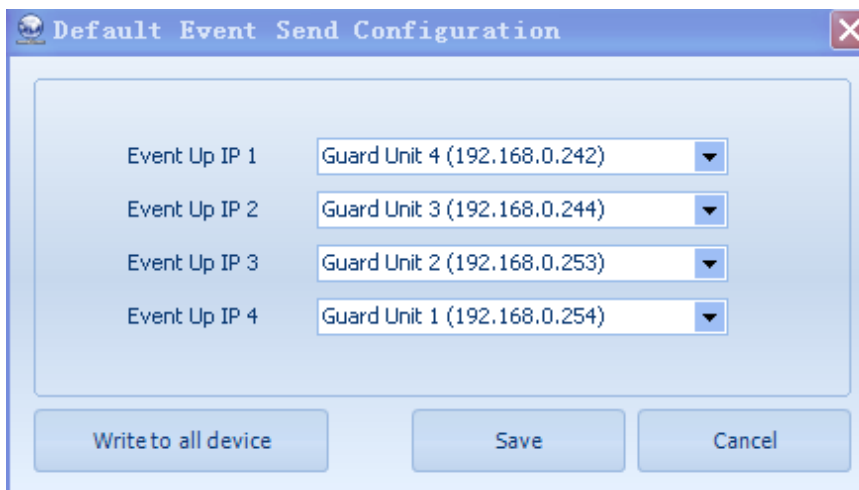
Press the Write to all device buttons to download the parameters to all C5-IPC connected to the network, and info will be saved to database at the same time. If only press save button, the info will be saved in the database only, and not to the devices.

5.3.6.2 Event up Setting

Event here has to do with the monitors. Events such as defense-enabling/disabling, emergency call, and alarm signal will be sent to all the switch boards in the list.

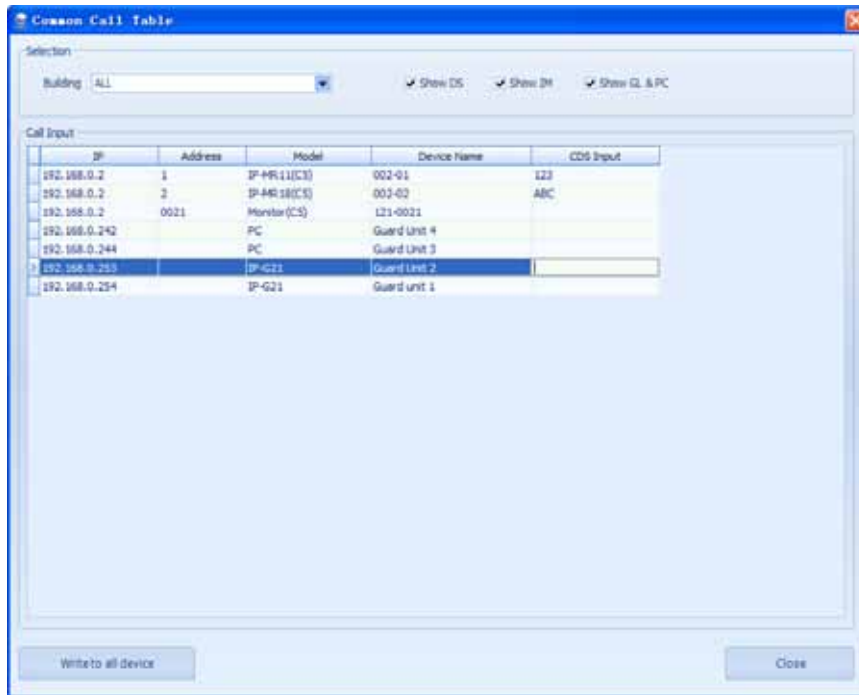


After the setting , click Save button to finish setup and Write to all device to set all the C5-IPC connected.



5.3.6.3 Input table

Input table is to make a name list for all the monitors and door stations and switch boards in the system. And we can call each of them by the name in the list without having to input their address.



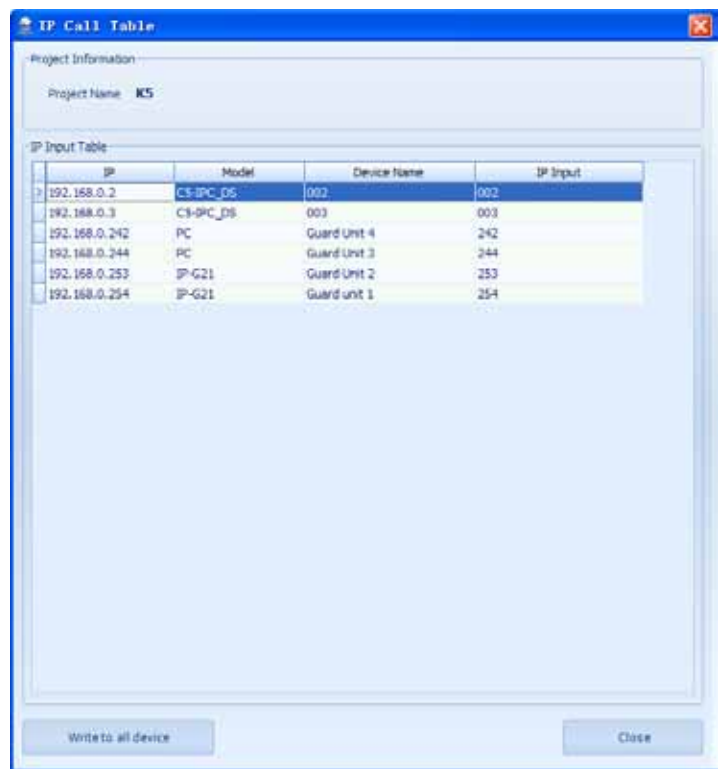
Here please note that:

1. Switch can call any of the devices directly by their name.
2. Common door stations can all any one of monitor by their name.
3. Door stations and monitors can not choose to call different monitors, should see Guard center priority.

5.3.6.4 IP Table

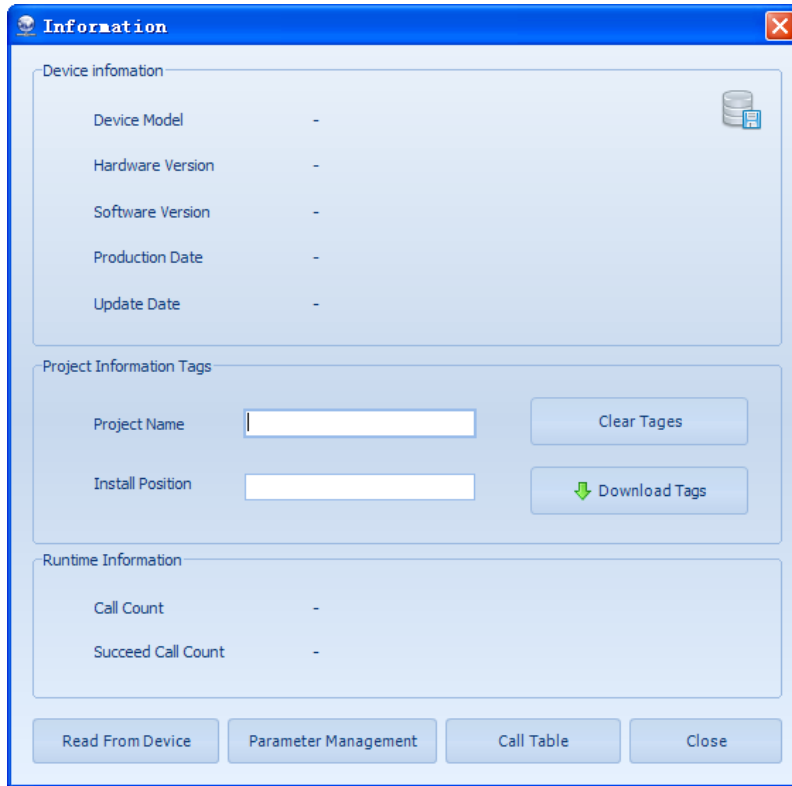
The IP Table is a name list for all the devices which have IP address, such as C5-IPC and switch boards. And when call the devices, we can use the name instead of the IP address.

Note: When the table is finished, do **Write to all device** to complete the parameters setting.



5.3.7 Management of Block C5-IPC

The management of C5-IPC provides access to all the parameters of a C5-IPC, the different parameters can be set, changed and saved according to different requirements on each of the C5-IPC. Right click on the C5-IPC, and select the Management, see the below window:



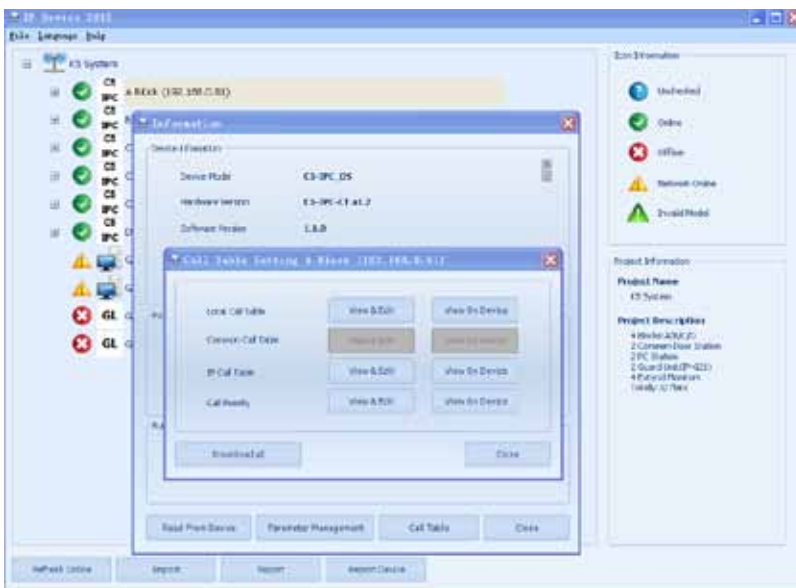
Read From Device: To upload all the parameters saved in the C5-IPC to the computer

Parameter management: To set the parameters of C5-IPC

Call Table: To set local, IP call table and call priority of each C5-IPC

Close: to exit

5.3.7.1 Call Table



1. Local Call Table: To make namelist for the monitors inside the block. The door station can input the specified number to call the monitor.

- **View&Edit:** To make and edit the call table



- **View on device:** to view the call table of the device

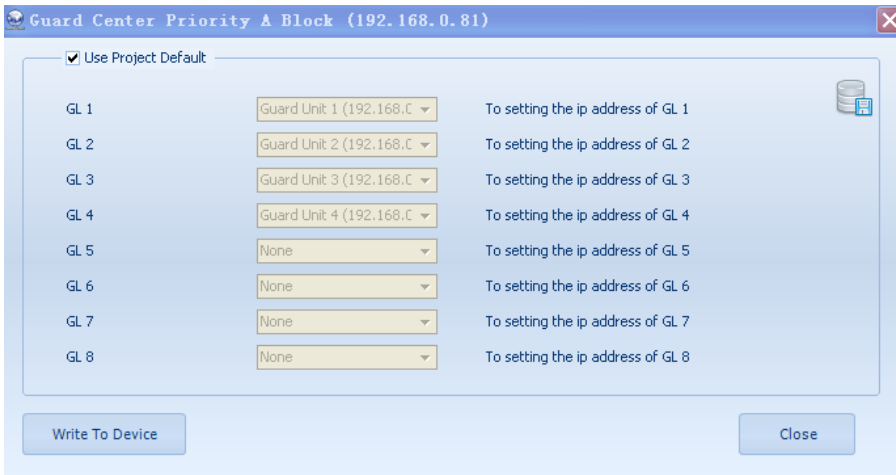


2. IP Call Table

See IP Call Table in the previous chapter.

3. Call Priority

The call priority here, unlike the Call Priority setting in Default project parameters, is to set the priority for each C5-IPC. So this setting is only valid for the only one C5-IP



Here we can choose to Use Project Default, refer to previous chapter Default project parameters. Or we can untick the item, and set the Call priority manually. Maximum 8 Guard centers can be set for each C5-IPC.

5.3.7.2 Parameters Management

Click on Parameters management to get to the window below:



Button Description:

Read from Device: Read all the parameters stored in the device

Write To Device: Write all the parameters to the device

Reset To Default: Reset all the parameters in the database to Default (Note that the operation is for database in PC, if you want to reset the device parameters, press Reset To Default and then press Write To Device)

Import: Import a parameter file that has been saved previously to reset the parameters.

Export: Export a parameter file to backup the current parameters.

Close: To exit

1) General

Number of Monitor: How many monitors can monitor the door station at the same time, ranging from 1~5

Talk On Mon: Enable/Disable the talk function when monitor is doing monitoring

Unlock On Mon: Enable/Disable the unlock function when monitor is doing monitoring

IM Monitor Time: To set Monitor Time from IM monitor to Door Station, ranging from 6~600s

Call Wait Time: To set calling waiting time from door station to monitor. Range from 10 to 600s

Call Talk Time: To set limitation for talking time, Range from 10 to 600s

IM To IM Talk Time: To set limitation for talking time between IM and IM, Range from 10 to 600s

Call Transfer Wait Time: To set the waiting time before diverting calling to next Switchboard when there is no answer. Set to 0 to disable divert function when no answer.

Extend Room Table Mode: To set the code rule for multi-monitors in one apartment

Network Intercom: Enable or Disable Network Intercom between monitors

2) Call Priority

Set priority for different call. Ranging from 1 to 5. The higher the value of number, the higher the priority. Note that calls of the same call type can not cut one another. See below:



GL Call IM: To set Priority for Switchboard calling indoor monitor.

GL Call DS: To set Priority for Switchboard calling door station.

CDS Call IM: To set Priority for Common Door Station calling indoor monitor.

DS Call IM: To set Priority for door station calling indoor monitor

DS Call GL: To set Priority for door station calling Switchboard.

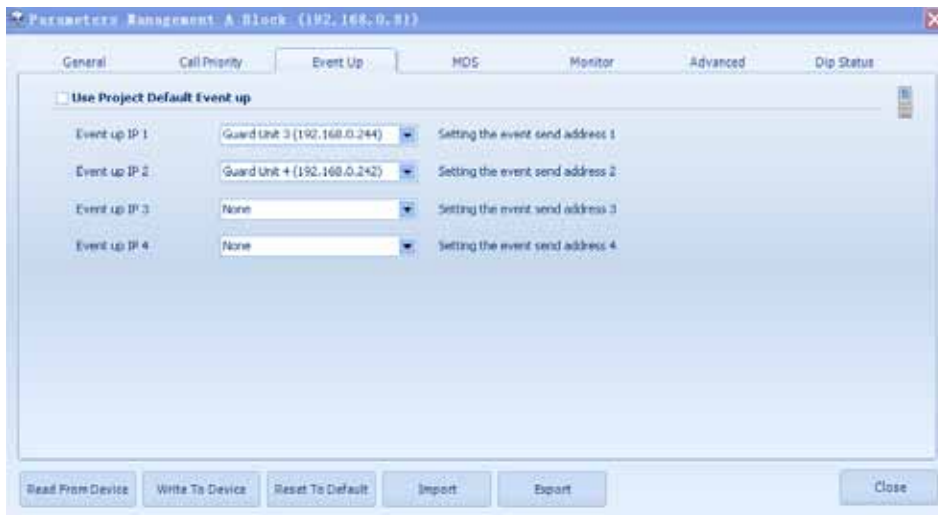
IM Call GL: To set Priority for indoor monitor calling Switchboard.

Inline IM To IM: To set Priority for indoor monitor calling indoor monitor in the same block

Outline IM To IM: To set Priority for indoor monitor calling indoor monitor between blocks.

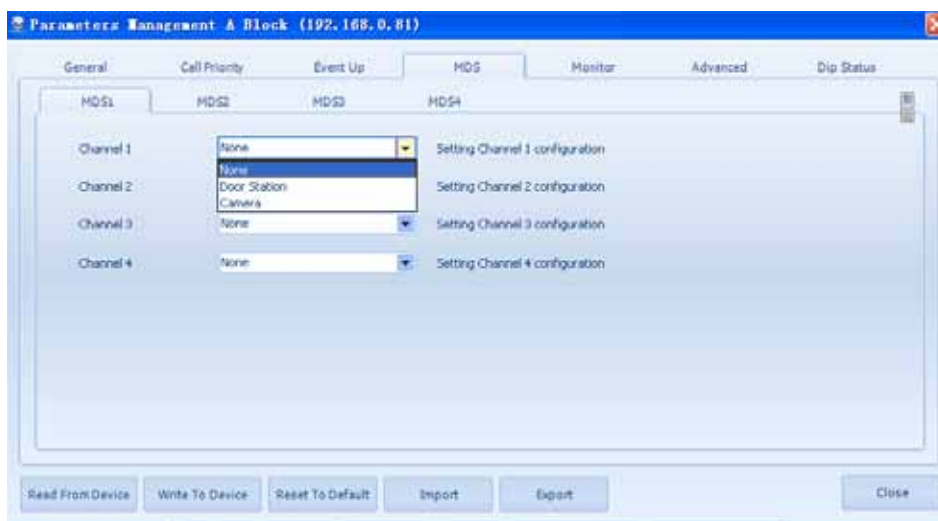
3) Event up

Event up setting decides which switchboard should the alarm and events be sent to. We can adopt the default setting, or untick to set the switchboard we want. Maximum 4 switchboards can be set to one C5-IPC, and the events will be sent to all the switchboards at one time.



4) MDS

MDS serves as multi- door station switcher. When there are more than one door station in one block, it must be used to make the system work properly. The system now allows maximum 2 C5-MDS to work at one block. Any one of the 4 ports of C5-MDS can be connected to door station, or camera or None.



Door Station: The port is connected to Door Station

Camera: The port is connected to camera

None: the port is left empty

Note: To set different devices for each port of C5-MDS can effect smart detection, when monitor

does the monitoring. It always surveys camera port , skips the door station port when off line and skips None port always.

5) Monitor



Monitor Switch Timer: Set the time duration of each port when do monitoring on the monitor

Monitor 1~8: Set the channels available when do automatic monitoring on the monitor, it switches from one to another by turn

6) Advanced



• **IP8210 control**

This item is reserved, don't change the setting easily.

• **Special function**

IMC: Set Enable/Disable for IMC

F4XX driver: Set the Distributor type

G Call Type: When the switchboard calls monitor, to set it as a network call or a DS call

IMC Monitor Timer: To the time duration of each photo, when monitor is browsing the photos recorded in IMC

• **Call Table Quan**

Rows of Common Call Table: To set the limitation of rows when making the Common call table

Rows of IP Table: To set the limitation of rows when making the IP call table

Rows of Room Call Table: To set the limitation of rows when making the Local call table

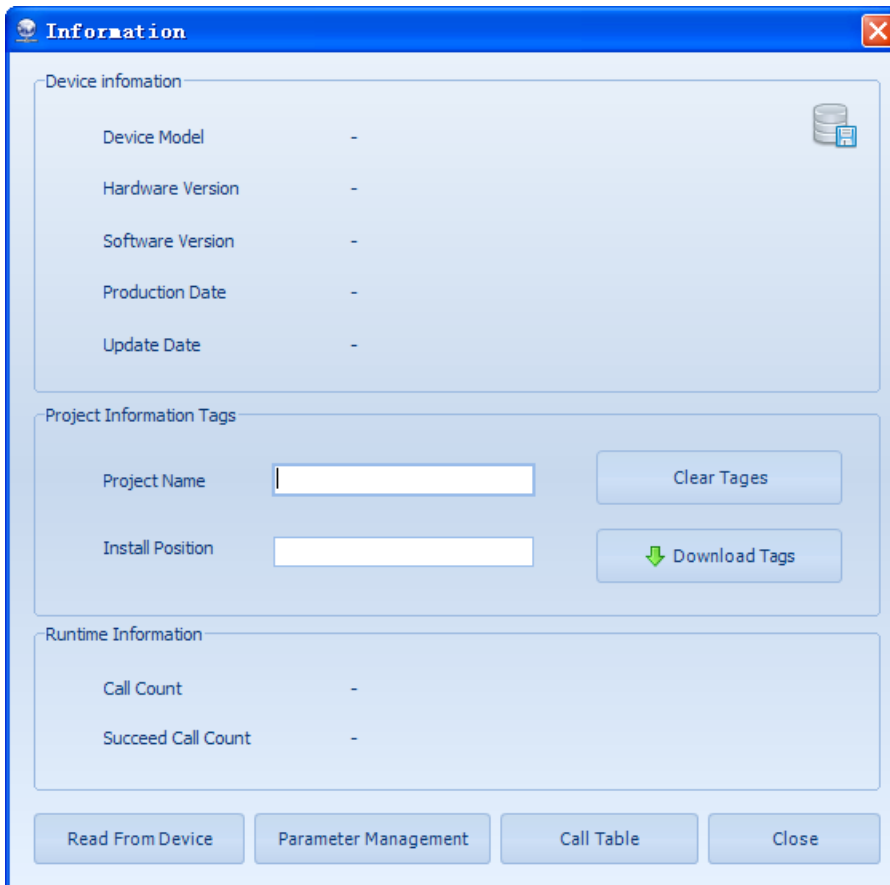
7) Dip Statues

This information is uploaded from C5-IPC device DIP switch setting; it just can be changed on C5-IPC. For more details, refer to C5-IPC settings in part 4.

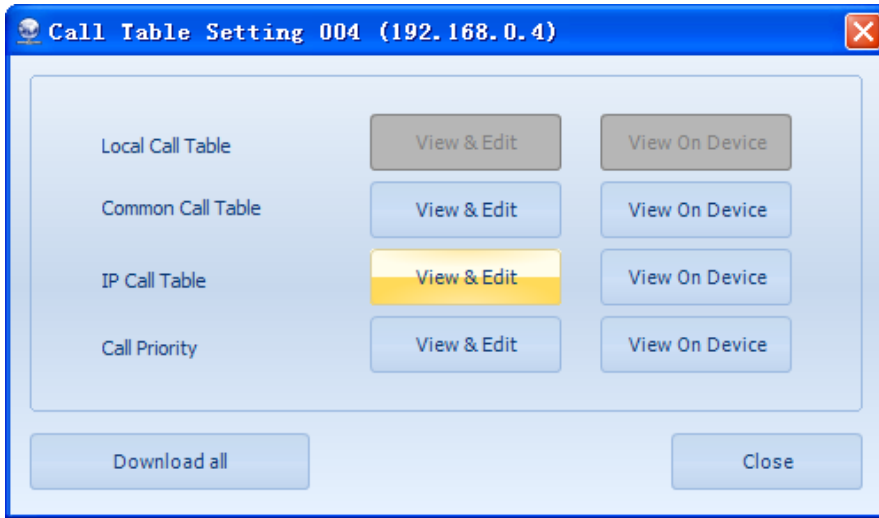


5.3.8 Management of Common C5-IPC

The Common C5-IPC is set to work with Common door station, and common door station is able to call all the monitors in the system. Right click on the C5-IPC and select Management



5.3.8.1 Call Table

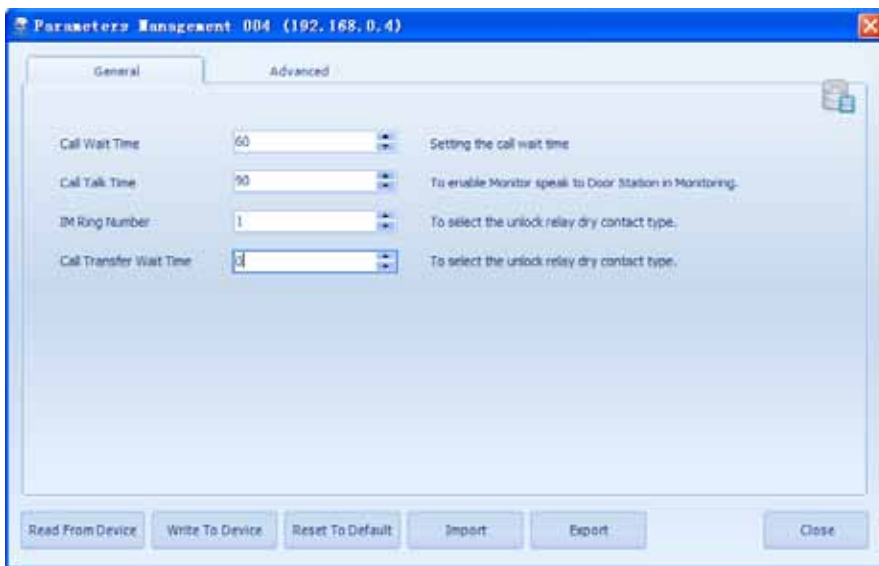


Common Call Table: See Input Table in 5.3.6.

IP Call Table: See IP Call Table in 5.3.6.

Call priority: See Call Priority 5.3.6.

5.3.8.2 Parameters setting



Call Wait Time: To set calling waiting time for door station and monitor, Ranging from 10 to 600s.

Call Talk Time: To set limitation for talking time, Ranging from 10 to 600s

IM Ring Number: To set the ring times for monitor when called, Ranging from 1 to 4

Call Transfer Wait Time: To set waiting time before diverting calling to next Switchboard when no answer.

5.3.8.3 Advanced

- **Call priority**

GL Call IM: To set Priority for Switchboard calling indoor monitor.

CDS Call IM: To set Priority for Common Door Station call indoor monitor.

DS Call IM: To Set Priority for door station call indoor monitor



- **IP8210 control**

This item is reserved, don't change the setting easily

- **Call Table Quan**

Rows of Common Call Table: To set the limitation of rows when making the Common call table

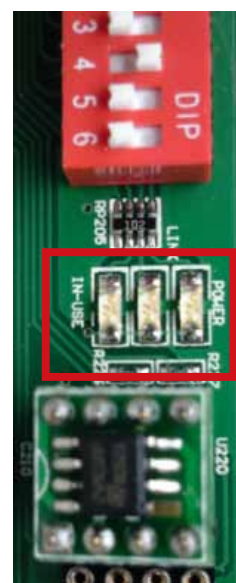
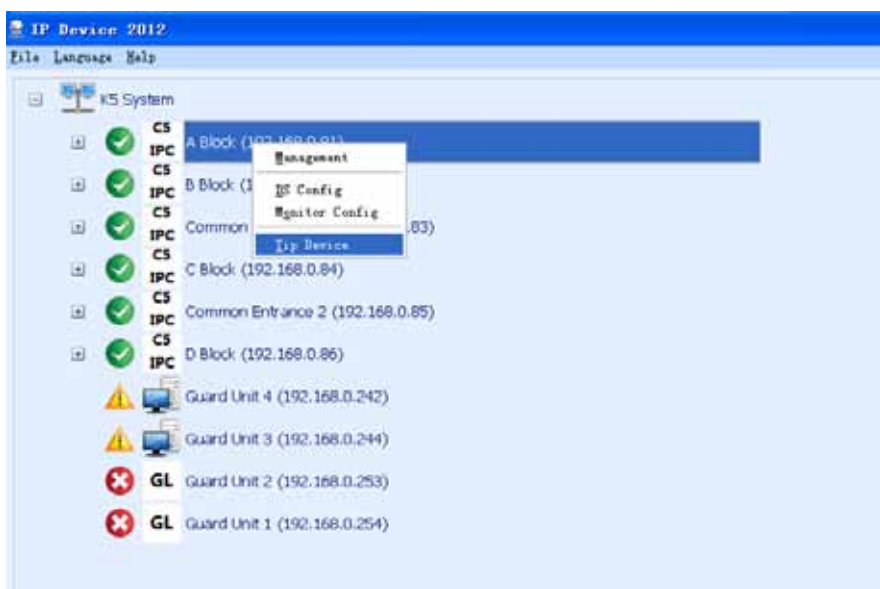
Rows of IP Table: To set the limitation of rows when making the IP call table

Rows of Room Call Table: To set the limitation of rows when making the Local call table

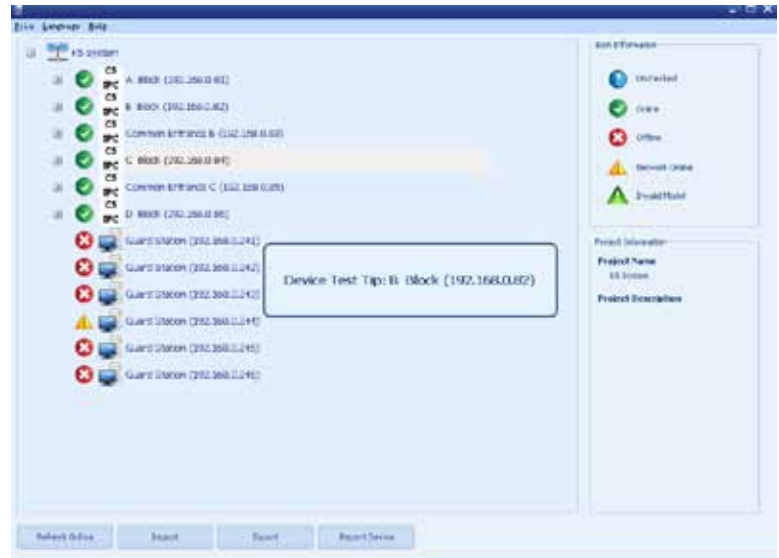
5.3.9 Tip Device

Tip Device is debug tool to find the physical C5-IPC. By activating the Tip Device function, the related C5-IPC will flash its LED 8 times that enables us to locate the C5-IPC.

1) Select one IP device you want to check, right click on it, select Tip Device in the pop-up menu. Then Power (red) & Link (blue) of the related C5-IPC will flash 8 times.



2) Press the PA key of the related C5-IPC, A window will pop up showing the IP address of the C5-IPC.




§ 5.4 IP Agent 2012

5.4.1 Introduction

IP-Agent is the main software of PC Station. It's a Switchboard that enables you communicate with user, entrance of blocks, common entrances and other Switchboards in one residential area via IP network.

- Unlock door when talking with entrances or monitoring.
- Capture picture of entrances when monitoring or calling entrances
- Record video automatically when answering incoming call
- Record video manually when monitoring or calling entrances
- Share the Database built by IP-Device

5.4.2 Login

Click on  icon that has been created automatically, IP-Agent gets started. To Access IP-Agent, you must log in with a registered account at first

1. On your desktop, double click the IP-Agent icon, the login dialog comes up.

2. Enter the user ID and password

Default ID: device

Default Password: 123456

3. Enter the Server name and Database Name

Server name: machine name + '\K2012'

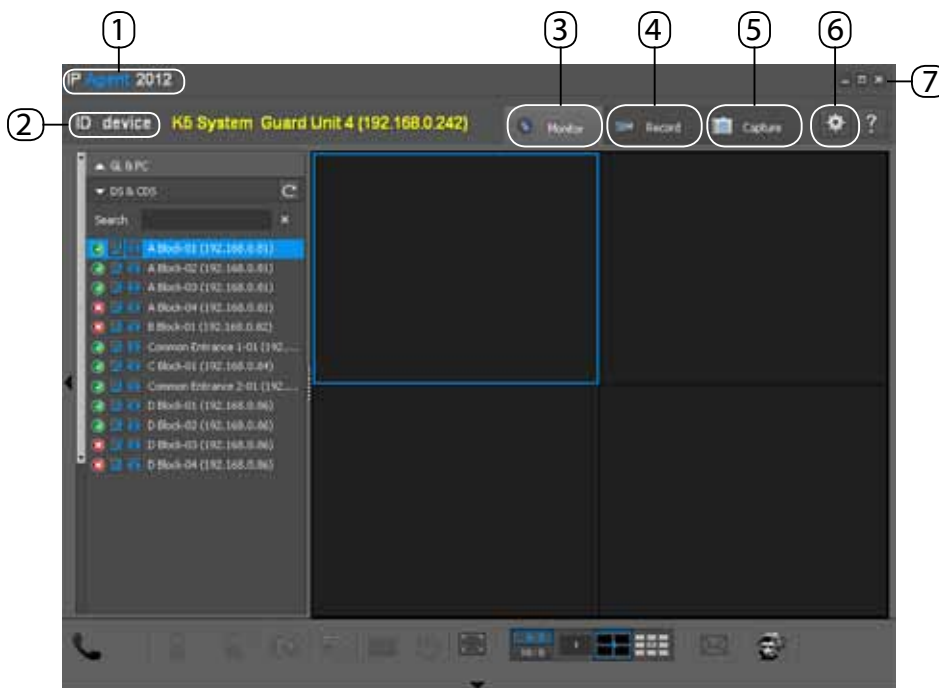
Database Name: K2012



It is strongly recommended that the password should be changed via IP-Admin. Otherwise it may cause information leak and the responsibility is on the user.

5.4.3 Operate Interface

Input the correct User ID, Password, Server Name and Database Name, It will pop up the window of operate interface. Just like the following picture shows.

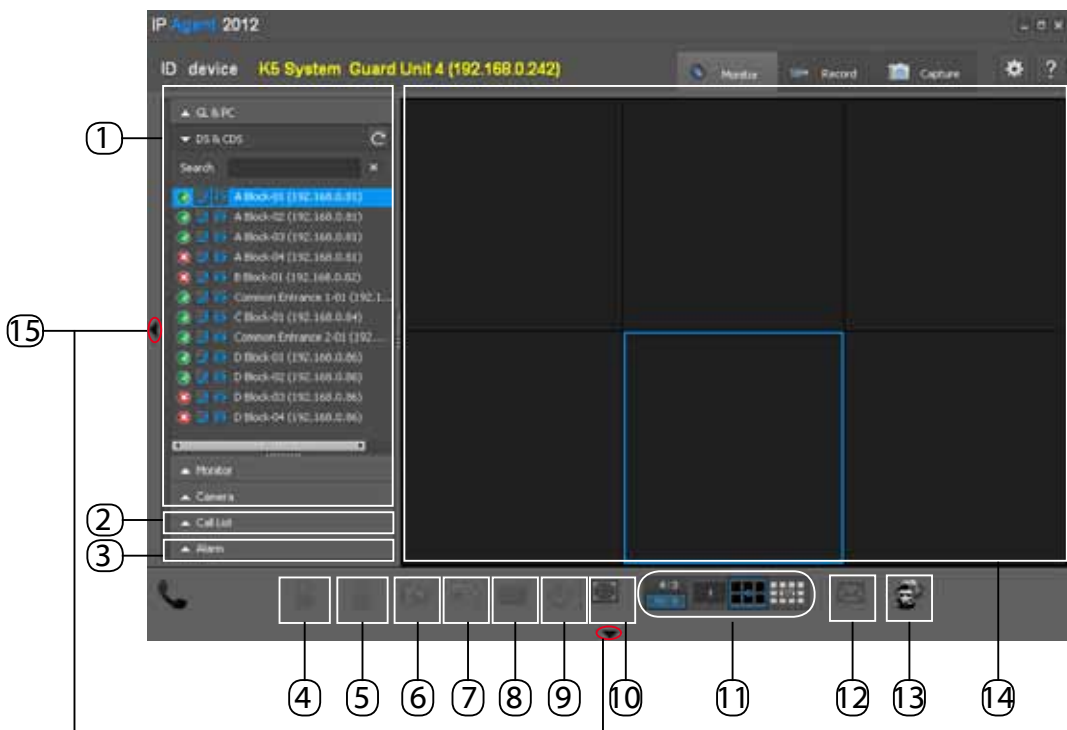


Item	Description
1. S/W Title Bar	Display the name of the software
2. ID	Shows the user ID
3. Monitor	Launches the Monitor Viewer.
4. Record	Launches the Record Viewer
5. Capture	Launches the Capture Viewer
6. Setup	Open the setup page
7. Exit	Terminates the application

5.4.4 Monitor Viewer

From the right upper corner of the IP-Agent main screen, click the [Monitor] tab.

5.4.4.1 Name & Function in Monitor Viewer



Item	Description
1. Device List	Consists of 4 parts: GL & PC, DS & CDS, Monitor & Camera
2. Call List	Call info record
3. Alarm	Alarm and events record
4. Unlock 1	Unlock the latch of the entrance
5. Unlock 2	Unlock the latch of the entrance
6. Capture	Capture a picture of the selected video window
7. Record	Performs/Stop Recording the selected video window
8. Digital Keypad	Open digital keypad for operation
9. Exit	Exit monitoring
10. Maximum	Maximize the monitoring screen
11. Aspect Ratio	Select an aspect ratio and a number of split screen
12. Message	To enter the message editing interface
13. Reserved	Reserved
14. Monitor Screen	Displays the monitor viewer screen
15. Adjust Window Button	Displays or hides the menu window
16. Video Screen	Displays monitoring video

5.4.4.2 Name & Function in Monitor Window



Item	Description
1. Monitor Time	Displays the monitor time elapsed
2. Device Name	Displays the name of the monitored device

5.4.4.3 Name & Function in Pop-up Call Window

It will pop up a calling window for video and operation when there is a calling to DS/CDS or an incoming calling from DS/CDS.









Item	Description
1. Capture	Capture a picture of the video window
2. Record	Performs/Stop recording the video window
3. Unlock 1	Unlock the latch of the entrance
4. Unlock 2	Unlock the latch of the entrance
5. Speaker Volume	Adjust speaker volume via up and down button
6. Mic Volume	Adjust mic volume via up and down button
7. Hang up	Exit the communication window
8. Maximum	Maximize the video window

5.4.4.4 Device List

Device List consists of 4 parts, including GL & PC, DS & CDS, Monitor and Camera. After device configuration operation in IP Device software, all the devices that have been configured in IP Device will show in the Device List.


Icons & Description:

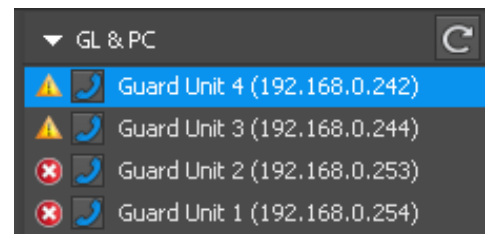
1.  : Device Online
2.  : Device Offline
3.  : PC Online, but IP-Agent is not running
4.  : Invalid Model
5.  : Call
6.  : Monitor

• **GL & PC**

GL & PC is a list of Switchboards, including Guard Station and IP-Agent. In the GL & PC frame, you can see other Switchboard status.

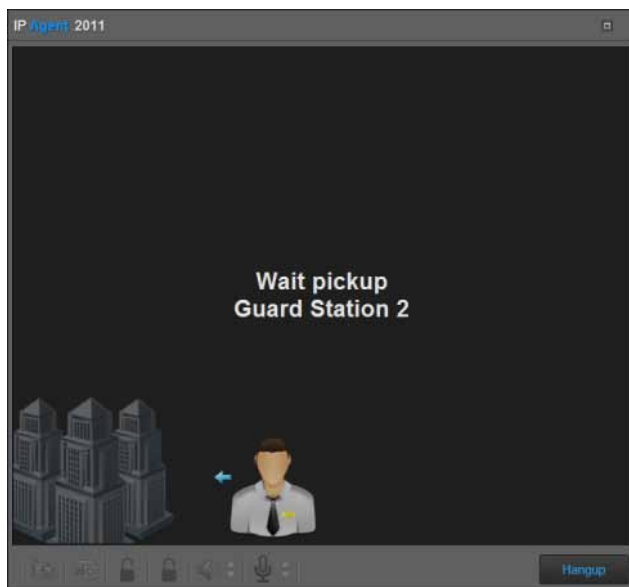
Press  button to reflash Switchboard status

Press  button to call the related Switchboard

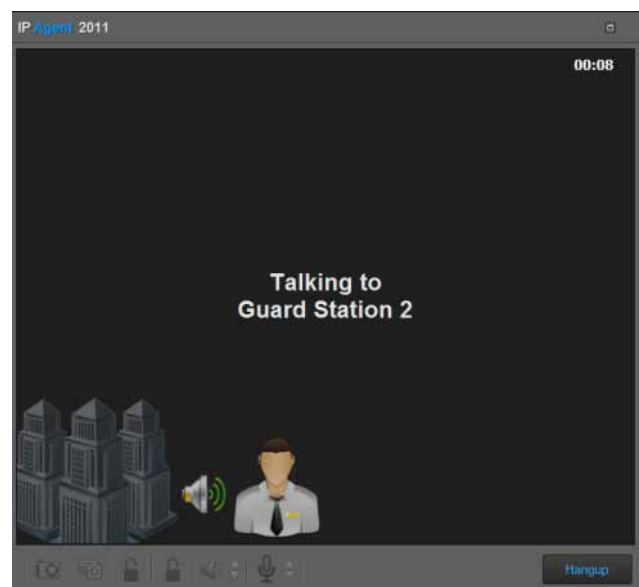


1) CALL

It will pop up a calling window when calling a Switchboard. Press **Hangup** button to exit the calling window.

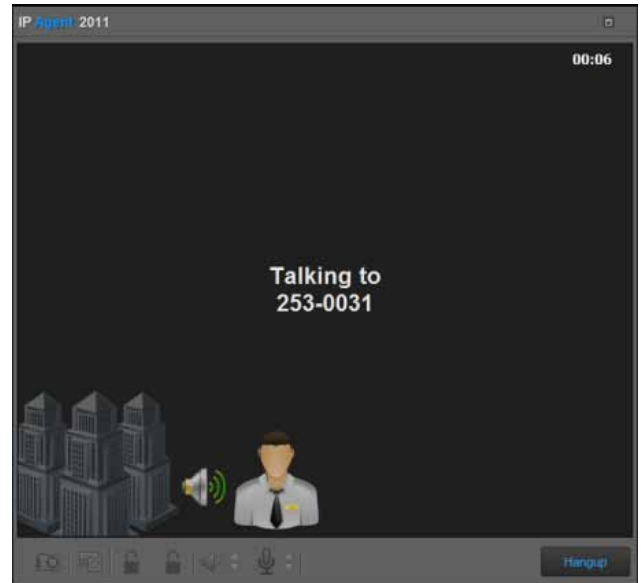
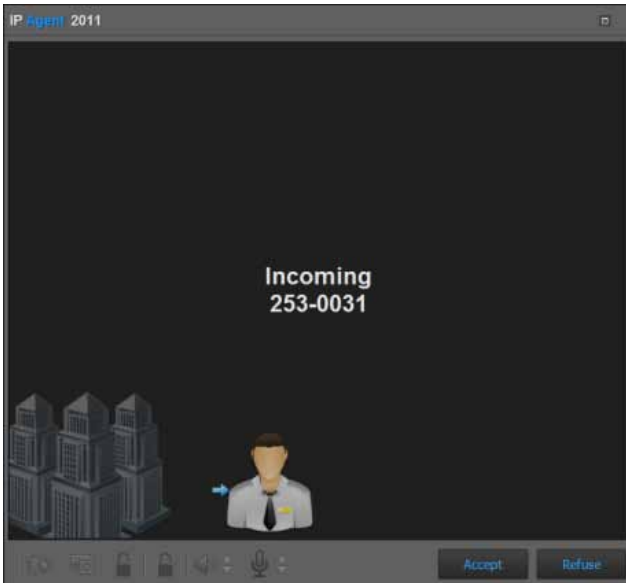


1) Call and wait for picking up



2) Talking established if the called Switchboard picks up

2) Incoming Call



1) Press Accept to enter talking status, else press Refuse to deny the calling

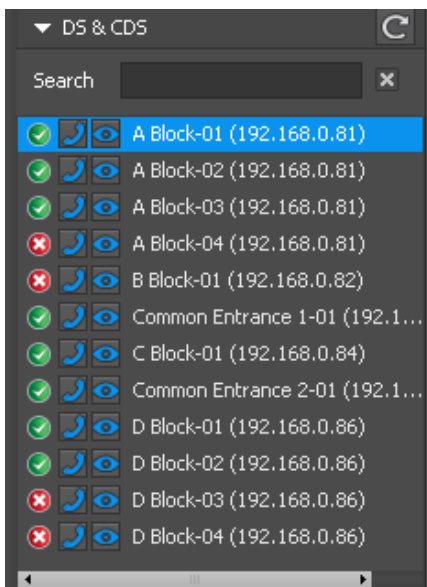
2) Talking established after accepting the calling, you can press Hand up button to end the conversation

• *DS & CDS*

All the door stations & common door stations are listed in this frame. You can input full or part of a device name to search one DS or CDS in the Search input box. You can call or monitor DS or CDS in the DS & CDS frame

1) CALL

Press button to call the related DS or CDS, then it will pop up a window for video and operation



2) Incoming Call



1) Press Accept to enter talking status, or else press Refuse to deny the calling.

2) Talking established after accept the calling, you can press Hand up button to end the conversation.


3) Monitor

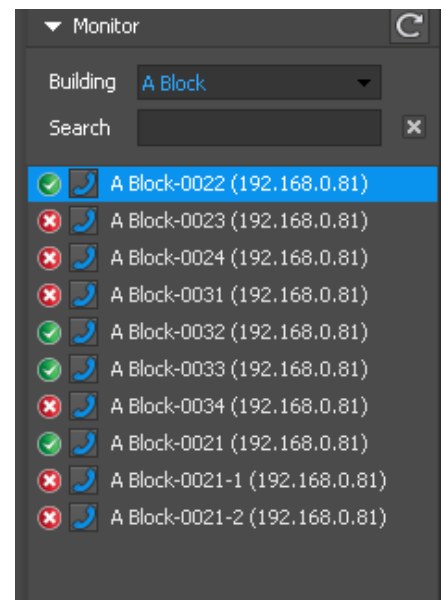
Press  button to monitor the related DS or CDS. The video will be shown in the focused monitor window.

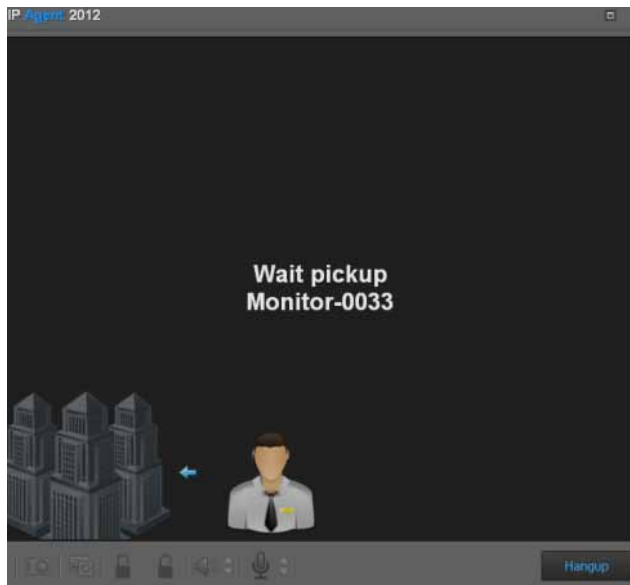
• Monitor

All the monitors of one selected building are listed in this frame. Click Building box and Select the related building, or input full or part of a monitor name in the Search input box.

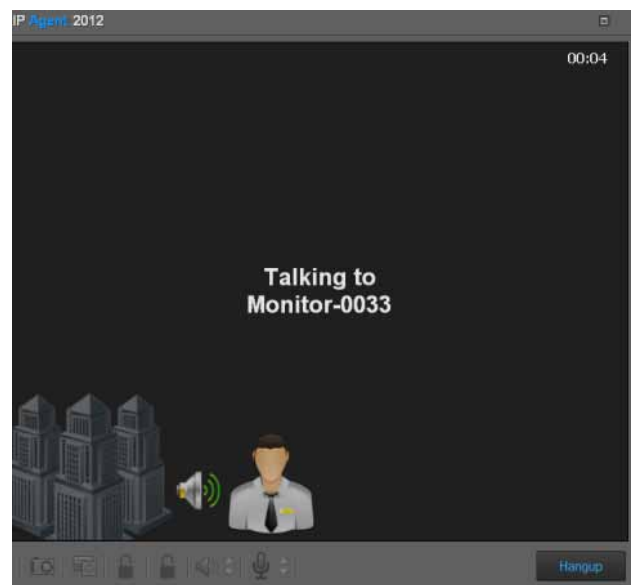
1) Call

Press  button to call the selected monitor, then it will pop up a window for calling.



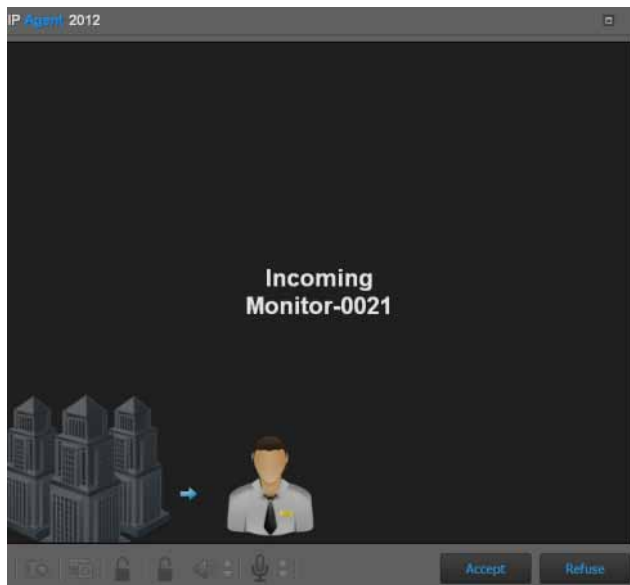


1) Call and wait for picking up

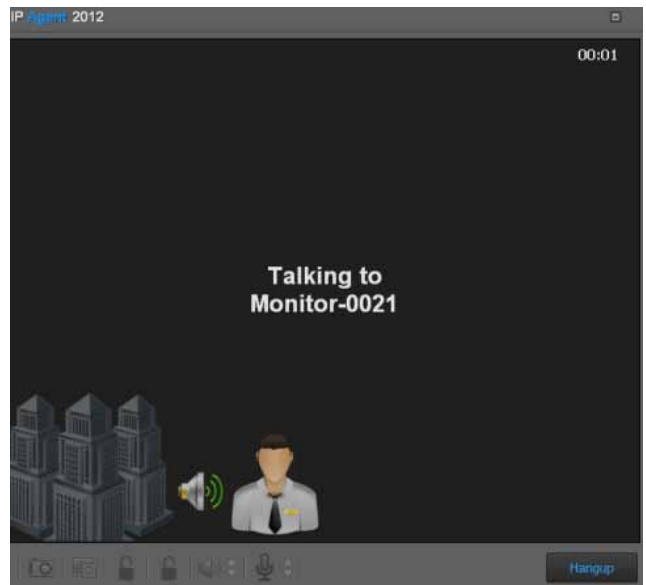


2) Talking established if the called Switch-board picks up

2) Incoming Call



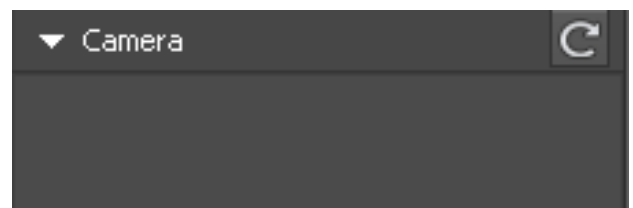
1) Press Accept to enter talking status, else press Refuse to deny the calling



2) Talking established after accept the calling, you can press Hand up button to end the conversation

• **Camera**

You can connect one camera to IP Network via CM-IPC.



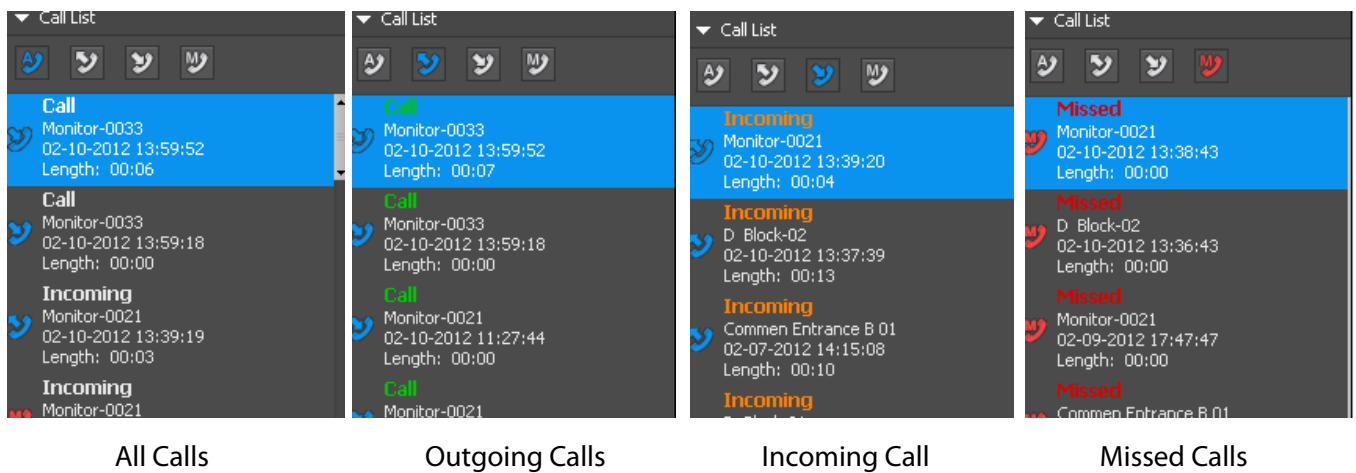
- **Call List**

Click the Call List tab to unfold the lists. Call List is a record that includes call destination/call source, date, time and length of time

Icons & Description of Sub Lists

1. (All Call): All call info including outgoing calls, incoming call, missed calls
2. (Calls): Outgoing call info
3. (Incomings): Incoming call info
4. (Missed calls): Missed call info

Double click one record to call the related destination



5.4.5 Record Viewer

From the right upper corner of the IP-Agent main screen, click the [Record] tab.

5.4.5.1 Name & Function in Record Viewer



Item	Description
1. Record List	Includes audio record, video record and talking record
2. Video Screen	Displays video/audio record
3. Record Controller	Controls record playing
4. Progress Bar	Shows the playing progress when playing record

5.4.5.2 Name & Function in The Record Window



Item	Description
1. Device Name	Displays the recorded device name
2. Record Time	Displays the time when the video/audio was recorded






5.4.5.3 Record List

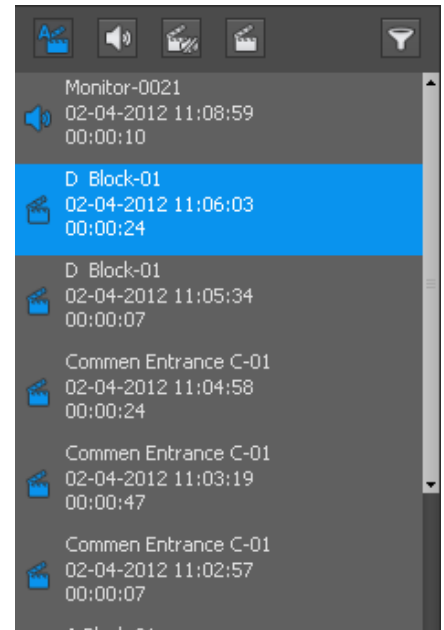
Record operation will be activated in the following cases:

- 1) Incoming calls from DS/CDS or monitor and answer the calls
- 2) Call DS/CDS or monitor and Auto Recording On Call function has been activated by setting*1
- 3) Monitor DS/CDS and Auto Recording On Monitor function has Been activated by setting*2

*1 & *2: Details refer to Setting Chapter

Icons & Description

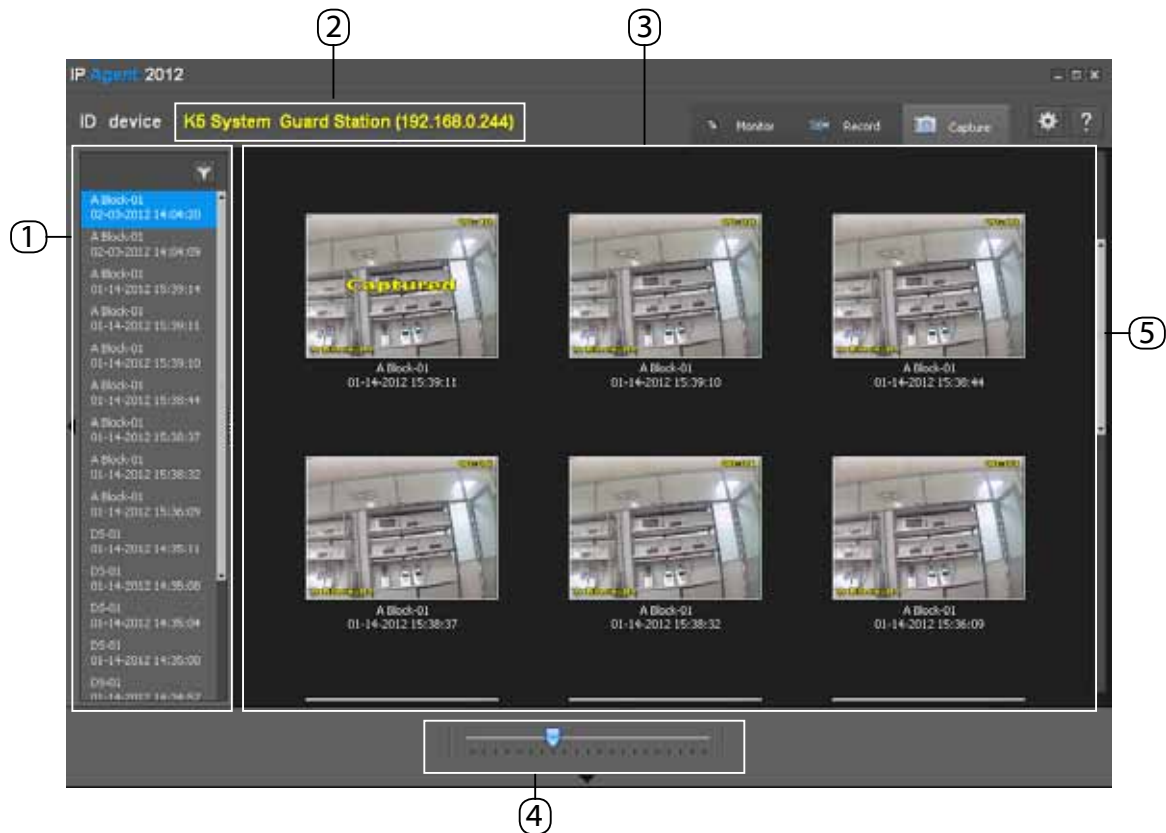
1.  (All Record): All record including audio record, video record and talk record
2.  (Audio Record): Audio record for conversation between IP-Agent and monitor (based on setting), no video.
3.  (Video Record): Video record for DS/CDS when monitoring (based on setting), no audio.
4.  (Talk Record): Talk record for conversation with video.
5.  (Record Filter): Filter record used on specific time and address.



Double click to select one record to display in the video screen. As you see, more than one record can display in the video screen simultaneously, the number of displaying videos is up to the split number of the screen.



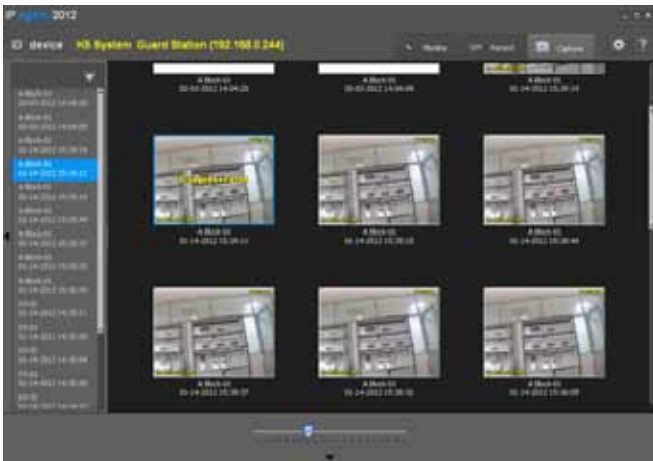
5.4.6 Capture Viewer



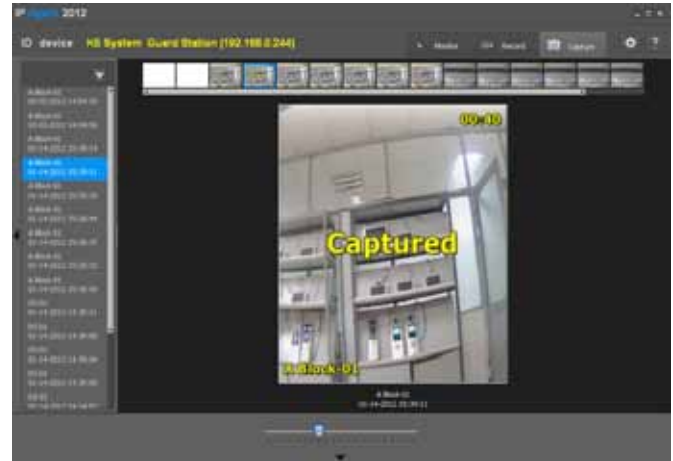
Item	Description
Captured Picture List	Click to select the specific picture
Record Filter	Filter record based on specific time and address
Video Screen	Displays captured pictures
Slide bar	Slide to adjust the number of pictures that can be viewed simultaneously in the video screen
Scroll bar	Slide to browse other pictures

TO View Big Picture

Select one picture in the captured picture list. Double click the selected picture, and then video screen will turn to **BIG PICTURE MODE** from **BROWSE MODE**




BROWSE MODE



BIG PICTURE MODE

If you want to back to BROWSE MODE, just double click on one picture in the video screen.

5.4.7 Setting

From the right upper corner of the IP-Agent main screen, click the  button to enter setting page.

5.4.7.1 General

⚙ **Setting** ✕

General
Alarm Setting
View & Layout
Handset
Security & Startup

📺 **Title OSD**
 Time Name

📡 **IP:**
 IP: Use IP camera in IM call
 Camera IP: Use IP camera in GL call

📷 **Capture**
 Capture Path:

🎞 **Record**
 Record Path:
 Auto Recording On Call Auto Recording On Monitor

🌐 **Language**
 Language:

📹 **Video**
 Video Type: Maintain the aspect ratio

⌚ **Timer**
 Max call time: s Max monitor time: s

OK
Cancel



Time: Show time in video window when monitoring or calling

Name: Show device name in video window when monitoring or calling



IP: Select the local machine address

Camera IP: Input IP Address of IP-Agent camera [CM-IPC]

Use IP Camera in IM call: Transmit video of IP-Agent camera to the called monitor

Use IP Camera in GL call: Transmit video of IP-Agent camera to the called Switchboard



Capture Path: Select a path to save all captured pictures



Record Path: Select a path to save all record documents

Auto Recording On Call: Activate auto recording when IP-Agent answers calls

Auto Recording On Monitoring: Activate auto recording when monitoring devices



Language: English or Chinese optional (Others need to be customized)



Video Type: PAL or NTSC optional

Maintain the aspect ratio: Maintain the aspect ratio or not



Max call time: To set max call waiting time

Max monitor time: To set max monitor time for monitoring

5.4.7.2 Alarm Setting

Setting

General **Alarm Setting** View & Layout Handset Security & Startup

Region Name

Region 1 Name Region 2 Name
 Region 3 Name Region 4 Name
 Region 5 Name Region 6 Name
 Region 7 Name Region 8 Name

Tip Event

Call guard unit Emergency Call
 Defense at home Defense out of home
 Threatened undefense Undefense
 Region 1 Name Region 2 Name
 Region 3 Name Region 4 Name
 Region 5 Name Region 6 Name
 Region 7 Name Region 8 Name

Alarm Sound and Tip

Auto show tip window
 Alarm Sound File ...
 Play time
 Ignore time

Region Name

Each of the 8 alarm regions can be set to its name. And when alarm trigger, the IP-Agent will show the name of the region.

Tip Event

Call guard unit: Door Station or Monitor or other switchboards call the switchboard

Emergency Call: Monitor calls guard unit in emergency

Defense out of home: Signal will be sent to Switchboard when customers activate defense function

Undefense: Signal will be sent to Switchboard when customers deactivate defense function

Region X Name: Switchboard will display the alarm signal of the regions selected

Alarm Sound and Tip

Auto show tip window: A window will come up when there is event coming to the switchboard

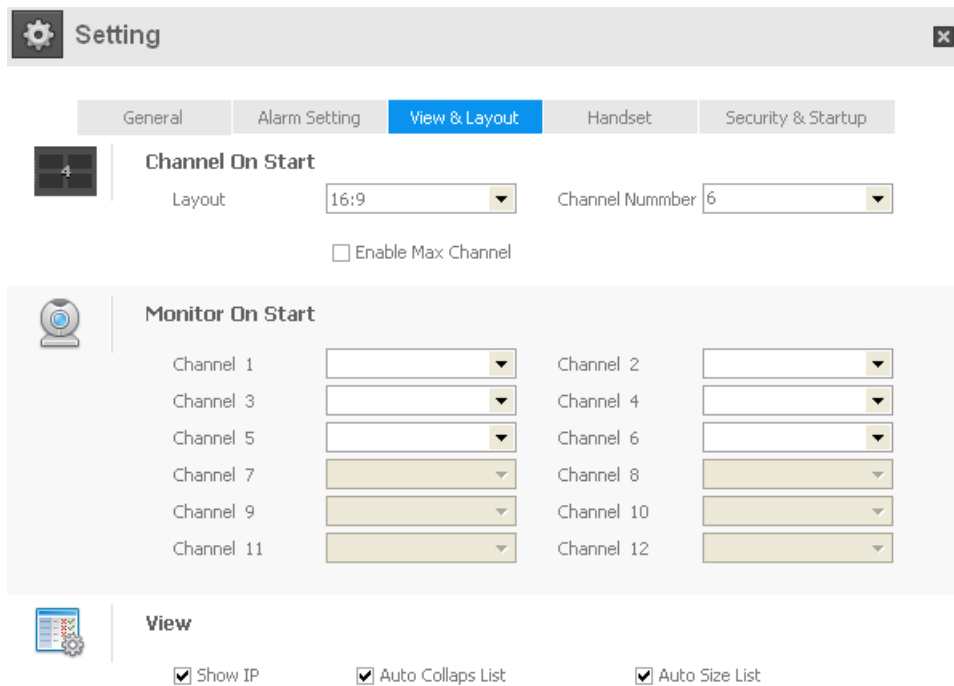
Alarm Sound: The sound for alarm

File: The path of the alarm sound.

Play time: how many times the alarm sound is played

Ignore Time: A certain period of time after which the alarm tip/window will be disabled when there is no answer on the PC.

5.4.7.3 View & Layout



Channel On Start :

Layout: To set initial aspect ratio for video screen when IP-Agent gets start

Channel Number: To set initial channel number for video screen when IP-Agent gets start

Enable Max Channel: Deselect the option to disable 9 and 12 channel selection in the main frame.

 **Monitor On Start:** To select specific DS/CDS to monitor automatically when IP-Agent starts.

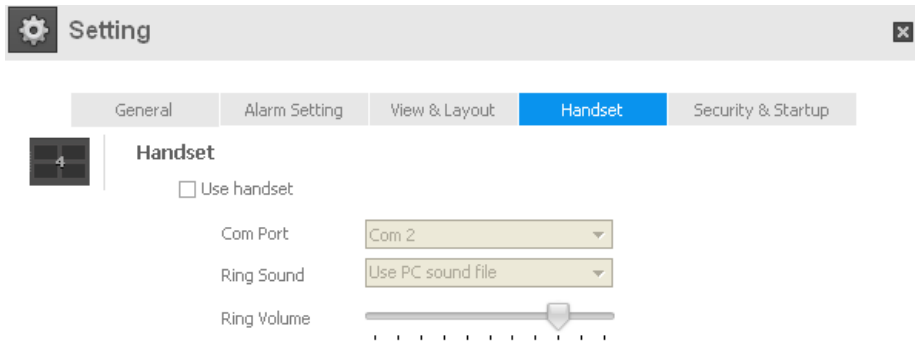
 **View:** Device list display setting

Show IP: Deselect the option to hide IP address of devices

Auto Collapse List: To set display format of device list, call list & alarm list. You can unfold more than one list in the frame if deselecting the option. If not, you just can unfold only one list, the previous unfolded list will be folded automatically if you unfold a new list.

Auto Size List: It is available only when Auto Collapse List is activated . If select Auto Collapse List & then select the option, list will be unfolded to max size.

5.4.7.4 Handset



Handset: Add one handset to IP-Agent

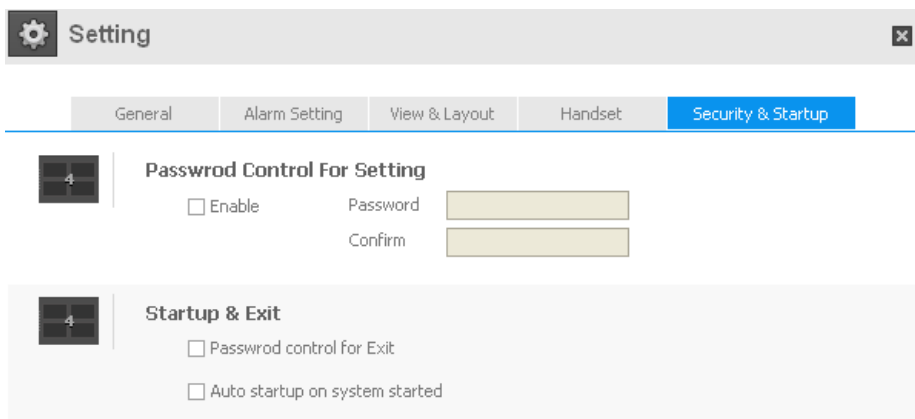
Use handset: Enable a handset

Com Port: Select related com port for the connected handset

Ring Sound: Select a Ring Tone for handset

Ring Volume: Adjust Ring Volume for handset

5.4.7.5 Security & Startup



Password Control For Setting

Select the Enable item, input the password and confirm it. If you want to change the setting, you must input the correct password.

Startup & Exit

Password control for exit: If you want to exit the system, you must input the correct password.

Auto startup on system started: Set to run when Windows starts

§ 5.5 IP Access 2012


5.5.1 Introduction

IP Access 2012 is responsible for the maintenance and management of access control system to the whole management software, which can add access controller (C5-IPC), add/delete cards, back up and restore cards information, also check the pass record.

Operating tools: Access controller gets card information Via Door Station and RFID link USB.

5.5.2 Login

1) Start the IP Access 2012 Software

On your desktop, click  icon that has been created automatically. IP Access gets started. A window will pop up for login .



2) Log in IP Access 2012

To Access IP Access 2012, you must log in with a registered account at first

a) Provide the user ID and password

Default ID: device

Default Password: 123456

b) Provide the Server name and Database Name

Server name: machine name + '\K2012'

Database Name: K2012

- The default password can be exposed to a hacking thread so it is recommended to change the password by IP-Admin software after installing the product. Otherwise the users are responsible for any information leak.

- The following are two examples of login failure; you will see the error messages if input wrong information.



Input incorrect ID or Password



Input incorrect Server Name or Database Name

3) When successfully login the system



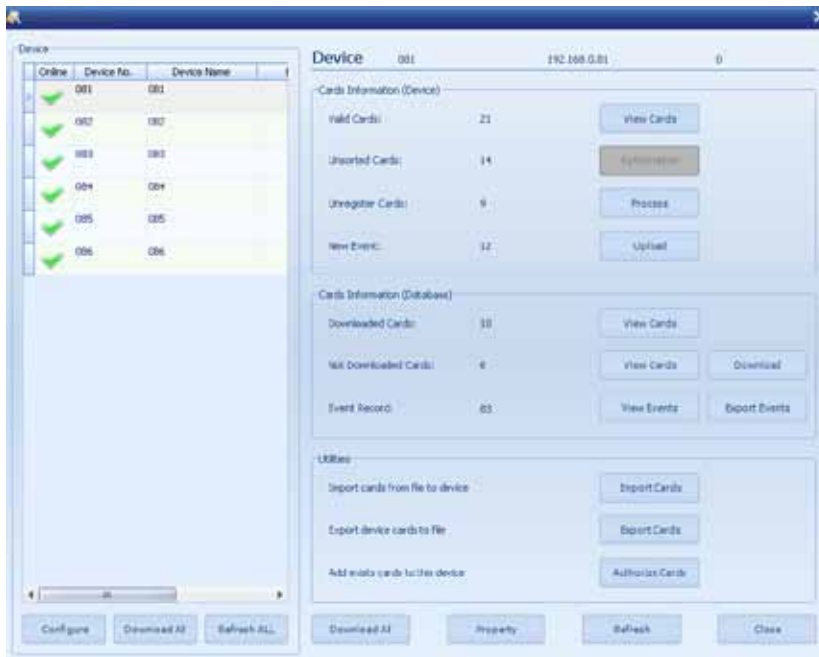
File: Include Card Type, Change Password, Change Account and Exit.

Language: Include English and Chinese.

Help: Include Content and About.

5.5.3 Access Device Console

Click on Access Device Console into setting interface, just like the following picture shows



5.5.3.1 Cards information (Device)

Valid Cards: Cards those have been added to the C5-IPC and are able to open the door

Unregister Cards: Cards added via door station directly, but PC doesn't have these cards info. Click Process button to add these cards info to database in PC.

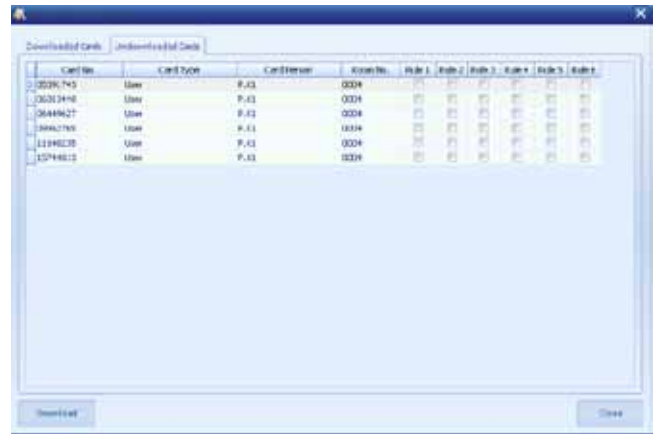
New Event: The number of new records of card access. Click Upload to upload new events to PC.

5.5.3.2 Card Information (Database)

Downloaded Cards: Cards downloaded in device by PC. Click view card to view all the downloaded card info of the selected device.



Not Downloaded Cards: Cards that have been inputted into database in PC but haven't been downloaded to the related device.



Event Record: Card access record that has been saved in PC.

Click on View Events to view card access records that include card number, access time, related room number and whether pass granted or not.



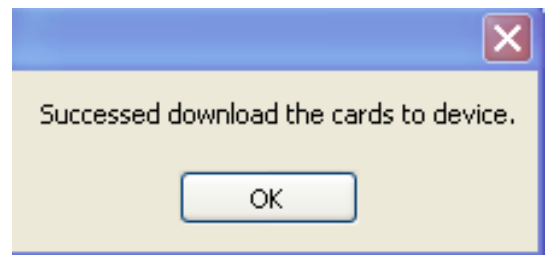
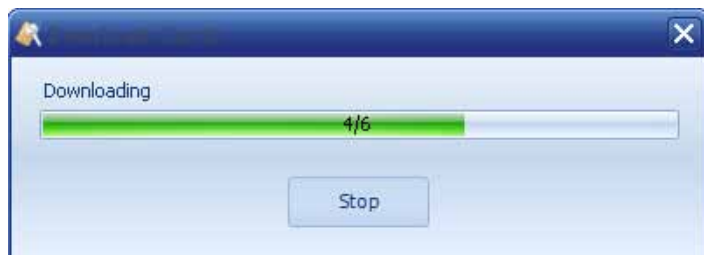
5.5.3.3 Utilities

Import cards from file to device: Click Import Cards to import a backup file suffixed by CDF to the related device.

Export device cards to file: Click Export Cards to export card info in device to a CDF file for backup.

Add exists cards to this device: Click Authorize Cards to select cards that exist in the database, and then download them to the related device.

Download All: Download all the related cards to the device.



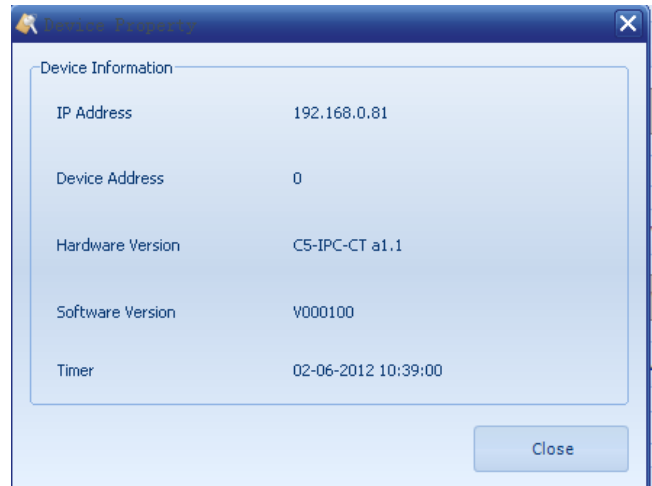
Property: The device information, include device address, hardware versions, software version and timer. Just like the following picture shows

Refresh: Refresh all the info in this page.

Download All: Download all the cards in the database to their related device respectively

Refresh all: Refresh all devices to check if it's online

Close: Exits current window

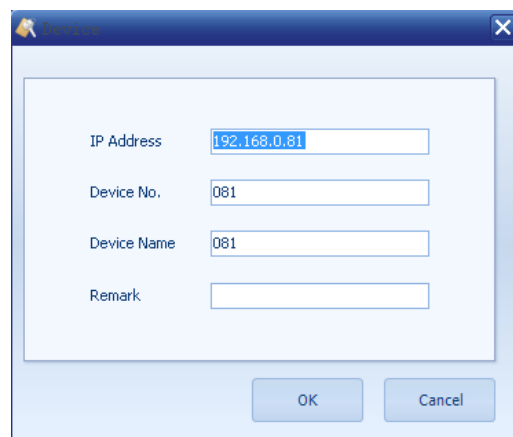
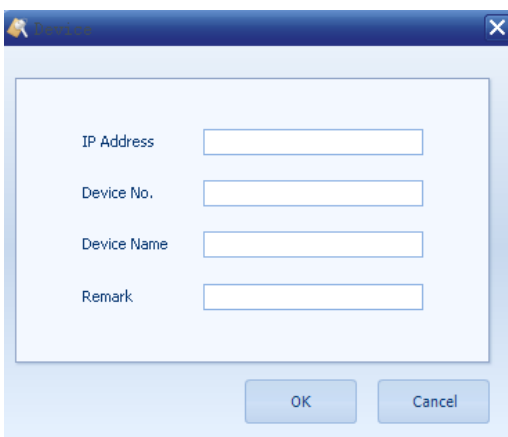


5.5.3.4 Configure

Click on Configure, It will pop up a window of the Device Management, Just like the following picture shows:



1. **New:** Add a new device. Input IP Address, Device No., Device Name and Remark, then click OK.

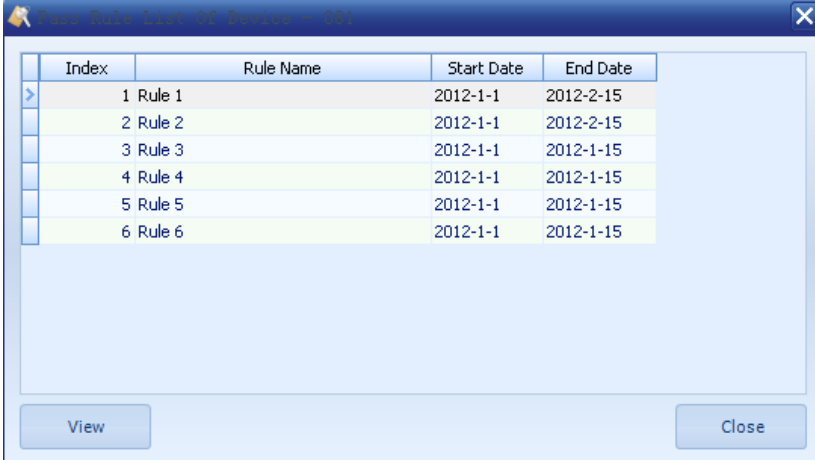


2. **Edit:** Modify the device information

3. **Delete:** Delete device

4. **Format:** All the information in the device will be deleted

5. **Set clock:** Synchronize the device time by PC time
6. **Set pass rule:** Set pass rule for device.(Retails refer to setting rule section)
7. **View Pass Rule:** View the pass rule in the device



Index	Rule Name	Start Date	End Date
1	Rule 1	2012-1-1	2012-2-15
2	Rule 2	2012-1-1	2012-2-15
3	Rule 3	2012-1-1	2012-1-15
4	Rule 4	2012-1-1	2012-1-15
5	Rule 5	2012-1-1	2012-1-15
6	Rule 6	2012-1-1	2012-1-15

Buttons: View, Close



Sunday Monday Tuesday Wednesday Thursday Friday Saturday

Holiday

Time 1 00:00:00 - 00:00:00

Time 2 00:00:00 - 00:00:00

Time 3 00:00:00 - 00:00:00

Time 4 00:00:00 - 00:00:00

Time 5 00:00:00 - 00:00:00

Time 6 00:00:00 - 00:00:00

Close

8. **Search:** Search all the devices to check if it's online
9. **Set Clock All:** Synchronize time of all devices by PC time
10. **Set Pass Rule All:** Set Pass Rule for all devices
11. **Check online all:** Check all devices if it's online
12. **Report:** Display all the device information, including whether online, device name, Device number, and IP address
13. **Refresh All Online:** Check all devices if it's online
14. **Close:** Exit device configuration window

5.5.4 Card Console

Click **Card Console** into setting interface, just like the following picture shows.



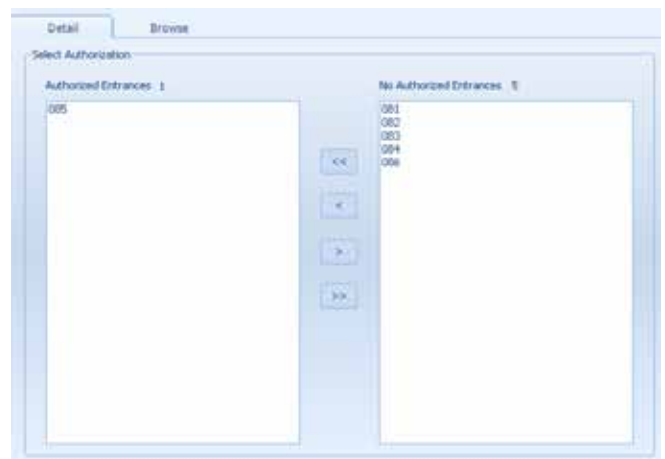
5.5.4.1 Browse

Display all card information in detail, including the card No, Remark, Card Person, Card type, room No, whether downloaded or not, and added time and operator.

Click Detail tab, just like the right picture shows:

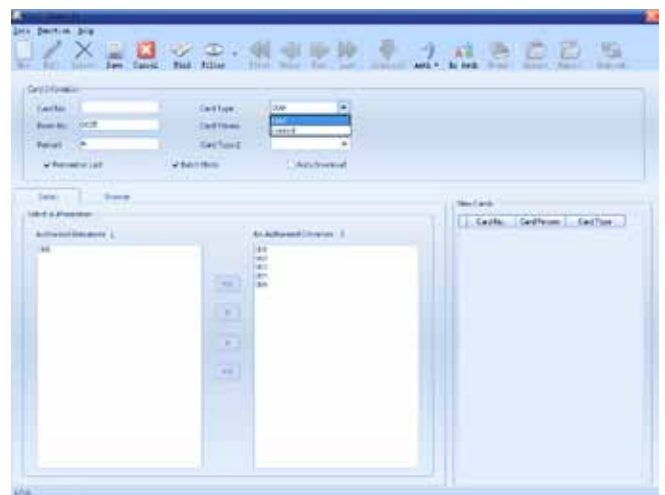
Authorized Entrance: All the C5-IPC that are authorized to be associated with the selected card

No Authorized Entrances: All the C5-IPC that have nothing to do with the selected card



5.5.4.2 Toolbar

Click New, select the target devices in the No Authorized Entrances frame, and double click the targets to move them to Authorized Entrance frame. If the target devices have been in the Authorized Entrance frame, just go to next step.



Fill the text boxes with card info in the Card Information frame.

Card NO: Two methods:

- 1) Inputted Card NO by keyboard manually
- 2) Filled automatically by swiping the card over card reader(USB card reader)

Room No: Input the related room

Remark: Remark info for card

Card type: Choose the type of card (User/control)

Remember Last: Enable keeping all the card info of last card except card NO

Batch Mode: Enable batch adding for cards

Auto Download: Enable auto-download. If a new card is saved, it will be automatically downloaded to the device.

If the card is control card, one at least one pass rule must be chosen. There are totally 6 pass rules available

After adding new cards, new cards will be shown in the New Cards frame. Select one card in the New Cards frame, you can edit or delete it.

Edit: Modify the selected card

Delete: Delete the selected card

Save: Save card to database in PC

Cancel: Cancel the current operation

Find, Filter: To find a card quickly
Click **Find** item, It will pop up a window, just like the right picture shows:





Select its Field, there are some options to choose, and choose the Room No as an example, input 0004 in Value text box, click OK, then card info window will pop up if found.

Card No.	Remark	Card Person	Card Type	Room No.	Downloaded
00047700	A	P.K	User	0003	<input checked="" type="checkbox"/>
00049086	A	P	User	0005	<input checked="" type="checkbox"/>
00051450	A	P.K	User	0003	<input checked="" type="checkbox"/>
00051681	A	P	User	0005	<input checked="" type="checkbox"/>
00064171	A	P.K	User	0003	<input checked="" type="checkbox"/>
05981749	A	P.K	User	0004	<input checked="" type="checkbox"/>
05987972	A	P.K	User	0005	<input checked="" type="checkbox"/>

Click **Filter** item, It will pop up a window, just like the right picture shows.

Record Count: Choose the max number of the card.

Saved Filters: Save the filters for quick start next time.

-  Create a new filter
-  Edit the selected filter
-  Delete the selected filter
-  Save filter info

Field Name: include all the info of cards.

Operator: Limiting condition for searching
 = target info must be identical to Filter Value exactly

<> target info is not equal to Filter Value

< target info is less than Filter Value

> target info is greater than Filter Value

<= target info is less than or equal to Filter Value

>= target info is greater than or equal to Filter Value

like target info is part of or equal to Filter Value

Filter Value: Input the number.

Click these 4 buttons can view cards in Browse tab

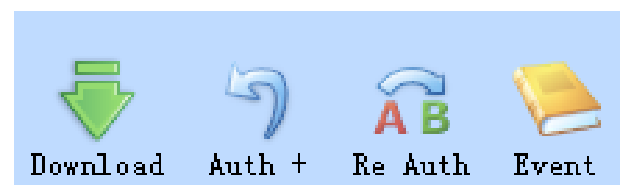
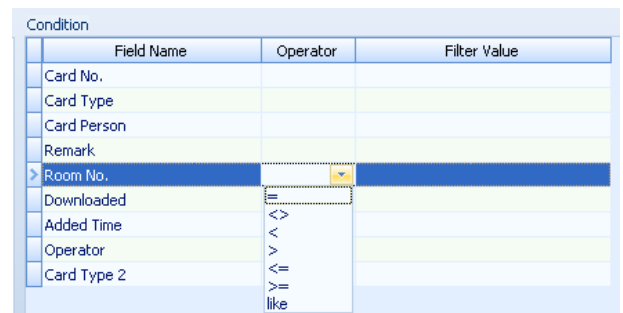
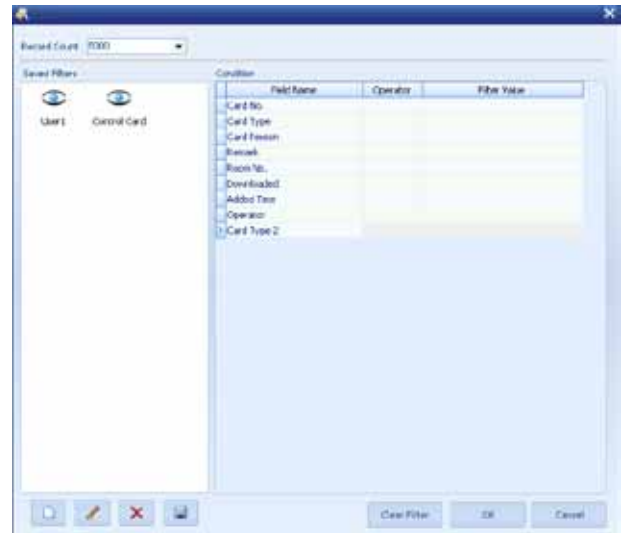
First: Jump to the first card

Prior: Jump to the prior card

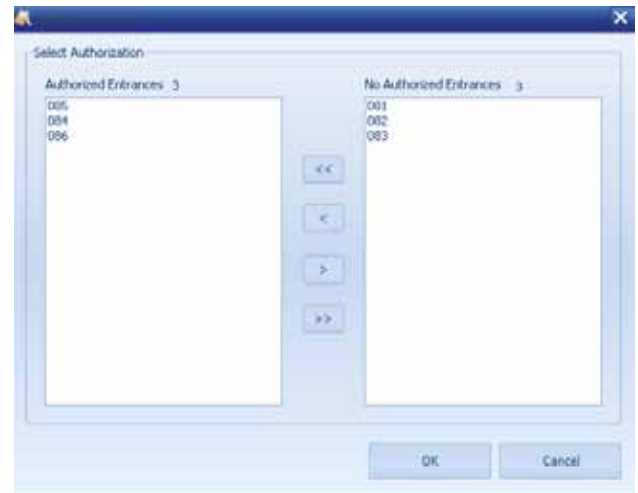
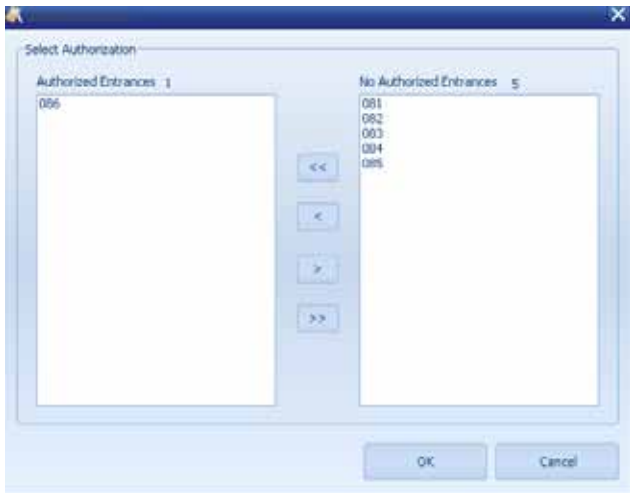
Next: Jump to the next card

Last: Jump to the last card

Download: Download the cards to device



Auth +: Add the selected card to other authorized C5-IPC



Re Auth: The selected card will be diverted to other authorized entrances. And the card info will be deleted in the original entrances automatically

Event: Access records of cards

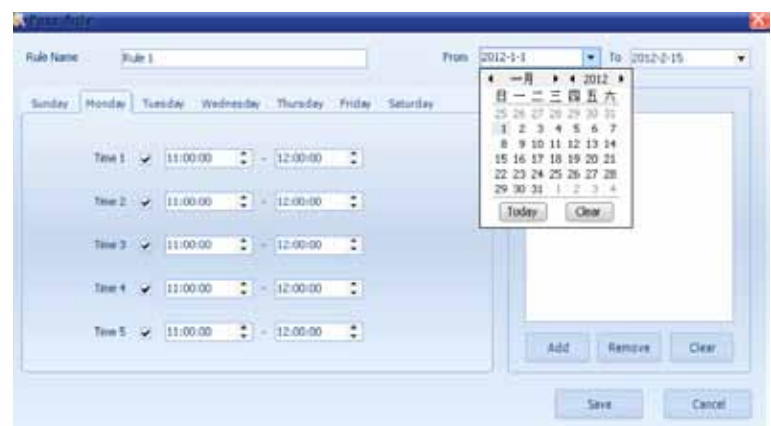
5.5.5 Pass Rule

Pass Rule can be useful for real estate management. Pass rule is valid only with control card which is designed for management stuff of a residential area. The control card takes effect only during the time set via the pass rule, and any time else it can not open the door. Click **Pass Rule** into setting interface, just like the following picture shows.



Select one of pass rule, such as Rule 1, Click **Edit**, the following picture shows.

Select the date, such as from 1/1/2012 to 2/15/2012, click Monday tab, and then set access time for Rule 1, up to 5 periods are for setting, just like the following picture shows. If you want to set the holiday pass time, click Add to choose time, click Remove to delete the selected date time, click **Clear** to delete all the date time.



Click Save, set Rule 1 success. Rule 2 ~ Rule 6 settings refers to above-mentioned operation.

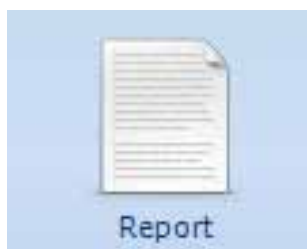
If you want to download the rules to all devices, click Download to all devices button

If you want to download the rules to one specified device, setting method refers to Access device configuration->device management->(Set Clock/Set Pass Rule)

Click Close exits current setting window

5.5.6 Report

Click on Report, enter Report interface, just like the following picture. The page shows all the devices

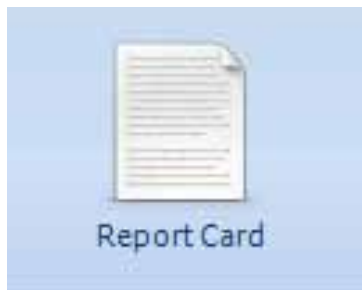


Report Device							
Total Count 6							
	Online	Device No.	Device Name	IP Address	Remark	Software Version	Hardware Version
<input checked="" type="checkbox"/>	001	001		192.168.0.01			
<input checked="" type="checkbox"/>	002	002		192.168.0.02			
<input checked="" type="checkbox"/>	003	003		192.168.0.03			
<input checked="" type="checkbox"/>	004	004		192.168.0.04			
<input checked="" type="checkbox"/>	005	005		192.168.0.05			
<input checked="" type="checkbox"/>	006	006		192.168.0.06			

Click Print button to print report, click on Export to export a report document.

5.5.7 Report Card

Click Report Card, Enter Report Card interface, Click Query to show all the CARDS, just like the following picture shows.



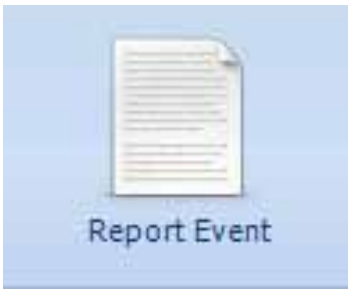
Report Cards													
Device	ALL Device	Card Type	ALL card type	Remark	Room No.	Rule 1	Rule 2	Rule 3	Rule 4	Rule 5	Rule 6	Downloaded	Added Time
Card No.	Card Type	Card Person	Remark	Room No.	Rule 1	Rule 2	Rule 3	Rule 4	Rule 5	Rule 6	Downloaded	Added Time	
06571536	User	P.K		0001	01	01	01	01	01	01	01	2/9/2012 10:18:32 AM	
07944450	User	P.K		0001	01	01	01	01	01	01	01	2/9/2012 10:18:37 AM	
00051450	User	P.K		0001	01	01	01	01	01	01	01	2/9/2012 10:18:26 AM	
15751434	User	P.K		0001	01	01	01	01	01	01	01	2/9/2012 10:18:29 AM	
07943248	User	P.K		0001	01	01	01	01	01	01	01	2/9/2012 10:18:41 AM	
11432464	User	P.K		0001	01	01	01	01	01	01	01	2/9/2012 10:18:45 AM	
07921275	User	P.K		0001	01	01	01	01	01	01	01	2/9/2012 10:18:47 AM	
11432344	User	P.K		0001	01	01	01	01	01	01	01	2/9/2012 10:18:50 AM	

Of course, you can query the cards under some limiting conditions that includes Device, Room No, Card Person, Card Type, Remark and Added Date.

Click Print to print report card, click Export to export a report document.

5.5.8 Report Event

Click Report Event, enter Report Event interface, select some limiting condition that includes Start Date, End Date, Device, Card Type, Card No and Pass Type, then click Query to search all pass records, just like the following picture shows.



The screenshot shows a software window titled "Report Event" with a search and filter interface. It includes dropdown menus for "Start Date" (2012-2-1), "End Date" (2012-2-8), "Device" (ALL device), "Card Type" (ALL card type), "Card No.", and "Pass Type" (All). There are buttons for "Query", "Print", "Export", and "Close". Below the filters is a data table with the following columns: Time, Card No., Card Type 2, Card Person, Remark, Card Type, Device Name, and Room No.

Time	Card No.	Card Type 2	Card Person	Remark	Card Type	Device Name	Room No.
2012-2-3 9:59:00	11621487			User	004		0002
2012-2-3 10:02:00	10636150			Control	004		9901
2012-2-3 10:06:00	08567223			Control	004		9901
2012-2-3 10:07:00	08567223			Control	004		9901
2012-2-3 10:16:00	08567223			Control	004		9901
2012-2-3 10:17:00	08567223			Control	004		9901
2012-2-3 10:18:00	08567223			Control	004		9901
2012-2-3 10:20:00	08567223			Control	004		9901

Click Print to print report card, click Export to export a report document.

