MICRON VIDEO INTERCOM
USER MANUAL

☐   MTS

☐   MTSCT

micron

- Thank you for purchasing our products.
- Please carefully read this User's Guide(in particular, precautions for safety) before using a product and follow instructions to use a product exactly.
- The company is not responsible for any safety accidents caused by abnormal operation of the product.

Index

Version 1.1

Warning and caution

◎ Make sure to follow the instructions to prevent any danger or property losses.

⚠ **Warning**
  Death or serious injury is expected.
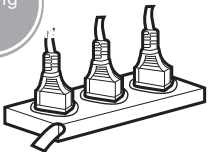
🚫 It indicates prohibition.

🔧 It indicates disassembly.

✋ It indicates prohibition of contact.
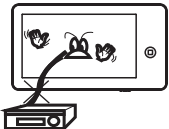
❗ It indicates dos and don'ts.

🔌 It indicates that the plug should be pulled out from the socket.

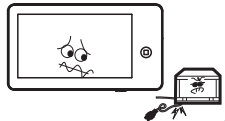**warning**

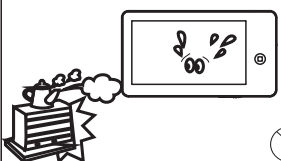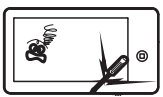|		
NO	**NO**	**NO**
Do not put the plug in the socket simultaneously. It may generate abnormal heat or cause a fire.	Do not connect to other products while in use. It may cause breakdown.	Do not forcibly bend the cord or put a heavy object on the product. It may cause a fire.
NO	**NO**	**NO**
Do not use water, thinner or a detergent used to wash oil products when you wash the exterior. Make sure to wash it by using a dry cloth to prevent any breakdown or electric shock.	Do not install the product in a humid place. It may cause an electric shock or a fire.	Do not forcibly pull out the cord from the socket. If the cord is damaged, it may cause a fire or an electric shock.
✋	🔧	❗
Do not put the plug in the socket with a wet hand. It may cause an electric shock.	Do not disassemble, repair or modify the product. It may cause a fire, an electric shock or an injury due to malfunction of the product.	Do not use AC circuit breaker. It may cause an electric shock.

A injury or property losses are expected.

It indicates prohibition.

It indicates disassembly.

It indicates prohibition of contact.
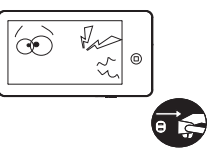
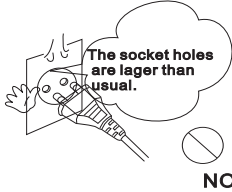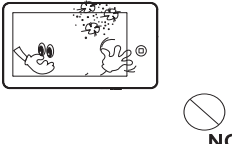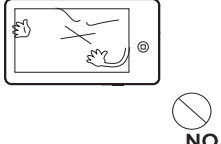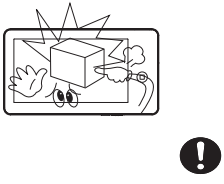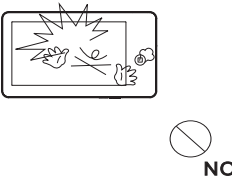It indicates dos and don'ts.

It indicates that the plug should be pulled out from the socket.

CAUTION

The socket holes are lager than usual.

NO

If the socket holes are larger than normal, do not put the plug.
It may cause an electric shock or a fire.

NO

Make sure that dust or foreign substances are not gathered on the product.

NO

Make sure to prevent foreign substances from entering the product.
It may cause a breakdown.

Do not put a heavy object on the product.
It may cause a breakdown.

NO

Do not disassemble the product.

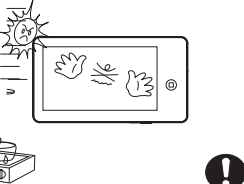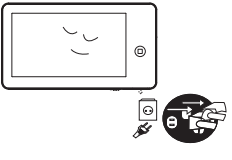**Avoid direct rays of the sun or heating devices at a time of installation.**

Install the product in a flat and stable place.
Otherwise, it may not function properly.

Pull the plug if the product is not used for a long time.

If the product generates strange sound, make sure to pull the plug immediately and contact Commax service center.

The function and name of each part
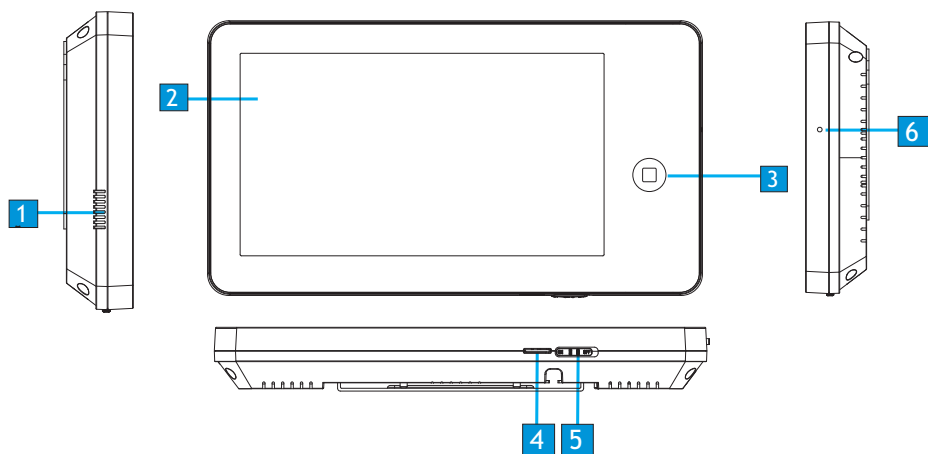
| No.	Item	Function description
1	Speaker	
2	LCD	
3	Home key	Enter system main menu
4	TF card slot	For inserting TF card
5	Switch	Power on／off
6	Microphone	

Features and main function

1.Features

- 7" color digital LCD
- Touch screen
- Hands free design, perfect intercom with clear voice
- Surface-mounted
- 4 -wire connection
- Simple operation

2.Main function

- Lock control
- Support TF card
- ″Don't disturb″ function
- Broadcast function
- Monitor listening
- Auto leaving message
- Video & audio recording
- Picture taking with internal flash or TF card
- Multimedia function: photo frame, music playing
- Brightness, contrast and color adjustable
- Alarm clock and calendar
- Real-time monitoring to doorbell or CCTV camera
- Make internal call to other monitors
- Call transfer (Only available for the model with telephone module)

Package contents
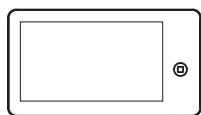
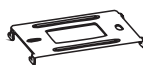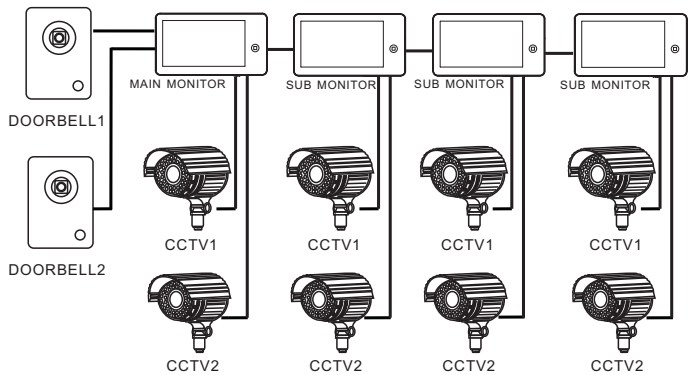|				
Monitor	User manual	Wall bracket	2*Expansion bolt	Desiccant
Adapter	2*M4*20 fixing screws	2x5 pin connector (red/blue/yellow/ white/brown)	4 pin connector (red/blue/yellow/ white)	4 pin connector (white/blue/ white/blue)

System layout

1.The port 2 connect doorbell panel

The system can maximum support 1 main monitor, 3 sub monitors, 2 door panels and 8 CCTV cameras.
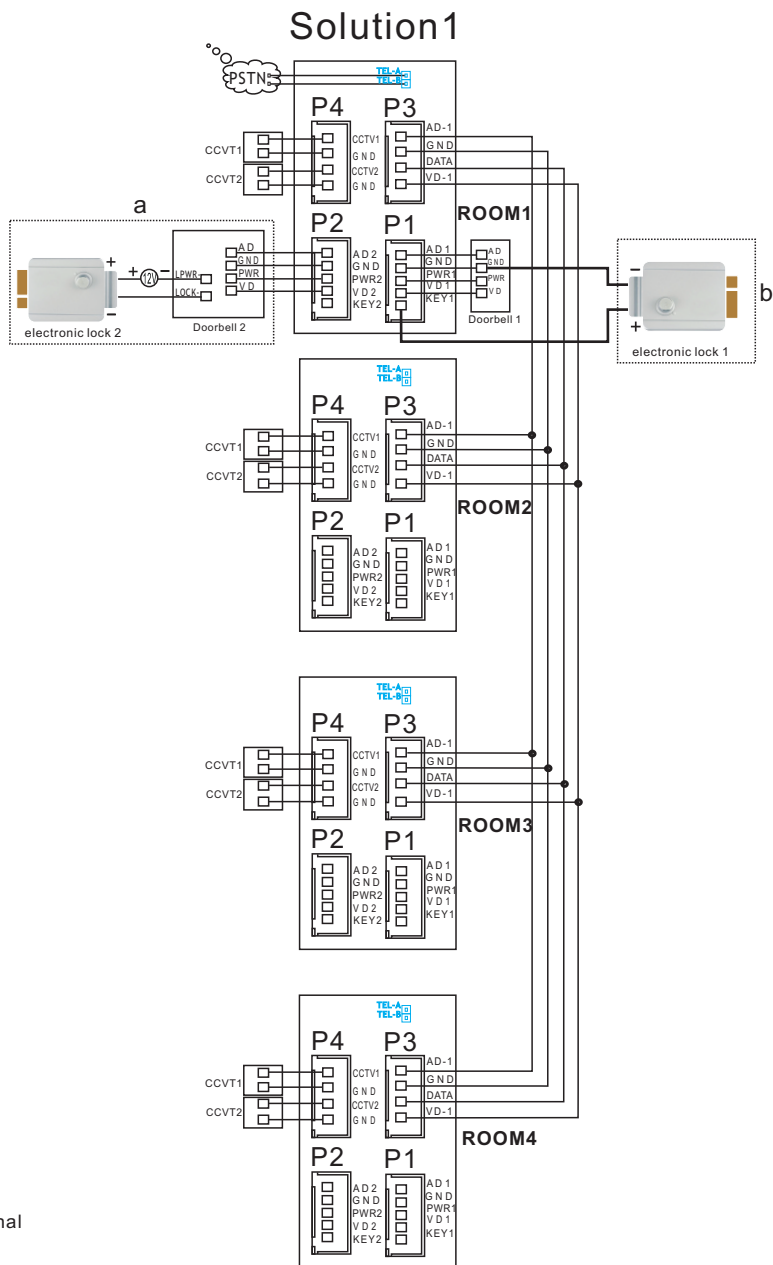

2.The port 2 connect the CCTV camera

The system can maximum support 1 main monitor , 1 door panels, 9 CCTV cameras and 3 sub monitors .
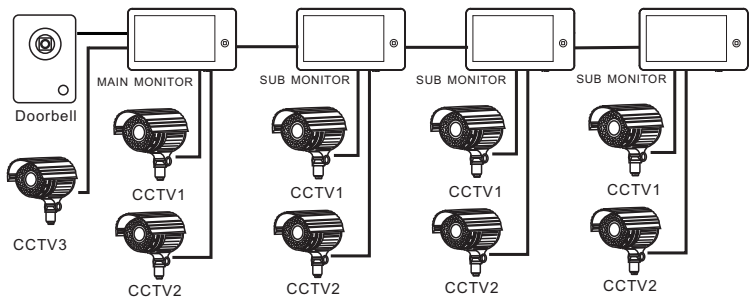
Note: Based on the actual usage ,please refer to P23 set the port state.

Wiring diagram

Solution1

PSTN

TEL-A
TEL-B

P4 **P3**

CCVT1
CCVT2

CCTV1
G N D
CCTV2
G N D

AD-1
G N D
DATA
VD-1

ROOM1

a

P2 **P1**

electronic lock 2

LPWR
LOCK-

A D
G N D
PWR
V D

Doorbell 2

AD 2
G N D
PWR2
V D 2
KEY2

AD 1
G N D
PWR1
V D 1
KEY1

A D
G N D
PWR
V D

Doorbell 1

electronic lock 1

b

TEL-A
TEL-B

P4 **P3**

CCVT1
CCVT2

CCTV1
G N D
CCTV2
G N D

AD-1
G N D
DATA
VD-1

ROOM2

P2 **P1**

AD 2
G N D
PWR2
V D 2
KEY2

AD 1
G N D
PWR1
V D 1
KEY1

TEL-A
TEL-B

P4 **P3**

CCVT1
CCVT2

CCTV1
G N D
CCTV2
G N D

AD-1
G N D
DATA
VD-1

ROOM3

P2 **P1**

AD 2
G N D
PWR2
V D 2
KEY2

AD 1
G N D
PWR1
V D 1
KEY1

TEL-A
TEL-B

P4 **P3**

CCVT1
CCVT2

CCTV1
G N D
CCTV2
G N D

AD-1
G N D
DATA
VD-1

ROOM4

P2 **P1**

AD 2
G N D
PWR2
V D 2
KEY2

AD 1
G N D
PWR1
V D 1
KEY1

AD:Audio
VD:Video
PWR:Power
GND:Ground
KEY1/2:Unlock signal

Note: (a)Door panel unlock wiring: electronic lock 2+external power supply.
(b)Indoor monitor unlock wiring: electronic 1+bold black cable part.
(c)The terminal of TEL-A/B is only available for the model with
telephone module(MTSCT).

Wiring diagram

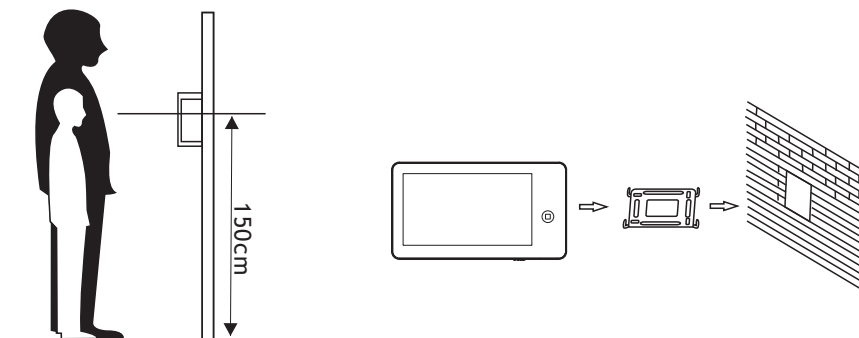## Solution2
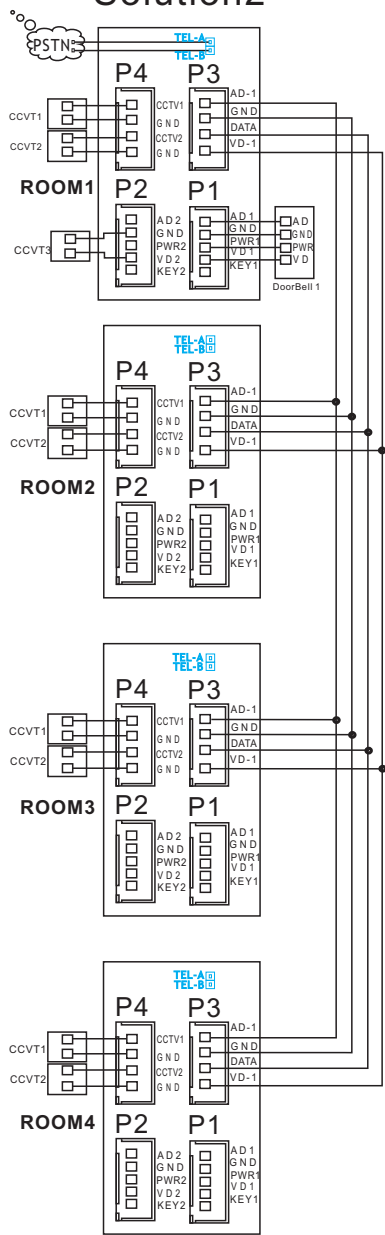
Note: Each indoor monitor can only view the images from the CCTV connected on its own CCTV port(If the CCTV is connected on main monitor's outdoor panel port, all the monitors can view the images from it).

Installation method

1.Refer to relevant wiring diagram for the system you have chosen and ensure you have the correct cable.
2.Determine the monitor installation position:
     -suggest to install at 1.5~1.6Meters;
     -suggest distance between indoor monitor and doorbell is at least 350 mm;
3.Ensure no power supply connection before installation finished
4.Take off the bracket from the back of the monitor.
5.Install the bracket on the wall
6.Connect cables as per the wiring diagram indicated.
7.Fix the monitor onto the bracket.
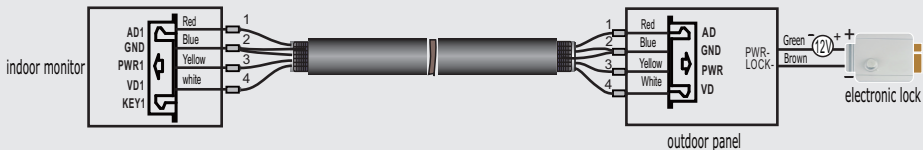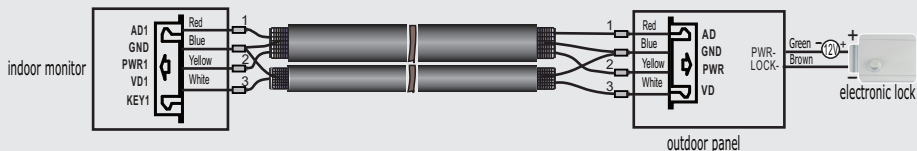8.Connect power when doorbell is installed.

150cm

Cable specification

Our system has 2 solutions to unlock the door: Unlock signal from doorbell or unlock signal from monitor.(The cable shield wire needs to be grounded)
When signal from the doorbell,cable specification is:

● Distance between monitor and door station is less than 30 meters,shielded $4*0.5\ mm^2$ cable is available;

indoor monitor
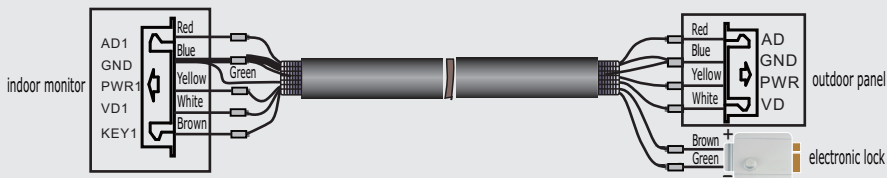AD1
GND
PWR1
VD1
KEY1
Red — 1
Blue — 2
Yellow — 3
white — 4

1 — Red
2 — Blue
3 — Yellow
4 — White
AD
GND
PWR
VD

outdoor panel

PWR-
LOCK-
Green
Brown
12V
electronic lock

● Distance exceed 30 meters,please choose SYV-75-3 coaxial cable for video with another shielded $2*0.5mm^2$ cable or professional cable SYV−75−3+RVVP2∗0. 5mm (recommend);

indoor monitor
AD1
GND
PWR1
VD1
KEY1
Red — 1
Blue
Yellow — 2
White

1 — Red
Blue
2 — Yellow
3 — White
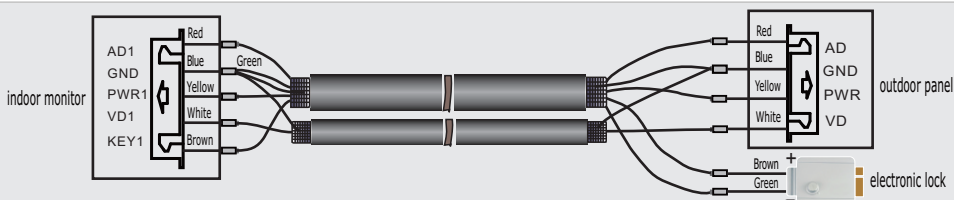AD
GND
PWR
VD

outdoor panel

PWR-
LOCK-
Green
Brown
12V
electronic lock

When signal is from monitor,cable specification is:
● Distance between monitor and door station is less than 30 meters,shielded $6*0.5mm^2$ cable is available;

indoor monitor
AD1
GND
PWR1
VD1
KEY1
Red
Blue
Yellow Green
White
Brown

Red
Blue
Yellow
White
AD
GND
PWR
VD
outdoor panel

Brown
Green
electronic lock

● Distance exceed 30 meters,please choose professional cable SYV−75−3+RVVP $4*0. 5mm^2$ (recommend).

indoor monitor
AD1
GND
PWR1
VD1
KEY1
Red
Blue Green
Yellow
White
Brown

Red
Blue
Yellow
White
AD
GND
PWR
VD
outdoor panel

Brown
Green
electronic lock

Operation guide

The system support five kinds of action types:

1.Click: Enter/choose.

2.Left slide*:* Return/ View last picture.

3.Right slide: View next picture.

4.Up slide: In system settings, up slide to next page.

5.Down slide: In system settings, down slide to last page.

When at answering or monitoring state, the below menu will show on the

right of the screen.

Icon des-cription	Answer	Hang up	Call/Call transfer	Monitor switching	Function adjust-ment	Image capturing	Video recording	Unlock

Incoming call answer

When a visitor presses doorbell, all the indoor monitors in this house will chime

simultaneously, the screen will show INCOMING CALL. Click the icon

 to talk with the visitor(talk time is 60 seconds). If you want to unlock the door

for the visitor, click the   icon , then DOOR UNLOCKED will show on the

screen.

1.If there is another call incoming during conversation, SOMEONE IS VISITING

DOOR 2 will display, click the   icon can switch to another visiting .

2.You can transfer your call to other monitors in the system while talking with the visitor. If you want to transfer the call to others, click the can transfer the call.(The words TRANSFERRING TO OTHER ROOMS will display).

Talking volume/ adjust

At talking/intercom state. Click the icon to enter volume adjust screen, then click + or −   to adjust the volume .

Brightness/color/contrast adjust

When the screen is on,click the icon to adjust the volume first , then click it again you can enter the BRIGHT/COLOR /CONT adjust screen,click +   or − to adjust the brightness,color and contrast   .

Monitor doorbells/CCTV camera

At standby state, click   to enter system main menu, then click the icon , you can view images from the connected doorbell/CCTV. Click the icon again you can switch to other monitor channels. When monitoring the doorbell, click the icon can change into (MUTE STATE). If the microphone is in normal state, click the icon can open the door.

If you have more than one monitor (up to 4 monitors) in your house, you can make below operations.

Internal call among monitors

If you make intercom request for all monitors. At standby state, click to enter system main menu, then click the icon .If you have more than 2 monitors connected together, you can click the target monitor NO. on the screen to confirm the calling.

Broadcast function

This function allows you to broadcast information for all monitors in your house. At standby state, click to enter system main menu, then click the icon , the screen will show BROADCAST REQUEST, the monitor in other rooms will show BROADCASTING . Now you can make broadcast .

Monitor listening

To activate listening of another monitor, click to enter system main menu, then click the icon .If you have more than 2 indoor monitors, click the target monitor NO. on the screen to confirm. Display of your monitor will show "LISTENING TO OTHER". The maximum monitor listening time is 8 hours.
Note: CAN BE MONITORED function should be enabled in SYSTEM SETTINGS of the target monitor. If you want to deny listening of your monitor from another monitors, disable CAN BE MONITORED function in the system.

Capture images

1.Automatic image capturing: "Auto capture quantity" should be set as 1,2 or 3 in the SYSTEM SETTINGS. The system can automatically take and save pictures when the doorbell calls.

2. Manual image capturing: When at answering and monitoring state, click the 🖼️ icon to capture images manually before answer. The words IMAGE CAPTURED will show on the screen.

Manual video recording

When at the answering and monitoring state, click the 📹 icon to record video manually . Click the 📹 icon again to end the recording.

Note: View and manage video files. pls refer to P17.18.19.

Auto leaving message

This function let your visitors to leave a video message for you while nobody is at home. You should activate AUTO LEAVING MESSAGE or MANUAL ANSWER function in the SYSTEM SETTINGS before leaving home to activate this function. When the visitor presses call button on the door panel and nobody answers before the chime time ends, visitor can hear a voice"Hello, no one is at home at the moment, please leave a message after the tone"from the door panel and have 20 seconds to leave a message for you .

Note: View and manage messages and more operation, please refer to P17.18.19.

Family audio message

You can record audio message to your family. At standby state, Click 🔲 to

go to the system main menu, click the icon to enter message recording
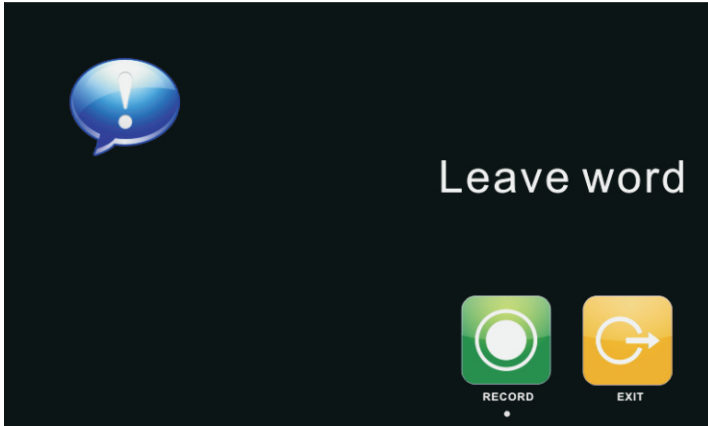
menu as Figure 1.

Click "RECORD" to start recording. When the recording finished, click "STOP"

to stop recording. If your message was recorded successfully, then click"EXIT"

to exit the recording menu.

Note:View and manage messages and more operation, please refer to P16-19.

Change attention for automatic answering function

When AUTO LEAVING MESSAGE or MANUAL ANSWER is on, if nobody

answers the call before chime time ends, the visit will hear a voice attention

message : no one is at home at the moment, please leave a message after

the tone"? If the user wants to change this attention message（BEGINNING

TONE） into their own sound, please take the following steps:

Go to the menu and record one audio message, then exit menu and enter

 menu as Figure 2.

Figure 2

Click to choose the audio file you want to set as beginning tone, then click the

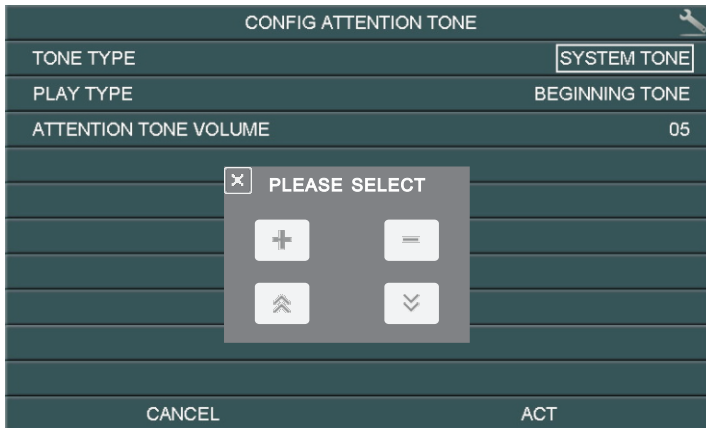icon(Tone setting) to "CONFIG ATTENTION TONE " menu as Figure 3.

Figure 3

Click the TONE TYPE to change the option to be USER TONE. Then click the

PLAY TYPE to change the value to be BEGINNING TONE .Also you can adjust

the attention tone volume. When you click the selected content, a selected

menu will display on the screen. Click $+$ or $-$ to modify the system

setting, click $\ll$ or $\vee$ to slide up and down. If you finished the above

operation, click ACT to confirm the setting. Same operation to change the

ENDING TONE.

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Alarm clock and electronic calendar

1.Pls enable ALARM CLOCK SETTING in the SYSTEM SETTINGS.

2.At the set time , you can turn off the alarm by clicking the chime icon at the left corner of the screen.

3.When Figure 4 displays on the screen, click the alarm clock (The left corner) and the display time (The right corner), you can set the alarm clock and calendar in the shortcut way.
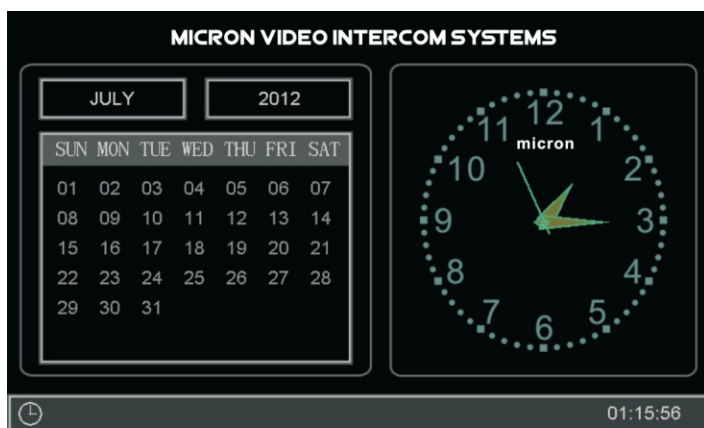
4.Please refer to P25.26 for detailed settings.

Figure 4

View photo , video , multimedia file

At standby state, press (□) button to go to system main menu. If you have unread files, there will be a number on the right corner of the icon with red color, the number is the unread files' quantity. All files names consists of the date and time it was created, for example: 01-02-2012-02- 11:30:20,means that files was created on 11:30:20,Feb, 1 st,2012. So it's very convenient for you to know the recording time and tell the different files.

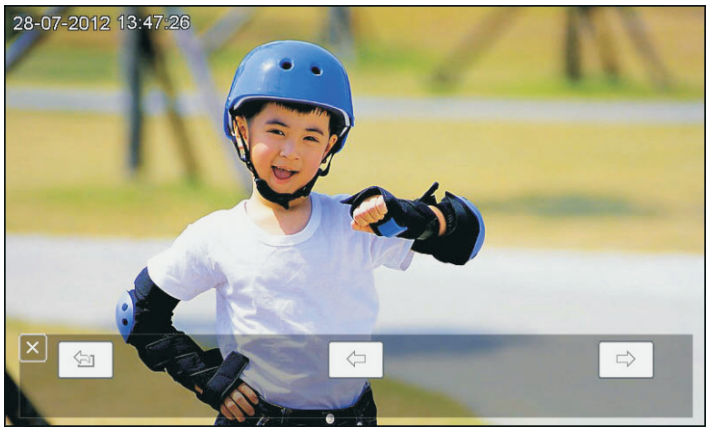1.View photo: click the icon to view image files ,click the file's name then you can see image as Figure 5.

Figure 5

Click the ⇐ or ⇒ icon to view the images.The image will automatically change in every 5 seconds. If you want to exit , click the ⇐ icon can return to the last menu.

2.Review video :click to enter the video list , select the video file to enter Figure 6.

Figure 6

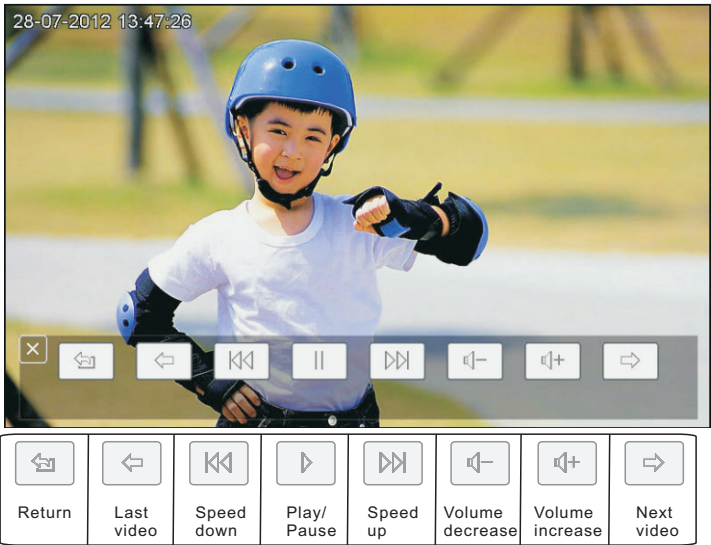| ⇐	⇐	KKI	▷	DDI	◁−	◁+	⇒
Return	Last video	Speed down	Play/ Pause	Speed up	Volume decrease	Volume increase	Next video

You can click the related icon to play the video, click the ⇐ icon to exit .

4.View multimedia files: click the [icon] icon to review multimedia files. You can review pictures and play music follow the above steps(Review photo).

Note: When there is no TF card inserted ,you can review the pictures in the internal flash, if a TF card inserted , you can view the pictures saved in the TF card.

Delete single file or folder

If you want to delete a file or folder, you can select the single file or folder in the list, then click the [icon] icon(Delete) to enter the screen as Figure 7:

```
ARE YOU SURE TO DELETE THE FILE?




CANCEL                          DELETE
```

Figure 7

Click DELETE to delete the selected file or folder.

Note: same operation to delete image, audio and DVR files.

Transfer outdoor panel's call to telephone/mobile (Only available for the model with telephone module)

1) Go to the [icon] SYSTEM SETTINGS and set ANSWER MODE to be CALL TRANSFER(only available for master monitor). Then enter PHONE NUMBER SETTINGS and enter phone number which the call will be transfered to. If want to add a pause during dialing, insert a letter "P", which means 1 second pause during dialing, If want longer pause, pls add more "P" in the telephone no.

2) If no one answers during CHIME TIME, the call will be transfered to the set telephone. "TRANSFERING TO TELE" will display on the monitor's screen while transferring.

3)After picking up the call, the user will hear the chimes from the door panel.
a) press ## on the phone to talk with the visitor.Talking time: 60 seconds (Max).
b) Press ** on the phone to hang up the call.
c) Press 00 on the phone to unlock the door

System main menu

At standby state, press ⬚ to enter system main menu as Figure 8.

Multimedia menu

Pic	Functions	Notes
	Review/delete captured images.	If there are new/unread images, there will be a NO. on the right corner of the icon
	Review/delete recorded videos.	If there are new/unread videos, there will be a NO. on the right corner of the icon
	Turn on/off the ring sound.	
	View/delete the pictures stored in TF card. Listen/delete the music files stored in TF card.	
	View/delete the recorded audio files. Change the attention tones to user's own sound.	If there are new/unread audios, there will be a NO. on the right corner of the icon
	Record audios.	

2.Shortcut menu

Pic	Functions	Notes
TUE 23	Calendar	Electronic calendar display
	Doorbell monitoring	Choose to enter doorbell monitoring state
	Call transfer	Enter call transfer state
	Broadcast	Make broadcast to others
	Monitor listening	Enter monitor listening state
	System settings	Enter system settings

System setting

When enter the system main menu, click [icon] to go to the system settings menu as figure9,10,11.
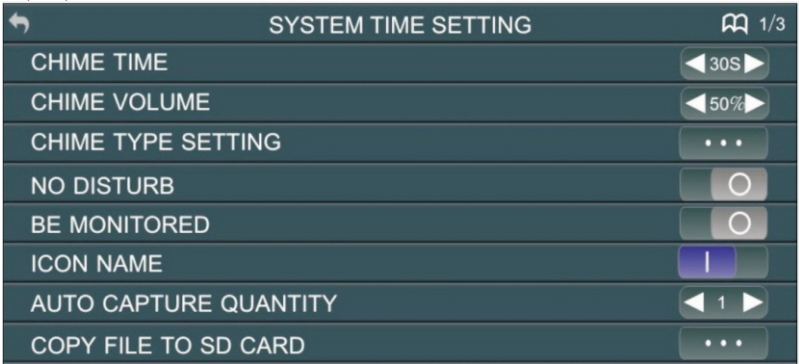
Figure9
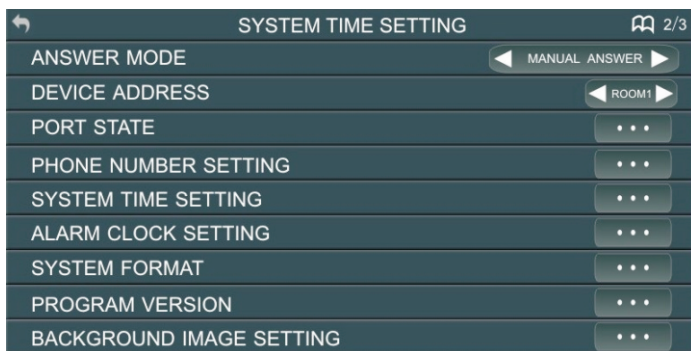
Figure10
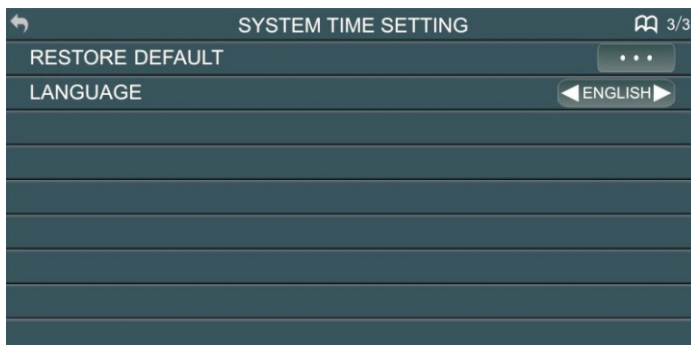
Figure11

No.	Setting items	Options	Note
1-1	CHIME TIME	10S/15S/20S/25S/30S/35S /40S/45S /50S/55S /60S	Chime duration time
1-2	CHIME VOLUME	10~100%	
1-3	CHIME TYPE SETTING	DOOR1 CHIME TYPE	00 - 07
		DOOR2 CHIME TYPE	
		INTERCOM CHIME TYPE	
		RINGE TONE REPEAT	Ring tone will repeat when the option is
1-4	NO DISTURB		
			The indoor monitor will be mute once someone presses doorbells/makes internal call/broadcast.

No.	Setting items	Options	Note
1-5	BE MONITORED	O	
		I	
1-6	ICON NAME	O	No icon names displayed on the screen
		I	The icon names will display on the screen
1-7	AUTO CAPTURE QUANTITY	DISABLE	Do not capturing images automatically
		1	Automatically capturing 1 image
		2	Automatically capturing 2 images
		3	Automatically capturing 3 images
1-8	COPY FILE TO SD CARD	CANCEL	
		COPY	
2-1(a)	AUTO LEAVING MESSAGE	O	
		I	
2-1(b)	ANSWER MODE	MANUAL ANSWER	
		AUTO ANSWER	Only valid when the device address set ROOM 1
		CALL TRANSFER	Only available for the model with telephone module
2-2	DEVICE ADDRESS	ROOM1/2/3/4	The option will be red if two monitors set the same address

No.	Setting items	Options	Note
2-3	PORT STATE	PORT2 STATE	
		Door 2/CCTV3	
		CCTV1	
		CCTV2	
2-4	PHONE NUMBER	P/*/#/0/1/2/3/4/5/6/7/8/9	Set the call transfer number
2-5	SYSTEM TIME SETTING	DATE: DAY-MONTH-YEAR	
		TIME: HOUR:MINUTE:SECOND	
2-6	ALARM CLOCK SETTING	ALARM CLOCK 1	1. Each alarm clock can be set separately.
		ALARM CLOCK 2	
		ALARM CLOCK 3	2. Since set time, it will alarm every 50 seconds till you turn the alarm clock off by press menu key
		ALARM CLOCK 4	
		ALARM CLOCK 5	
		ALARM CLOCK6	
		ALARM CLOCK CHIME TYPE	00 - 07
2-6-1	SET ALARM CLOCK1/2/3/4/5	STATE	
		CYCLE TYPE	4 types available: SINGLE/WEEK/MONTH/YEAR
		WEEK SELECT	Only valid at Week Type.
		TIME	
		DATE	
2-6-1-1	STATE		
			The alarm will trigger at the set time.

No.	Setting items	Options	Note
2-6-1-2	CYCLE TYPE	SINGLE	
		WEEK	
		MONTH	
		YEAR	
2-6-1-3	WEEK SELECT	SUNDAY	You can set each day's state as enable/disable to create an alarm group you like.
		MONDAY	
		TUESDAY	
		WEDNESDAY	
		THURSDAY	
		FRIDAY	
		SATURDAY	
2-6-1-4	TIME	HOUR:MINUTE	
2-6-1-5	DATE	YEAR-MONTH-DAY	At Single Type, YEAR, MONTH and DAY are all valid; at Week Type, all options are invalid; at Month Type, only DAY is valid; at year type, only MONTH and DAY are valid.
2-7	SYSTEM FORMAT	FORMAT FLASH	
		FORMAT SD CARD	
2-8	PROGRAM VERSION		
2-9	BACKGROUND IMAGE SETTING	PICTURE1/2/3/4; COLOR1/2/3/4/5/6/7	
3-1	RESTORE DEFAULT	CANCEL	
		RESTORE	
3-2	LANGUAGE		

Note:System settings menu of "2-1(b)ANSWER MODE "and "2.4 PHONE NUMBER

SETTING" are only available for the model with telephone module.

Parameters of picture capturing, video recording

Picture Capturing Function

Storage location	Resolution ratio	Pictures quantity
Internal flash	320*240	Over 64 pcs
External TF card	640*480	Depends on the capacity of TF card

Video Recording Function

TF card capacity	Resolution ratio	Frame rate
1G	320*240	2
2G	320*240	5
4G	320*240	10
>=8G	640*480	10

Specification

No.	Item	Content
1	Operation power	AC 100V-240V,50~60Hz
2	Power consumption	50mA(Max)，15mA(In standby)
3	Operation temperature	0℃ to + 40 ℃
4	Operation humidity	0%~95%
5	Display Panel	7 inch
6	Intercom function	Hands-free
7	Connection	4 wires (RVVP 4*0.5mm²)
8	Dimension	210mm*116mm*25mm
9	Weight	470g