

Since 1968

COMMAX
SmartHome & Security

User Manual

CIOT-L7FM



www.commax.com

COMMAX Co.,Ltd.



- Thank you for purchasing COMMAX 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.

Table of Contents

Warnings and caution	2
1. Name of each parts	4
2. Screen description	5
2.1 Status Bar	5
2.2 Display	5
3. Guard station call	6
4. Household call	7
4.1 The number of building is specified	7
4.2 The number of building is not specified	8
5. Access authentication	9
5.1 Access to RF card	9
5.2 Access by household password	9
5.2.1 The number of building is specified	9
5.2.2 The number of building is not specified	10
5.2.3 Access by password in off-line	11
6. Registering eKey for Smartphone and Door Release	12
6.1 Registering eKey for Smartphone	12
6.2 Lobby Entrance Release	13
7. Name Search	14
8. Environment Configuration	15
8.1 Password Reset	16
8.2 Configuration Menu	17
8.2.1 Set Network+	17
8.2.2. Set VoIP+	17
8.2.3. Management+	17
8.2.4. Audio/Video+	17
8.2.5. Extra Config+	18
8.2.6. Database+	19
8.2.7. System Info+	19
8.2.8. Test+	19
9. Wiring	20

Warnings and caution

Please follow the things described below in order to prevent any danger or property damage.



Warning

It may cause a serious damage or injury if violated.



Caution

It may cause a minor damage or injury if violated.



Prohibition.



No disassembly



No touch



Must follow strictly.



Shows plugging out the power cord without an exception



Shows the warning and caution for an electric shock.



Shows the warning and caution for a fire.

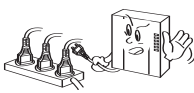


Warning

Power & Installation

Please don't use several products at the same time on one power socket.

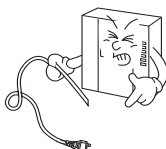
- It may cause a fire due to an abnormal overheating.



Prohibition Fire

Please don't bend the power cable excessively or it may cause an electric shock.

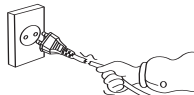
- fire when using a damaged power cable.



Prohibition Electric shock Fire

Please don't handle the power cable with a wet hand.

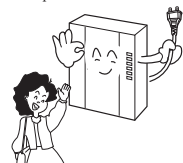
- It may cause an electric shock.



Prohibition Fire

Please plug out the power cable from the socket when not using it for a long period of time.

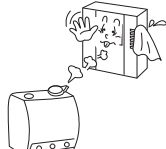
- It may shorten the product lifespan or cause a fire.



Request Fire

Please don't install the product in the place where there is much oil, smoke or humidity.

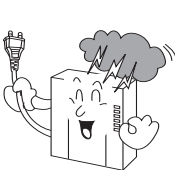
- It may cause an electric shock or fire.



Prohibition Electric shock Fire

Please don't install the product with the lightning and thunder.

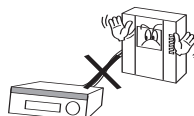
- It may cause an electric shock or fire.



Prohibition Electric shock Fire

Please don't use and connect this product with other products with different rated voltage.

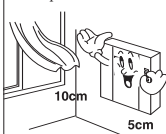
- It may cause a disorder or fire.



Prohibition Fire

When installing the product that generates heat, please install the product away from the wall (10cm) for the ventilation.

- It may cause a fire due to the increased internal temperature.



Prohibition Fire

⚠ Warning

Cleaning & Use

Please don't disassemble, repair or rebuild this product arbitrarily (please contact the service center if a repair is needed).

- It may cause an electric shock or fire.



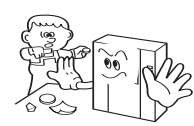
If an abnormal sound, burning smell or smoke is coming out of the product, please plug out the power cable and contact a service center.

- It may cause an electric shock or fire.



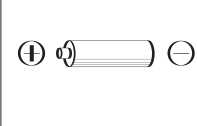
Please don't insert any metallic or burnable materials into the ventilation hole.

- It may cause an electric shock or fire.



Please use only the designated batteries for the products of using DC power.

- It may cause an electric shock or fire.

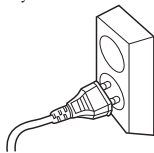


⚠ Caution

Power & Installation

Please plug the power cable firmly into the inner end

- It may cause a fire.



Please hold the plug tightly when unplugging the power cable (a part of the copper wire may be disconnected if the grabbing is only made on the cord when pulling out the cable).

- It may cause an electric shock or fire



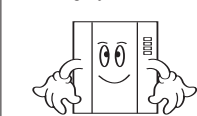
When connecting the power cables after cutting the cable, please install the product with power off

- It may cause an electric shock or fire

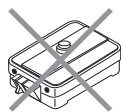


When installing the product, please fix it firmly while using the wall-mounting unit and screws.

- It may cause an injury from the falling object.



Please be careful when using an AC circuit breaker since there is a possibility of an electric shock.



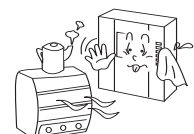
Please check the use voltage and current for the DC-only products and use the appropriate rectifier.

- It may cause a fire.



Please avoid direct rays of the sun or heating devices at a time of installation.

- It may cause a fire.



Please don't install the product on an unstable place or small support board.

- It may cause an injury if it falls down while in use.



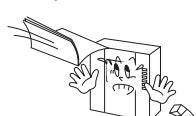
Cleaning & Use

When cleaning the product, please rub it with a soft and dry cloth after plugging out the power cable. (Please don't use any chemical products such as wax, benzene, alcohol or cleanser.)



Please don't drop the product on the ground and don't apply a shock.

- It may cause a failure.

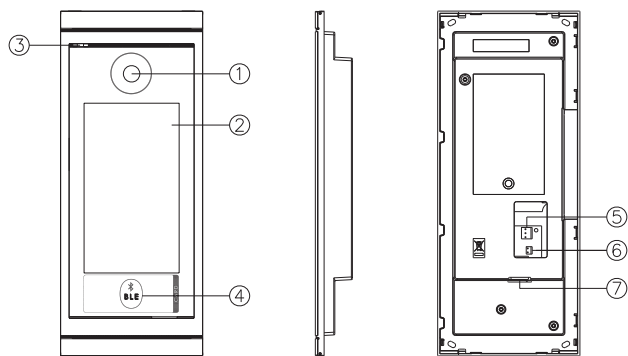


Please use the designated connection cable within the maximum calling distance designated for the product

- It may reduce the product performance.



1. Name of each parts



No.	Parts	No.	Parts
1	CAMERA	6	Open / Close connection (NO,NC)
2	TOUCH SCREEN	7	LAN port
3	Proximity Sensor	8	
4	RFID	9	
5	DC 14V	10	

2. Screen description



2.1. Status Bar

Icon	Description	Icon	Description
	The status of LAN connection		Status registered on server
	Outside lobby phone		Failed to register with the server
	Lobby phone in the building		The status of local server connection
	The status of RF card data storage		Hot line motion indication
	BLE connection status		

2.2. Display

- ① Time : Show current time
- ② Circumstance setting : Lobby phone setting
- ③ Building display : The building set on the lobby phone (Outside lobby phone is "0000")
- ④ Lobby number display : Lobby phone number (If there are more than 3 digits, only 2 digits are displayed.)
- ⑤ Household password authentication : Open the door after verifying household password .
- ⑥ Guard station call : Guard station call
- ⑦ Name search : Searching user names registered on the server
- ⑧ Household call : Household call

3. Guard station call



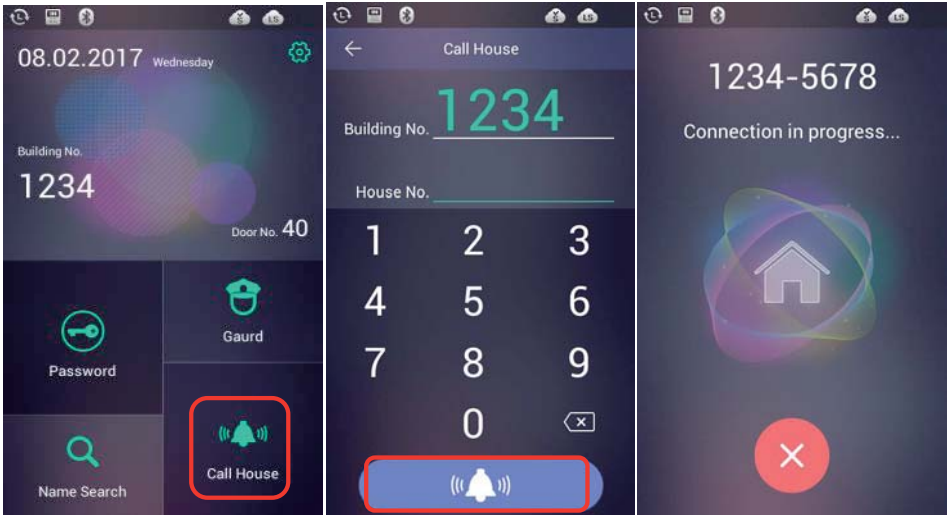
- ① Press the 'Guard' button .
- ② Call the guard with a ring tone.
- ③ Call the guard with a ring tone.
- ④ Make a call when you get answer from the guard room (Call time: 1 minute)
- ⑤ Press the button  on the screen to end the call.
- ⑥ If you press the "Open Door" button in the guard room, the voice message "Door is open" will be provided and then the door will open.
- ⑦ If you hear a "Tou ---" sound, please call again after a while.

※ You can call only the guard station registered by the manager in advance.

4. Household call

4.1. The number of building is specified :

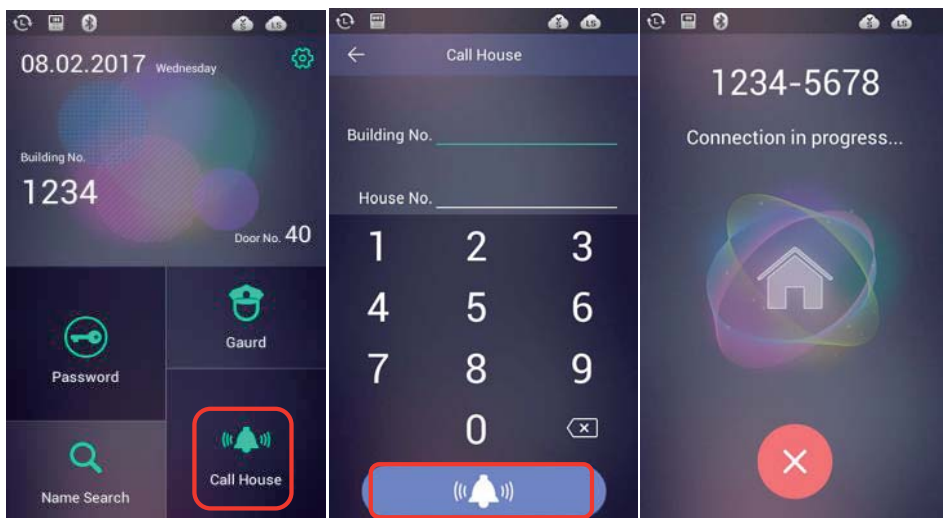
The Call Prefix has the number of building



- ① Press 'Call House' button.
- ② Enter the household number on the screen.
- ③  Press the (Call) button.
- ④ Call the household with a ring tone.
- ⑤ Make a call when you get answer from household (Call time: 1 minute)
- ⑥ Press the button  on the screen to end the call.
- ⑦ If you press the "Open Door" button in the household, the voice message "Door is open" will be provided and then the door will open.

4.2. The number of building is not specified :

The Call Prefix has not number of building



- ① Press 'Call House' button.
- ② Enter the number of building and household on the screen.
- ③  Press the (Call) button.
- ④ Call the household with a ring tone.
- ⑤ Make a call when you get answer from household (Call time: 1 minute)
- ⑥ Press the button  on the screen to end the call.
- ⑦ If you press the "Open Door" button in the household, the voice message "Door is open" will be provided and then the door will open.

5. Access authentication

5.1. Access to RF card

- ① Close the RF card registered in the card window.
- ② If the authentication is successful, the voice message "Door opened" will be provided and the door will open.
- ③ If the authentication fails, you can hear a blinking beep.

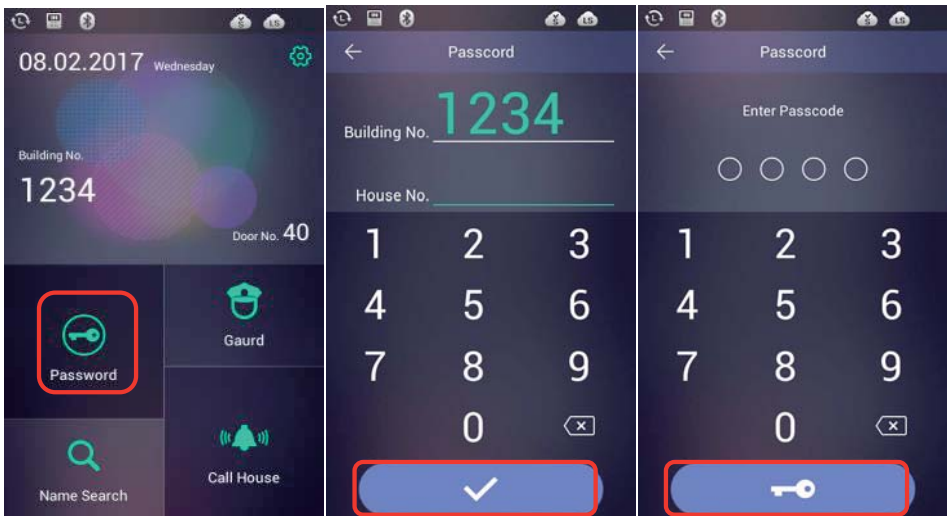


[RF-Card]

5.2. Access by household password

5.2.1. The number of building is specified :

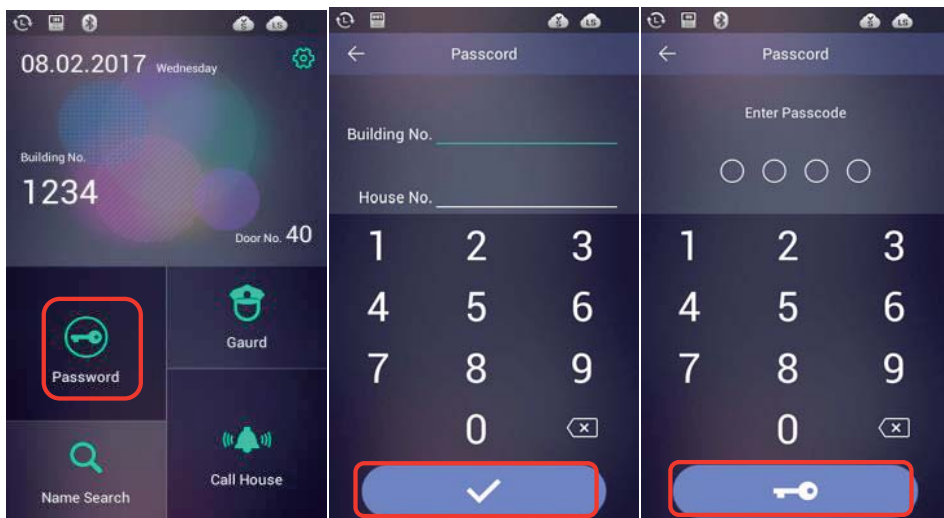
The Call Prefix has the number of building



- ① Press 'Pass cord' button.
- ② Enter the number of household on the screen.
- ③  Press the button.
- ④ Enter the password of household on the screen.
- ⑤  Press the button.
- ⑥ If the authentication is successful, the voice message "Door opened" will be provided and the door will open.
- ⑦ If the authentication fails, you can hear a blinking beep.

5.2.2. The number of building is not specified :

The Call Prefix has not the number of building



- ① Press 'Pass cord' button.
- ② Enter the number of building and household on the screen.
- ③  Press the button.
- ④ Enter the password of household on the screen.
- ⑤  Press the button.
- ⑥ If the authentication is successful, the voice message "Door opened" will be provided and the door will open.
- ⑦ If the authentication fails, you can hear a blinking beep.

5.2.3. Access by password in off-line

(Local sever cannot be connected)

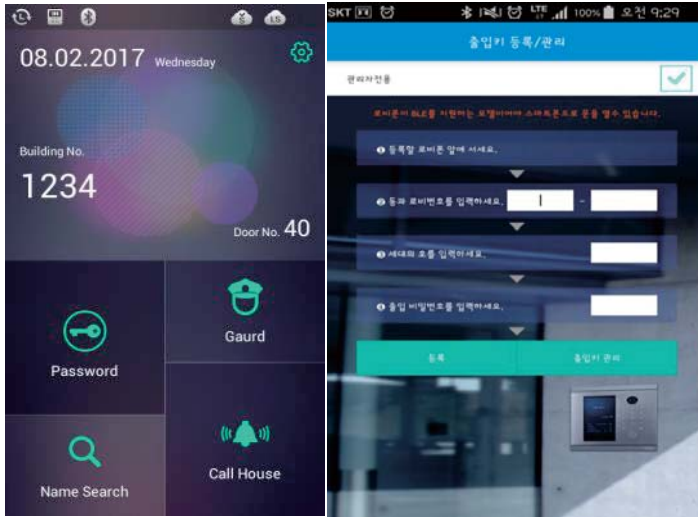


- ① Press 'Pass cord' button'.
- ② Enter the OFF-Line password on the screen.
- ③  Press the button.

- ※ When you are On-Line (when the local sever is connected) this access do not work.
- ※ You should delete Off-Line password when you are On-Line.

6. Registering eKey for Smartphone and Door Release

6.1. Registering eKey for Smartphone



- ① Input "Building and Lobby No." at Smartphone same as Building No. on Screen of Lobby (Building No.) and Lobby No. (Door No.)
(Ex: 1234-40)
- ② Input No. of Apartment.
- ③ Input Password of Lobby Entrance.
- ④ Press the Register button.

※ Caution

1. You can't use the default password of Wallpad such as 1234, 4321, 0000.
2. You can't use No. 9999 as the (Building/Apartment) Number.
3. if eKey is full you must delete the eKey and register it again. (Maximun 7 ekeys)

6.2. Lobby Entrance Release



- ① Press the Green Door Release button.
- ② Once you're connected with the Lobby, door will be released.

※ Caution

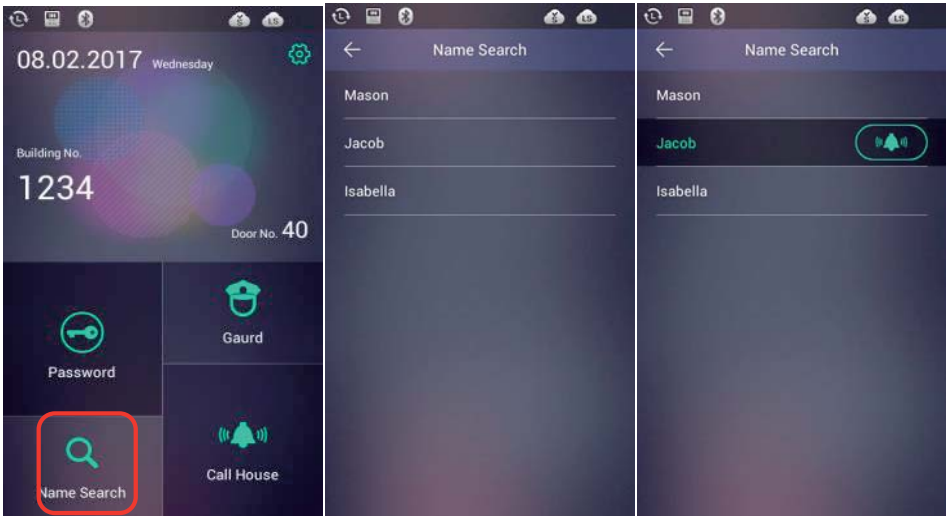
- If Lobby Entrance Password is changed of Key Registered on Lobby Phone is deleted you can't Release (Open) the Door.

Register the eKey again.

※ Configuration of BLE Module Name

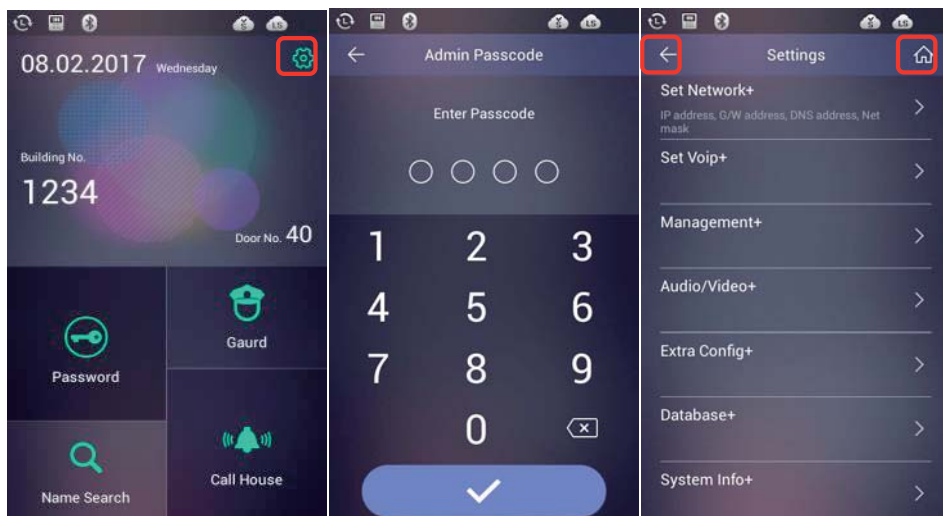
- BLE Module Name : Combination of Call Prefix(Building Configuration) and System ID
- If System ID exceed 3 digits just the last 2 digits will be displayed
- Outside Lobby can't use the BLE functions

7. Name Search



- ① Press 'Name Search' button.
- ② Select the Name you want to call from the User List.
- ③  Press the (Call) button to call to the Residence.

8. Environment Configuration



- ①  Press the (Setting) button.
- ② Input the Password.
- ③  Press the Confirmation button.

※ We recommend you to change the default password(0000) for security.

※ If you press the  (Home) button you can return to the default screen.

※ If you press the  (Previous) button you will return to the previous step.

8.1. Password Reset



- ①  Press the (Setting) button.
- ② Input the default password (0000).
- ③ Press the "Empty" Space on the screen to enter to the Reset Mode.
- ④ Enter default password (0000).
- ⑤  Press the Confirmation button.

※ After reset the password, we recommend you to change the password for security.

8.2. Configuration Menu

8.2.1. Set Network+

- IP address: (Input IP address)
- G/W address (Input Gateway address)
- DNS address (Input DNS address)
- Net mask (Input Network Mask)

8.2.2. Set VoIP+

- SIP Server (Input SIP Server address)
- Guard ID (Input Guard Station ID)

8.2.3. Management+

- Server address (Input Local Server address)
- Update address (Input Update Server address)
- System ID (Input Lobby Phone ID)
- Call Prefix (Building Configuration)

* If Building configuration value is empty, when you call to the residence building input screen will be displayed automatically.

- Call Line+
 - Min Call Line (Input minimum call line)
 - Max Call Line (Input maximum call line)

* Caution: If Min Call Line is greater than Max Call Line call function will not be available.

※ If you change System ID and Call Prefix BLE Module Name will be changed.

8.2.4. Audio/Video+

- Audio+
 - Gener. Spe. Vol. (Adjust volume of speaker for Call to residence)
 - Gener. Mic Vol. (Adjust volume of microphone for Call to residence)
 - Guard Spe. Vol. (Adjust volume of speaker for Call to guard station)
 - Guard Mic Vol. (Adjust volume of microphone for Call to guard station)
 - Gener. Number Speech (Select voice button for Residence Building/Apartment)
 - Key Sound (Select sound effect for button)
 - Ring Sound (Select ringtone)
 - Key Vol. (Select volume for button)
 - Ring Vol. (Select volume for ringtone)
 - Effect Vol. (Select volume for sound effect)
 - Initialization (initialization of Audio)

* Values you modified on Audio Menu will be restored to default values.

- Video:+
- Quality (Adjust visitor image quality)
 - * You can select between 1M/2M/3M.
 - ※ Data usage will increase if Quality of Image is higher.
- Initialization (Video initialization)
 - * Values you modified on Video Menu will be restored to default values.

8.2.5. Extra Config+

- Language (Language Select)
- Set Time+
 - Door Open Time (Door Release Time)
 - * Select between 2sec, 5sec, 10sec, 15sec, 20sec, 25seconds.
 - Sleep Mode Time (Configuration of LCD Sleep Mode)
 - * Select between 30sec, 1min, 2min, 3min, 4min, 5minutes.
 - Key Time Out
 - * Select between 10sec ~ 30sec in units of 10sec
 - Use 24-hour format
 - * Select 24 hours type
- ADC Sensor
 - Distance (Change the range of distance for proximity sensor.)
 - * With direct light distance will be shorter.
 - 100cm, 90cm, 80cm, 70cm, 60cm, 50cm, 40cm, 30cm, Unused (Not use)
 - Detection Hold Time (Configuration for proximity sensor detection time)
 - 200ms, 300ms, 400ms, 500ms, 600ms
- BLE Intensity(Configuration for BLE output)
 - 1 setp, 2 setp, 3 setp, 4 setp, 5 setp, 6 setp, 7 setp, 8 setp ,
- Change Pwd (Change the password)
- Off-Line Pwd (Input the password to release the Door when you are Off-Line)
 - * Default Off-Line password is "123456".
- Reboot: (Reinitialization of the System)
- System Reset (Reset the values of the system to factory default values)
 - * Modified IP information will not the changed.

8.2.6. Database+

- Password Down. (Download the password of residence)
- RF-Card Down. (Download RF-Card Data)
- Password Del. (Delete the password of residence)
- RF-Card Del. (Delete RF-Card Data)

8.2.7. System Info+

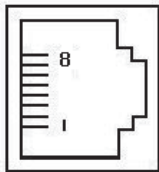
- Version (Version of Software is displayed)
- Boot (Boot Loader information is displayed)
- Kernel (OS information is displayed)

8.2.8. Test+

- Test Door Open (Test door release)
- Test RF Card (RF Card number is displayed)
- * Useful Function when you want to know RF Card number.
- * Contact the Card to Card Reader when Reader is in Reading... Mode.
- ADC Sensor Test (Proximity sensor information is displayed)
- Temp Sensor Test (Temperature sensor information is displayed)
- * You can verify the functionality with "Defroster : ON".
- System Initialize (Initialize System sensors.)

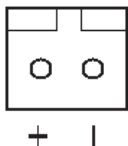
9. Wiring

1. LAN connection (1:1) Straight



Direct Connection thru UTP CAT5.

2. DC 14V/2.1A



Please be careful with the polarity when you connect the power connection

3. Door Release(NO,NC)

: Pin 2 is common, in stand by mode with Pin 1 and in short circuit mode with Pin 3



10. Specification

Spec. \ Model	CIOT-L20M
Transportation	TCP/IP
Votage	DC14V / 1.8A
Display	7" LCD
Power Consumption	Max: 1.4A Standby : 0.35A
Telecommunication	VoIP
Video Format	H.264 / MPEG4
Camera Pixel	2M CMOS
Temperature	-40 ~ 50

FCC approval

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

This device should be installed and operated with minimum 20 cm between the radiator and your body.

This device contains certified modules.

Contains FCC ID: CCEMD8107F70001, CCECRM-1356B, CCEEZ-HS301



COMMAX Co.,Ltd.

513-11, Sangdaewon-dong, Jungwon-gu, Seongnam-si, Gyeonggi-do, Korea

Int'l Business Dept. Tel. : +82-31-7393-540~550 Fax. : +82-31-745-2133

Web site : www.commax.com

PM48L7FM0010

Printed In Korea / 2017.09.104