Since 1968

COMMAX
SmartHome & Security

User Manual

LOBBY PHONE CIOT-L20M

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
CONFIGURATION ····· 4
1. SCREEN SETTING ····· 5
2. GUARD CALL ····· 6
3 HOUSEHOLD CALL ····· 7
4. ENTRY AUTHORIZATION ····· 9
5. REGISTRATION OF SMART EKEY & DOOR OPEN ····· 11
6. NAME SEARCH ····· 12
7. GENERAL SETTINGS ····· 13
8. WIRING DIAGRAM ····· 17

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.

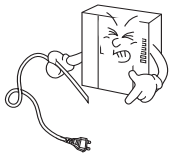
Warning

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.

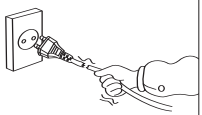
Prohibition Fire

Please don't bend the power cable excessively or it may cause an electric shock.
· fire when using a damaged power cable.



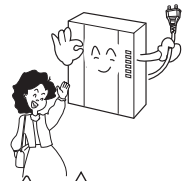
Prohibition Electric shock Fire

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.

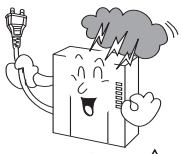


Request Fire

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.

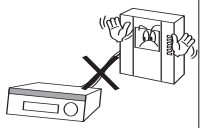
Prohibition Electric shock Fire

Please don't install the product with the lightening and thunder.
· It may cause an electric shock or fire.



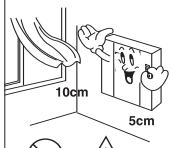
Prohibition Electric shock Fire

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.

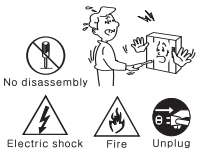


Prohibition Fire

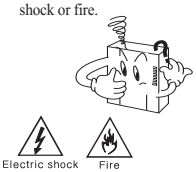
Warning

Cleaning & Use

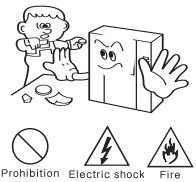
Please don't disassemble, repair or rebuild this product arbitrarily (please contact the service center if a repair is needed.
· It may cause an electric shock or fire.



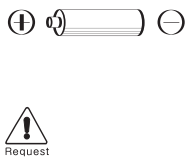
If an abnormal sound, burning smell or smoke is coming out of the product, please plug out the power cable and contact a service center.
· It may cause an electric shock or fire.



Please don't insert any metallic or burnable materials into the ventilation hole.
· It may cause an electric shock or fire.



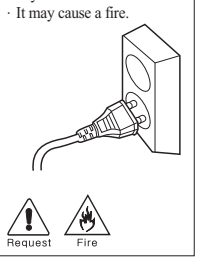
Please use only the designated batteries for the products of using DC power.
· It may cause an electric shock or fire.



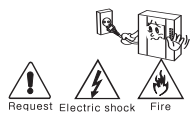
Caution

Power & Installation

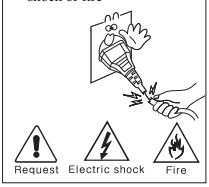
Please plug the power cable firmly into the inner end
· It may cause a fire.



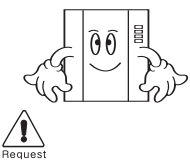
Please hold the plug tightly when unplugging the power cable (a part of the copper wire may be disconnected if the grabbing is only made on the cord when pulling out the cable).
· It may cause an electric shock or fire



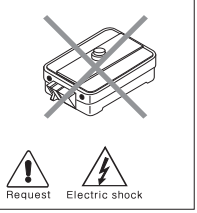
When connecting the power cables after cutting the cable, please install the product with power off
· It may cause an electric shock or fire



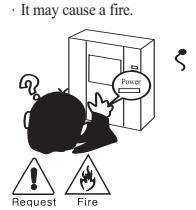
When installing the product, please fix it firmly while using the wall-mounting unit and screws.
· It may cause an injury from the falling object.



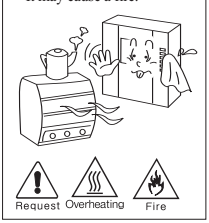
Please be careful when using an AC circuit breaker since there is a possibility of an electric shock.



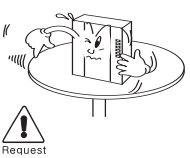
Please check the use voltage and current for the DC-only products and use the appropriate rectifier.
· It may cause a fire.



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.

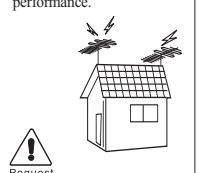


Cleaning & Use

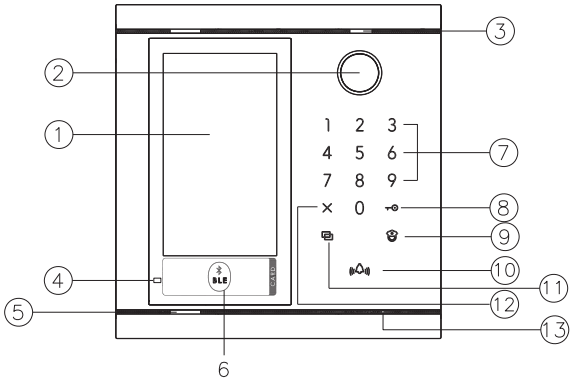
When cleaning the product, please rub it with a soft and dry cloth after plugging out the power cable. (Please don't use any chemical products such as wax, benzene, alcohol or cleanser.)

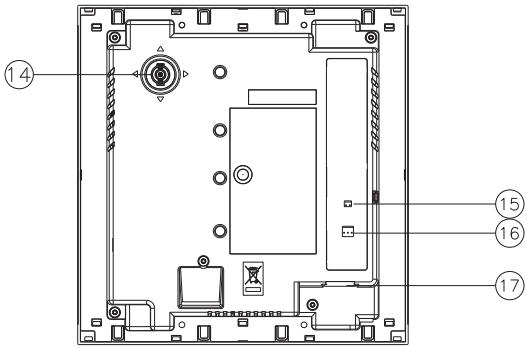
Please don't drop the product on the ground and don't apply a shock .
· It may cause a failure.

Please use the designated connection cable within the maximum calling distance designated for the product
· It may reduce the product performance.



CONFIGURATION





NO	NAME	NO	NAME
1	LCD	10	CALL BUTTON
2	CAMERA	11	PROGRAM BUTTON
3	LED	12	CANCEL BUTTON
4	PROXIMITY SENSOR	13	MIC
5	SPK	14	CAMERA ADJUSTMENT
6	RF CARD READER	15	DC 14V
7	NUMERIC KEY BUTTON	16	SWITCH CONNECTION(NO,NC)
8	ELECTRONIC KEY BUTTON (FOR PASSWORD ENTRY USE)	17	LAN PORT
9	GUARD CALL		

1. SCREEN SETTING

1.1. INITIAL SCREEN

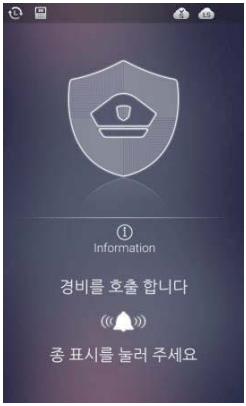
	SKIN THEME	
	FLIP CLOCK	RED CLOCK
KOREAN		
	GREEN CLOCK	BLACK CLOCK

1.2. STATUS ICON

ICON	DESCRIPTION	ICON	DESCRIPTION
	LAN CONNECTIVITY		CONNECTED TO SERVER
	OUTDOOR LOBBYPHONE		UNCONNECTED TO SERVER
	BUILDING LOBBYPHONE		LOCAL SERVER CONNECTIVITY
	RF CARD DATA STORAGE STATUS		HEAT WIRE CONNECTIVITY
	BLE CONNECTIVITY STATS		

2. GUARD CALL

① PRESS (GUARD STATION) BUTTON
② PRESS (CALL) BUTTON.
③ CALL GUARD STATAION WITH RING SOUND.
④ WHEN GUARD ANSWERS THE CALL, TALK TO GUARD (TALK TIME: 1MINUTE)
⑤ PRESS "X" BUTTON IF YOU WANT TO HANG UP.
⑥ WHEN GUARD PRESS "DOOR OPEN" BUTTON, DOOR OPEN WITH "DOOR OPEN" SOUND
⑦ IF YOU LISTEN TO "BEEP" SOUND, IT MEANS THE LINE IS BUSY. SO, PLEASE CALL LATER.



PIC.1. GUARD CALL

※ YOU CAN CALL THE GUARD WHICH WAS REGISTERED BY OPERATOR.

3. HOUSEHOLD CALL

2.1. CALL AMONG HOUSEHOLD

I. IN CASE EACH BUILDING NO. IS REGISTERED :

BUILDING NO. REGISTERED IN CALL PREFIX

PIC.2. HOUSEHOLD NO. REGISTRATION SCREEN

① ENTER HOUSEHOLD NO. IN KEYBOARD.

EXAMPLE) HOUSEHOLD NO. 101➔ ENTRY 101

② PRESS (CALL) BUTTON

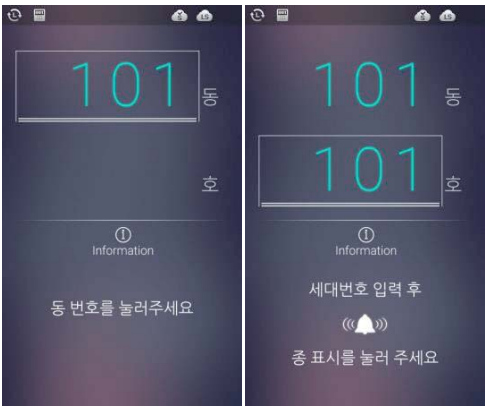
③ CALL THE HOUSEHOLD WITH RING SOUND.

④ WHEN THE HOUSEHOLD ANSWERS THE CALL, TALK TO THE HOUSEHOLD (TALK TIME: 1MINUTE)

⑤ PRESS "X" BUTTON IF YOU WANT TO HANG UP.

⑥ WHEN HOUSEHOLD PRESS "DOOR OPEN" BUTTON, DOOR OPEN WITH "DOOR OPEN" SOUND

II. IN CASE BUILDING NO. NOT REGISTERED :
BUILDING NO. NOT REGISTERED IN CALL PREFIX



PIC.3. BUILDING, HOUSEHOLD NO. ENTRY SCREEN

① ENTER BUILDING NO. IN KEYBOARD
EXAMPLE) BUILDING NO. 101 ➔ ENTER "101"
② ENTER HOUSEHOLD NO. IN KEYBOARD.
EXAMPLE) HOUSEHOLD NO. 101 ➔ ENTER "101"
③ PRESS (CALL) BUTTON
④ CALL THE HOUSEHOLD WITH RING SOUND.
⑤ WHEN THE HOUSEHOLD ANSWERS THE CALL, TALK TO THE HOUSEHOLD (TALK TIME: 1MINUTE)
⑥ PRESS "X" BUTTON IF YOU WANT TO HANG UP.
⑦ WHEN HOUSEHOLD PRESS "DOOR OPEN" BUTTON, DOOR OPEN WITH "DOOR OPEN" SOUND

4. ENTRY AUTHORIZATION

4.1. ENTRY WITH RF CARD

① PUT RF CARD ON CARD READER.

② IF AUTHORIZED, DOOR OPEN WITH "DOOR OPEN" SOUND.

③ IF UNAUTHORIZED, IT SOUNDS A DULL WARNING SOUND.

PIC.4. PUTTING RF-CARD

4.2. ENTRY WITH PASSWORD

I. IN CASE EACH BUILDING NO. REGISTERED :
BUILDING NO. REGISTERED IN CALL PREFIX

① ENTER PASSWORD IN KEYBOARD.

② PRESS (KEY) BUTTON.

③ ENTER THE PASSWORD OF THE HOUSHOLD NO.

④ PRESS (CALL) BUTTON.

⑤ IF AUTHORIZED, DOOR OPEN WITH "DOOR OPEN" SOUND.

⑥ IF UNAUTHORIZED, IT SOUNDS A DULL WARNING SOUND.

II. IN CASE BUILDING NO. NOT REGISTERED :
BUILDING NO. NOT REGISTERED IN CALL PREFIX

① ENTER BUILDING NO. IN KEYBOARD
EXAMPLE) BUILDING NO. 101 ➔ ENTER "101"
② PRESS (CALL) BUTTON.
③ ENTER HOUSEHOLD NO. IN KEYBOARD.
EXAMPLE) HOUSEHOLD NO. 101 ➔ ENTER "101"
⑦ PRESS (KEY) BUTTON.
⑧ ENTER THE PASSWORD OF THE HOUSEHOLD NO.
⑨ PRESS (CALL) BUTTON.
⑩ IF AUTHORIZED, DOOR OPEN WITH "DOOR OPEN" SOUND.
⑪ IF UNAUTHORIZED, IT SOUNDS A DULL WARNING SOUND

PIC.5. ENTERING PASSWORD

4.3. ENTRY WITH PASSWORD IN CASE OF OFF-LINE CONDITION
(NOT CONNECTED TO LOCAL SERVER)

① PRESS (KEY) BUTTON.
② ENTER THE PASSWORD.
③ PRESS (CALL) BUTTON.

※ UNDER ON-LINE CONDITION (CONNECTED TO LOCAL SERVER), THIS FUNCTION DOES NOT WORK.
※ UNDER ON-LINE CONDITION, USER MUST DELETE PASSWORD FOR OFF-LINE ENTRY.

5. REGISTRATION OF SMART EKEY & DOOR OPEN

5.1. REGISTRATION OF SMART EKEY

① MEMORIZE 'GATE NAME' INDICATED IN THE SCREEN TOP OF LOBBYPHONE. (EX: GATENAME 0106-47)
② INPUT GATE NAME IN 'BUILDING/LOBBY NUMBER'
③ INPUT THE NUMBER OF HOUSEHOLD (EX: 101)
④ INPUT PASSWORD TO ACCESS TO THE BUILDING (PASSWORD FOR A WALLPAD)
⑤ ENTER THE BUTTON 'REGISTRATION'

※ PRECAUTIONS

1. DO NOT USE THE NUMBERS '1234, 4321, 0000' AS A PASSWORD FOR WALLPAD.
2. DO NOT USE THE NUMBER '9999' FOR BUILDING/HOUSEHOLD NUMBER
3. THE MAXIMUM QUANTITY OF EKEY REGISTRATION IS 7 KEYS. NEED TO REMOVE FORMER EKEY TO ADD.

5.2. OPEN THE DOOR AT THE LOBBY.

① PRESS THE BUTTON 'DOOR OPEN' IN GREEN COLOR.
② THE DOOR IS OPEN AFTER FEW SECONDS.

※ PRECAUTIONS

- IN CASE OF CHANGE OR DELETION OF LOBBY PASSWORD, PLEASE REGISTER EKEY ONCE AGAIN.

※ BLE MODULE NAME SET-UP

- BLE MODULE NAME WILL BE COMBINED CALL PREFIX NUMBER WITH SYSTEM ID.

(EX) CALL PREFIX : 106, SYSTEM ID : 40

GATE (BLE MODULE NAME) : 0106-40

- BLE FUNCTION IS NOT AVAILABLE WITH OUTDOOR LOBBYPHONE

6. NAME SEARCH

① PRESS THE BUTTON (CALL).

② INPUT THE NAME ON THE KEYPAD.

③ SELECT THE NAME YOU ARE LOOKING FOR BY USING UP (KEY) & DOWN (GUARD) BUTTONS.

④ PRESS THE BUTTON (CALL) TO CALL THE HOUSEHOLD.

PIC 6. KEYPAD

PIC 7. NAME SEARCH

※ PRESS THE KEY WITHIN TWO SECONDS TO INPUT THE ANOTHER LETTER IN ONE BUTTON.
(THE COLOR OF ALPHABET WILL BE CHANGED AFTER TWO SECONDS.)

※ ALPHABET SEARCH IS AVAILABLE ONLY IN ENGLISH AND RUSSIAN.

ENGLISH (ALPHABET SEARCH)

1	2 A B C	3 D E F
4 G H I	5 J K L	6 M N O
7 P Q R S	8 T U V	9 W X Y Z
	0	

RUSSIAN (ALPHABET SEARCH)

1 А Б В	2 Г Д Е Ё	3 Ж З И Й
4 К Л М	5 Н О П	6 Р С Т
7 У Ф Х	8 Ц Ч Ш Щ	9 Ъ Ы Ь
	0 Э Ю Я	

7. GENERAL SETTINGS

SETTINGS

1. PRESS THE BUTTON .
2. INPUT YOUR PASSWORD.
3. PRESS THE BUTTON (CALL).

※ FOR NETWORK SECURITY, PLEASE CHANGE THE PASSWORD FOR THE FIRST USE.

※ INITIALIZATION OF THE PASSWORD: + "0000" + + + + +

HOW TO USE THE BUTTONS

※ WHEN YOU INPUT THE IP ADDRESS, USE THE BUTTONS AND "•".

MENU OF THE SETTINGS

0: SET NETWORK+

0: IP ADDRESS: (INPUT IP ADDRESS)

1: G/W ADDRESS (INPUT GATEWAY ADDRESS)

2: DNS ADDRESS (INPUT DNS ADDRESS)

3: NET MASK (INPUT NETWORK MASK)

1: SET VOIP+

0: SIP SERVER (INPUT SIP SERVER ADDRESS)

1: GUARD ID (INPUT GUARD ID)

2: MANAGEMENT+

0: SERVER ADDRESS (INPUT LOCAL SERVER ADDRESS)

1: UPDATE ADDRESS (INPUT UPDATE SERVER ADDRESS)

2: SYSTEM ID (INPUT SERIAL NUMBER OF DRC-700S)

3: CALL PREFIX (SETTING BUILDING NUMBER)

* IN CASE OF NO INPUT BUILDING NUMBER, INPUT SCREEN WILL AUTOMATICALLY APPEARE.

4: CALL LINE+

0: MIN CALL LINE (INPUT MINIMUM CALL LINE)

1: MAX CALL LINE (INPUT MAXIMUM CALL LINE)

* CAUTION : IF MIN CALL LINE IS HIGHER THAN MAX CALL LINE, IT'S NOT POSSIBLE TO CALL.

5: POSITION (SETTING THE INSTALLATION PLACE OF DRC-700S)

※ USE THE BUTTON FOR SETTING ABOVEGROUND AND THE BUTTON FOR BELOWGROUND.

EX) PRESS THE BUTTON TO INDICATE '1', THE BUTTON TO INDICATE 'B1'.

※ IF YOU DO NOT INPUT THE FLOOR, THE FIRST FLOOR WILL BE AUTOMATICALLY SET.

※ IN CASE OF CHANGE OF SYSTEM ID AND CALL PREFIX, BLE MODULE NAME WILL BE CHANGED.

3: AUDIO/VIDEO+

0: AUDIO+

0: GENER SPE. VOL. (SPEAKER VOLUME CONTROL WHEN CALLING HOUSEHOLD)

1: GENER MIC VOL. (MICROPHONE VOLUME CONTROL WHEN CALLING HOUSEHOLD)

2: GUARD SPE. VOL. (SPEAKER VOLUME CONTROL WHEN CALLING GUARD)

3: GUARD MIC VOL. (MICROPHONE VOLUME CONTROL WHEN CALLING GUARD)

4: GENER NUMBER SPEECH (SETTING VOICE BUTTON OF BUILDING/HOUSEHOLD NUMBERS)

5: KEY SOUND (SETTING KEY SOUND)

6: RING SOUND (SETTING RING SOUND)

7. KEY VOL. (SETTING KEY VOLUME)

8. RING VOL. (SETTING RING VOLUME)

9: EFFECT VOL. (SETTING SOUND EFFECT VOLUME)

10: INITIALIZATION (AUDIO INITIALIZATION)

* ALL SETTINGS IN AUDIO MENU WILL BE INITIALIZED.

1: VIDEO:+

0: QUALITY (ADJUST VIDEO QUALITY)

* AVAILABLE TO ADJUST THE QUALITY BY 1M/2M/3M.

※ DATA SIZE INCREASES IN HIGHER QUALITY.

1: RESOLUTION

* 480P(640*480)/720P(1280*720)/1080P(1920*1080)

2: INITIALIZATION (VIDEO INITIALIZATION)

* ALL SETTINGS IN VIDEO MENU WILL BE INITIALIZED.

4: EXTRA CONFIG+

0: LANGUAGE (SELECT LANGUAGE)

1: SKIN THEME

0: AUTO

* IT AUTOMATICALLY SETS ONCE A DAY WHEN BOOTS UP SKIN THEME.

1: FLIP CLOCK

* FIX THE SKIN THEME BY FLIP CLOCK TYPE.

2: RED CLOCK

* FIX THE SKIN THEME BY RED CLOCK TYPE.

3: GREEN CLOCK

* FIX THE SKIN THEME BY GREEN CLOCK TYPE.

4: BLACK CLOCK

* FIX THE SKIN THEME BY BLACK CLOCK TYPE.

2: SET TIME+

0: DOOR OPEN TIME

* 2, 5, 10, 15, 20, 25 SEC. SELECTION

1: SLEEP MODE TIME

* 30 SEC., 1, 2, 3, 4, 5 MIN. SELECTION

2: KEY TIME OUT

* 10, 20, 30 SEC. SELECTION.

3:USE 24-HOUR FORMAT

* SELECT THE TYPE OF TIME (24HOURS)

3: ADC SENSOR

0: DISTANCE (CHANGE THE RANGE OF DISTANCE MEASUREMENT OF ADC SENSOR)

* IN CASE OF EXPOSED TO DIRECT SUNLIGHT, DISTANCE WILL SHORTEN.

0:[ ] 100CM

1:[ ] 90CM

2:[*] 80CM

3:[ ] 70CM

4:[ ] 60CM

5:[ ] 50CM

6:[ ] 40CM

7:[ ] 30CM

8:[ ] UNUSED

1: DETECTION HOLD TIME

0:[ ] 200MS

1:[*] 300MS

2:[ ] 400MS

3:[ ] 500MS

4:[ ] 600MS

4: BLE INTENSITY

0:[ ] 1 SETP

1:[ ] 2 SETP

2:[ ] 3 SETP

3:[ ] 4 SETP

4:[*] 5 SETP

5:[ ] 6 SETP

6:[ ] 7 SETP

7:[ ] 8 SETP

5: CHANGE PWD

* PLEASE USE THE BUTTON TO CHANGE THE PASSWORD.

6: OFF-LINE PWD (ENTER THE PASSWORD TO OPEN THE DOOR WHEN OFFLINE)

* PLEASE USE THE BUTTON TO CHANGE THE PASSWORD.

* INITIAL OFF-LINE PASSWORD IS 123456.

7: REBOOT: (OPERATION SYSTEM REBOOTS)

8: SYSTEM RESET (SYSTEM IS RESET TO THE FACTORY SETTINGS)

* CHANGED IP IS NOT INITIALIZED.

5: DATABASE+

0: PASSWORD DOWN. (DOWNLOAD HOUSEHOLD PASSWORD)

1: RF-CARD DOWN. (DOWNLOAD RF-CARD DATA)

2: PASSWORD DEL. (DELETE HOUSEHOLD PASSWORD)

3: RF-CARD DEL. (DELETE RF-CARD DATA)

6: SYSTEM INFO+

0: VERSION (SOFTWARE VERSION)

1: BOOT (BOOT LOADER INFORMATION)

2: KERNEL (OS INFORMATION)

7: TEST+

0: TEST DOOR OPEN

1: TEST RF CARD

* IT'S TO KNOW RF CARD NUMBER.

* PUT THE RF CARD TO THE READER IN READING MODE.

2: TEST ELEVATOR (TESTING ELEVATOR CALLING)

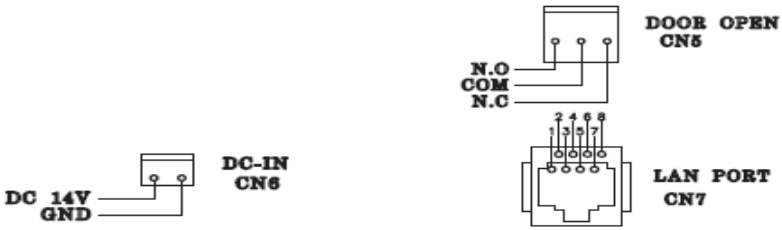
3: ADC SENSOR TEST

4: TEMP SENSOR TEST

* IT IS AVAILABLE TO IDENTIFY THE SENSOR THROUGH "DEFROSTER : ON".

5: SYSTEM INITIALIZE

8. WIRING DIAGRAM



※ BE CAREFUL OF EACH POLARITY

9. Specification

Model / Spec.	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

PM49L20M0010

Printed In Korea / 2017.09.104