

Since 1968

COMMAX
SmartHome & Security

User Manual

COMMAX BIOLOBBY PHONE DRC-BIOL



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.

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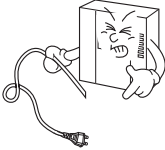



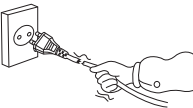





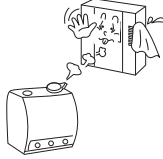







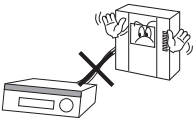


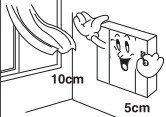


Safety Warning & Caution

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

 <p>Warning It may cause a serious damage or injury if violated.</p>  <p>Caution It may cause a minor damage or injury if violated.</p>	 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

<p>Please don't use several products at the same time on one power socket.</p> <ul style="list-style-type: none"> It may cause a fire due to an abnormal overheating.  <div>   </div> <p>Prohibition Fire</p>	<p>Please don't bend the power cable excessively or it may cause an electric shock.</p> <ul style="list-style-type: none"> fire when using a damaged power cable.  <div>    </div> <p>Prohibition Electric shock Fire</p>	<p>Please don't handle the power cable with a wet hand.</p> <ul style="list-style-type: none"> It may cause an electric shock.  <div>   </div> <p>Prohibition Fire</p>	<p>Please plug out the power cable from the socket when not using it for a long period of time.</p> <ul style="list-style-type: none"> It may shorten the product lifespan or cause a fire.  <div>   </div> <p>Request Fire</p>
<p>Please don't install the product in the place where there is much oil, smoke or humidity.</p> <ul style="list-style-type: none"> It may cause an electric shock or fire.  <div>    </div> <p>Prohibition Electric shock Fire</p>	<p>Please don't install the product with the lightning and thunder.</p> <ul style="list-style-type: none"> It may cause an electric shock or fire.  <div>    </div> <p>Prohibition Electric shock Fire</p>	<p>Please don't use and connect this product with other products with different rated voltage</p> <ul style="list-style-type: none"> It may cause a disorder or fire.  <div>   </div> <p>Prohibition Fire</p>	<p>When installing the product that generates heat, please install the product away from the wall (10cm) for the ventilation.</p> <ul style="list-style-type: none"> It may cause a fire due to the increased internal temperature.  <div>   </div> <p>Prohibition Fire</p>

⚠ Warning

Cleaning & Use

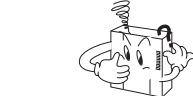
Please don't disassemble, repair or rebuild this product arbitrarily (please contact the service center if a repair is needed).

- 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.



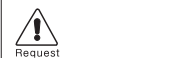
Please don't insert any metallic or burnable materials into the ventilation hole.

- 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.

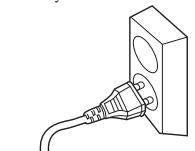


⚠ Caution

Power & Installation

Please plug the power cable firmly into the inner end

- It may cause a fire.



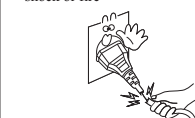
Please hold the plug tightly when unplugging the power cable (a part of the copper wire may be disconnected if the grabbing is only made on the cord when pulling out the cable).

- 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.

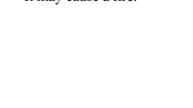


Please be careful when using an AC circuit breaker since there is a possibility of an electric shock.



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.



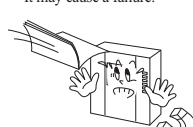
Cleaning & Use

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.

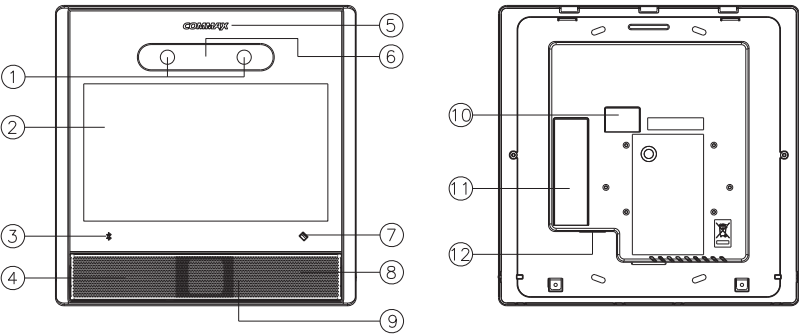


Please use the designated connection cable within the maximum calling distance designated for the product

- It may reduce the product performance.



1. Part names and Features












No	Description	No	Description
1	CMOS Camera (For Call, Face Recognition)	7	RF Card Receiver
2	10.1" LCD (Full Touch type)	8	MIC
3	BLE Receiver	9	Reset Switch
4	Speaker	10	Spare Port
5	Night LED	11	Line Connection (Wiring) Terminals
6	IR Transmitter	12	Switchgear Connection Terminals

2. Screen Setting



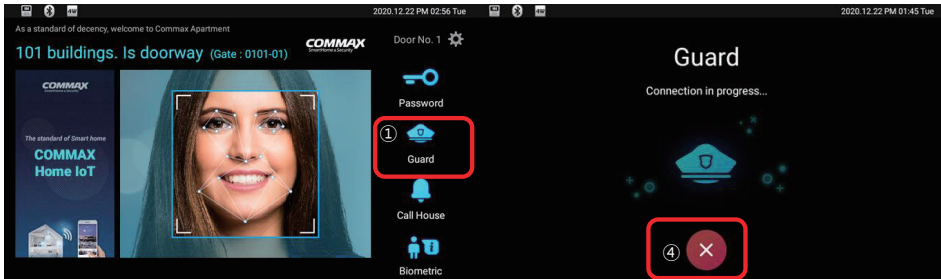
2.1. Status Display

Icon	Description	Icon	Description
	LAN Connection		RF Card Connection
	Outer Lobbyphone		BLE Connection
	Building Lobby phone		Heat rays Motion
	Common 8 Wires (For Interphone)		Common 4 Wires (For Videophone)
	Gateview Way		

2.2. Screen Display

- ① Status: It displays the Lobby phone status.
- ② Time: It displays the current time.
- ③ Building: It displays the building set in the Lobby phone.
- ④ Serial No: It displays a Serial No of Lobby phone.
- ⑤ Settings: It displays the Lobby phone settings
- ⑥ Face Recognition section: It displays the user's face.
- ⑦ Authentication of household password: Open the door after verification of the household. password.
- ⑧ Call the Guard Station: It call the Guard station.
- ⑨ Call the household: It calls each household.
- ⑩ Biometric Recognition: Register and delete a biometric(face) information.


3. Call Guard Station



① Click  Button.

② A calling tone is provided, and the Guard Station is called.

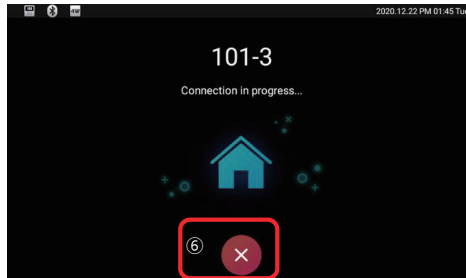
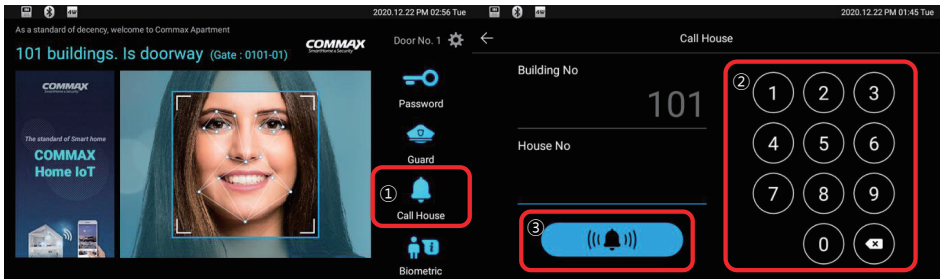
③ Make a call when answering from the Guard Station. (Talk time: 3 min)

④ Click  button on the screen to end the call.

⑤ When you click the 'Open Door' button at the security room, the door open text message and a voice message saying "The door is open" are provided and the door is opened.

⑥ If you hear "Beep--- Beep---", it is on the call. Please call again later.

4. Call Household.



① Call  button.

② Input the household No on the screen.




③ Click  button.

④ A calling tone is provided, and the household is called.

⑤ Make a call when answering from the household. (Talk time: 1 min)



⑥ Click  button on the screen to end the call.

⑦ When you click the 'Open Door' button at the household, the door open text message and a voice message saying "The door is open" are provided and the Lobby is opened.

⑧ If you hear "Beep--- Beep---", it's on the call. Please call again later

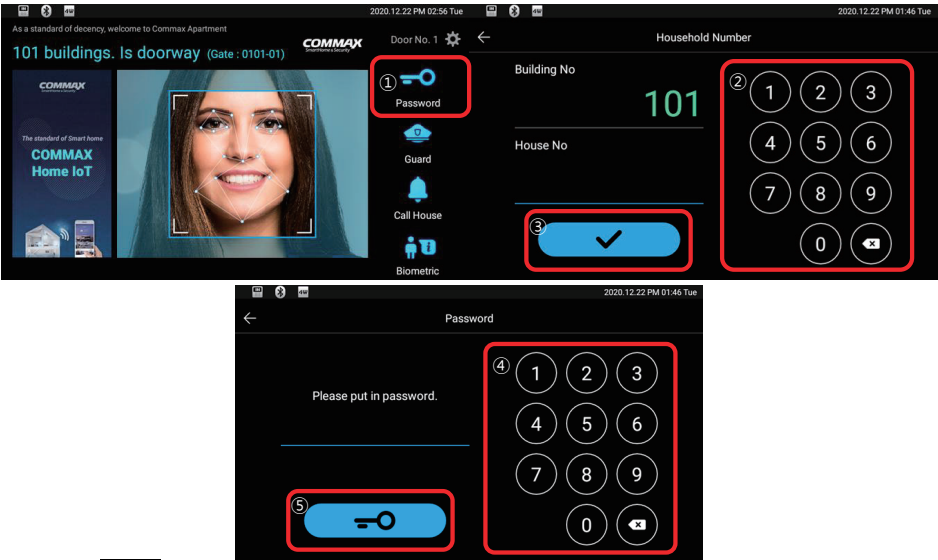
5. Entrance Authorization




5.1. By RF Card

- ① Close the registered RF card in the card input window
- ② If authentication is successful, the door open text message and the voice message “The door is open.” are provided and the door is opened.
- ③ If authentication fails, an authentication failure message is displayed.

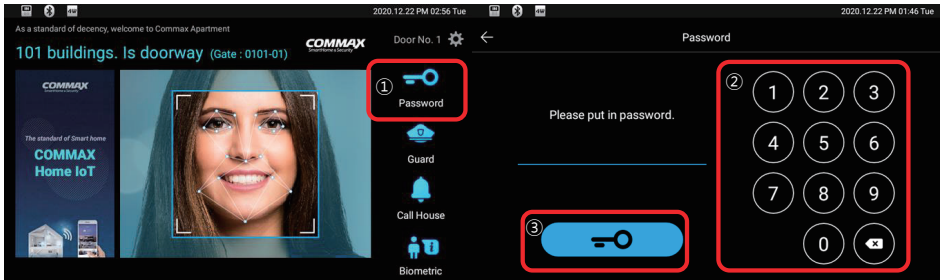




5.2. By Household's Password



- ① Click  button.
- ② Input the household No on the screen.
- ③ Click  button.
- ④ Input household password.
- ⑤ Click  button.
- ⑥ If authentication is successful, a voice message saying “The door has been opened” is provided and the door is opened.
- ⑦ If authentication fails, an authentication failure message is displayed.

5.3. By Offline Password



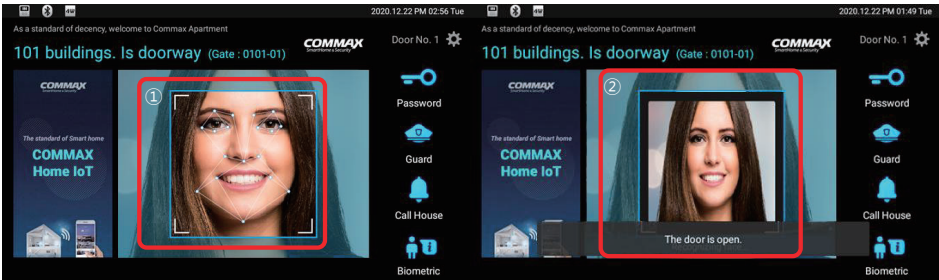
- ① Press and hold  button.
- ② Input Building password.
- ③ Click  button.
- ④ If authentication is successful, a voice message saying "The door has been opened" is provided and the door is opened.
- ⑤ If authentication fails, an authentication failure message is displayed.

※ You can use the simple password setting in the environment setting only.

※ This function is used to simply open the door by using the same password.

※ This function is not secure. (Because the same password is shared, there is no security. So please be careful when using this function.)

5.4.By Registered Facial Information



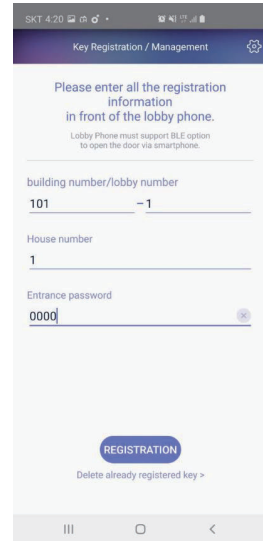
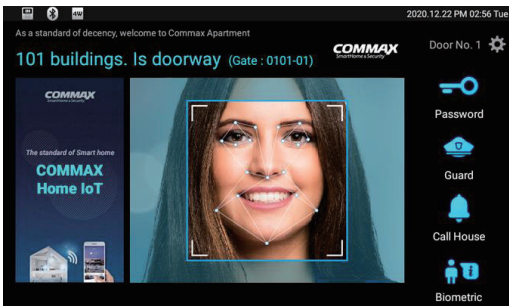
① Placing your face within the guideline displayed on the screen and stay around 1~3 seconds without movement.

② When authentication is success, open the door with the sound message of "Open door".

※ For facial information registration, please refer to 7. Biometrics – 7.1 Biometric Management Mode.

6. Register Smartphone eKey and open the Lobbyphone

6.1. Register Smartphone eKey

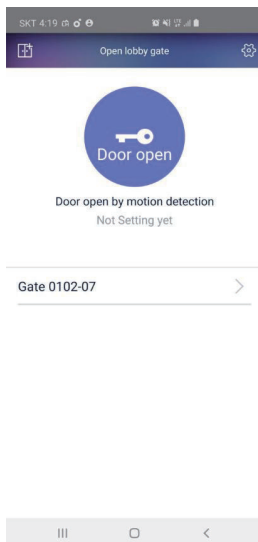


- ① Remember Lobbyphone's building number and ID number. (ex: Gate : 1234-1))
- ② Install and start "COMMAX LobbyPhone" App on your smartphone.
- ③ Enter LobbyPhone's building number, Lobby number, Household number and household's password
- ④ Click "Register" button.

※ Remark

1. Basic passwords of wallpad like 1234, 4321 or 0000 cannot be used.
2. Building or Household's number of 9999 cannot be used.
3. Once eKey is fully registered, you should delete eKey and re-register (Max. number of eKey: Admin 128 eKeys, Household 7 eKeys)

6.2. Open the Lobbyphone



- ① After running the "COMMAX Lobbyphone" application, press the blue "Open Door" button.
- ② When connected to the lobby, the door opens.

※ Warning

- The door cannot be opened if the access password for the lobby has been changed or the key stored on the lobby phone has been deleted.

You must register the lobby eKey again.

※ BLE Module Name setting

- BLE Module Name : Combination of Building and Unit numbers

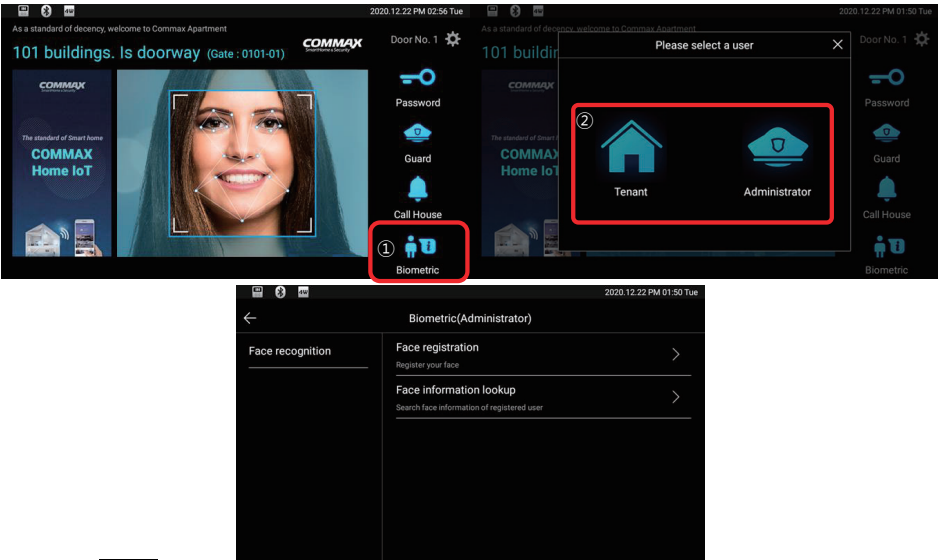
(Ex) Call Prefix : 1234, System ID : Ser as "1"




Gate : 1234-1

- The BLE function is not available for the outer lobby.

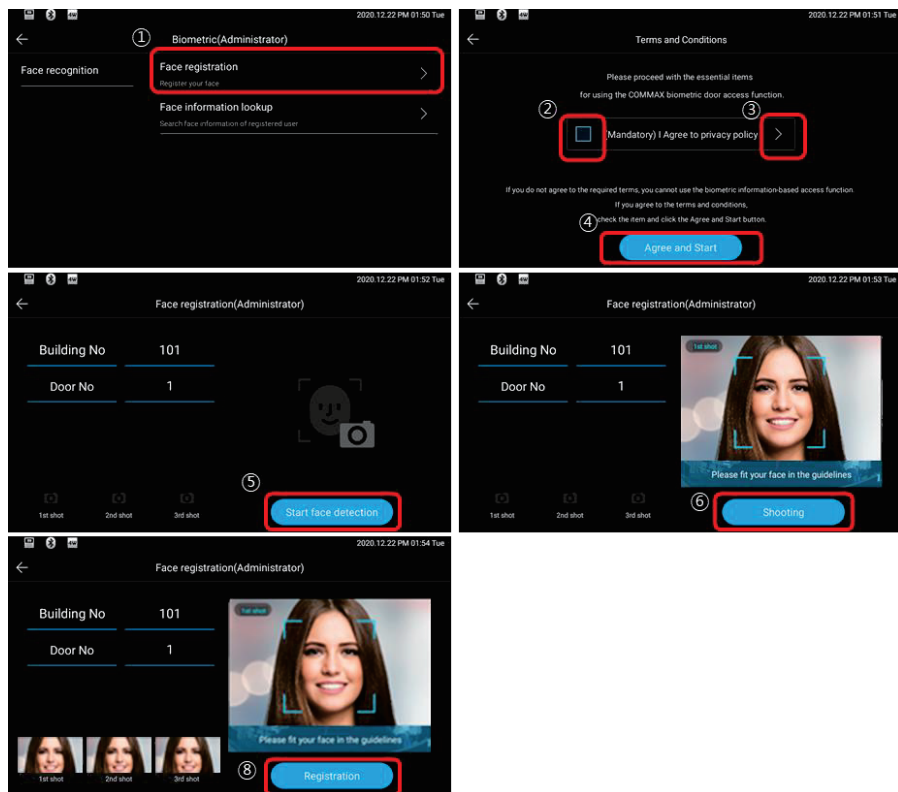
7. Biometrics







7.1. Biometric Management Mode



- ① Push  button of Biometrics.
- ② Click  button or  button.
- ③ Enter the admin password and tenant (generation Building/Unit numbers and password) to enter the management mode.

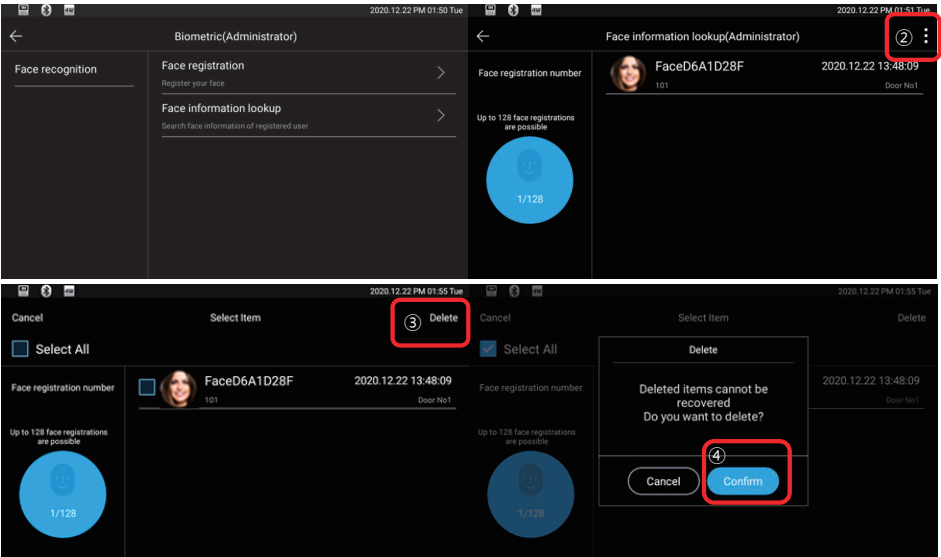
7.2. Register Face Information





- ① Press the face registration button in biometric mode.
- ② In order to register face recognition, you must agree to the privacy policy. Click  button to click.
- ③ If you want to see detailed information about the privacy, Click  button.
- ④ Press  button to move the face registration screen..
- ⑤ Press  button to prepare for face registration.
- ⑥ Place your face on the guideline displayed on the screen and press  button.
- ⑦ Repeat step 3 to take 3 faces.
- ⑧ Press  button to register face information.

- ※ When shooting a face, make sure the face is positioned in the same position on the guide line.
- ※ Tenant registration: Enter the biometric management mode into tenant mode and register in the same manner as the admin registration method.
- ※ For face registration, up to 7 households and 128 administrators can register.

7.3. Search/Delete Face Information

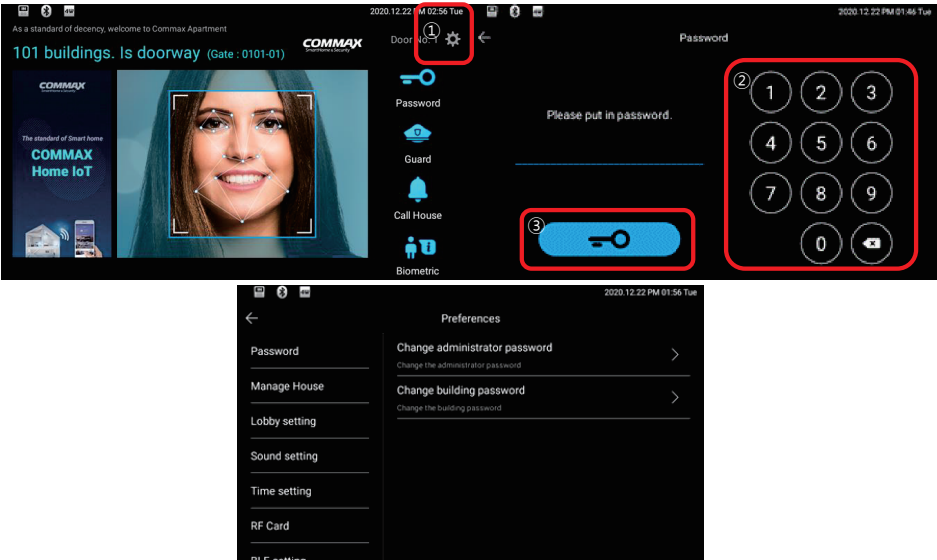




- ① In the biometric management mode, press the face information inquiry button to check the registered information.
- ② Click  button to enter the delete mode.
- ③ Select all and individual lists to delete. Click the delete button.
- ④ Check the delete list again and click  to delete the registered information.

- ※ Deleted information cannot be recovered. Please be careful when deleting.
- ※ If the number of available registrations is exceeded, please delete the existing registration information and register again.

8. Settings

8.1. Setting Menu





- ① Click  button.
- ② Input Admin pssword.
- ③ Click  button to enter the setting section.

- ※ The initial admin password is "4321" and the initial password is "1234".
- ※ After installing the product, be sure to change the management password before use.

8.2. Initialize Admin Password



- ① Click  button.
- ② Enter the initial admin password.
- ③ Delete the password entered with the "Delete" button.
- ④ Press "Blank" on the screen to enter password initialization mode.
- ⑤ Input the initial admin password again.
- ⑥ Click  button.

※ It is safe to use after changing the password after initializing the password.

※ In password reset mode, no message or sound effect is output.

8.3. Password

- ① Change admin password: Set a new administrator password
- ② Building password change: Set a new building password.

8.4. Household information

- ① Change household password: Change the household password.
- ② Confirm household password: Confirm the household password.
- ③ Enter the household number: Change the household number.
 - ※ However, it can be used only when the security guard phone is not installed.
- ④ Household video phone status: Check the status of household video phone.

8.5. Lobby setting

- ① Building number setting: Set a new building number.
- ② Serial number setting: Set a new lobby serial number
- ③ Change the number of common method lines: Set up the number of new common method lines.
- ④ Accessible building line number: Set up a new accessible building line number.
 - ex) In case of setting from line 1 to line 3, input "0103".
- ⑤ Simple password use setting: Set the simple password use.
 - ※ If you use a simple password, you can access with the same password, and you cannot use the household password.

- ⑥ Language setting: Change the lobby phone language.
- ⑦ Guard station automatic call setting: Set the guard station call method in case of 3 errors of password and RF card.
- ⑧ Floor distributor setting: Changes floor main equipment data.
 - * If you enter the ID of the Floor distributor, you can load and edit the data of the corresponding Floor distributor.
 - * You can set the household number, password, monitoring password, ring/bell selection, DTMF presence, etc.
 - * Even if you are not using it, please set a random password for security.
- 예) Default setting value according to new waiting type
 - Audio Phone: Lobby (0) DTMF (Off) BELL (Off) / DTMF Generation Unit: Lobby (0) DTMF (On) BELL (On)
 - CAV-702MR and others: Lobby (input the lobby ID) DTMF (off) BELL (off)
- ⑨ Inner sensor door open report: Set whether to report SECMAX when the door is opened with the PIR sensor.
- ⑩ Access Control Secumax Interlock: Set whether to report Secumax when the external door is opened.
- ⑪ Fire monitoring group and Secumax linkage: Set whether or not to report Secumax when interlocking with fire watchdog. * Emergency contact notification is also set.
- ⑫ TV OUT Settings: Set the type of video transmitted to the household (NTSC / PAL).
- ⑬ Screen saver setting: Set the type of screen saver in standby.

8.6. Sound setting

- ① Change the ring tone: Changes the security and household ring tone.
- ② Effect volume control: Change the sound effect (guard and household call sound, sound effect, button sound) ※ The sound effect can be set from 0 to 15.
- ③ Call volume control: Change the call sound (guard and household microphone and speaker).
- ④ Voice guidance: When entering the household number (household call and password), the number is output by voice.
 - ※ It is not supported when entering a password.
 - ※ When using the function, please use it carefully for security.
- ⑤ Setting the number of chime sound: It sets the number of chime sound.

8.7. Time setting

- ① Door open/close time setting : Set the door open/close time.
 - ※ The door opening and closing time is from 0 to 25 seconds, and the default setting is 3 seconds.
- ② Key input time limit setting: Set the key (button) input time limit.
 - ※ If there is no input during the key (button) input time limit, it will switch to the main screen.
 - Ex) In the environment setting, the key input time limit is 25 seconds.
- ③ Date and time setting : Set the date and time
- ④ Power saving mode time setting : Set the power saving mode time.

8.8. RF Card (13.56MHz RF card key)

- ① RF Card test mode : Check the card number of the RF Card (wireless card key).
- ② RF Card registration : If you touch the RF Card (wireless card key) to the recognition window, registration is completed with a registration completion message.
 - ※ The maximum number of RF cards that can be registered is 2,048 PCS.
- ③ Individual deletion of RF Card : When the registered RF Card (wireless card key) touches the recognition window, it is deleted.
- ④ Delete all the RF Cards : Delete all the registered RF Cards (wireless card keys).
 - ※ Please note that the deleted RF Card (wireless card key) cannot be recovered.
- ⑤ RF Card registration confirmation : If you touch the RF Card (wireless card key) to the recognition window, you can check the registration status.
- ⑥ RF Card data transmission : RF Card (wireless card key) data is transmitted to other lobby devices.
- ⑦ RF Card data reception : It receives RF Card (wireless card key) data from other lobby devices.
 - ※ RF Card transmission/reception is available only between DRC-BIOL.
- ⑧ RF Card linkage setting: It is used to link SECUMAX and RF Card data.
 - * If you have set this function, please register your card at SECUMAX.

8.9. BLE Setting

- ① BLE setting : Set the BLE output strength.
- ② Delete all administrator BLE keys: Delete all registered administrator BLE keys.
 - ※ Please note that the deleted administrator BLE Key cannot be recovered.

8.10. Biometrics

- ① Basic setting of Face Recognition
 - A. Threshold: Set the threshold for face recognition.
 - ※ The threshold value can be set from 55 to 75.
 - ※ If the threshold is low, recognition is easy, but the false recognition rate increases. If it is high, the recognition is difficult but the false recognition rate decreases.
 - B. Minimum face size: Set the minimum face size for recognition.
 - ※ Minimum face size can be set from 50 to 125.
 - ※ The smaller the size setting, the longer the face detection distance.
 - C. Real object detection: Set the real object detection function.
 - ※ Fake face information (printed photos, etc.) can be identified, but face recognition speed may be reduced.
 - D. Sensitivity: Set the sensitivity of real object detection.
 - ※ Sensitivity can be set from 5 to 9.
 - E. Face display: Displays the registered user's face after face authentication. (Default setting: Disabled)
 - ※ When using the function, there may be controversy over the infringement of portrait rights, so please use it with care.

8.11. Test

- ① Door open test: Test door open.
- ② Touch screen test: You can check the screen touch.
- ③ Proximity sensor: Test the proximity sensor.
- ④ Temperature sensor: Test the temperature sensor.
- ⑤ Camera : Preview cameras.

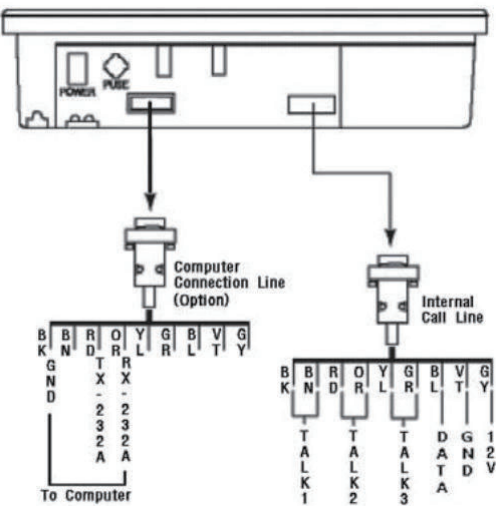
8.12. Product Information

- ① Version information : You can check the system version, MAC address, boot loader version, kernel version, and uptime.
- ② Restart: Restart the product.
- ③ Factory reset: Reset to factory default.
 - ※ After initialization, all settings (environment settings, database) of the product are initialized and cannot be restored.
 - ※ Please reset the product after initializing.

9. Wiring Diagram

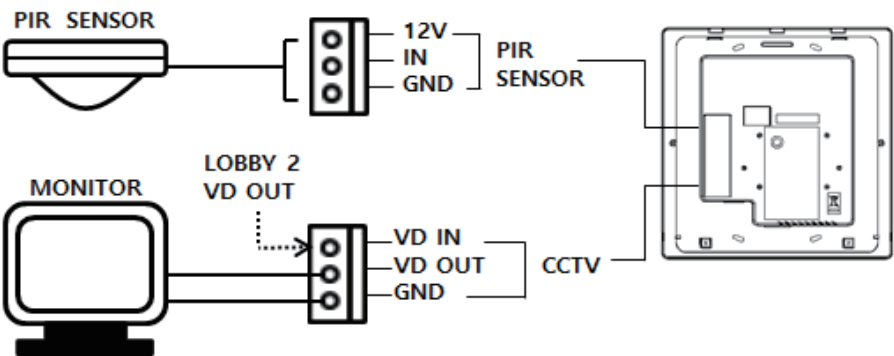
9.1 Guard station (CDS-481L)

- In the GateView system, internal call lines 2,3 are not used

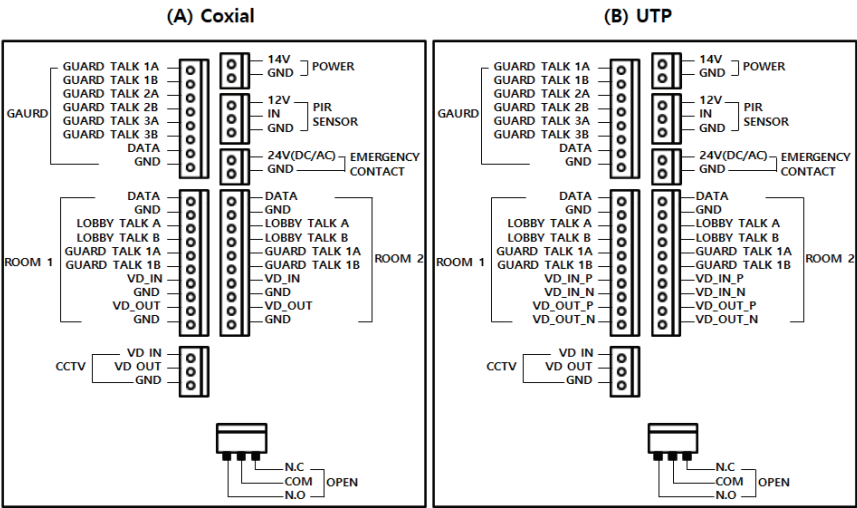


9.2 Wiring of CCTV and Sensor

- Please use coaxial line for video.
- The video is displayed only when the lobby and household are on a call.



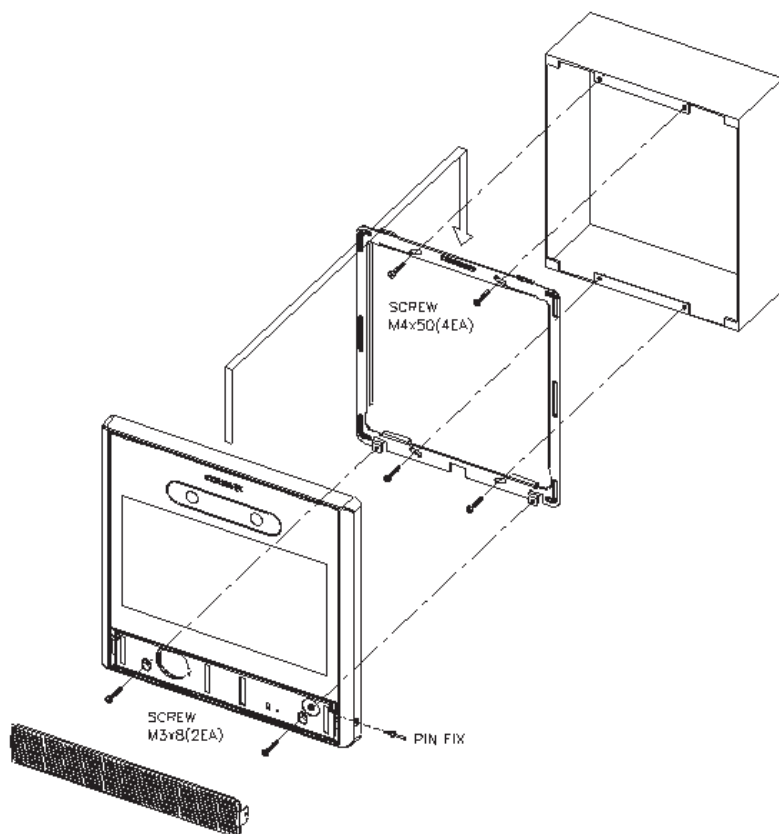
9.3 Lobbyphone



* Notice

- ① The voltage for emergency contact is AC/DC 24V.
- ② When the power is applied to emergency contact, the door related to the switch will be opened.
- ③ Make sure to use the correct VIDEO line (coaxial or UTP) according to the product.

10. Product Installation



Notes for installation

1. Please assemble the front panel at the end stage of the installation.
 - Put the panel from one side and insert the pin on the other side to fix it.
2. When installing the DRC-BIOL outdoor, please make sure to make it waterproof by molding with silicone at the surrounding edge of the product.

11. Parts list

PARTS LIST		
SORT	DESCRIPTION	Q'TY
CONN. 2PX300	Wiring Connector	2
CONN. 3P(3.96)X250	Wiring Connector	1
CONN. 3PX300	Wiring Connector	2
CONN. 8PX250	Wiring Connector	1
CONN. 10PX300	Wiring Connector	2
SCREW FHM 4X50 ZnY	Bracket + Built-in Box	4
SCREW PH2T 3X8 ZnY	Bracket + Case	2
PIN FIX DRC-BIO	Fixing a Front Grill	1
POWER CORD	For Adaptor	1

12. Specification

Spec	Model	DRC-BIOL
Mount type		Flush-mounted type
Wiring		Household: Common 4 or 8 wires, Video is IN/OUT wiring Guard station: Common 8 wires
Power source		14V=, 2.1A
Consumption		MAX. 1.6A
Communication		Hands free type (Half Duplex)
Image Sensor		2MP CMOS
Angle of view		Diagonal: 120°, Horizontal: 100°, Vertical: 53°
Min. Illumination		5 ± 3Lux (Up to 300mm in front of the camera)
Distance		Coaxial cable: - 300m based on 5C HBFT (less than 20 ohms per 1km line resistance) - 400m based on 7C HBFT (less than 13 ohms per 1km line resistance) UTP cable: - CAT. 300m based on 5E (10 ohms or less per 100m line resistance) * If the line resistance standard is not met, a problem may occur in the image quality.
RF Sensing Distance		Max. 30mm (Based on COMMAX RF Card)
Lighting		Color: Lighting required at night (built-in lamp)
Operating temp.		-20°C ~ 50°C
Dimension(mm)		244(W) x 270(H) x 46(D) mm



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