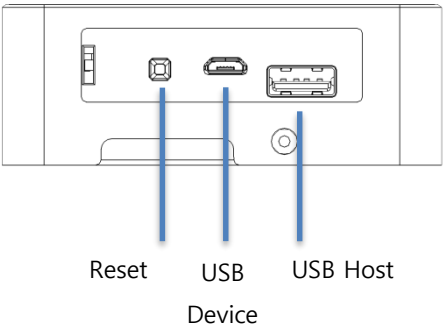
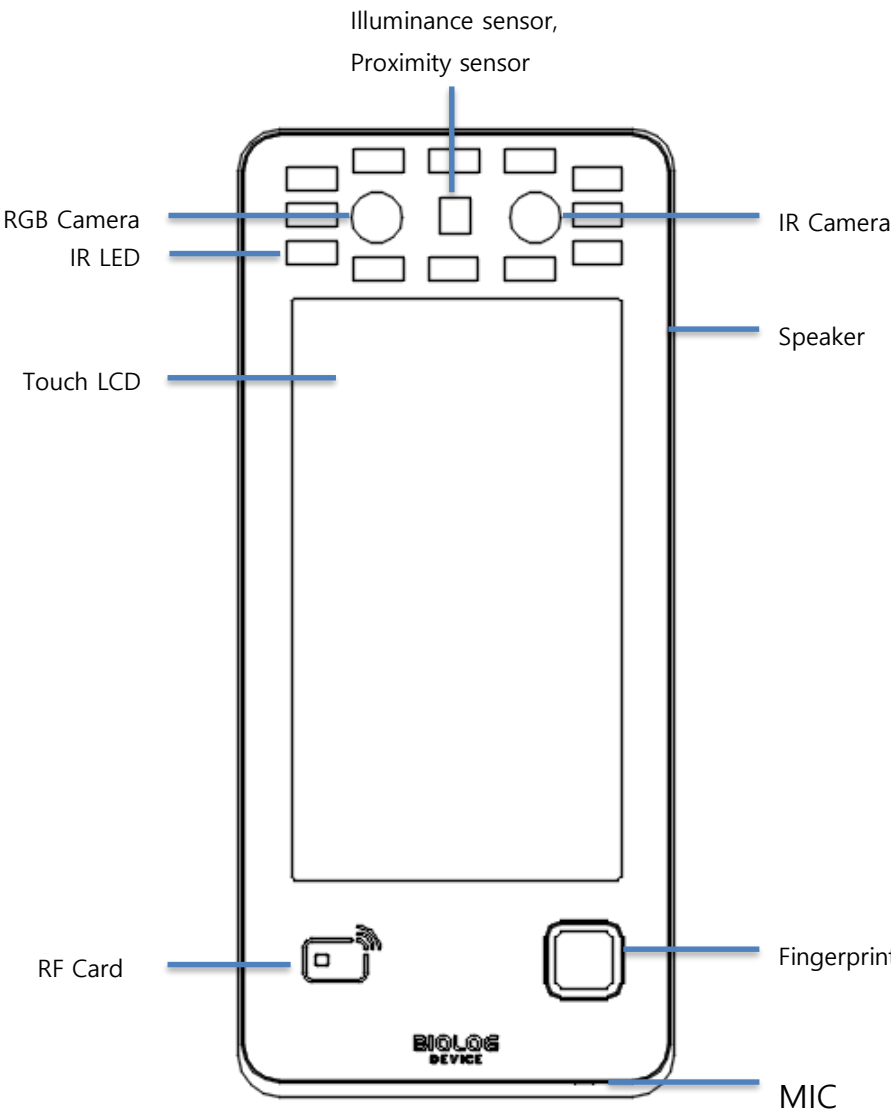
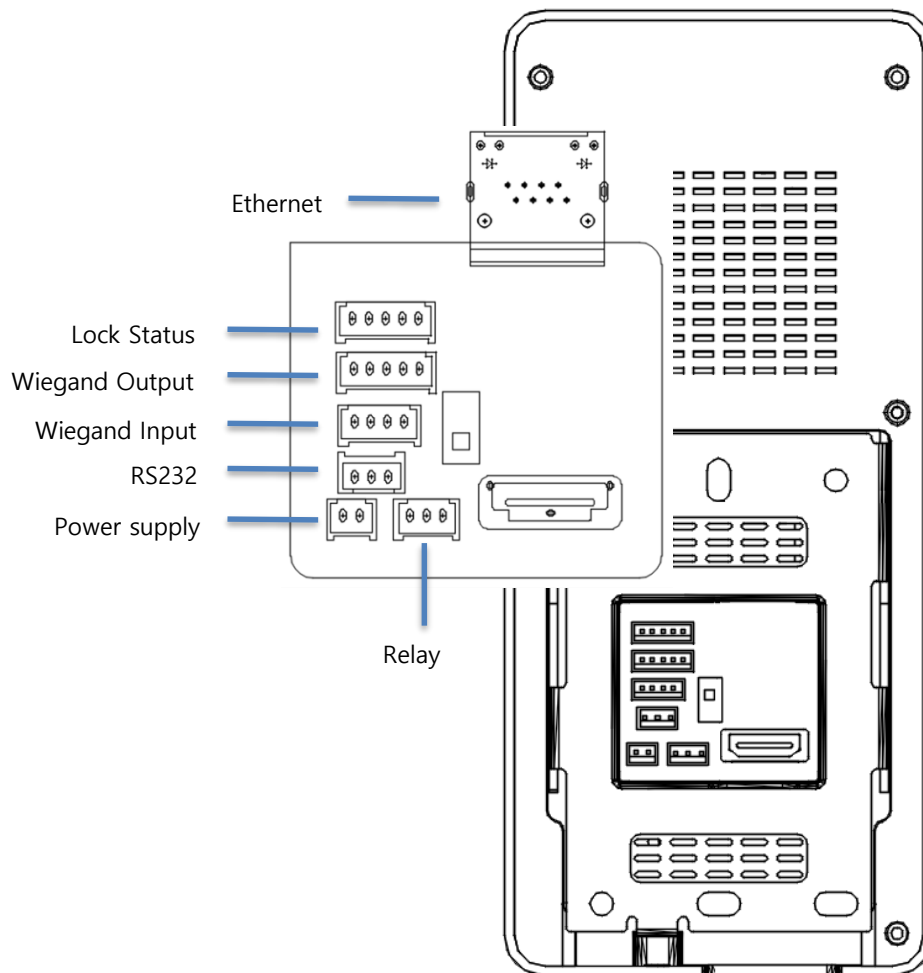
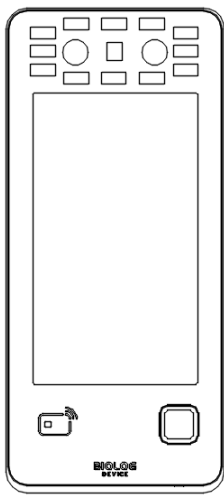


1. Details of the terminal

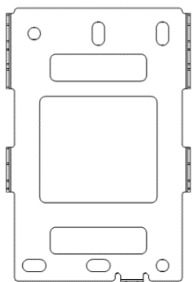




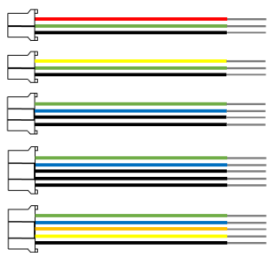
2. Components



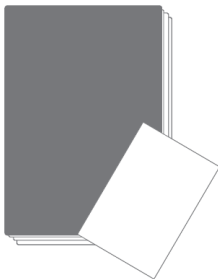
Facelog



Braket



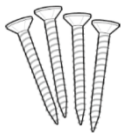
Extend Cable



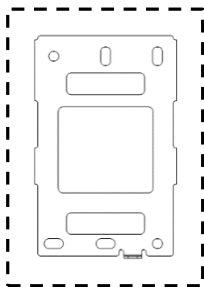
Manual



PVC anchor

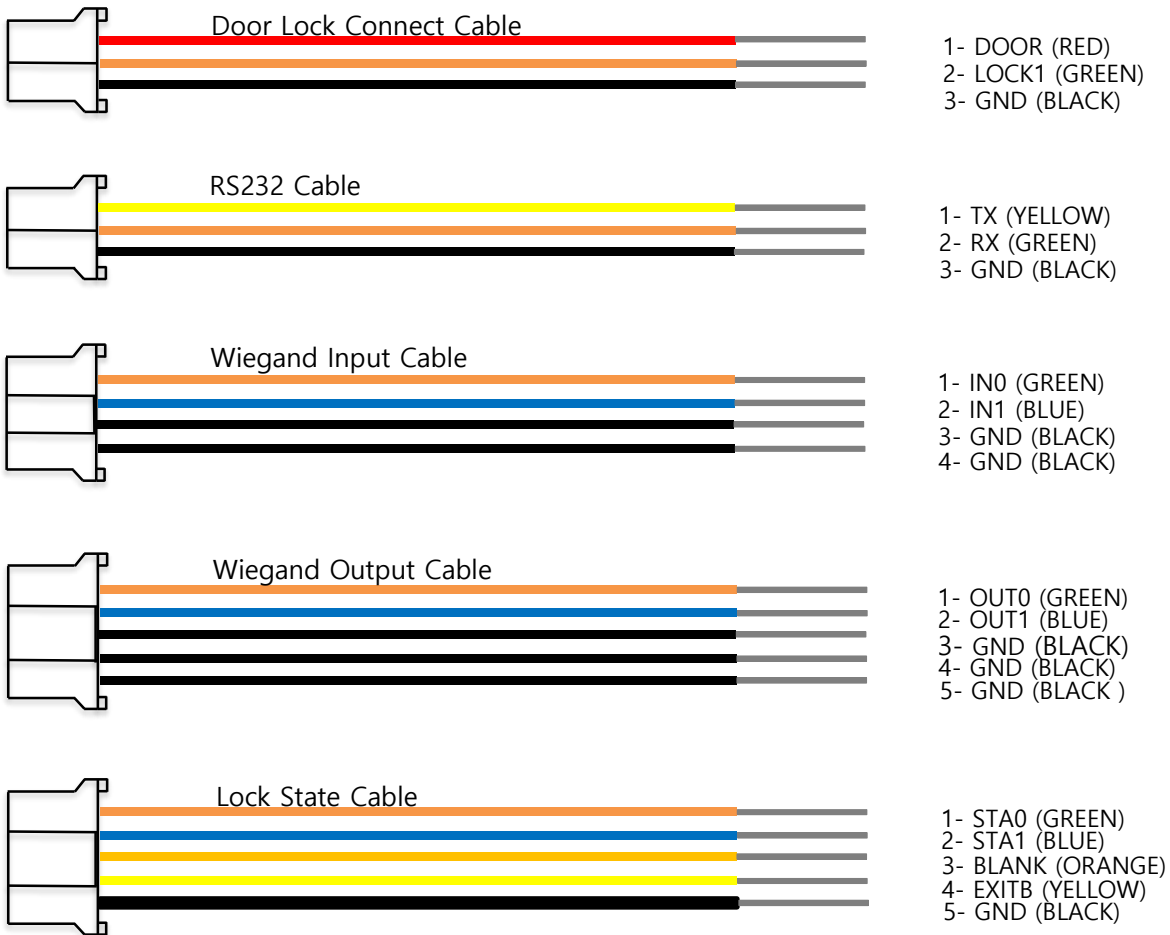


Fixing Screw

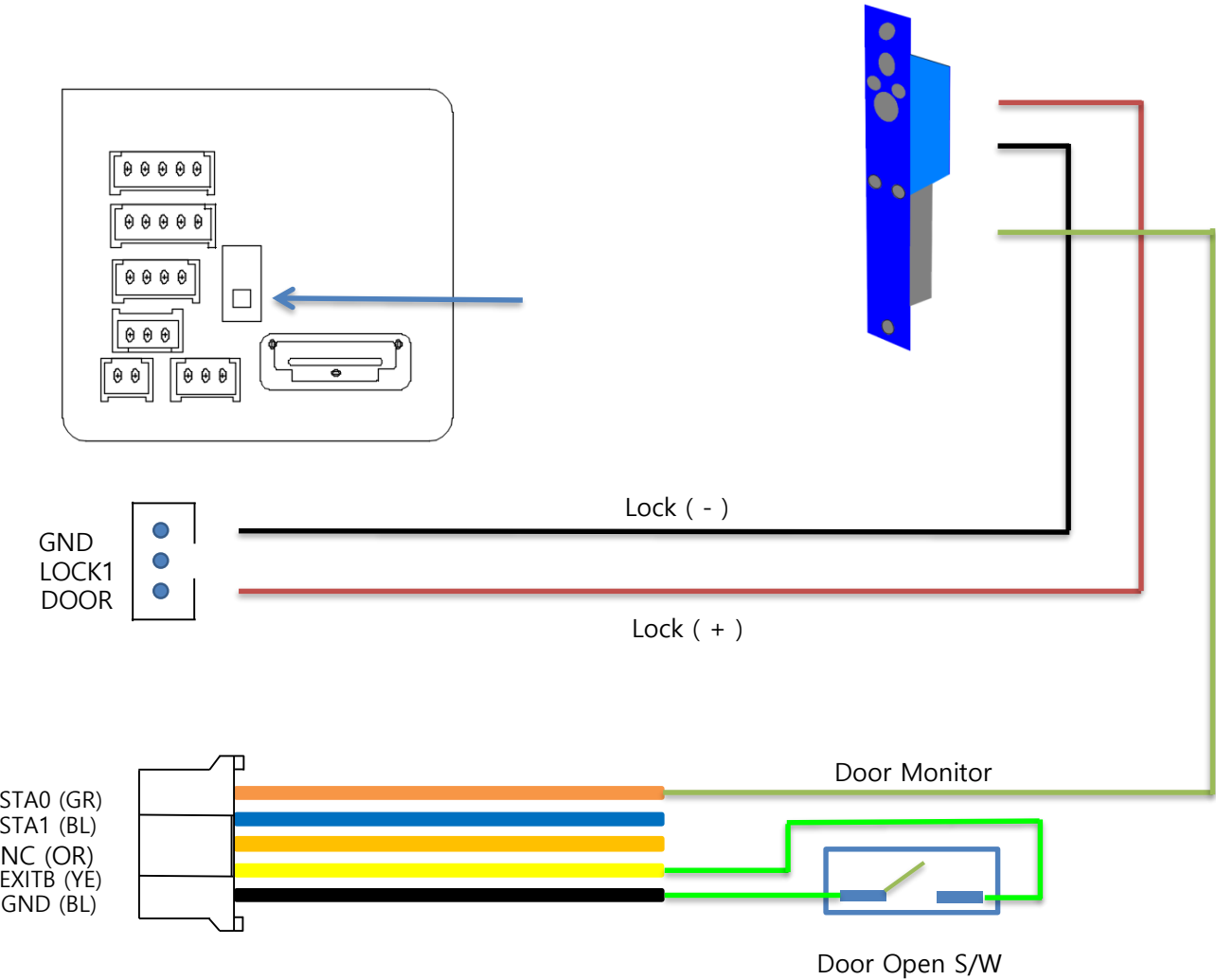


Drilling template

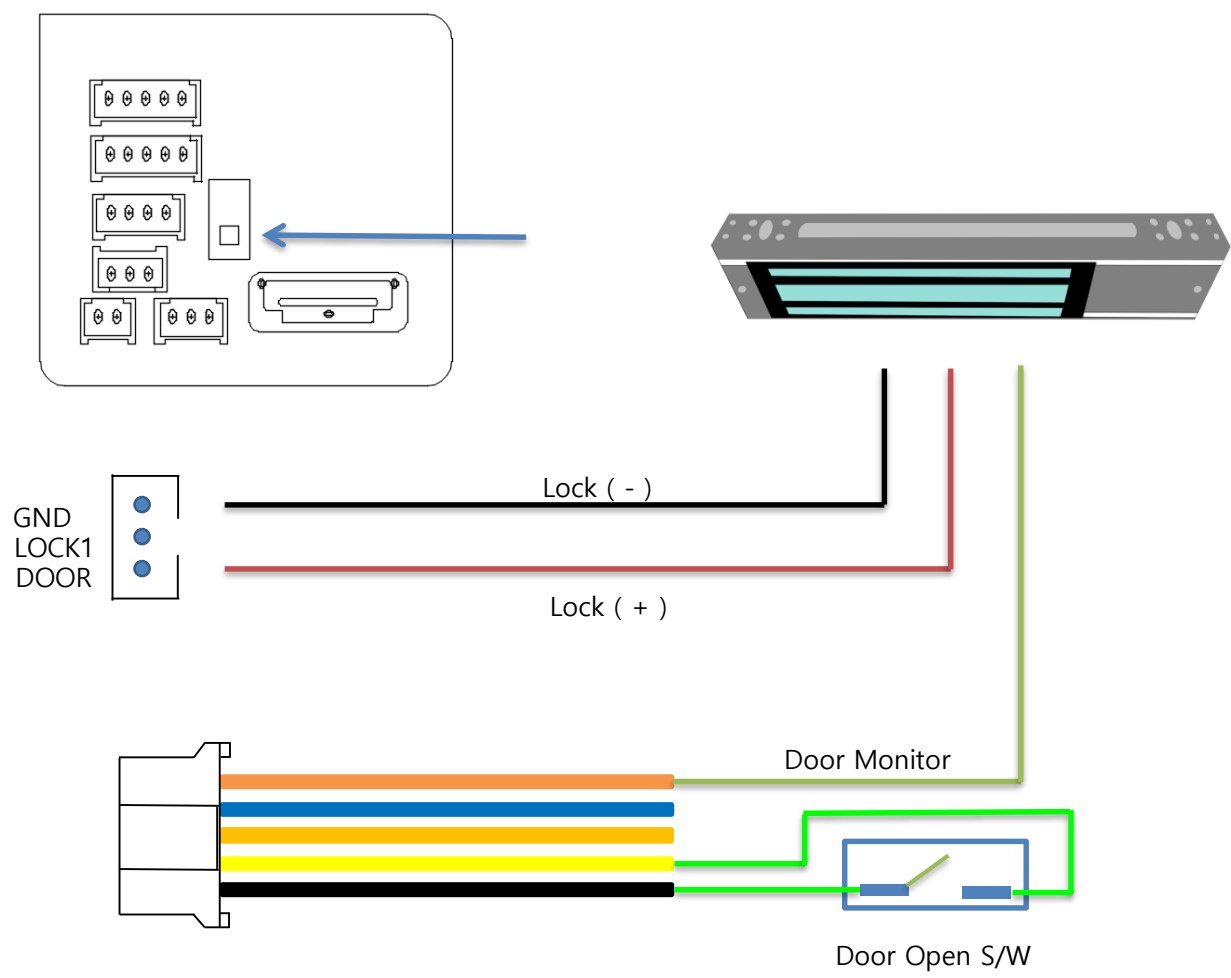
3. Cable and Connectors



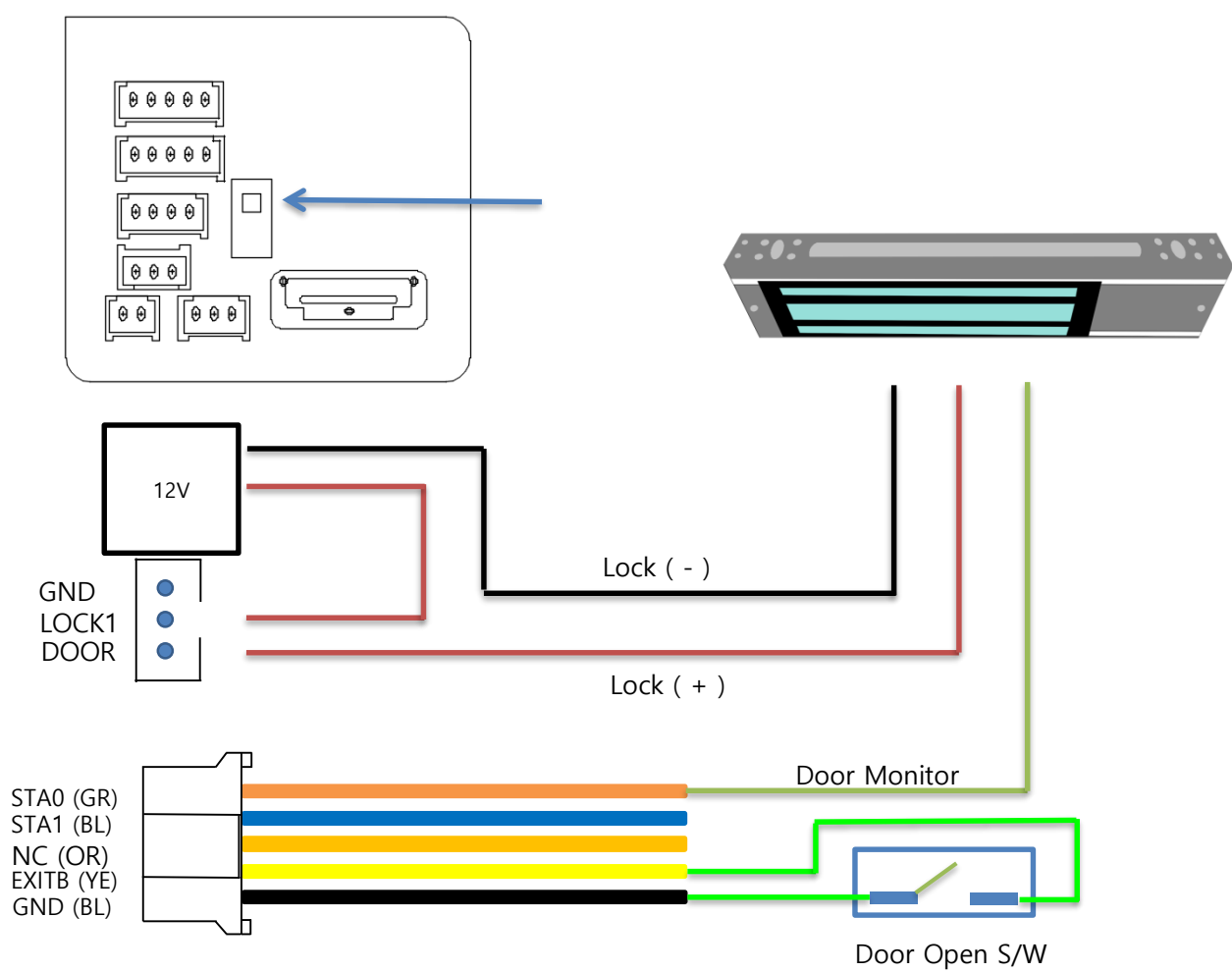
4. Connecting a Dead-Bolt Type Door Lock



5. Connecting an EM Type Door Lock



6. Connecting an EM Type Door Lock – Use external DC Power



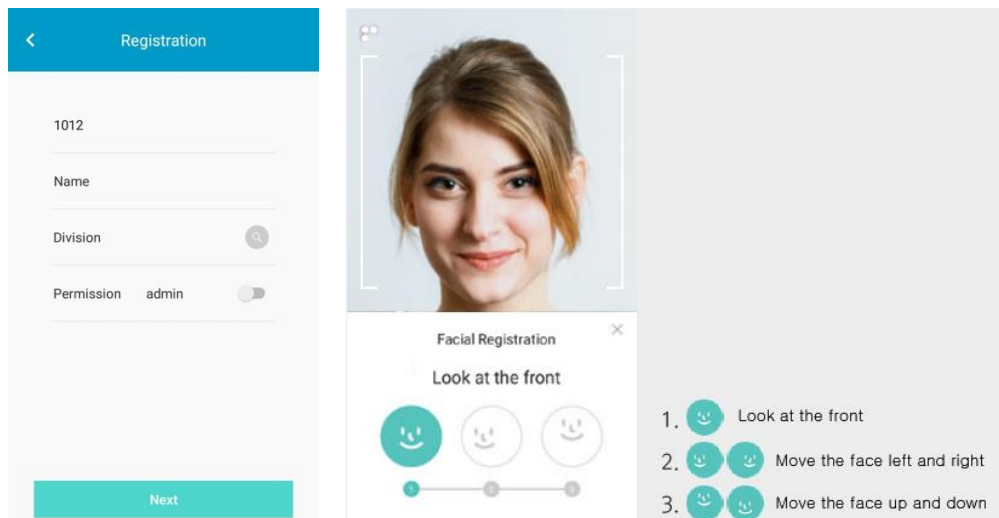
7. Spec Sheet

ITEM	SPEC
Model	Facelog
Display	5" IPS LCD (720 * 1280)
Touch Screen	Capacitive Multi Touch (5 point)
CPU/GPU	Quad Core Cortex-A53 1.5GHz, ARM Mali T720
Memory	RAM DDR3 2GB, NAND Flash 16GB or 32GB
OS	Android 7.0
Wi-Fi	802.11 b/g/n
Bluetooth	Bluetooth 4.0
Ethernet	10/100M
RS-232	1 Port
Wiegand	Input, Output
Finger print	Support
Sensor	Support (Illuminance sensor, Proximity sensor)
IR LED	850nm, 0.5W, 24ea
RGB Camera	5M
IR Camera	USB Interface
Speaker	1ea
MIC	Support
NFC	13.56MHz
Interface	USB OTG, USB Host, RS232, Wiegand Input, Wiegand Output, Lock Status,
Voltage	DC 12 V

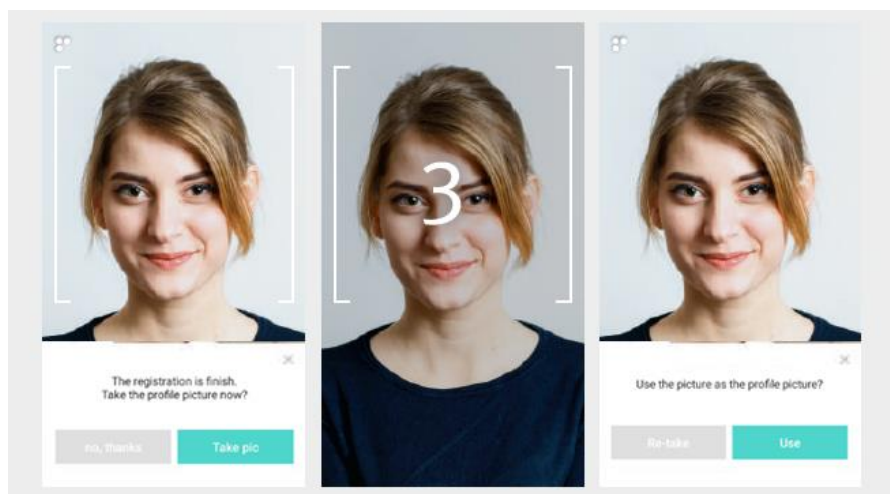
8. Register user

A. User -> Registration -> Profile picture -> Card registration

i. Registration



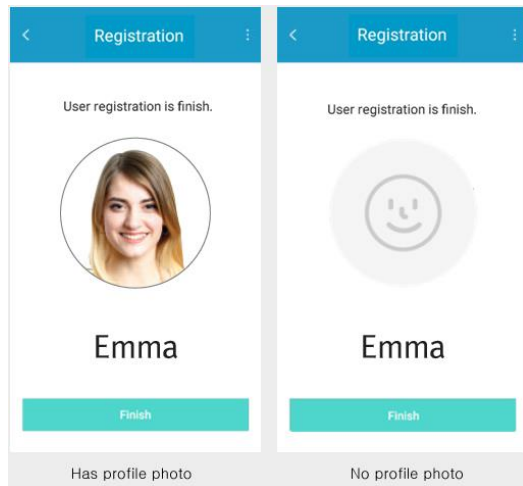
ii. Profile picture



iii. Card registration



iv. User registration is finish

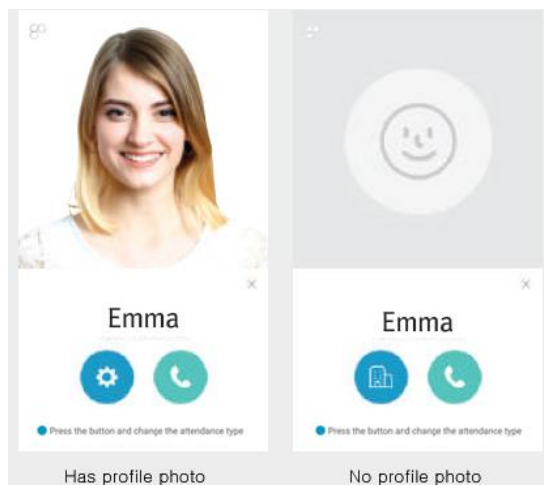


9. Face authentication

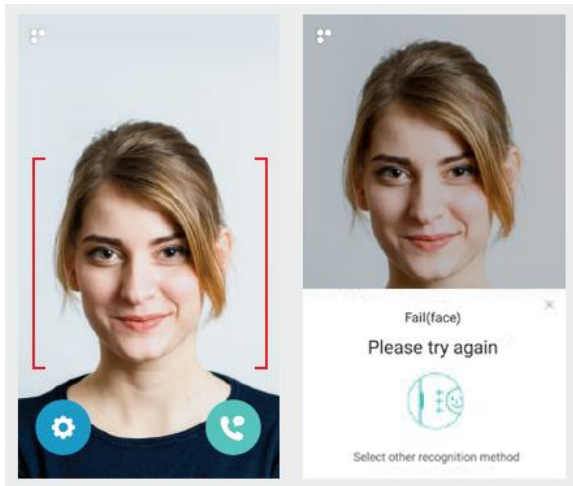
- B. Please show the front of your face in the screen window or Touch the NFC card to the front of the device



C. Authentication Success



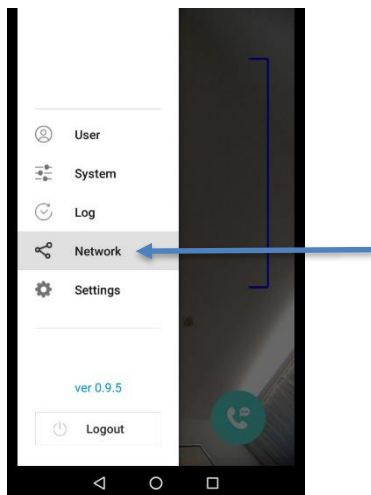
D. Authentication failed



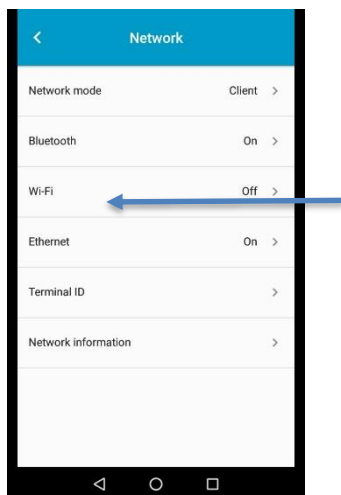
10. WIFI, Bluetooth Connect

1. WIFI

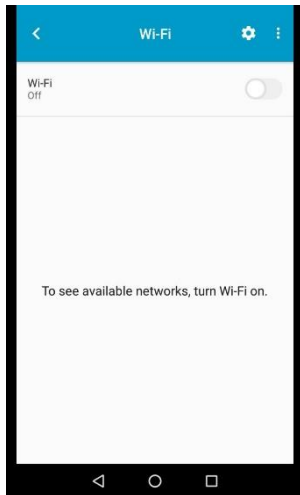
◆ Network Select



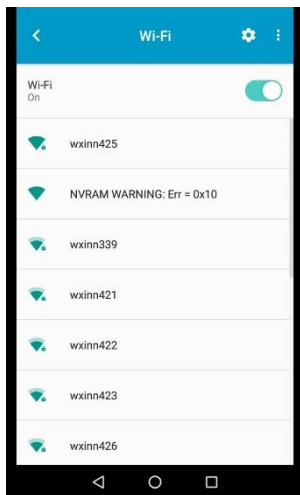
◆ Wi-Fi Select



◆ Wi-Fi ON Select

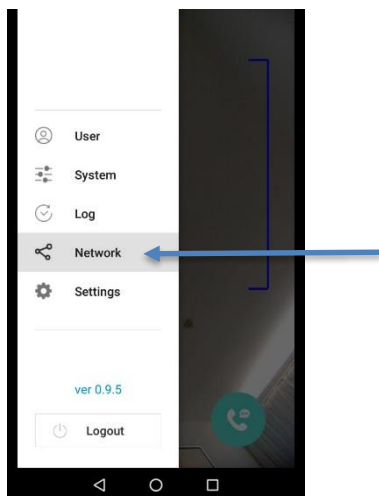


◆ AP Select

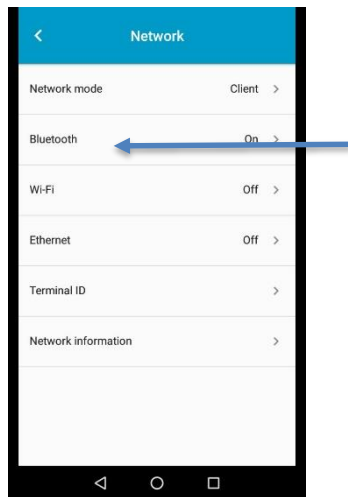


2. Bluetooth

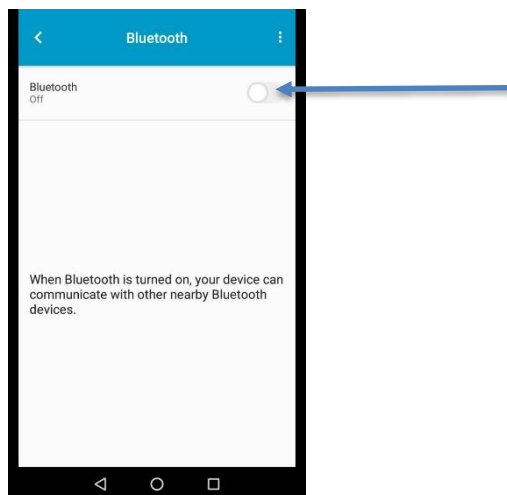
◆ Network Select



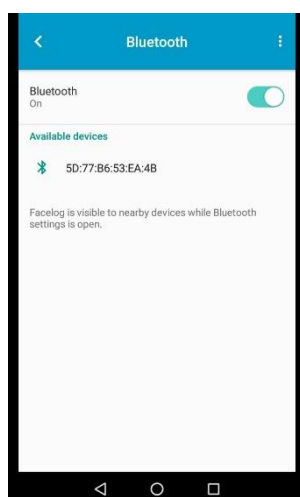
◆ Bluetooth Select



◆ Bluetooth ON Select



◆ Bluetooth Connect



11. Bluetooth Spec

1. Bluetooth BDR Receiver

Bluetooth BDR Receiver Specifications

Note:

- (1) The specification value is valid at room temperature (25°C).
- (2) All specifications are measured at the RF port unless otherwise specified.
- (3) System performance will depend on the companion modem chip's capability.

Table 3-11. Basic data rate receiver specifications

Parameter	Description	Min.	Typ.	Max.	Unit
Frequency range		2,402		2,480	MHz
Receiver sensitivity	BER < 0.1%		-94		dBm
Max. usable signal	BER < 0.1%	-20	-1.5		dBm
C/I co-channel	Co-channel selectivity (BER < 0.1%)	-	2.5	11	dB
C/I 1MHz	Adjacent channel selectivity (BER < 0.1%)	-	-14.5	0	dB
C/I 2MHz	2 nd adjacent channel selectivity (BER < 0.1%)	-	-40.5	-30	dB
C/I ≥3MHz	3 rd adjacent channel selectivity (BER < 0.1%)	-	-45.5	-40	dB
C/I image channel	Image channel selectivity (BER < 0.1%)	-	-30.5	-9	dB
C/I image 1MHz	1MHz adjacent to image channel selectivity (BER < 0.1%)	-	-47.5	-20	dB
Out-of-band blocking	30MHz to 2,000MHz	-10			dBm
	2,001MHz to 2,339MHz	-27			dBm
	2,501MHz to 3,000MHz	-27			dBm
	3,001MHz to 12.75GHz	-10			dBm
Intermodulation	Max. interference level to maintain 0.1% BER	-39	-26.5		dBm

2. Bluetooth BDR Transmitter

Bluetooth BDR Transmitter Specifications

Note:

- (1) The specification value is valid at room temperature (25°C).
- (2) All specifications are measured at the RF port unless otherwise specified.
- (3) System performance will depend on the companion modem chip's capability.

Table 3-12. Basic data rate transmitter specifications

Parameter	Description	Min.	Typ.	Max.	Unit
Frequency range		2,402	-	2,480	MHz
Output power	At max. power output level		8		dBm
Power control step		2	4	8	dB
ICFT	Initial carrier frequency drift	-75	5	75	kHz
Carrier frequency drift	One slot packet (DH1)	-	6	25	kHz
	Three slot packet (DH3)	-	6	40	kHz
	Five slot packet (DH5)	-	6	40	kHz
	Max. drift rate	-	180	400	Hz/us
Modulation characteristic	$\Delta f1_{avg}$	140	156	175	kHz
	$\Delta f2_{max}$ (for at least 99% of all $\Delta f2_{max}$)	115	150	-	kHz
	$\Delta f2_{avg}/\Delta f1_{avg}$	0.8	0.98	-	
20-dB bandwidth		-	922	1,000	kHz
In-band spurious emission	±2MHz offset		-44.5	-20	dBm
	±3MHz offset		-46.5	-40	dBm
	>±3MHz offset		-43.5	-40	dBm
Out-of-band spurious emission	30MHz to 1GHz			-36	dBm
	1GHz to 12.75GHz			-30	dBm
	1.8GHz to 1.9GHz			-47	dBm
	5.15 to 5.3GHz			-47	dBm

3. Bluetooth EDR Receive

Bluetooth EDR Receiver Specifications

Note:

- (1) The specification value is valid at room temperature (25°C).
- (2) All specifications are measured at the RF port unless otherwise specified.
- (3) System performance will depend on the companion modem chip's capability.

Table 3-13. Enhanced data rate receiver specifications

Parameter	Description	Min.	Typ.	Max.	Unit
Frequency range		2,402	-	2,480	MHz
Receiver sensitivity	$\pi/4$ DQPSK (BER < 0.01%)	-	-93	-70	dBm
	8PSK (BER < 0.01%)	-	-87.5	-70	dBm
Max. usable signal	$\pi/4$ DQPSK (BER < 0.1%)	-20	-4.5	-	dBm
	8PSK (BER < 0.1%)	-20	-4.5	-	dBm
C/I co-channel	$\pi/4$ DQPSK (BER < 0.1%)	-	6.5	13	dB
	8PSK (BER < 0.1%)	-	12.5	21	dB
C/I 1MHz	$\pi/4$ DQPSK (BER < 0.1%)	-	-13.5	0	dB
	8PSK (BER < 0.1%)	-	-8.5	5	dB
C/I 2MHz	$\pi/4$ DQPSK (BER < 0.1%)	-	-37.5	-30	dB
	8PSK (BER < 0.1%)	-	-34.5	-25	dB
C/I ≥ 3 MHz	$\pi/4$ DQPSK (BER < 0.1%)	-	-45.5	-40	dB
	8PSK (BER < 0.1%)	-	-44.5	-33	dB
C/I image channel	$\pi/4$ DQPSK (BER < 0.1%)	-	-31.5	-7	dB
	8PSK (BER < 0.1%)	-	-26.5	0	dB
C/I image 1MHz	$\pi/4$ DQPSK (BER < 0.1%)	-	-48.5	-20	dB
	8PSK (BER < 0.1%)	-	-42.5	-13	dB

4. Bluetooth EDR Transmitter

Bluetooth EDR Transmitter Specifications

Note:

- (1) The specification value is valid at room temperature (25°C).
- (2) All specifications are measured at the RF port unless otherwise specified.
- (3) System performance will depend on the companion modem chip's capability.

Table 3-14. Enhanced data rate transmitter specifications

Parameter	Description		Min.	Typ.	Max.	Unit
Frequency range			2,402		2,480	MHz
Output power	$\pi/4$ DQPSK			5.5		dBm
	8PSK			5.5		dBm
Relative transmit power	$\pi/4$ DQPSK		-4	-1.5	1	dB
	8PSK		-4	-1.5	1	dB
Frequency stability	ω_0	$\pi/4$ DQPSK	-10	3	10	kHz
		8PSK	-10	3	10	kHz
	ω_i	$\pi/4$ DQPSK	-75	3	75	kHz
		8PSK	-75	3	75	kHz
	$ \omega_0+\omega_i $	$\pi/4$ DQPSK	-75	4	75	kHz
		8PSK	-75	4	75	kHz
Modulation accuracy	RMS DEVM	$\pi/4$ DQPSK	-	4	20	%
		8PSK	-	4	13	%
	99% DEVM	$\pi/4$ DQPSK	-	8	30	%
		8PSK	-	8	20	%
	Peak DEVM	$\pi/4$ DQPSK	-	9	35	%
		8PSK	-	13	25	%
In-band spurious emission	± 1 MHz offset	$\pi/4$ DQPSK		-30.5	-26	dB
		8PSK		-28.5	-26	dB
	± 2 MHz offset	$\pi/4$ DQPSK		-26.5	-20	dBm
		8PSK		-26.5	-20	dBm
	± 3 MHz offset	$\pi/4$ DQPSK		-40.5	-40	dBm
		8PSK		-40.5	-40	dBm

FDD ID : 2ATMI-FL1000-A

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 operations.

Made in Korea

FCC Information to User

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 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.

Caution

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

FCC Compliance Information : 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.

RF Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment