Fingerprint Access Controller

eNBioAccess-T5

Installation Guide

NITGEN
biometric solutions

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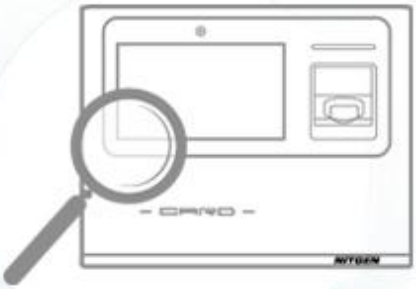


Chapter1
Before Installation

Installation Environment

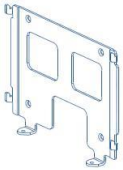
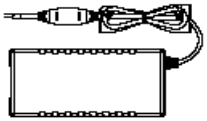
Consider the following conditions before selecting the place of installation, and get consent from user if necessary.

① This product should be installed indoors. If installed outdoors, the product must be protected from direct sunlight, snow, and rain.
② Cables must not be exposed and it is recommended that they are buried. If it impossible due to the environmental condition, get consent from user before installation.
③ Supply the power after cables are connected correctly. Do not change connection while power is supplied.
④ This product can be used more efficiently when it is installed at a convenient height for user and close location of the door. The recommended height for normal users is 150cm (4.9Ft) from the ground.
⑤ This product needs AC100~240V 50/60Hz power.

Note

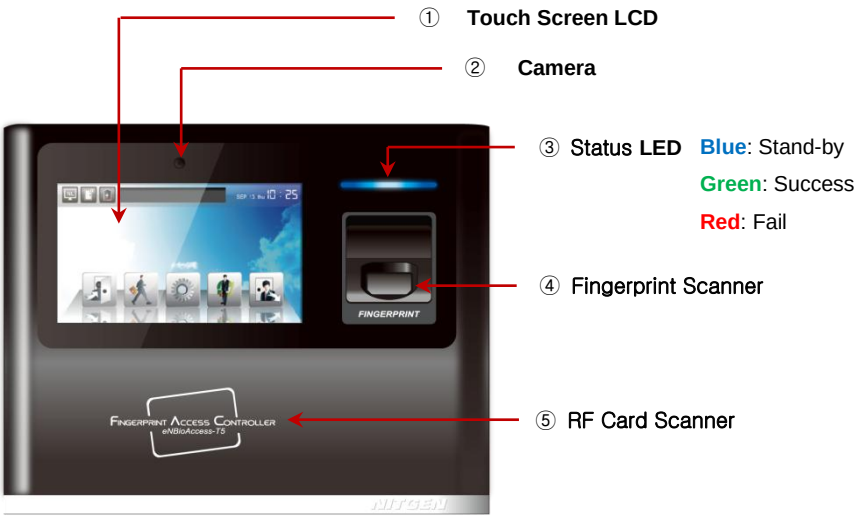
If the power is not grounded appropriately, a product may malfunction.

Product Package

Item	Shape	Quality	Usage
Terminal		1EA	Access Controller
Wall Bracket		1EA	A support projecting From wall
Adaptor		1EA	Power supply to terminal
Power Cable		1EA	

Bolt		2EA	Terminal fix to bracket
		4EA	Bracket fix to wall
Door/Aux Cable (6 Pin)		2EA	Cable between Door/Aux connector and external wire
Wiegand Input Cable (5 Pin)		1EA	Cable between Wiegand input and external wire
Wiegand Output Cable (5 Pin)		1EA	Cable between Wiegand output and external wire
Software Installation CD		1EA	“AccessManager Professional” Management Software

Product Detail



< Front Panel >

① **Touch Screen LCD:** It provides user interface. User can check the status of terminal and select various configurations. It includes touch panel interface, user can easily select by tapping.

② **Camera:** It snapshots user when authentication is processed.

③ **Status LED:** It indicates the result of authentication. Blue means “stand-by”, green is “successful result” and red is “failed result”.

④ **Fingerprint Scanner:** It captures fingerprint image when user registers or authenticates.

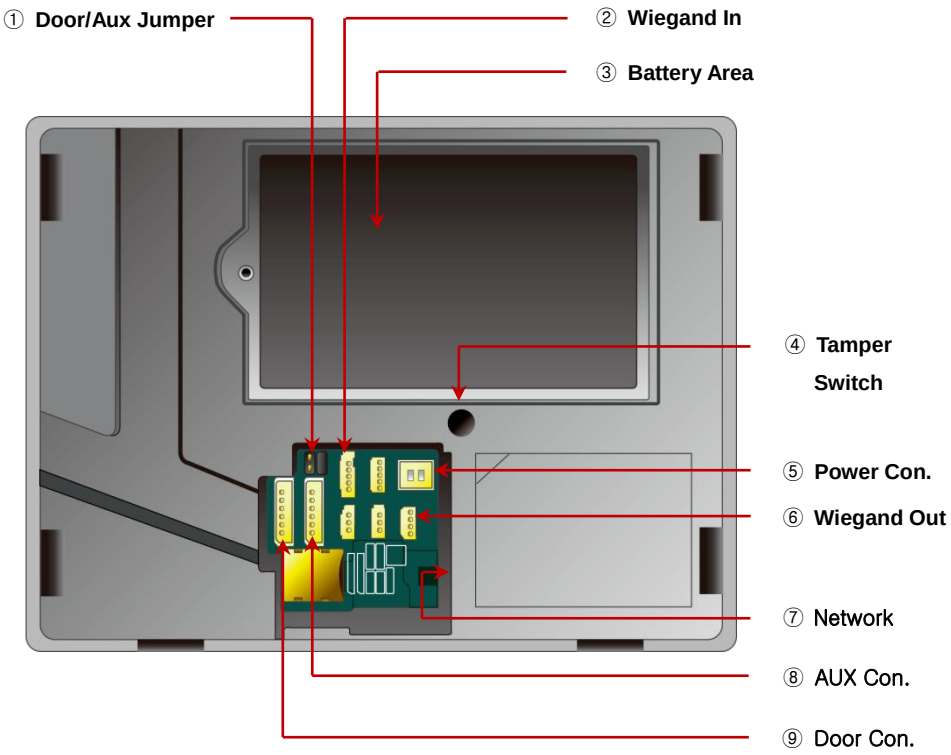
⑤ **RF Card Scanner:** It reads RF card when user registers or authenticates card.

< Bottom View>

① **Reset Button**: It rebstarts terminal without disconnecting power.

② **USB Port**: It supports USB memory stick to download logs/users and upload users/firmware.

③ **Speaker**: It outputs sound when sound option is enabled.



< Rear View >

① **Door/Aux Jumper:** It selects whether terminal supplies power to Door/Aux connector. Refer to “3.4.1 Cable Connection for Lock”.

② **WIEGAND Input Connector:** It receives external device’s external wiegand signals.

③ **Battery Area:** Optional battery can be inserted in this area. When power failure is occurred, battery supplies alternative power. (Battery is sold separately.)

④ **Tamper Switch:** It warns when terminal is torn off from wall bracket.

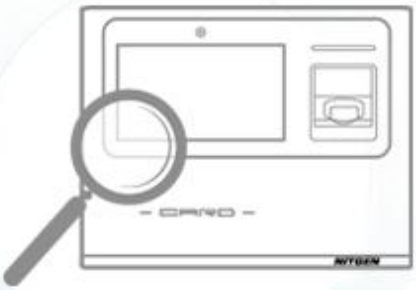
⑤ **Power Connector:** 12V power adaptor cable is connected in this connector.

⑥ **Wiegand Output Connector:** It outputs wiegand signals for external device when authentication is succeeded.

⑦ **Network Connector:** It uses RJ45 connector for normal Ethernet or POE connection.

⑧ **Aux Connector:** It is used for auxiliary door control signals.

⑨ **Door Connector:** It is used for door control signals.



Chaper 2
System Configuration

Network Mode

Terminals are connected by network and remotely controlled by “Access Manager Pro”.

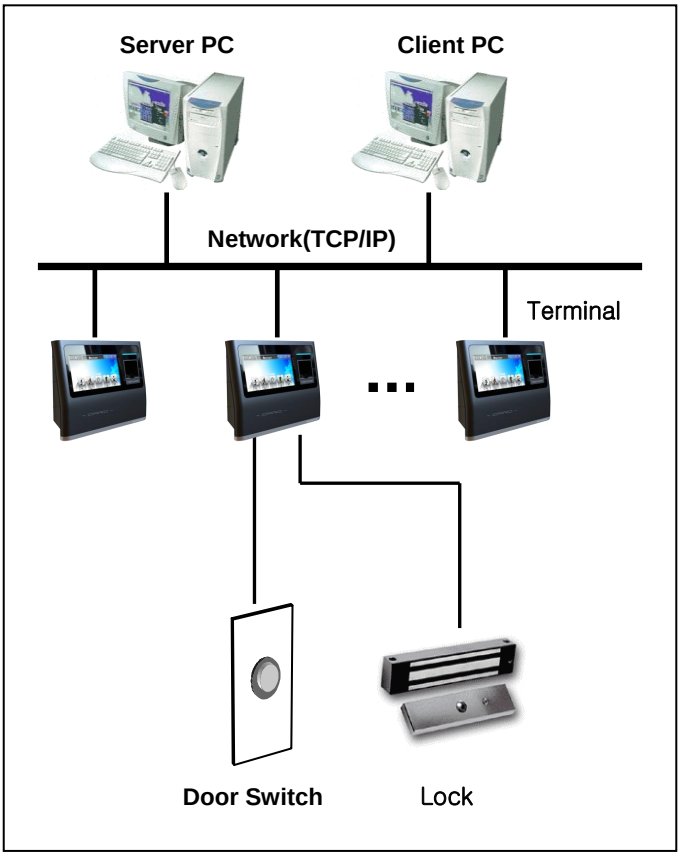


Figure 2.1 Network Configuration

Standalone Mode

One terminal is used independently.

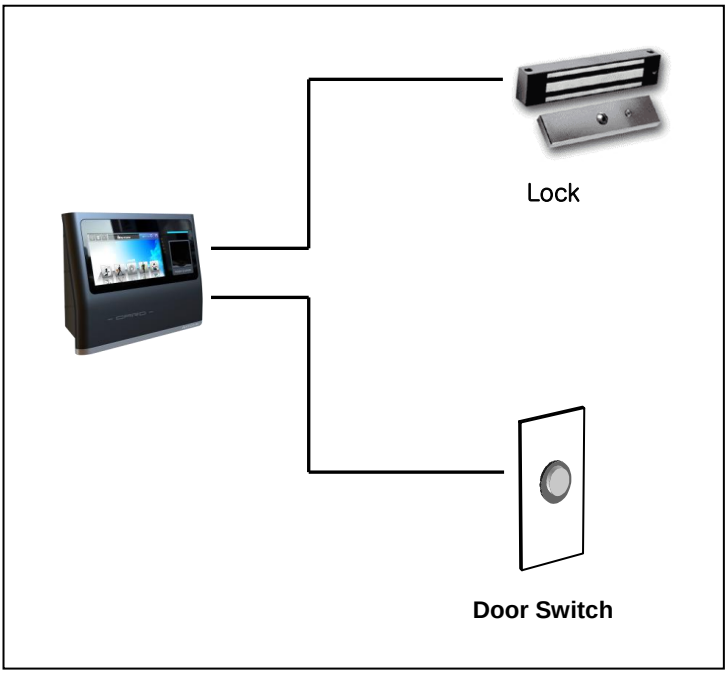
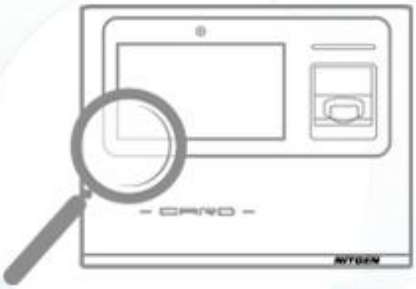


Figure2.2 Standalone Configration

eNBioAccess-T5 controls two doors.



Chapter 3
Installation

※ Installation Procedure

① Install wall bracket

② Install external devices (such as lock, door switch and so on)

③ Connect external cables (such as network, wiegand and so on)

④ Fix terminal to wall bracket

Installing Bracket

① Select suitable installion location and fix wall bracket with four bolts included in the package.

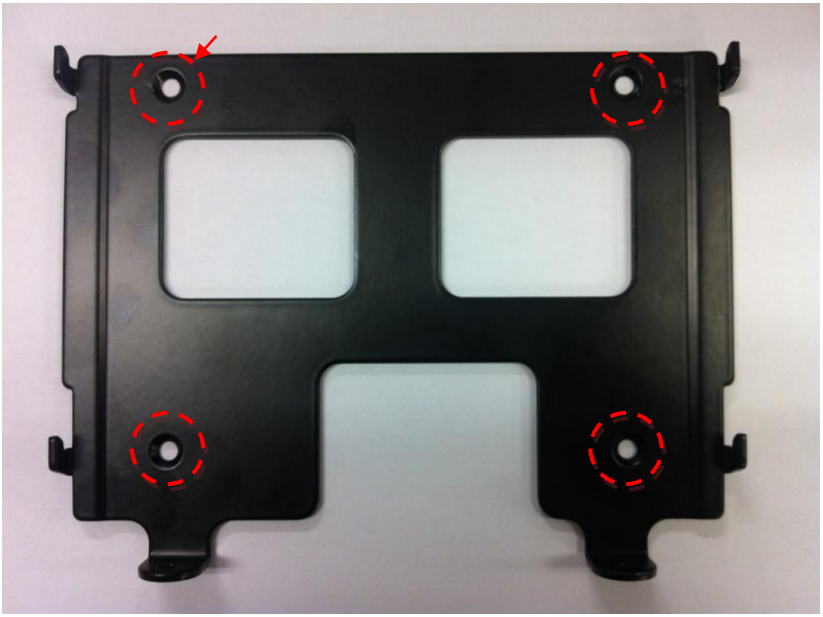


Figure3.1 Installation of wall bracket

Connecting External Devices

The following devices are supported, please refer to the table.

① Locking Device
② Door Switch

■ Lock Types and Specifications

Type	Specification	Remarks
DeadBolt	Voltage: DC12V, Current: less than1A	Supply power NC / NO Type
Electronic Magnetic-Lock	Voltage: DC12V, Current: Less than 1A	Supply power NC / NO Type
Electric Strike	Voltage: DC12V, Current: Less than 1A	Supply power NC / NO Type
Automation Door	*Max. Switching Voltage: 220V DC/ 250V AC. *Max. Switching Current: Less than 2A DC/ AC	Contact signal only

☞NC(Normal Close): Unlocked, Opened upon emergency
☞NO(Normal Open): Locked, Closed upon emergency

Installing Battery

Battery can be inserted in rear case for un-interrupted power supply.

Figure 3.2 Installation of battery

Caution for battery

Please follow instruction below in order to avoid heating, fire, explosion and so on.

- Contact manufacturer immediately when battery has notiable expansion. It may cause serious danger.
- We do not take any responsibility for unrecommended charging or discharging of bettery.
- Keey away from inflammable material.
- Do not leave in ther car in hot weather.
- Do not use in a hot and humid enviroment.
- Do not use long time on duvet, electric blanket or carpet.
- Do not store for a long period of time in a confined space with power-on.
- Keey battery's terminal contact away from metal product such as netlaces, coins, keys, and watches.
- Do not disassemble, compress or penetrate.
- Do not give a strong impact.
- Do not expose to above 60℃ temperature.
- Keep away from moisture.

Selecting Power

The terminal operates with two power soruces – adaptor and POE.

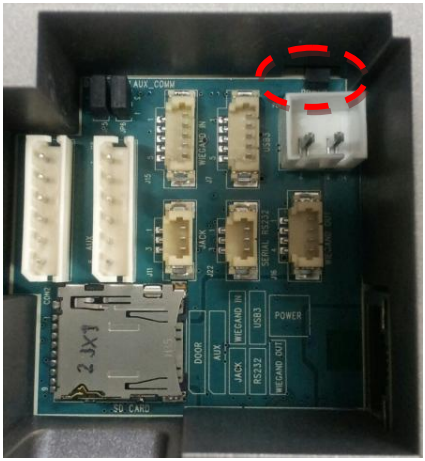


Figure3.3 Power Selection Switch

Power selection switch is located above power connector shown in Figure 3.3.
For power adaptor, move switch tap to right direction.
For POE power, move switch tap to left direction.

Note

POE mode is only possible in terminal with POE module.

Connecting External Cables

The following cables can be connected to terminal.

1. Door Control Cable
2. Network Cable
3. Power Cable
4. Wiegand Input Cable
5. Wiegand Output Cable

Some cables may not be connected according to application.

3.4.1. Door Control Cable (J17 and J18)

Housing	Receptacle	Cable
YMW025-06R	YMT250	UL1007, 24AWG

☞ Caution

① Make sure cable connection is correct before supplying power. Wrong connection causes permernent damage to terminal.

② When connecting to automation door, use contact signal by disconnecting JP5 in using J17 or JP6 in using J18. When delivered, [JP5] and [JP6] are connected by jumper.

③ Some locks do not have door monitoring signal.

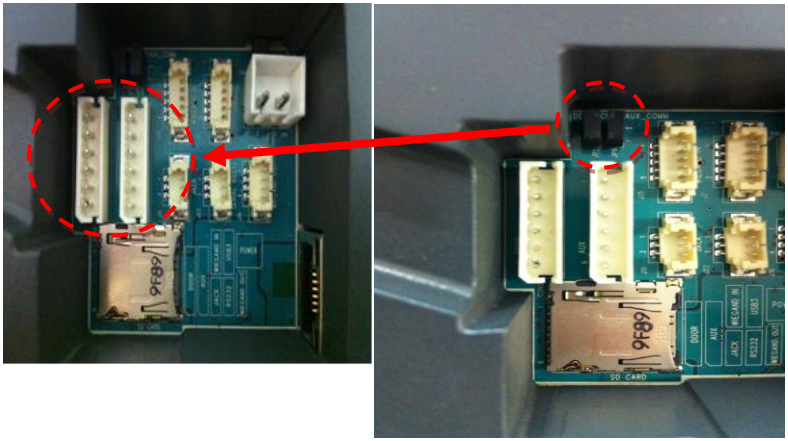


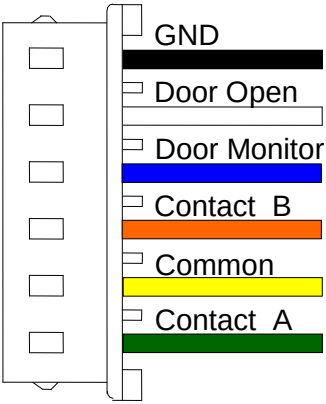
Figure 3.4 Power-Supplying Jumper for Lock

JP5 and JP6 are located in the back of the terminal above Door/Aux connector.

Note

[JP5] and [JP6] are jumpers for power supplying(12V) to a doorlock. If you use external power, those jumpers must be disconnected before connecting power.

■ 잠금 장치 종류별 케이블 결선 방법



Deadblot

Electric Strike

Electronic Magnetic Lock

PIN Number	Connector J16	Cable Color
1	GND	Black
2	Door Open	White
3	Door Monitor	Blue
4	Contact_B	Orange
5	Common	Yellow
6	Contact_A	Green

■ Connection for Deadbolt/ Electic Strike/ Electric Magnetic Lock

PIN	Function	NC	NO	DOOR OPEN
1	GND	GND COM(DoorStatus)	GND COM(DoorStatus)	OPEN Switch
2	Door Open			OPEN Switch
3	Door Monitor	NC (DoorMonitoring)	NO (DoorMonitoring)	
4	Contact_B	VCC(+12V)		
5	Common			
6	Contact_A		VCC(+12V)	

■ Automation Door

PIN	Function	NC	NO	DOOR OPEN
1	GND			OPEN Switch
2	Door Open			OPEN Switch
3	Door Monitor			
4	Contact_B			
5	Common	Conatct	Contact	
6	Contact_A	Contact	Contact	

3.4.2 Power Cable

Power cable is connected to J14 connector

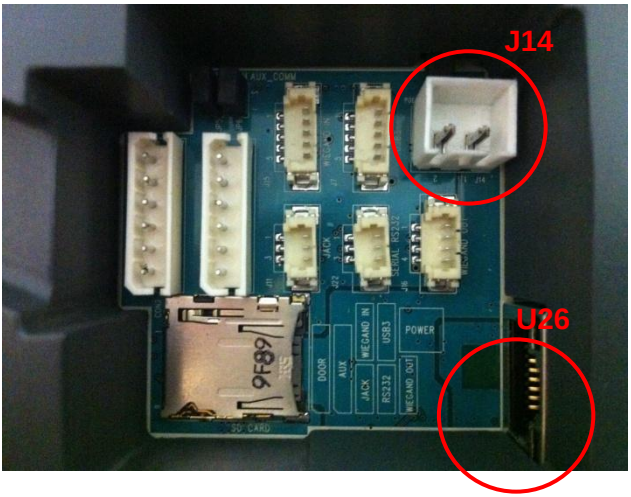


Figure 3.5 Power Connector and Network Connector

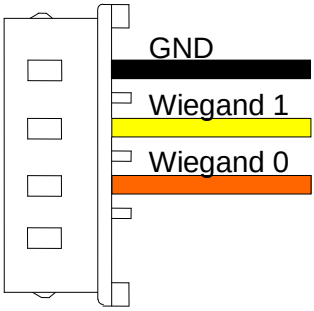
3.4.3 Network Cable

Network cable is connected to U26.

Figure 3.6 Connection of Netowrk Cable

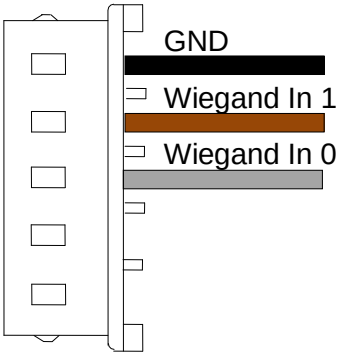
Hosing	Cable	Cabling	
		Pin Number	Function
RJ45, 8Pin	UTP	1	TXP
		2	TXN
		3	RXP
		6	RXN

3.4.4 Wiegand Output Cable (J16)



Pin	J16	Cable Color
1	GND	Black
2	Wiegand 1	Yellow
3	Wiegand 0	Orange

3.4.5 Wiegand Input Cable (J15)



Pin	J16	Cable Color
1	GND	Black
2	Wiegand In 1	Brown
3	Wiegand In 0	Gray

Fixing Terminal

① After cables are connected correctly, place the terminal on the bracket using 4 locking holes.

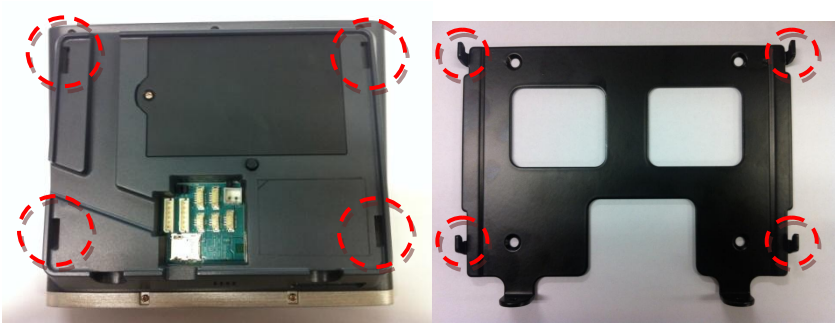


Figure 3.7 Placing the terminal on bracket

② Fasten terminal with bracket using bolts as shown in Figure 3.8

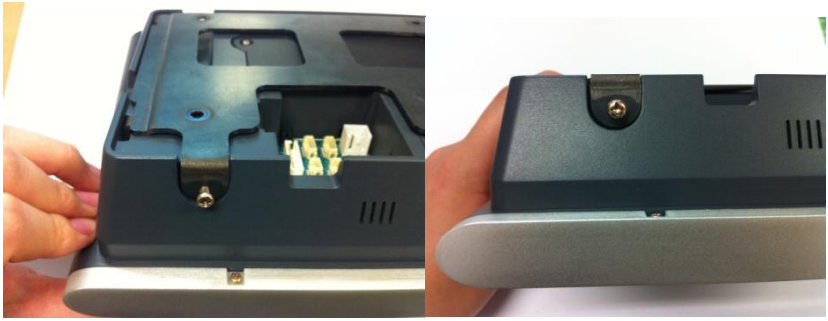
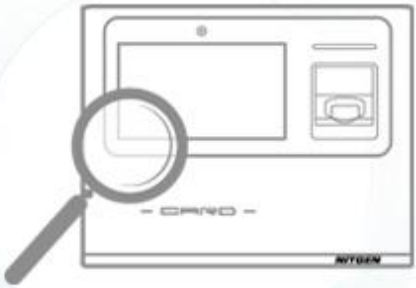


Figure 3.8 Fastening the terminal with bracket



Chapter 4
After Installation

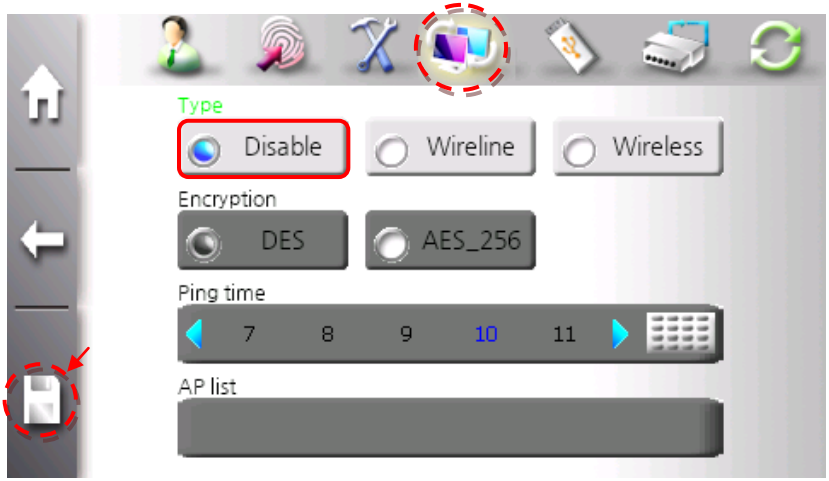
After Installation

After installation completed, check if it is done properly and plug in the power.

Check if the terminal and external devices properly operates as described below. For more information, refer to **"eNBioAccess-T5 Terminal User Manual"** and **"Access Manager Professional User Manual".**

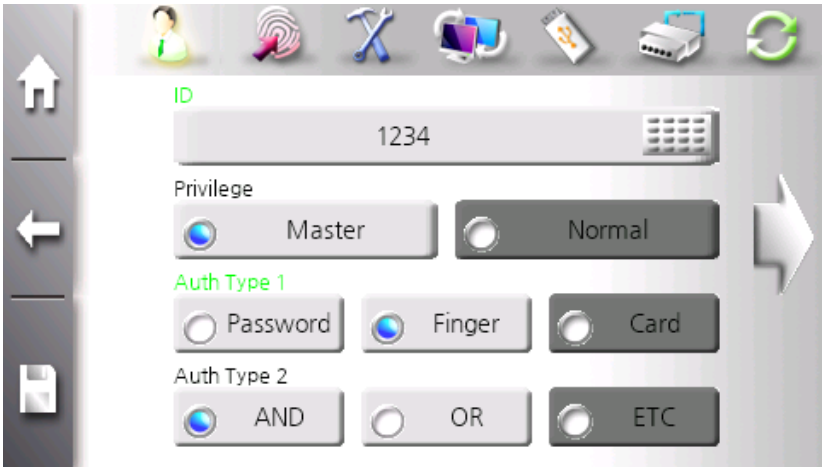
< Standalone Mode >

① When power is on, initial screen will be displayed after self-testing.

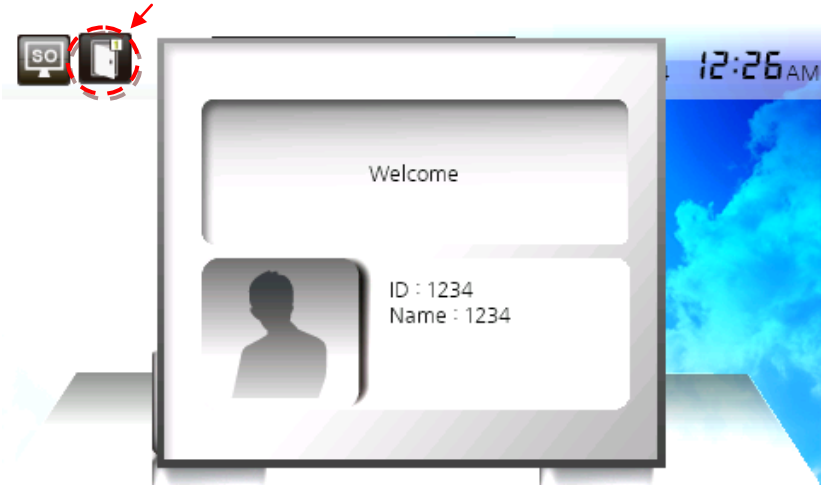


② Select menu “Network Icon → Normal → Type” and set “Disable” and click “Save"

③ In initial screen, network status icon is changed to ‘SO’ – standalone mode.



④ Select menu “User Icon → USER → + Button” and input user’ ID, priviledge, and auth-type. The first user must be “Master”.



⑤ Try to authenticate registered users. If door is connected properly, left top door icon of initial screen is changed to open-status when

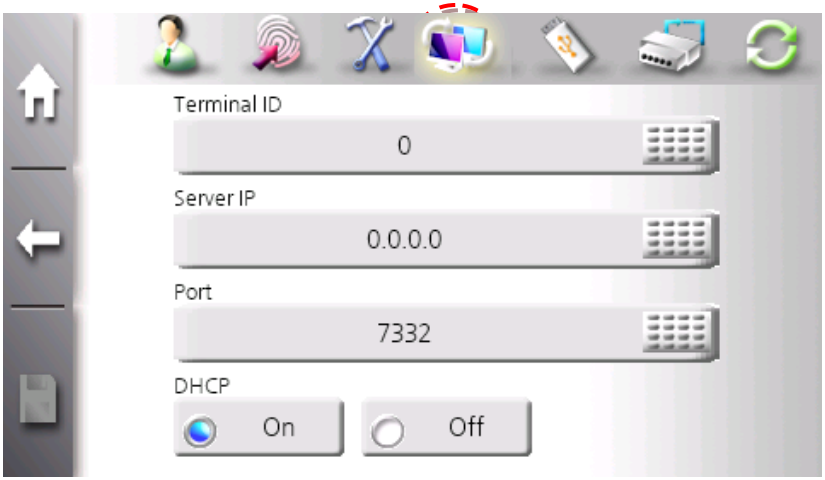
authentication is succeeded. (Door is configured to open door when succeeded.)


In standalone mode, the first registrated user has master-priviledge.

< Network Mode >

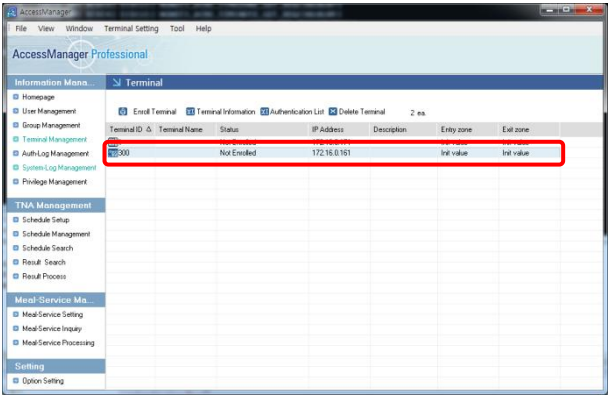
① When power is on, initial screen will be displayed after self-testing.

② Select menu "Network Icon → Normal → Type", set "Wireline", and click "Save" button

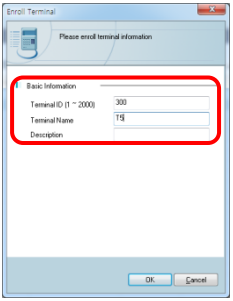


③ Select menu "Network Icon → TCP/IP" and input terminal ID, server IP, and DHCP mode. After setting, click "Save" button.

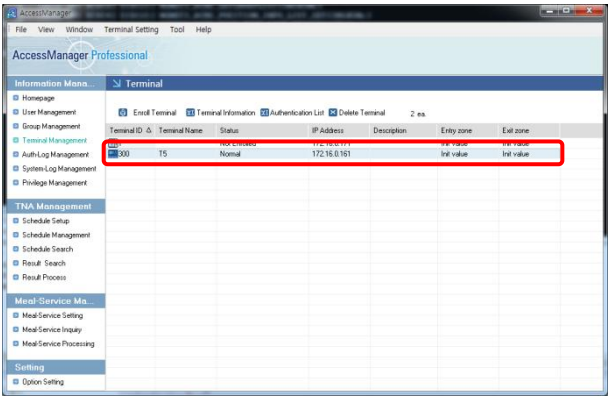
(a)


AccessManager
File View Window Terminal Setting Tool Help
AccessManager Professional
Information Mana...
Homepage
User Management
Group Management
Terminal Management
Auth-Log Management
System-Log Management
Privilege Management
TNA Management
Schedule Setup
Schedule Management
Schedule Search
Result Search
Result Process
Meal-Service Ma...
Meal-Service Setting
Meal-Service Inquiry
Meal-Service Processing
Setting
Option Setting
Terminal
Enroll Terminal
Terminal Information
Authentication List
Delete Terminal
2 ea.
Terminal ID
Terminal Name
Status
IP Address
Description
Entry zone
Exit zone
300
Not Enrolled
172.16.0.161
Init value
Init value

(b)


Enroll Terminal
Please enroll terminal information
Basic Information
Terminal ID (1 ~ 2000)
300
Terminal Name
15
Description
OK
Cancel

(c)



Run “AccessManager Pro.” Program in PC and register new terminal.
For more information, refere to “AccessManger Pro.” user manual.