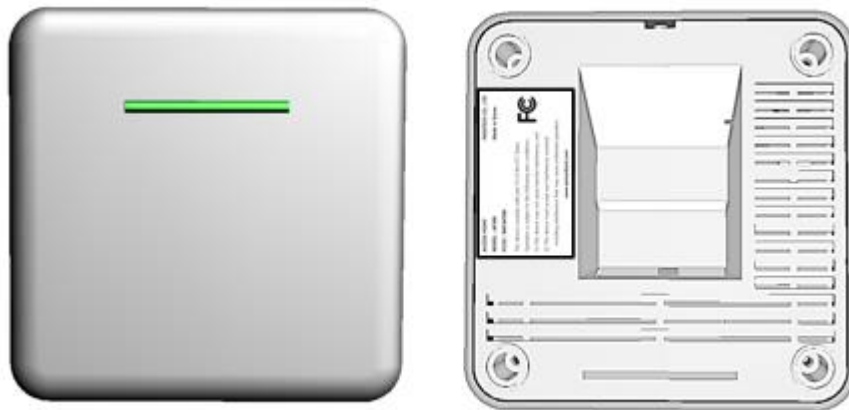


USER GUIDE

ACCESS POINT

(AP300_Ethernet Setting)



Passtech Co., Ltd.

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We have our development center in South Korea to provide technical support. For any technical assistance can contact our technical support team as below;

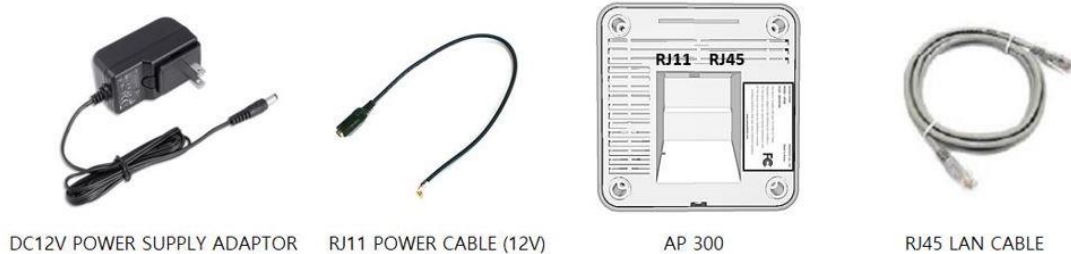
E-mail: passtech@esmartlock.com

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1. Components Preparation

1.1 SETUP Components

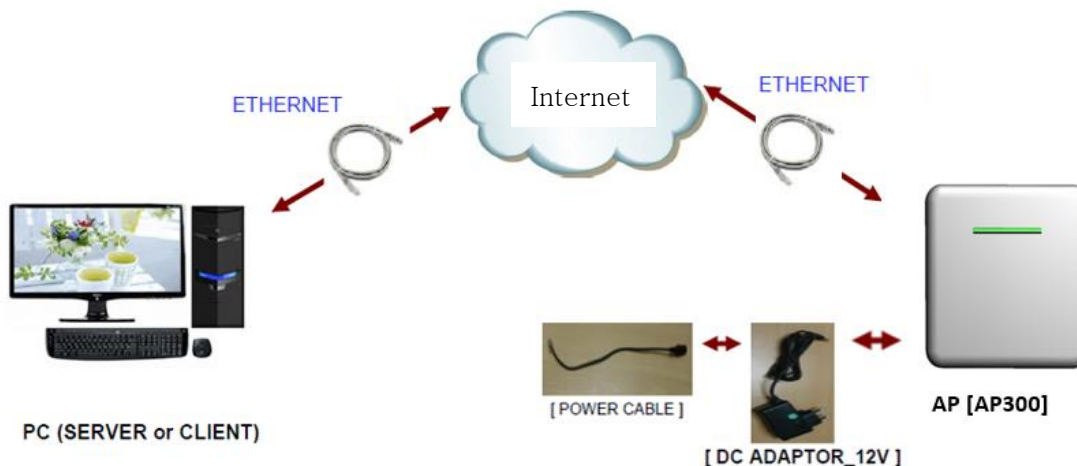


1.2 Setting Diagram



2. AP Setting

2.1 SERVER & AP300 Communication Diagram



2.2 AP Setting

Before creating AP account, please check PC IP and TCP/IP first by running 'Command Prompt' and inputting 'ipconfig' command as below.

```

Command Prompt
Microsoft Windows [Version 10.0.17763.503]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\Users\WIN10>ipconfig

Windows IP Configuration

Wireless LAN adapter 로컬 영역 연결* 3:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . : 
Wireless LAN adapter 로컬 영역 연결* 2:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . : 
Ethernet adapter 이더넷:

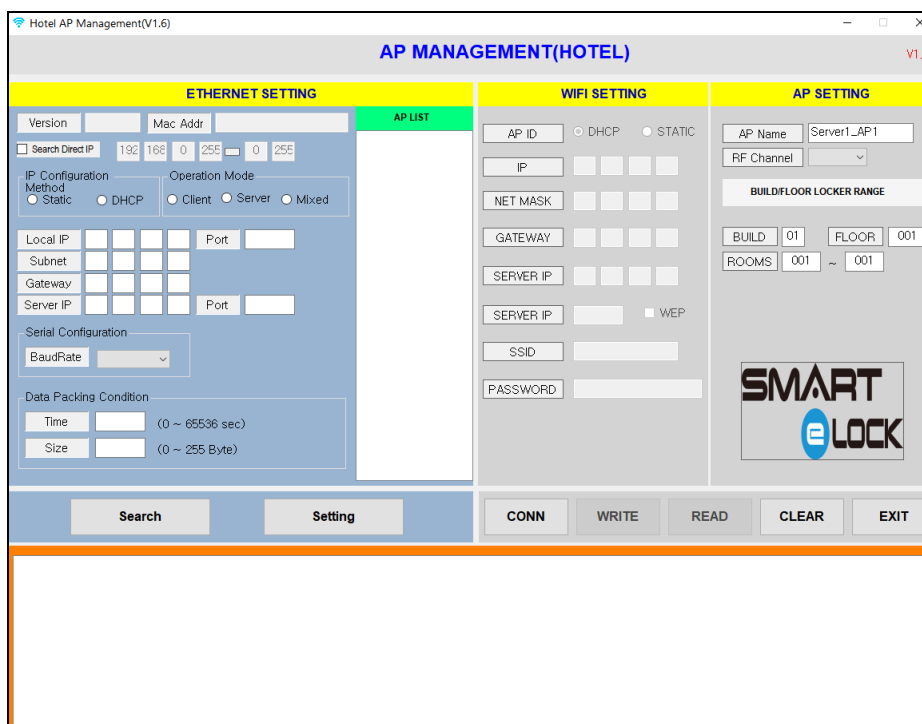
    Connection-specific DNS Suffix  . : 
    Link-local IPv6 Address . . . . . : fe80::1c6a:de1b:720:3b2f%6
    IPv4 Address. . . . . : 192.168.0.52
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.0.1

Wireless LAN adapter Wi-Fi:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . : 
  
```

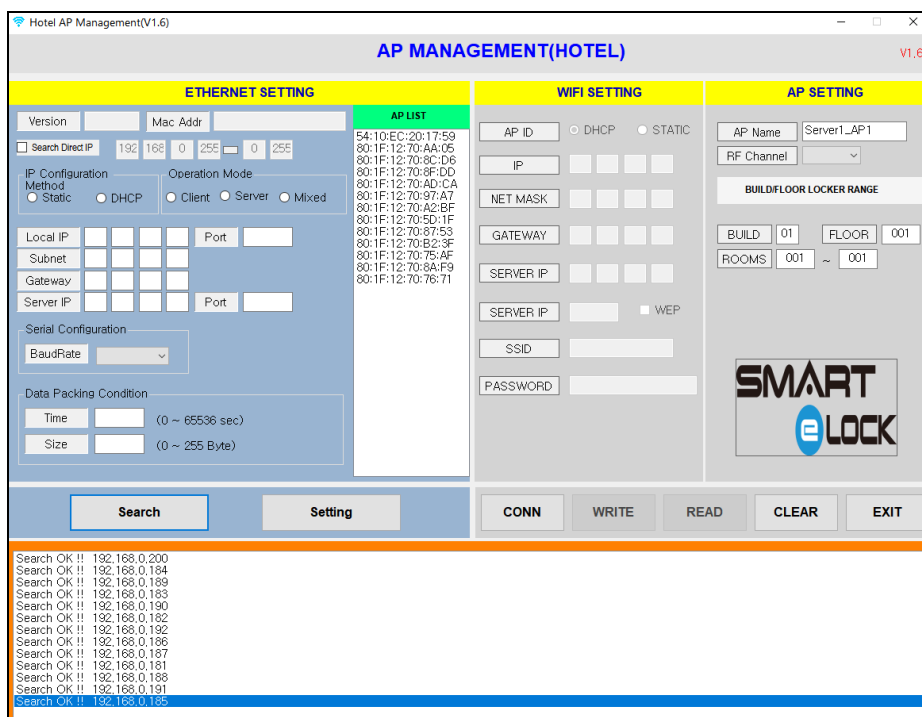
① Open 'AP300(2Bytes Floor)'.





② Click 'Search' button.

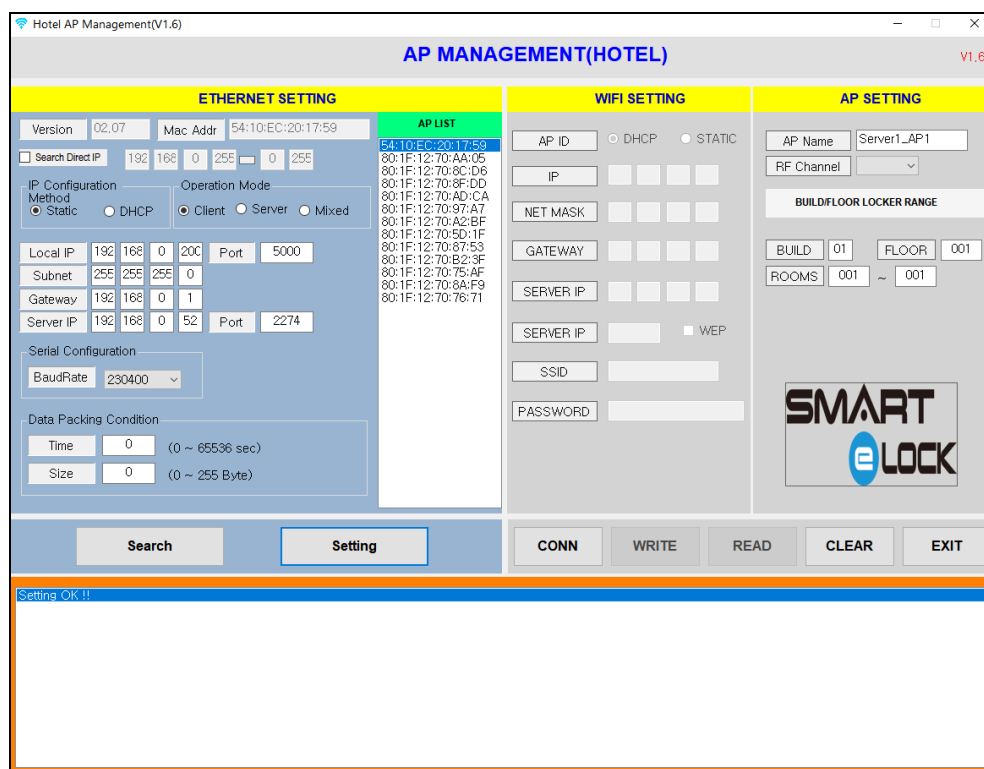
Mac address and IP of connected AP200 will be shown on AP List.



- ③ Select an AP which you want to configure from the AP list, and input values in 'Ethernet Setting' referring to the description below.

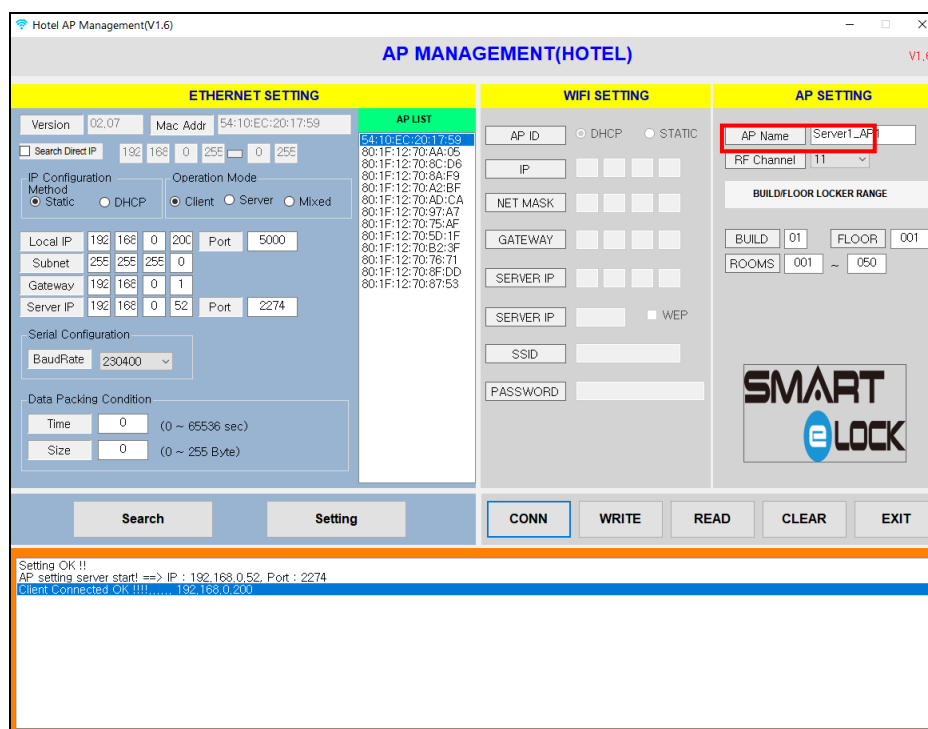
Item	Description
Local IP	AP IP Make sure this IP is only assigned to this AP
Local Port	Assign the port number on your own (Default: 5000)
Subnet	Input the value (Subnet Mask) checked in Command Prompt
Gateway	Input the value (Default Gateway) checked in Command Prompt
Server IP	Input the value (IPv4 Address) checked in Command Prompt
Server Port	Input the port number as set in Server program (Default 2274)

- ④ Click 'Setting' button to save the information to the selected AP, and check the message 'Setting OK' from the message box below.

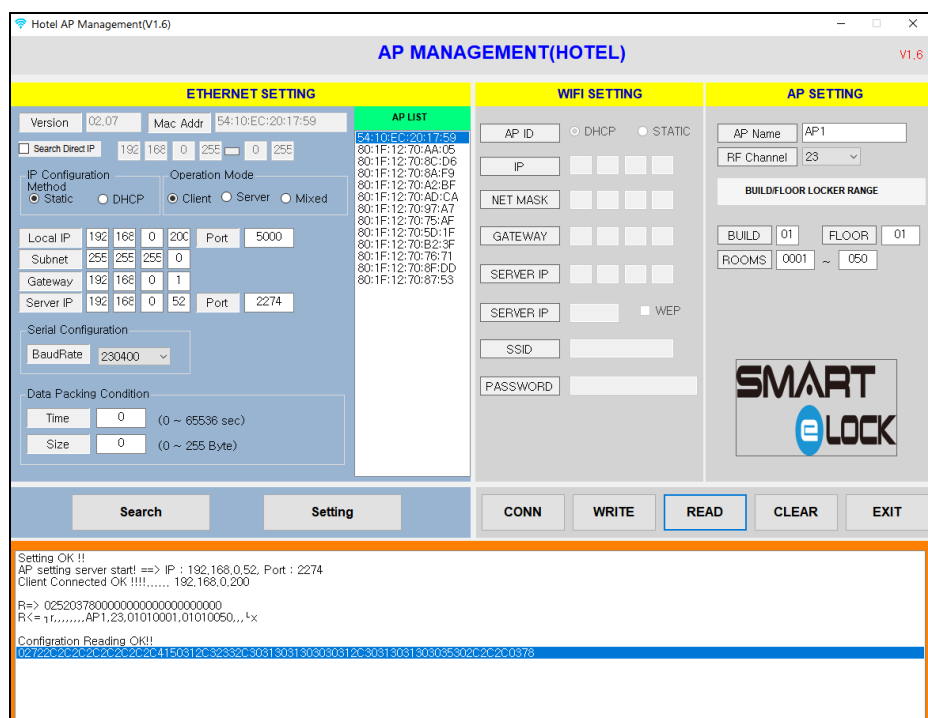


- ⑤ Select RF Channel and then click 'Conn' button and check the message 'Connected OK' from the message box.

If it is connected well, 'WRITE' and 'READ' buttons will be activated.



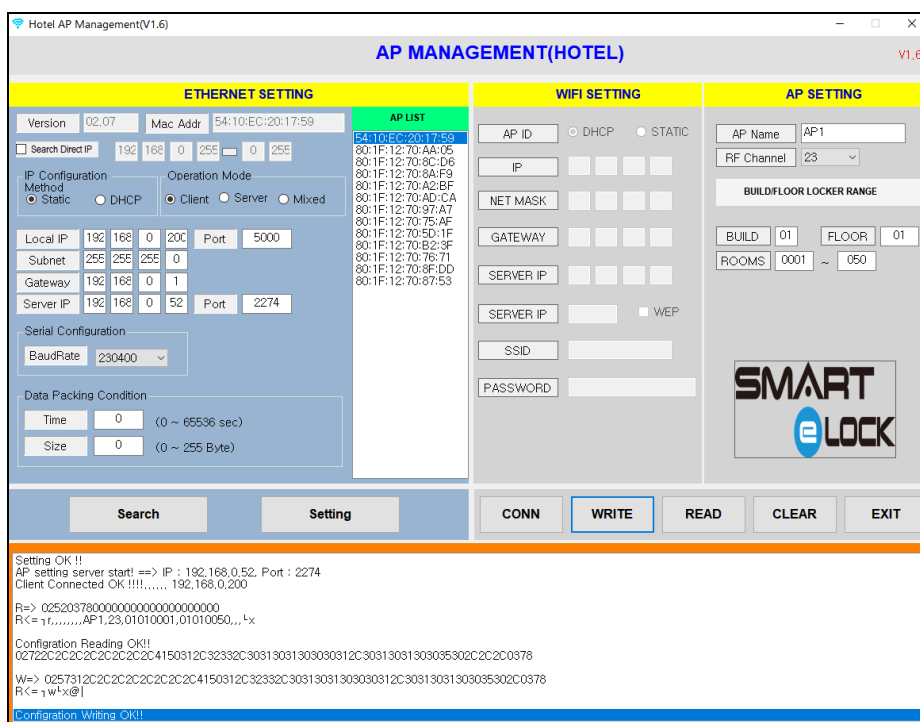
- ⑥ Click 'READ' button to check current saved information.



- ⑦ Input values in 'AP Setting' referring to the description below.

Item	Description
AP Name	AP name that will be inputted into AP Account in Client program Assign AP ID on your own, but do not duplicate Only English alphabet and number are available (Any space or special characters cannot be contained)
RF Channel	RF Channels you would like to connect (11~25)
BUILD	Building number (1~50)
FLOOR	Floor number (1~99)
ROOMS	Room numbers (1~999)

- ⑧ Click 'WRITE' button to save the information of the selected AP, and check the message 'Configuration writing OK' from message box.



- ⑨ Click 'READ' button again to check if the setting values are properly saved.
- ⑩ If you want to set another AP, follow the steps from ②.
- ⑪ After setting is completed, click 'EXIT' to close the window.
- ⑫ Click 'New' button from AP account window to enter new information.
- ⑬ Input the following items and click 'Save' button to save the entered information.

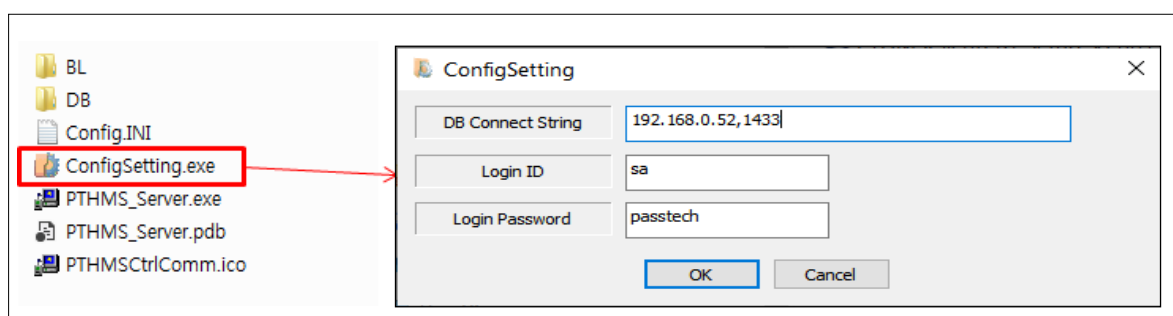
Item	Description
AP Name	Input AP Name which you set in AP Settings
Server IP Update Flag	Check to update the information into Server program automatically
AP IP	Input AP IP address which you set in AP Settings
Server IP	Input IP address of a PC which Server is installed in
Server Port	Input server port (Default: 2274)
Channel	Input RF Channel which you set in AP Settings
Building No.	Select Building number which you set in AP Settings
Group ID	Input Group number which you set in AP Settings
Lock Start	Input Starting Room number of the lock which you set in AP Settings
Lock End	Input Ending Room number of the lock which you set in AP Settings
AP Status	Waiting / Connect OK / Connect Error
AP Layout ID	Select AP Layout ID same as you set in Custom Layout

- ⑭ If you want to update the information, select the AP account from the list and click 'Update' button to activate the input boxes. Input the updated information and click 'Save' button to update.
- ⑮ If you want to delete the information, select the AP account from the list and click 'Delete' button to delete.

3. Server Setting

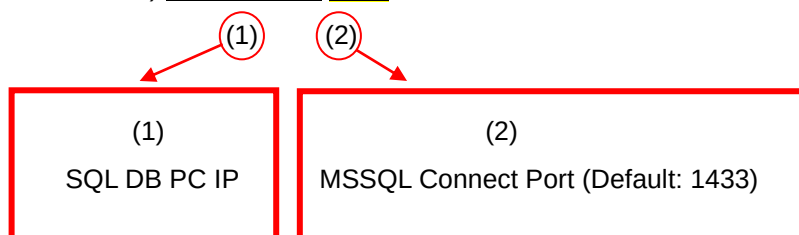
3.1 Server pre-setting (DB Connection)

- ① Change the environmental files for DB connection before executing the communication Server Program. Run "ConfigSetting.exe" in the folder where the program is installed.

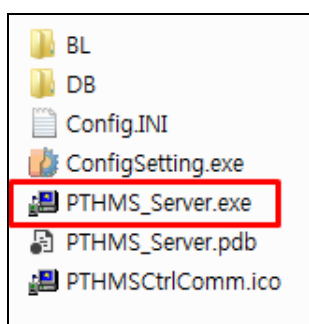
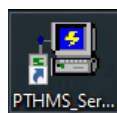


- ② Input the Connect information to connect DB.

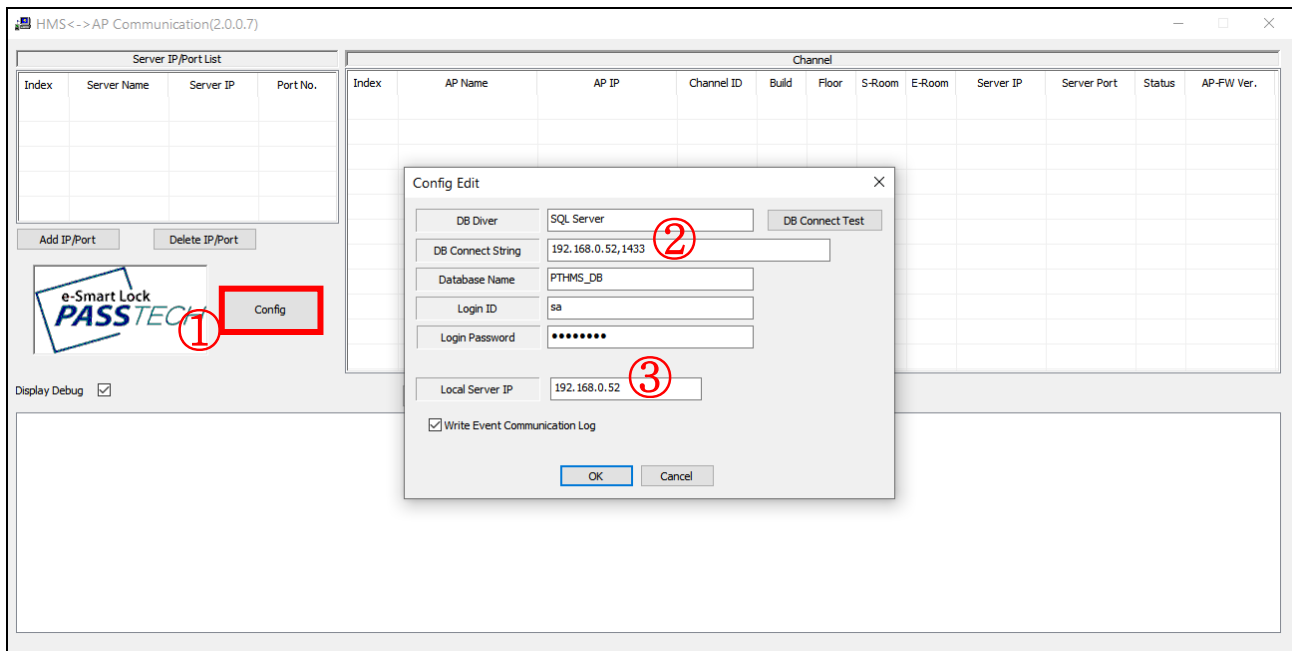
Ex) 192.168.0.52,1433



- ③ Run the Server Program (PTHMS_Server.exe).

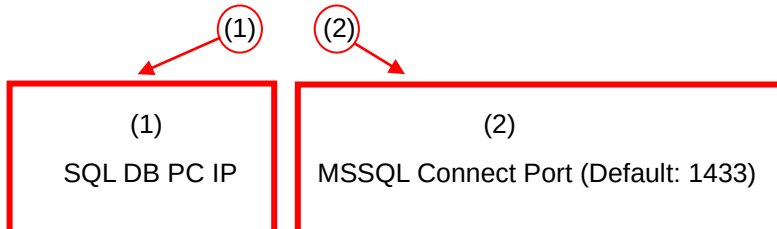


- ④ Click “Config” and put information as below;



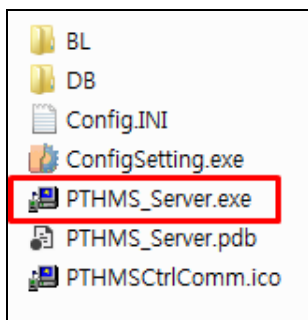
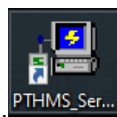
➔ Put information same as the one you put for config setting above. (Local Server IP will be your PC IP)

Ex) 192.168.0.52, 1433

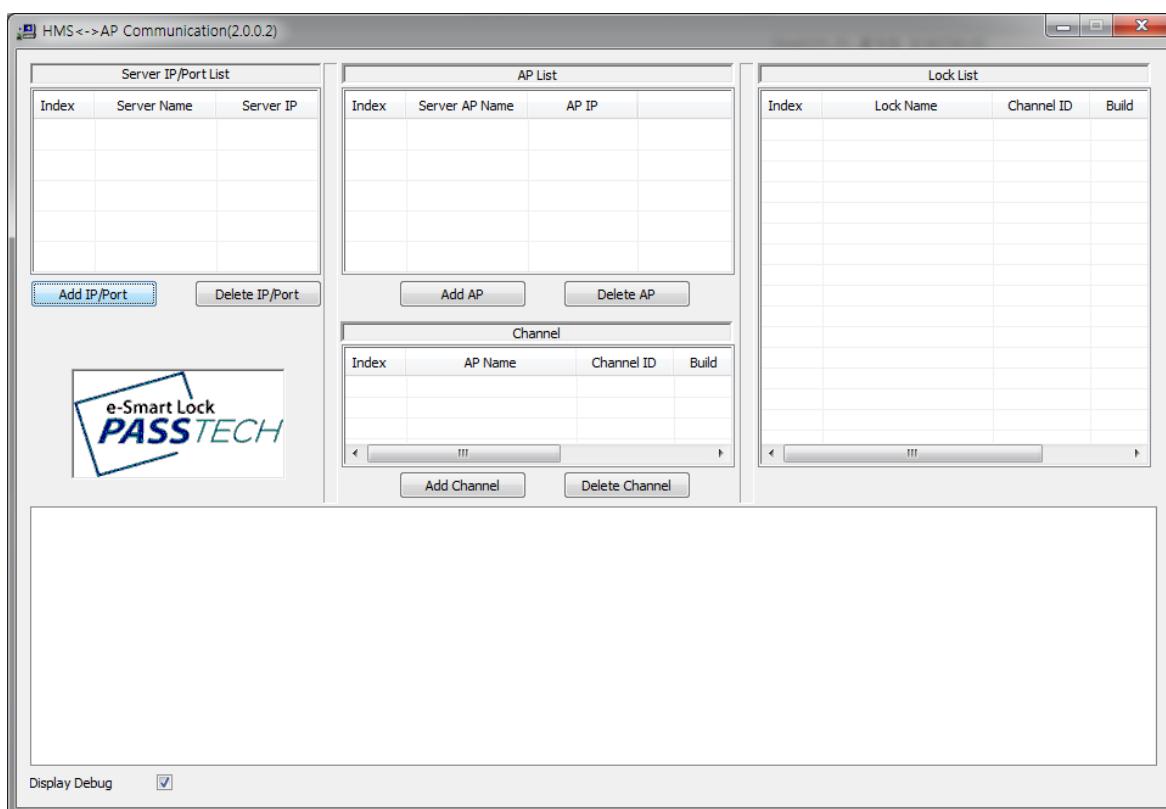


3.2 Server Connection

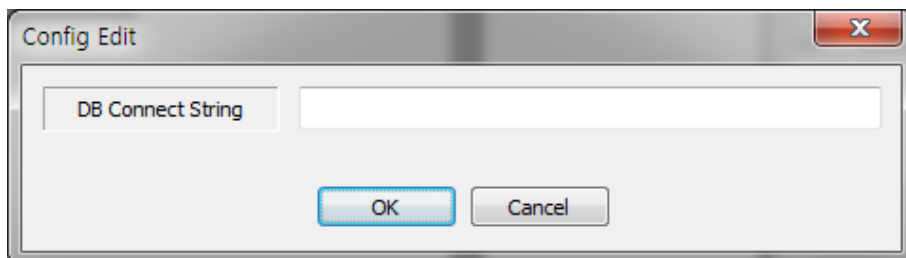
- ① Run the Server Program (PTHMS_Server.exe).



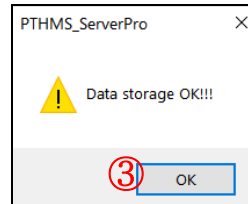
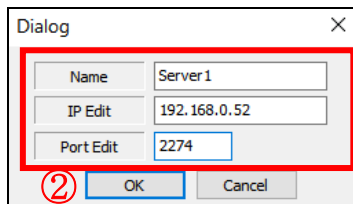
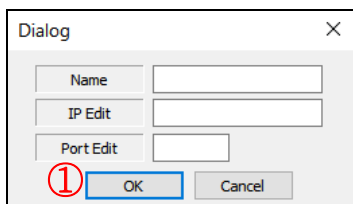
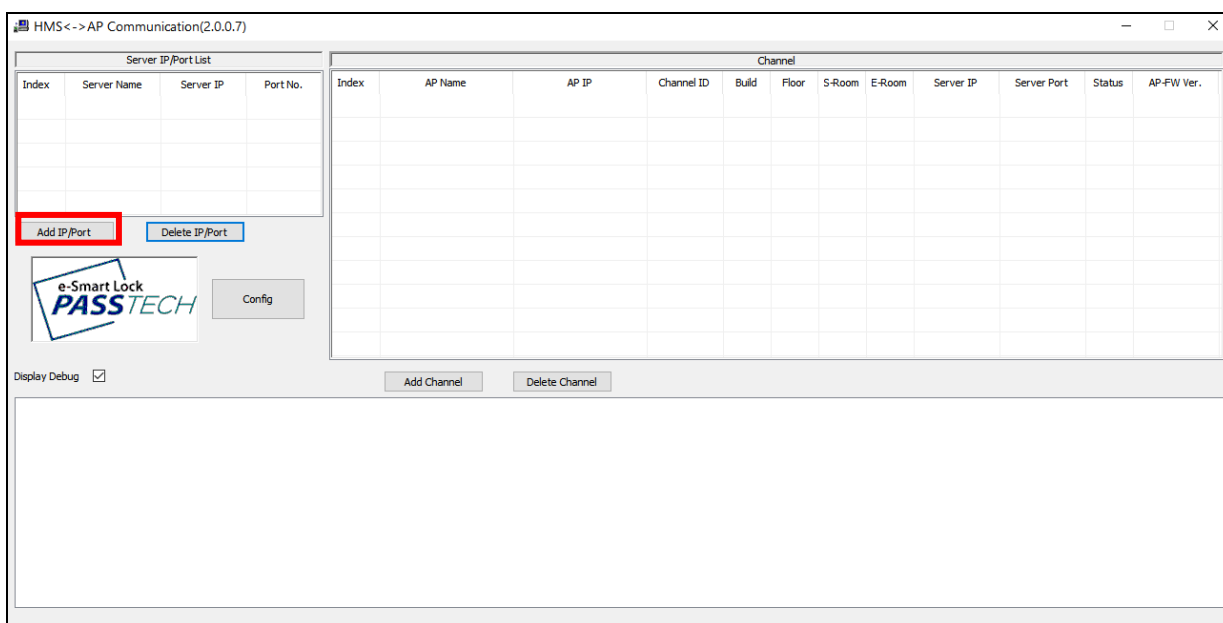
- ② The program is started as shown below.



- ③ If the SQL DB is not accessible, the above program will not be executed.
The DB Connection Configuration screen will appear, and you have to enter the DB connection value as shown below. (Refer to contents 4-1)

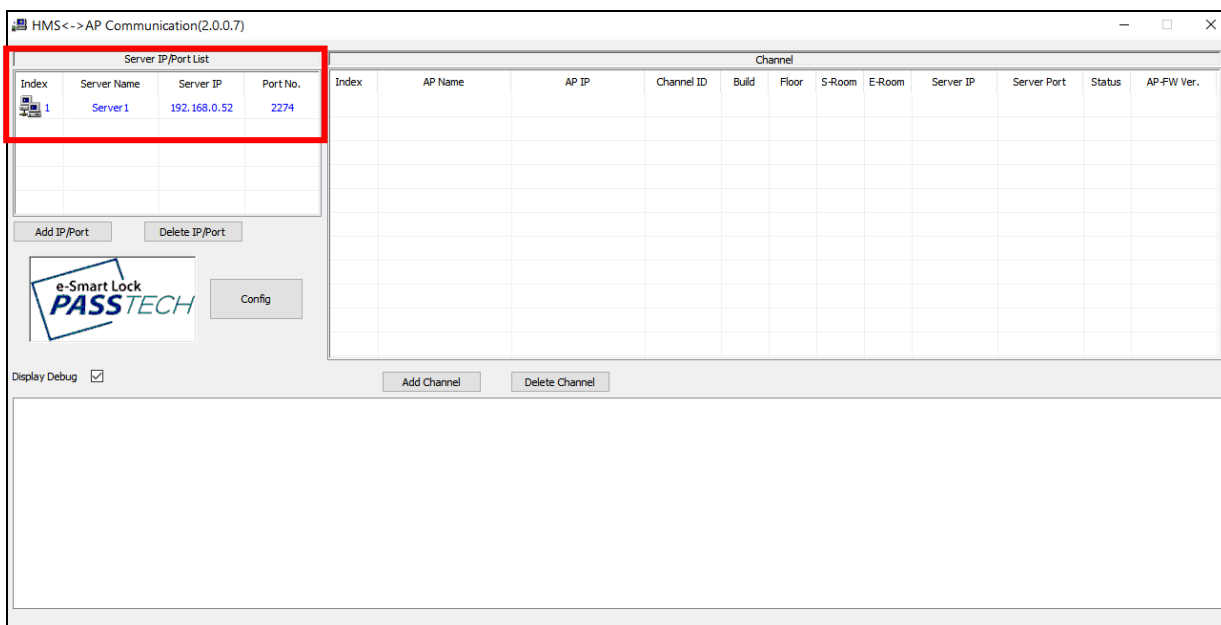


- ④ The Server Account is the part which sets the communication port to receive or send data form the AP.



- ⑤ Click "Add IP/Port", and once you see a Dialog screen, input server name, IP address where the server is installed, and the port number. Then, click "OK" to create a server account.

- ⑥ Once the server account is created successfully, you will see a screen below.

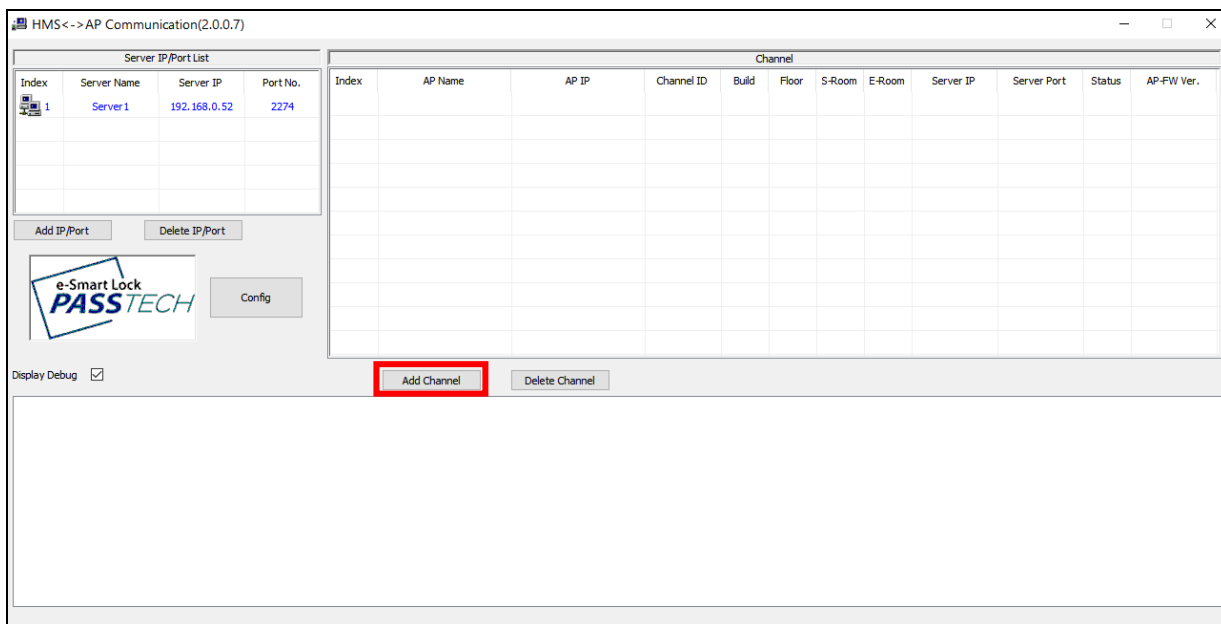


Index	Server Name	Server IP	Port No.
1	Server1	192.168.0.52	2274

Index	AP Name	AP IP	Channel ID	Build	Floor	S-Room	E-Room	Server IP	Server Port	Status	AP-FW Ver.
-------	---------	-------	------------	-------	-------	--------	--------	-----------	-------------	--------	------------

- ⑦ This is the part where you can register the AP information that connects to Server, which you have set from AP Management Program. (AP Client has to be set up before this. – please refer to 3-2)

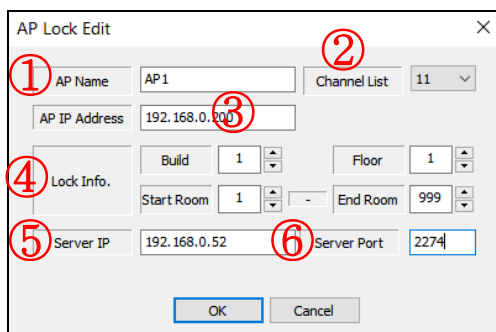
- ⑧ Click “Add Channel”



Index	Server Name	Server IP	Port No.
1	Server1	192.168.0.52	2274

Index	AP Name	AP IP	Channel ID	Build	Floor	S-Room	E-Room	Server IP	Server Port	Status	AP-FW Ver.
-------	---------	-------	------------	-------	-------	--------	--------	-----------	-------------	--------	------------

- ⑨ Put all the information same as AP Client.



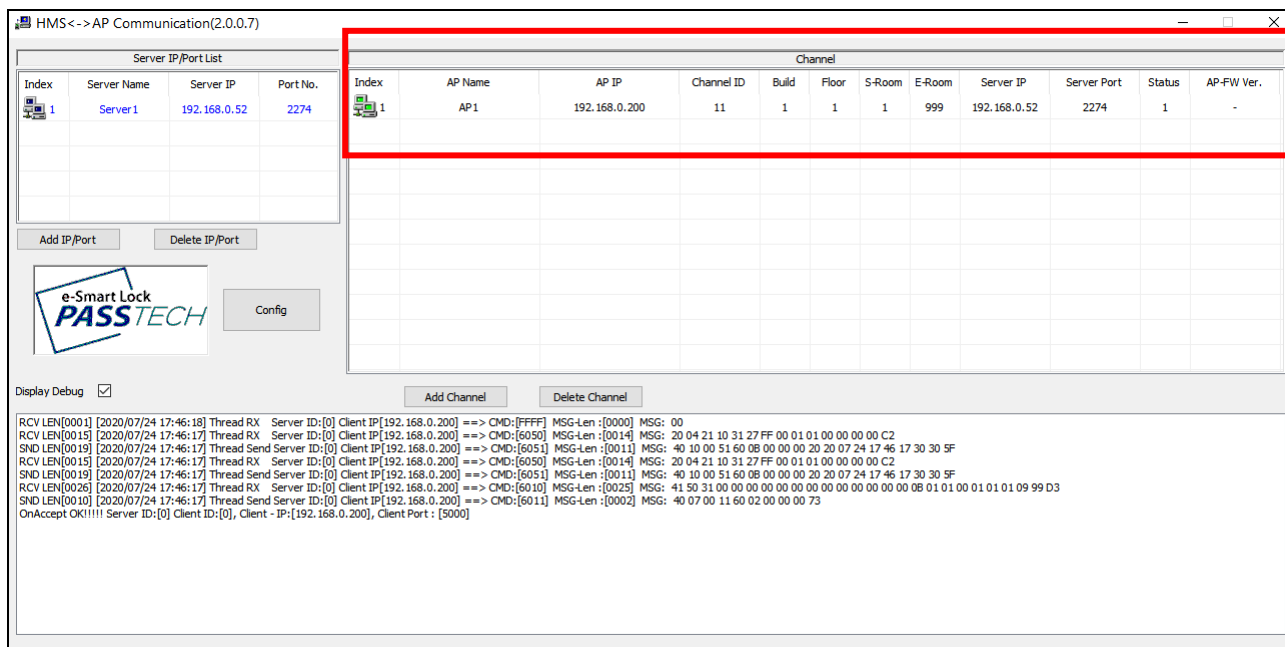
The image shows the 'AP Lock Edit' dialog box. It contains the following fields and controls:

- 1** AP Name: Text box containing 'AP1'.
- 2** Channel List: Dropdown menu showing '11'.
- 3** AP IP Address: Text box containing '192.168.0.200'.
- 4** Lock Info. section:
 - Build: Spin box showing '1'.
 - Floor: Spin box showing '1'.
 - Start Room: Spin box showing '1'.
 - End Room: Spin box showing '999'.
- 5** Server IP: Text box containing '192.168.0.52'.
- 6** Server Port: Text box containing '2274'.

At the bottom are 'OK' and 'Cancel' buttons.

①	AP Name (must be same as AP Client)
②	Channel number (must be same as AP Client)
③	AP IP Address (same IP as Local IP in AP Client)
④	Lock Info. (Building#, Floor#, Start/End Room# -> must be same as AP Client)
⑤	Server IP (Your PC IP)
⑥	Server Port (Default: 2274)

- ⑩ Once it is connected, you will see it on Channel box.



The screenshot shows the 'HMS<->AP Communication(2.0.0.7)' window. On the left is the 'Server IP/Port List' table, and on the right is the 'Channel' table. The 'Channel' table is highlighted with a red rectangle.

Index	AP Name	AP IP	Channel ID	Build	Floor	S-Room	E-Room	Server IP	Server Port	Status	AP-FW Ver.
1	AP1	192.168.0.200	11	1	1	1	999	192.168.0.52	2274	1	-

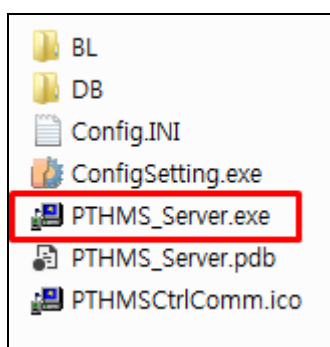
Below the tables are buttons for 'Add IP/Port', 'Delete IP/Port', 'Add Channel', and 'Delete Channel'. At the bottom is a 'Display Debug' checkbox (checked) and a log area showing communication details.

Item	Description
 1	Connected
 1	Disconnected Check if AP information in AP Setting and Client program are same, and AP cable is connected well
 1	Not Connected

3.3 Server Startup and Shutdown

1) Server Program Startup

- ① Run Server Program (PTHMS_Server.exe).

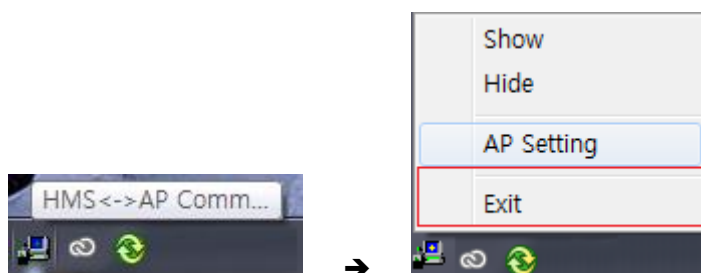


- ② When the program is running, a Tray-Icon is created as below.



2) Program Shutdown

To exit the program, right-click the Server Icon on the Tray-Icon and click "Exit"., or can be forced to terminate in the Task Manager.



6. Specification

Item	Detail
Material	ABS
Communication	2.4Ghz Zigbee(ONLINE LOCK COMM) TCP/IP(SERVER COMM)
Security	AES128
Power Supply	DC 12V ADAPTOR & POE(IEEE802.3af)
Indicator	LED
Dimension	101.60mm * 101.60mm * 27.50mm
Operation TEMP	0°C ~ 50°C
Certification	CE, FCC

*****This furniture lock system is using in Hotel, Office and any place which is without residential area.

7 Regulatory Statement

FCC Part 15.105 statement (Class A)

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC Part 15.21 statement

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This device must not be co-located or operating in conjunction with any other antenna or transmitter.

RF Exposure Statement (MPE)

The antenna(s) must be installed such that a minimum separation distance of at least 20 cm is maintained between the radiator (antenna) and all persons at all times.

Supplier's Declaration of Conformity

47 CFR § 2.1077 Compliance Information

Responsible Party –

Cardcom

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Tel.: 562-943-6300

E-mail: esmartlock@cardcom.com