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# Installation & Wiring Guide

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## Installation guide for MCP-040 V2.0 with VSR20D & EB030

*Doc. Ver. : V2.0*

*2014.10.23*

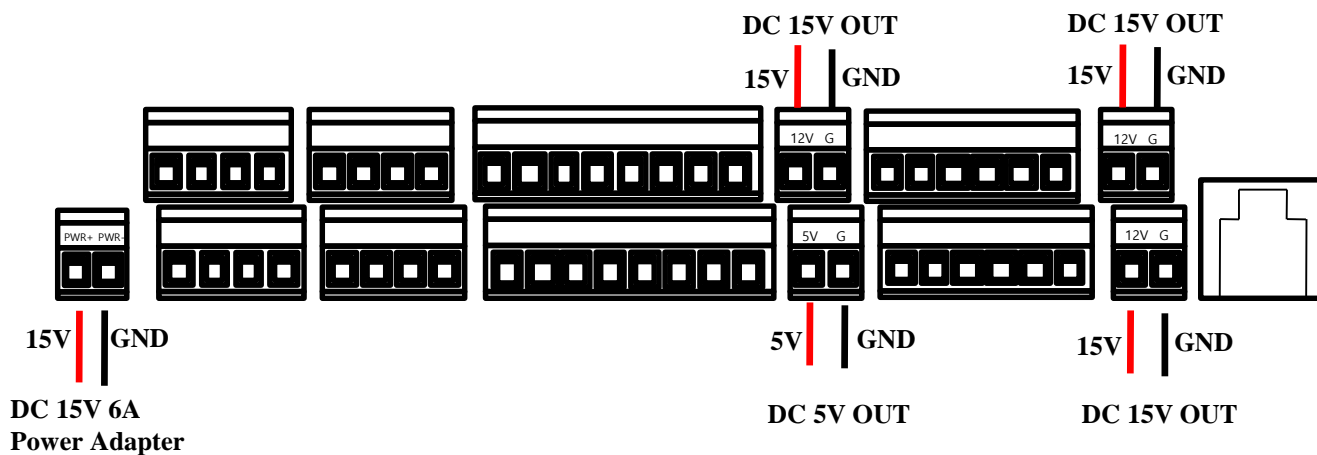
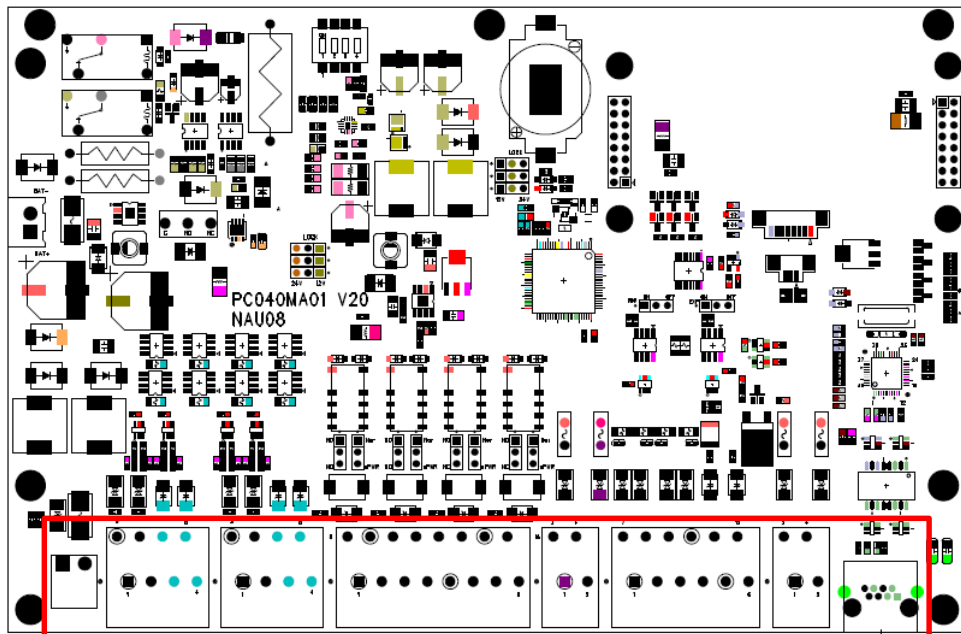
*R&D Center*

***Union Community Co., Ltd.***

# 1. Power Connector connection

Backup Battery Interface

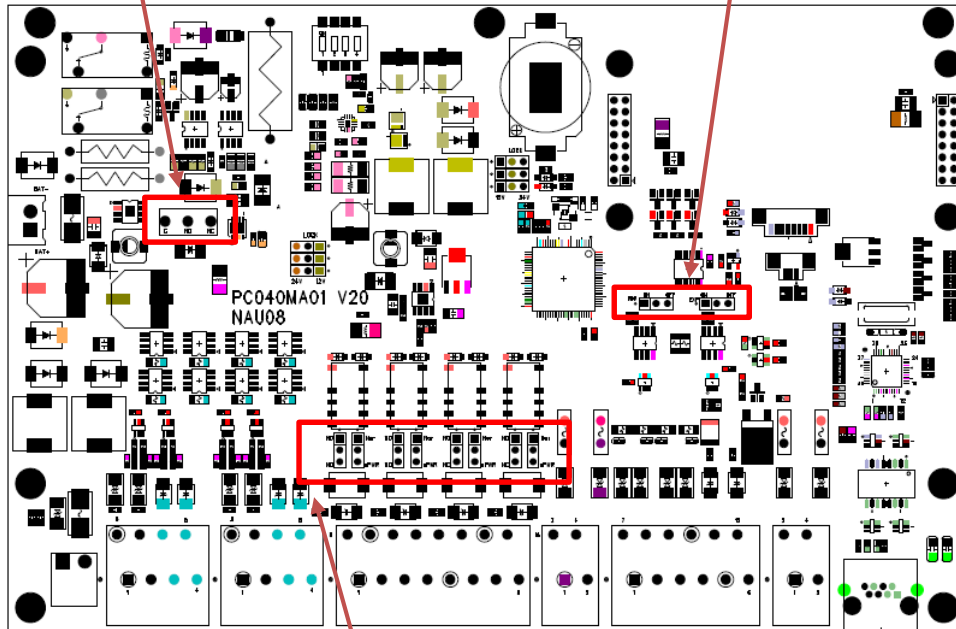
BAT(-)  
BAT(+)



# 2. Main Board Feature

SW301  
Battery Power On Switch

JP151/JP152 RS485 Termination  
Resistor Select Switch



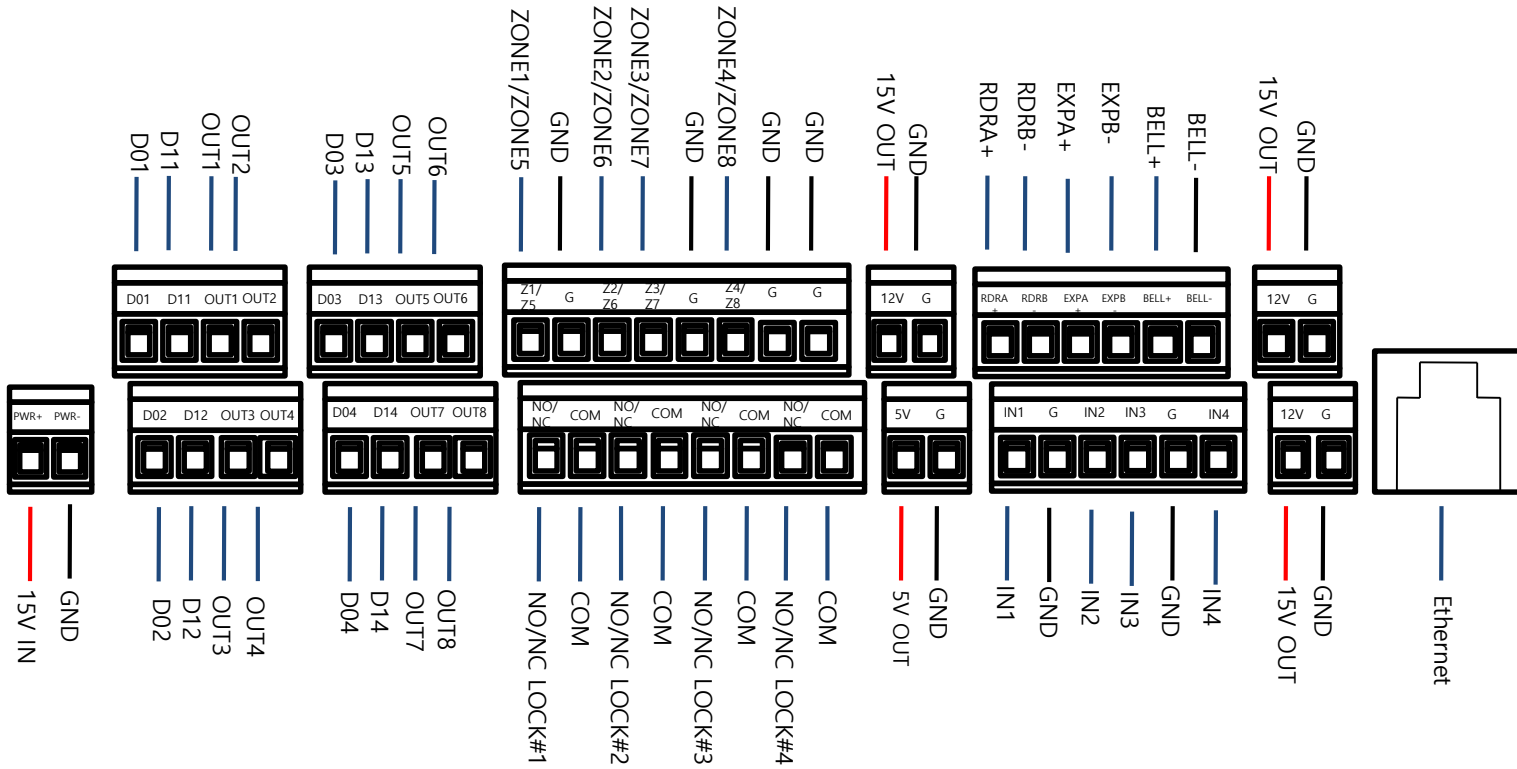
JP201~JP204  
JP205~JP208  
Lock Type Switch

**Switch Setting I [ Lock Type Selection ]**  
JP201 : NO [ Normal Open Relay Contact ]  
          NC [ Normal Close Relay Contact ]  
JP202 : NO [ Normal Open Relay Contact ]  
          NC [ Normal Close Relay Contact ]  
JP203 : NO [ Normal Open Relay Contact ]  
          NC [ Normal Close Relay Contact ]  
JP204 : NO [ Normal Open Relay Contact ]  
          NC [ Normal Close Relay Contact ]

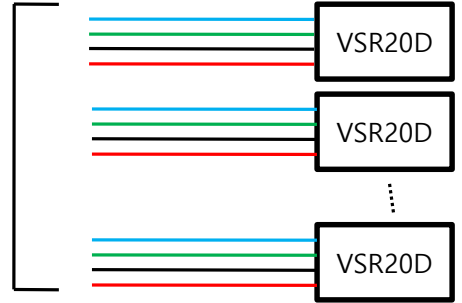
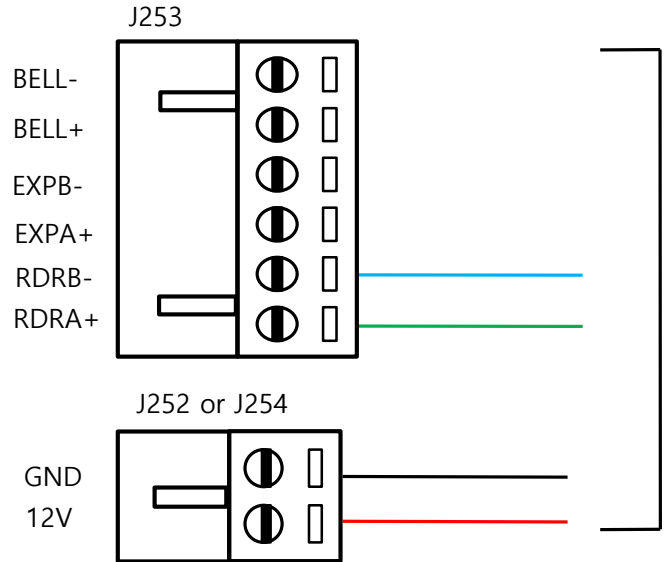
**Switch Setting II [ Lock Type Selection ]**  
JP205 : Lock Power Contact / Lock No Power Contact  
JP206 : Lock Power Contact / Lock No Power Contact  
JP207 : Lock Power Contact / Lock No Power Contact  
JP208 : Lock Power Contact / Lock No Power Contact

**Switch Setting III [ RS485 T\_Resistor Selection ]**  
JP151 : ON [ 120ohm termination resistor ]  
          OFF [ Open the termination resistor ]  
JP152 : ON [ 120ohm termination resistor ]  
          OFF [ Open the termination resistor ]

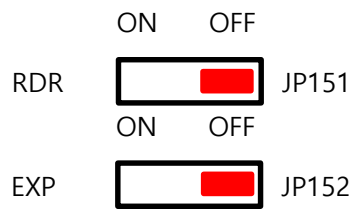
# 3. Connection of Wires to terminal blocks



# 4. Connecting VSR20D via RS485

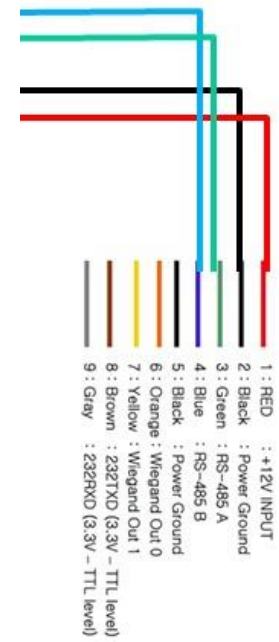


One MCP-040 can be connected with VSR20D readers max 8ea in parallel



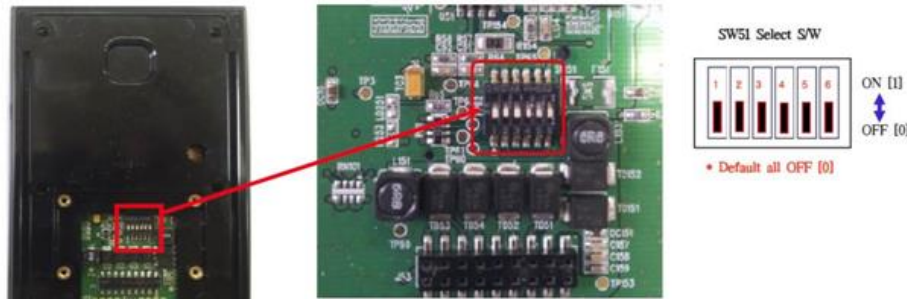
RS-485 Termination Resistor Select S/W : SW151

- 4:Blue : 485B-
- 3:Green : 485A+
- 2:Black : GND
- 1:RED : +12V



# 5. How to give the different 485 ID to each VSR20D

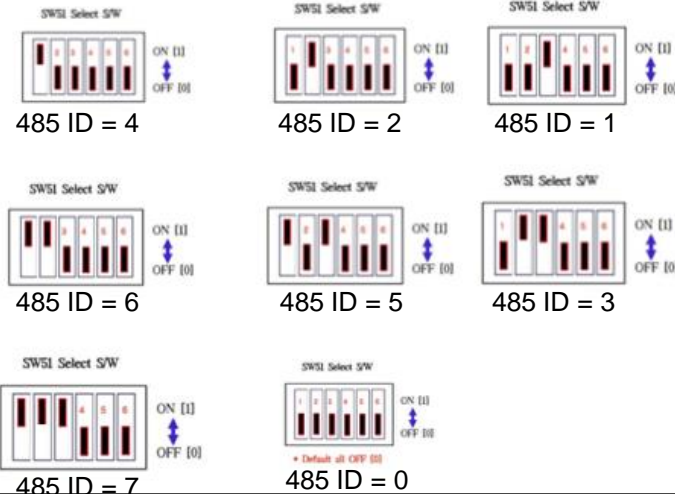
Each VSR20D reader should be set the different RS485 ID with DIP switch when they are connected to MCP in parallel



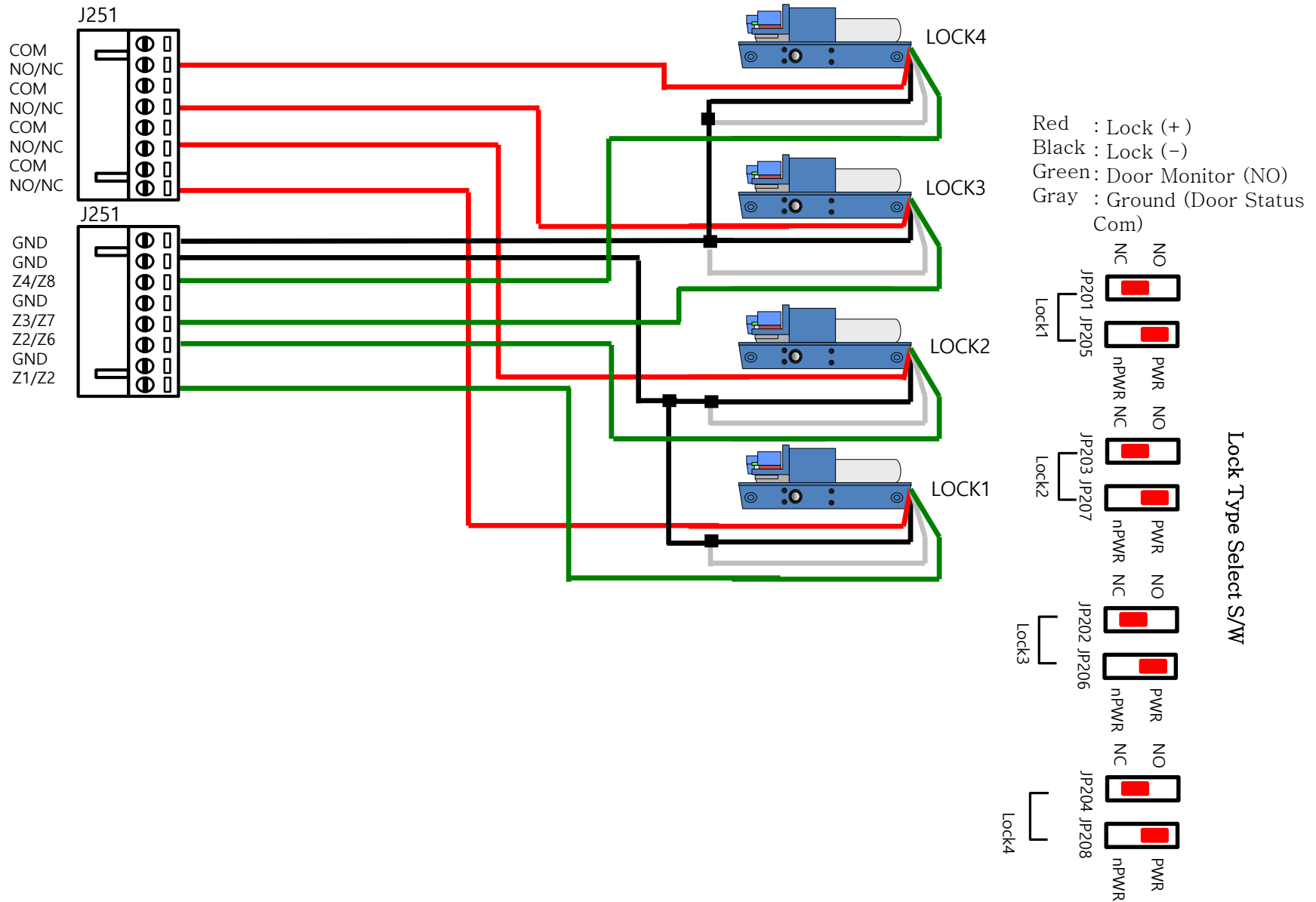
SW1 Select S/W Function

	1	2	3	4	5	6
Function	485 ID - Select			Weigond [1] RS485 [0]	Reserve	RS485 Termination Resistor

RS485 ID setting below :



# 6. Connecting Dead-Bolt Type Door Lock (Fail Safe)

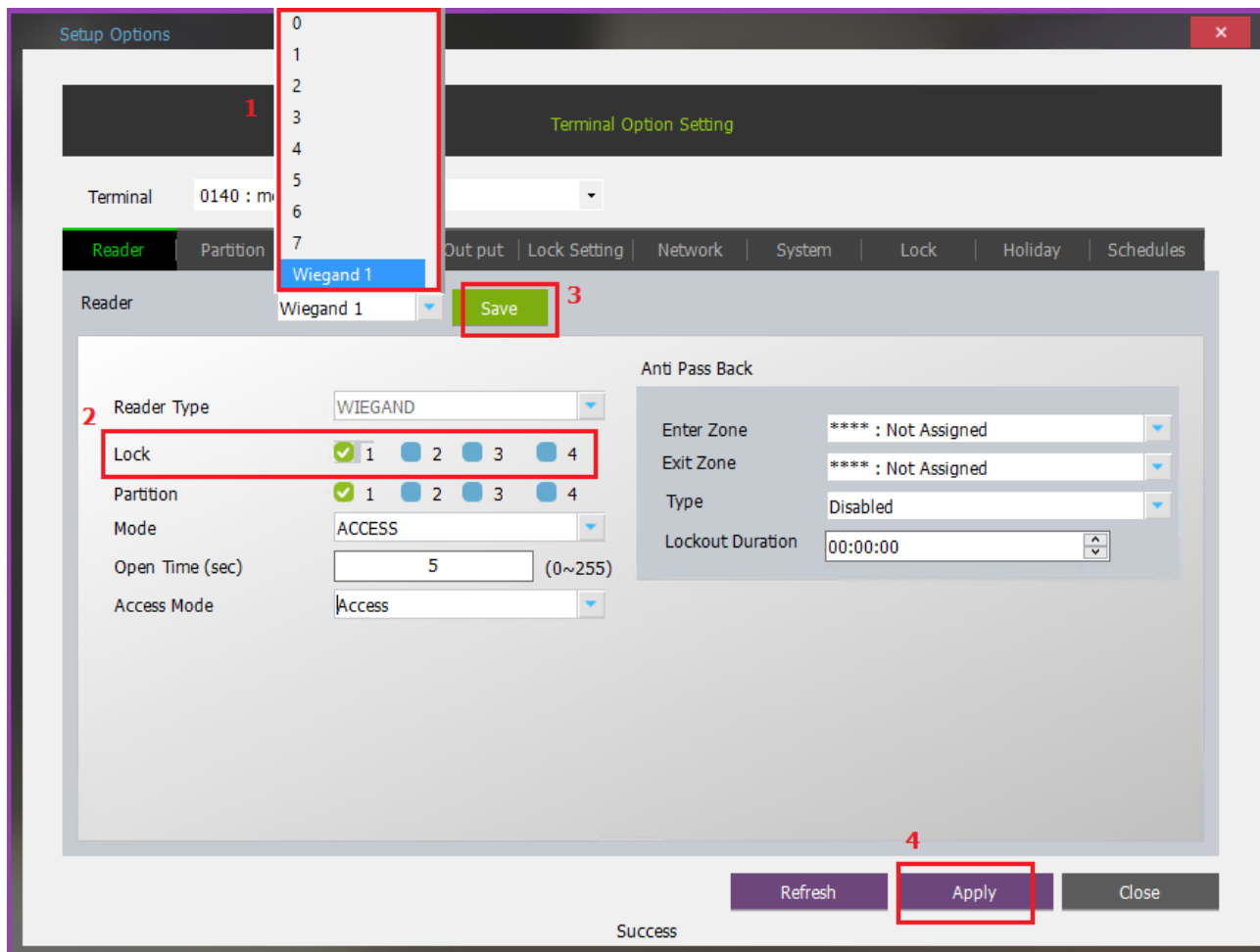


# 7. How to do pairing each lock to each reader

Do pairing between 4 locks to 12 readers on MCP-040 from the Terminal Setup Option on UNIS

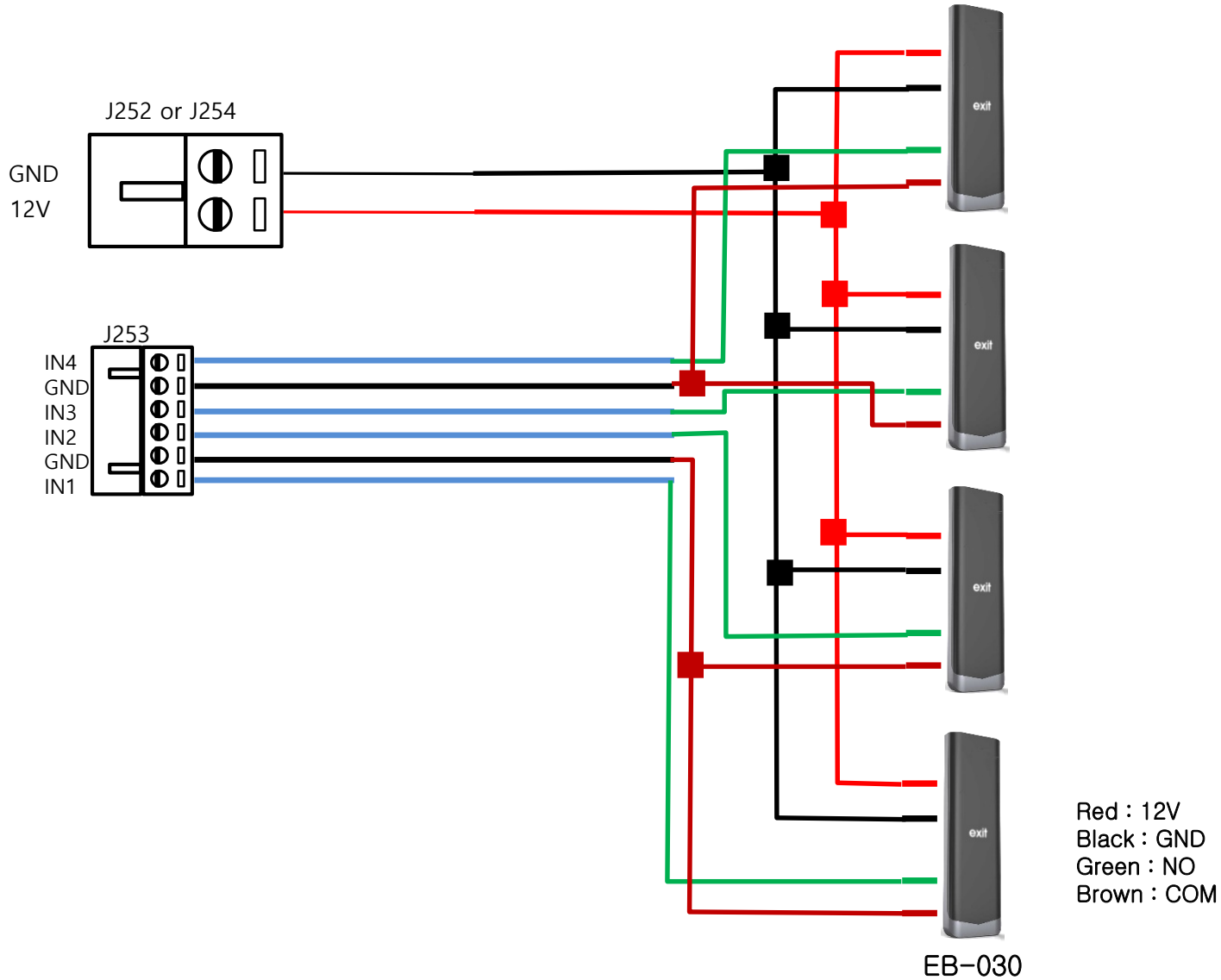
- 1> Select the reader among the readers are connected to MCP-040
- 2> Select the lock number among the locks are connected to MCP-040
- 3> Click the button "Save"
- 4> Click the button "Apply"

And then the paired lock will be opened whenever the user is authenticated by the paired reader.





# 8. How to connect four EB030 units to MCP-040



# 9. How to do pairing each EXIT button to each lock

Do pairing between 4 EXIT buttons to 4 locks on MCP-040 from the Terminal Setup Option on UNIS

- 1> Select the tab "In/Output"
- 2> Select the Exit button number among the buttons are connected to MCP-040
- 2> Insert the lock number from 1 to 4 which you want to pairing
- 3> Click the button "Save"
- 4> Click the button "Apply"

Terminal 0140 : mcp v2

Reader | Partition | Zone | **In/Output** | Lock Setting | Network | System | Holiday | Schedules

Output

Output 1 Save

Type AUTHORIZED

Time 5

Parameter 1

Inverted

Input

Input 1 Save

Type EXIT BUTTON NC

Time 5

Parameter 1

You can insert the lock number from 1 to 4

- Lock1 = 1
- Lock2 = 2
- Lock3 = 3
- Lock4 = 4

Refresh Apply Close

Success