
Installation & Wiring Guide

Fingerprint/Card Terminal

AC-6000 V2.0



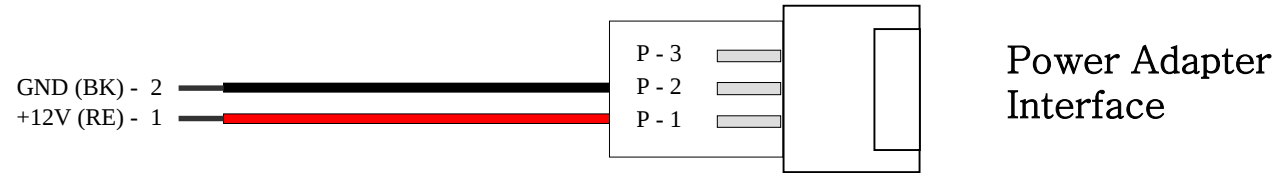
Doc. Ver. : V2.10

Aug., 21, 2014

R&D Center

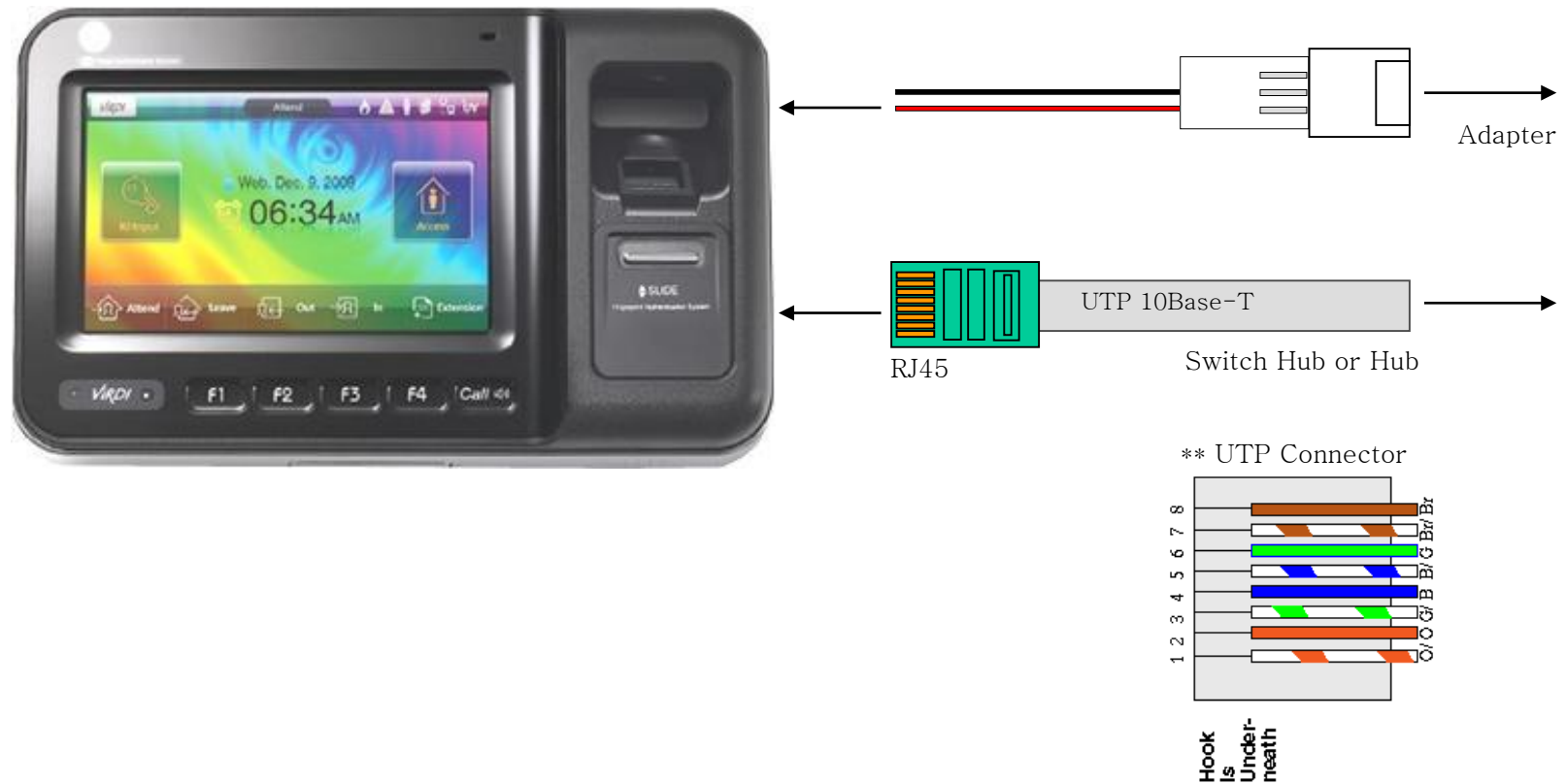
Union Community Co., Ltd.

1. Power Connector connection

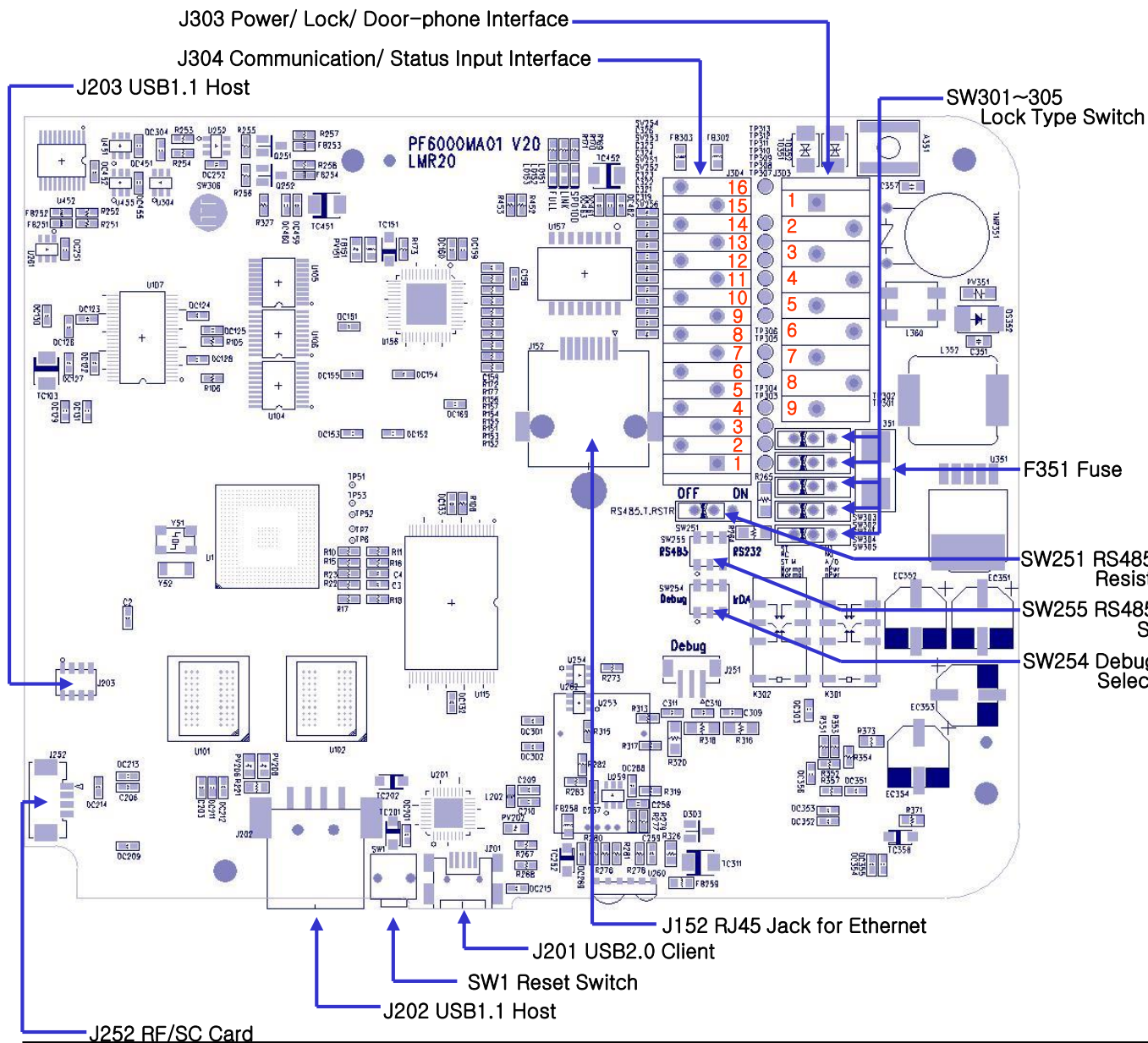


** Insert the Power Cable to VIN/PG Terminal Block in right color matching as the picture

2. Connecting Ethernet & Power Cable



3. Main Board Feature



Switch Setting I [Lock Type Selection]

- SW301 : ST/M [Strike/Motor/Dead-bolt Lock]
A/D [Auto Door / Lock1 No Power Contact]
- SW302 : NO/MT [Normal Open Relay Contact]
NC [Normal Close Relay Contact]
- SW303 : ST/AT.DR [Strike, Auto Door, Dead bolt]
MT [Motor Lock Selection]
- SW304, SW305 : Normal [2nd Lock, Emergency Lamp]
nPwr [Lock2 No Power contact]

Switch Setting II [RS485 T_Resistor Selection]

- SW251 : ON [120ohm termination resistor]
OFF [Open the termination resistor]

Switch Setting III [RS485↔RS232 Selection]

- SW255 : RS232 [J304 Pin 6&7 Enabled]
RS485 [J306 Pin 9&10 Enabled]

Switch Setting IV [Debug↔IrDA Selection]

- SW254 : Debug [for Developer]
IrDA [for IrDA]

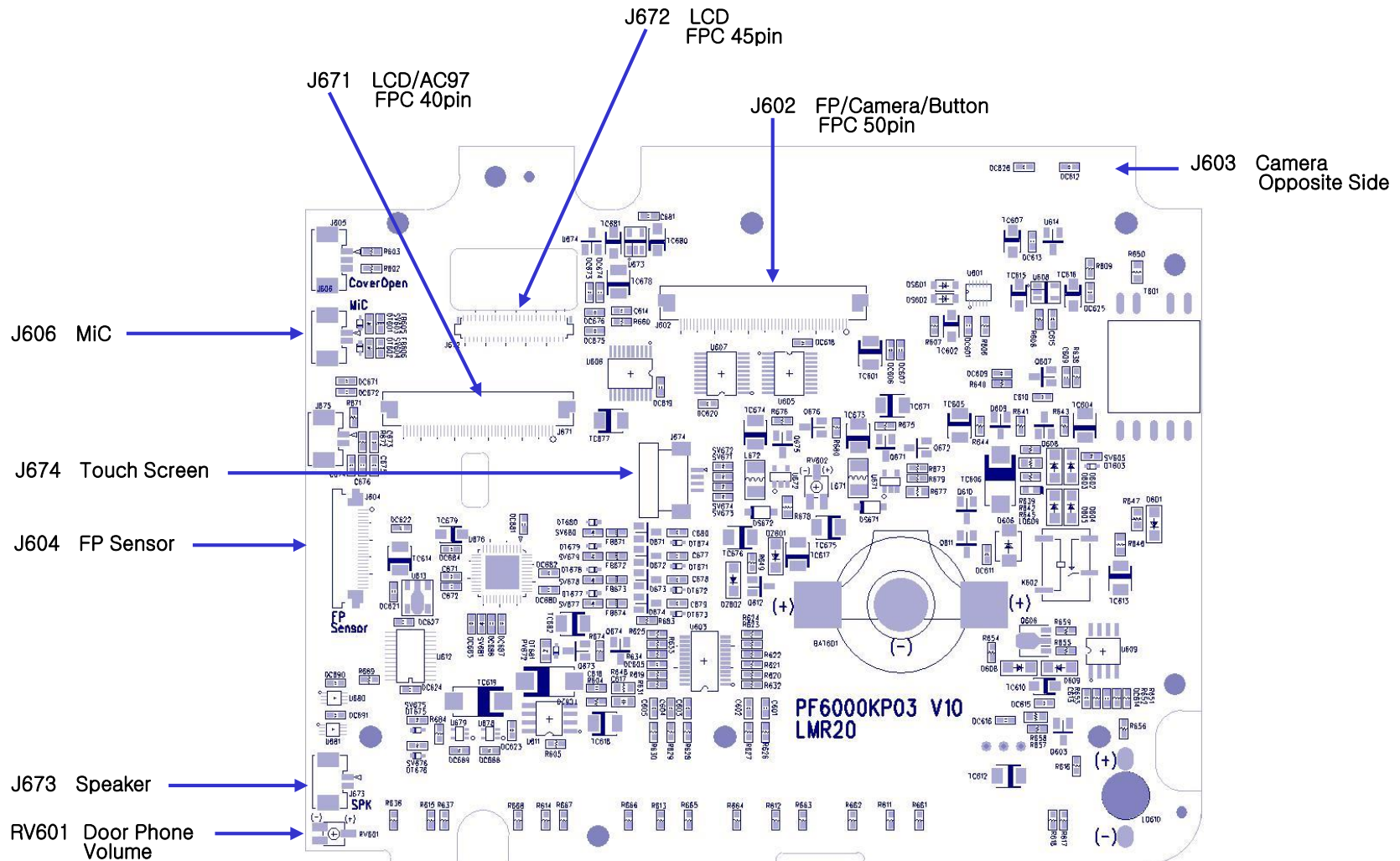
J303 Power/Door Lock Control Output

- 1 [Vin] : DC Power Input
- 2 [PG] : Ground for DC Power
- 3 [DPV] : Door Phone Voltage IN
- 4 [DPS] : Door Phone Signal
- 5 [L1] : Lock Output 1
- 6 [L1C] : Lock COM for Output 1
- 7 [L2] : Lock Output 2
- 8 [L2C] : Lock COM for Output 2
- 9 [LG] : Ground for Lock Control

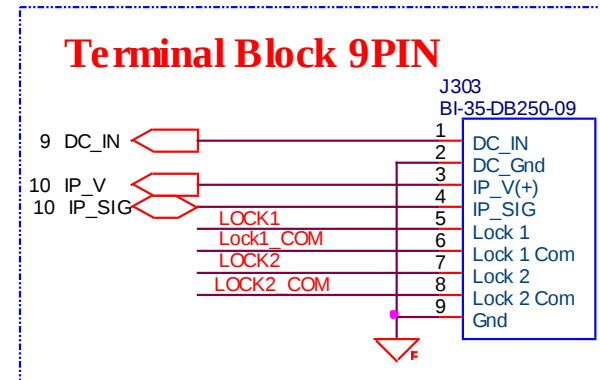
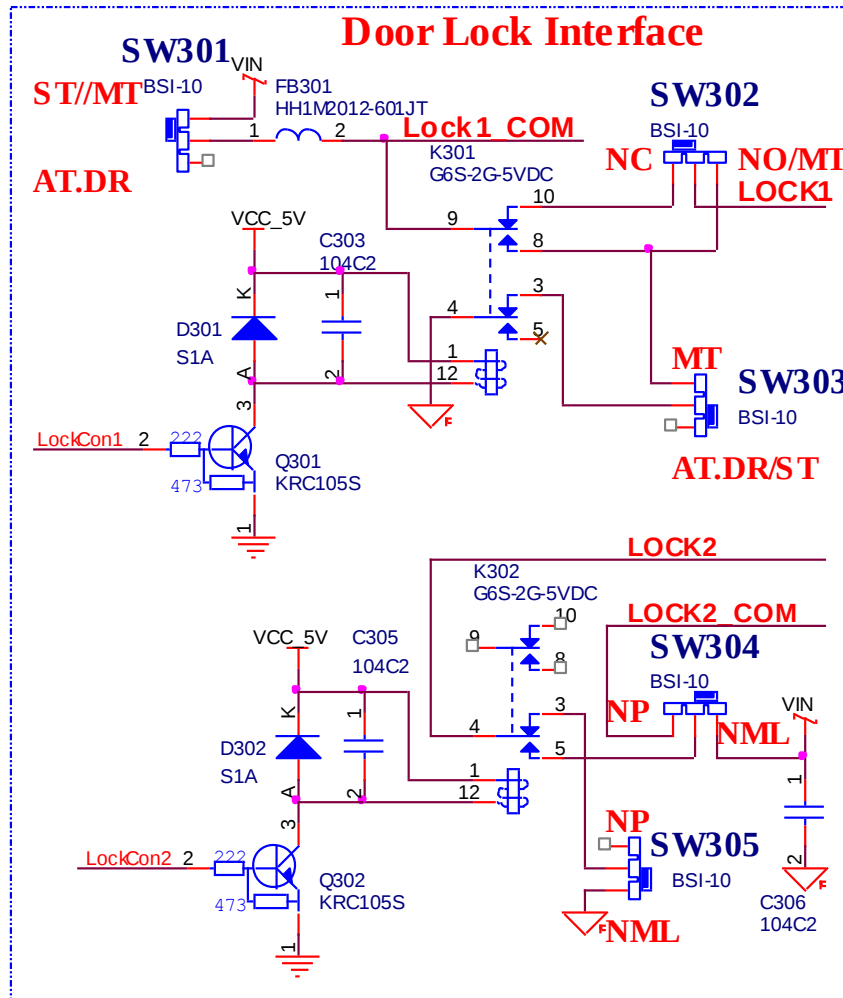
J304 communication/ Status Input

- 1 [IO] : Inside Open
- 2 [M0] : Door Monitor 0
- 3 [M1] : Door Monitor 1
- 4 [M2] : Door Monitor 2
- 5 [G] : Ground [Door Status]
- 6 [R2T] : RS232 TXD Output
- 7 [R2R] : RS232 RXD Input
- 8 [G] : Ground for RS232
- 9 [R4A] : RS485 A
- 10 [R4B] : RS485 B
- 11 [WIO] : Wiegand Input 0
- 12 [WI1] : Wiegand Input 1
- 13 [WO0] : Wiegand Output 0
- 14 [WO1] : Wiegand Output 1
- 15 [G] : Ground [Wiegand interface]
- 16 [5V] : 5V Output

4. Keypad Board Feature



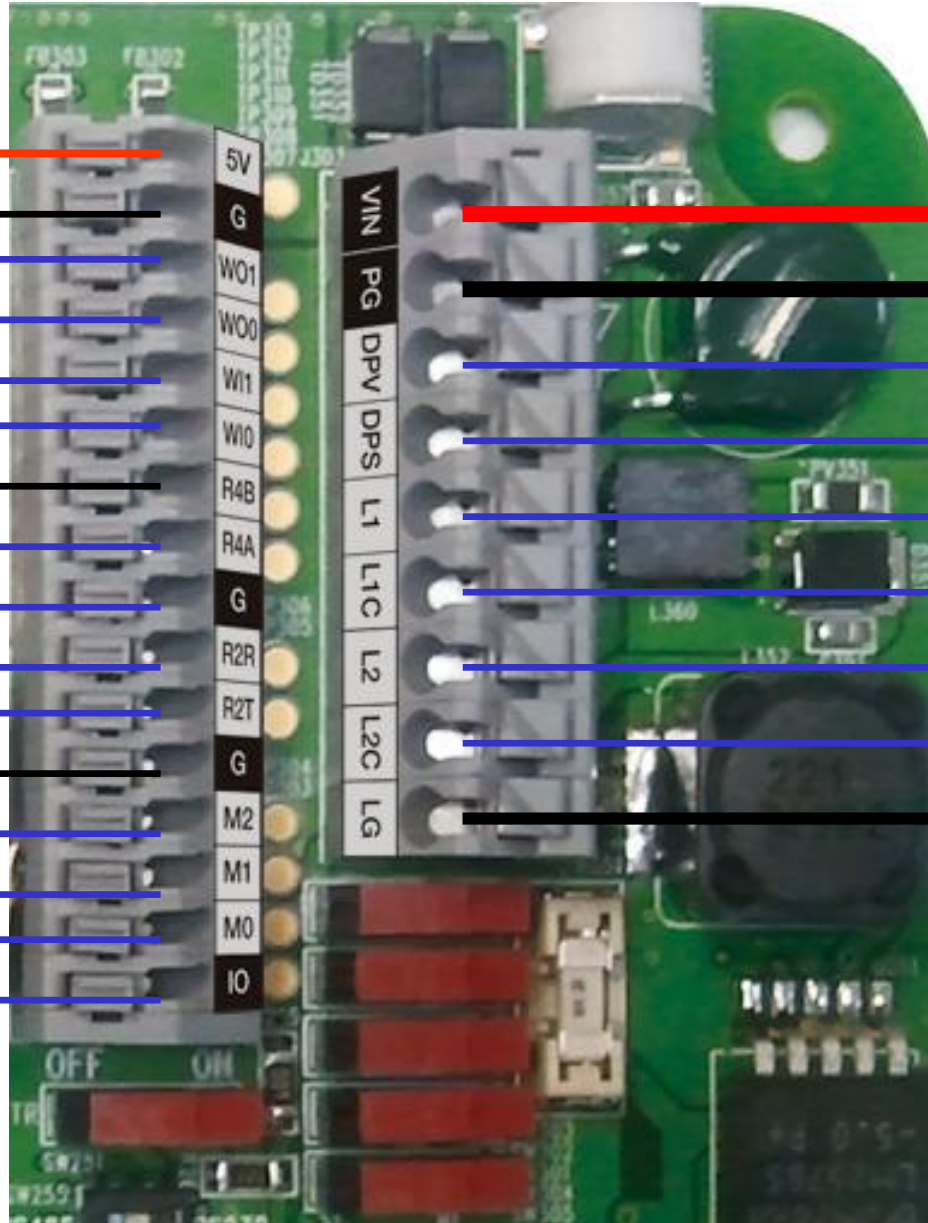
5. Schematic for Door Lock Interface



6. Connection of Wires to terminal blocks

J304 communication/ Status Input

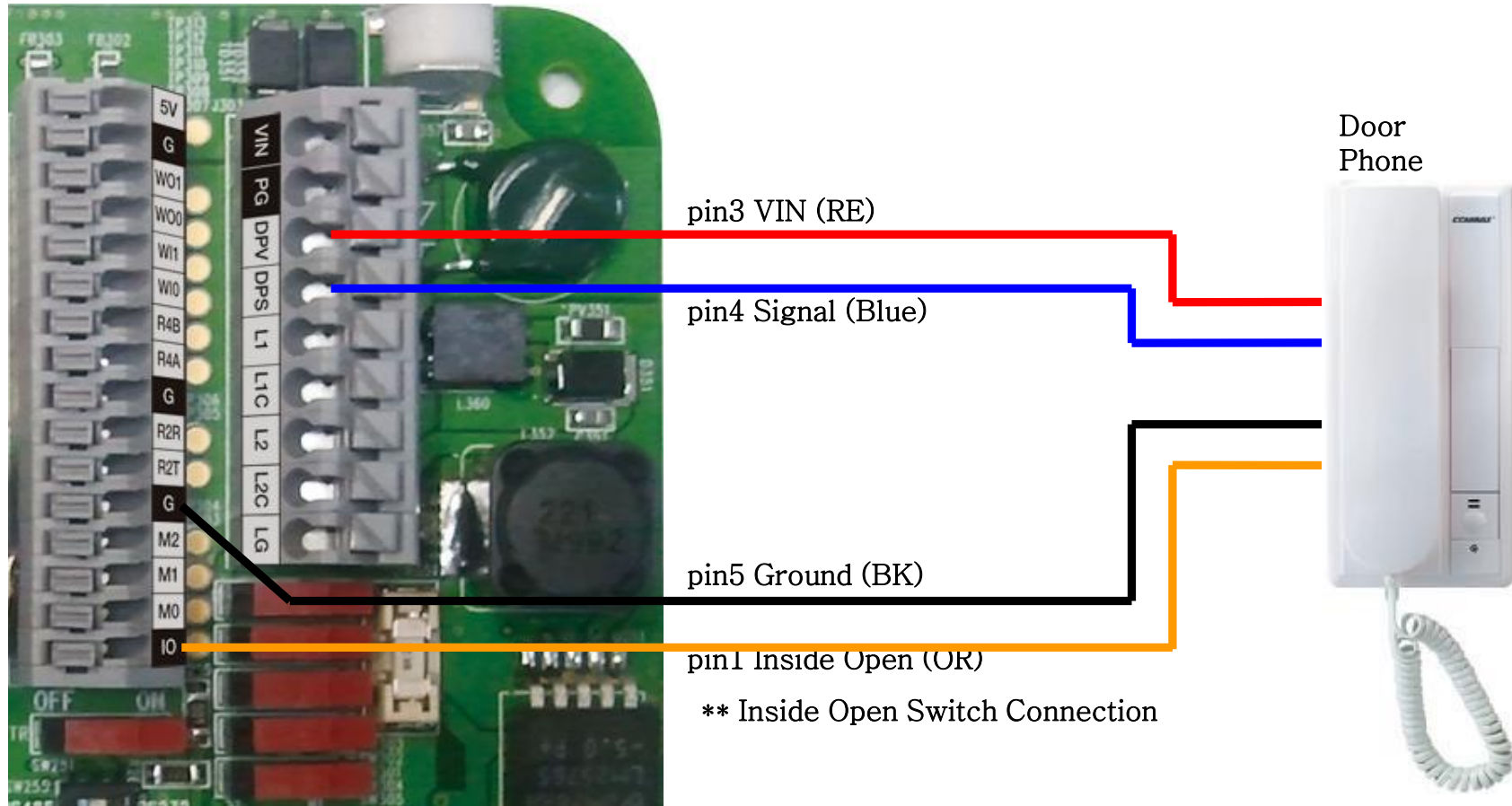
- 16[5V] : 5V Output
- 15[G] : Ground [Wiegand]
- 14[WO1]: Wiegand Output 1
- 13[WO0]: Wiegand Output 0
- 12[WI1]: Wiegand Input 1
- 11[WI0]: Wiegand Input 0
- 10[R4B]: RS485 B
- 9 [R4A]: RS485 A
- 8 [G]: Ground [Serial Port]
- 7 [R2R]: RS232 RXD Input
- 6 [R2T]: RS232 TXD Output
- 5 [G] : Ground [Input]
- 4 [M2]: Door Monitor 2
- 3 [M1]: Door Monitor 1
- 2 [M0]: Door Monitor 0
- 1 [IO]: Inside Open



J303 Door Lock Control Output

- 1 [VIN] : DC Power Input
- 2 [PG] : Ground for DC Power
- 3 [DPV] : Door Phone Voltage IN
- 4 [DPS] :Door Phone Signal
- 5 [L1] : Lock Output 1
- 6 [L1C] : Lock COM for Output 1
- 7 [L2] : Lock Output 2
- 8 [L2C] Lock COM for Output 2
- 9 [LG] : Ground for Lock Control

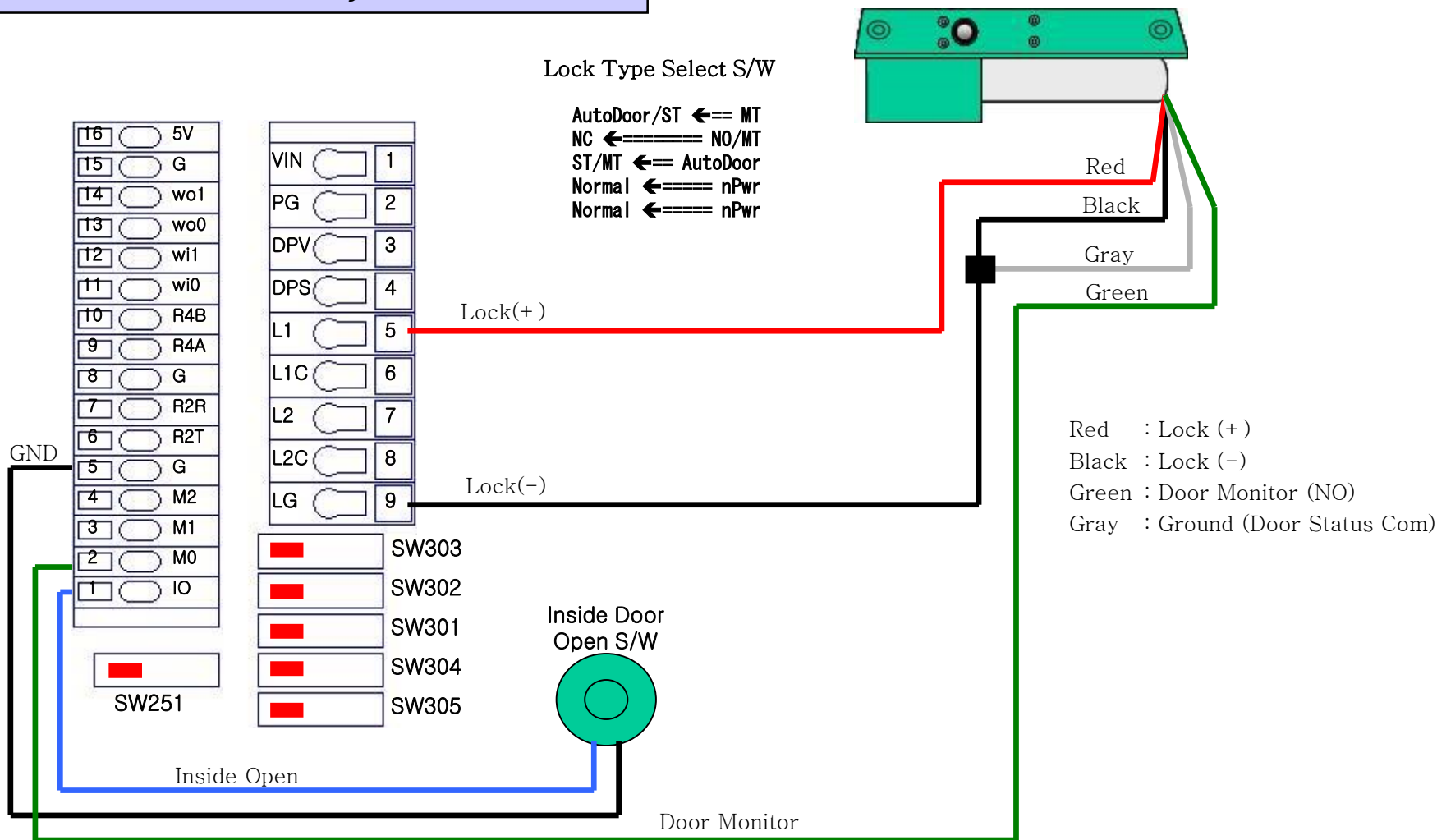
7. Connection of Door Phone



- ※ The Installation distance is Max 30M(100feet) between AC-6000 and Door Phone.
If you want to call the door phone, please use the “Call” button.
- ※ The Color is not important....

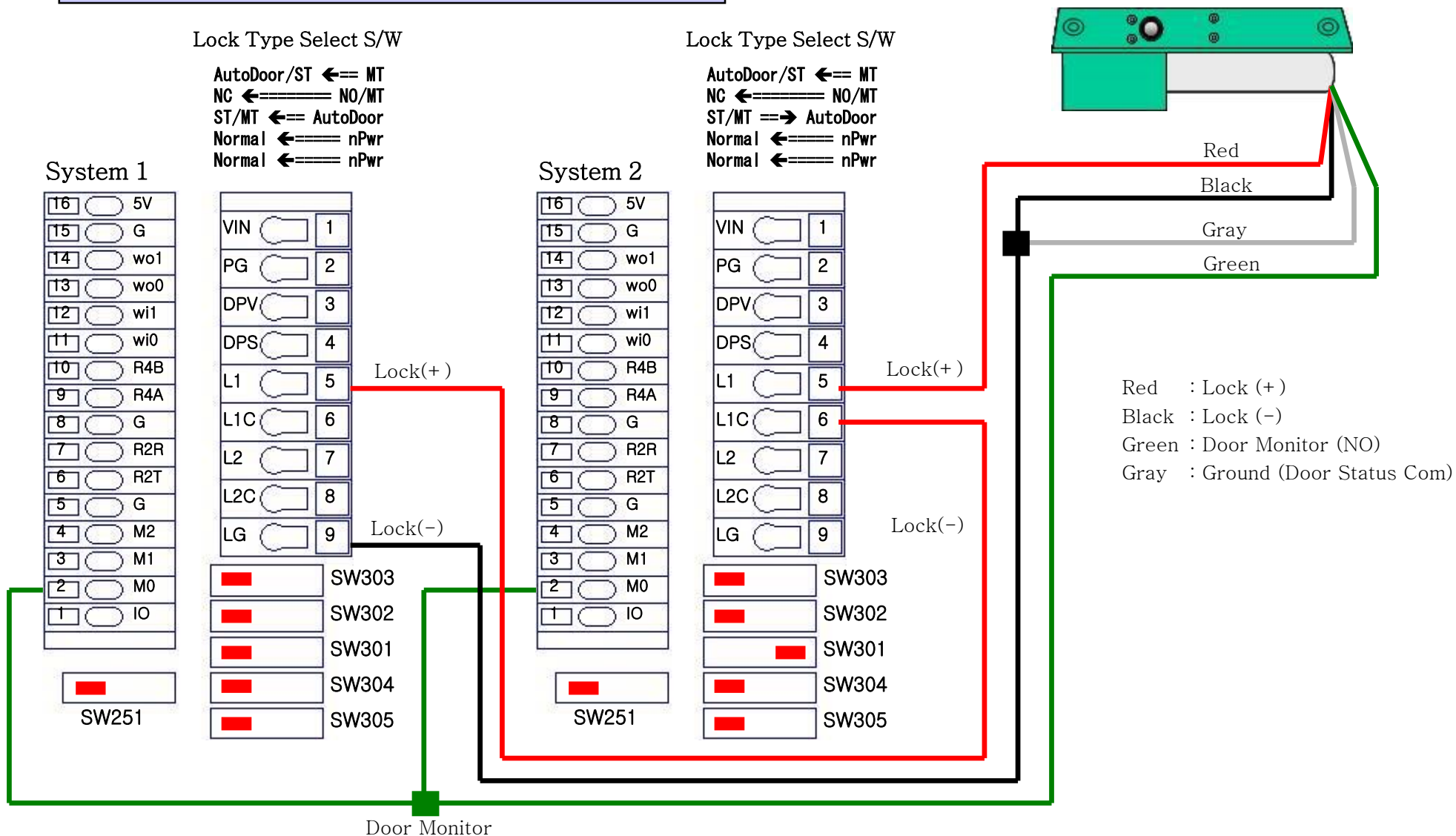
8. Connecting Dead-Bolt Type Door Lock (Fail Safe)

8.1. Connect with One System/ One Lock



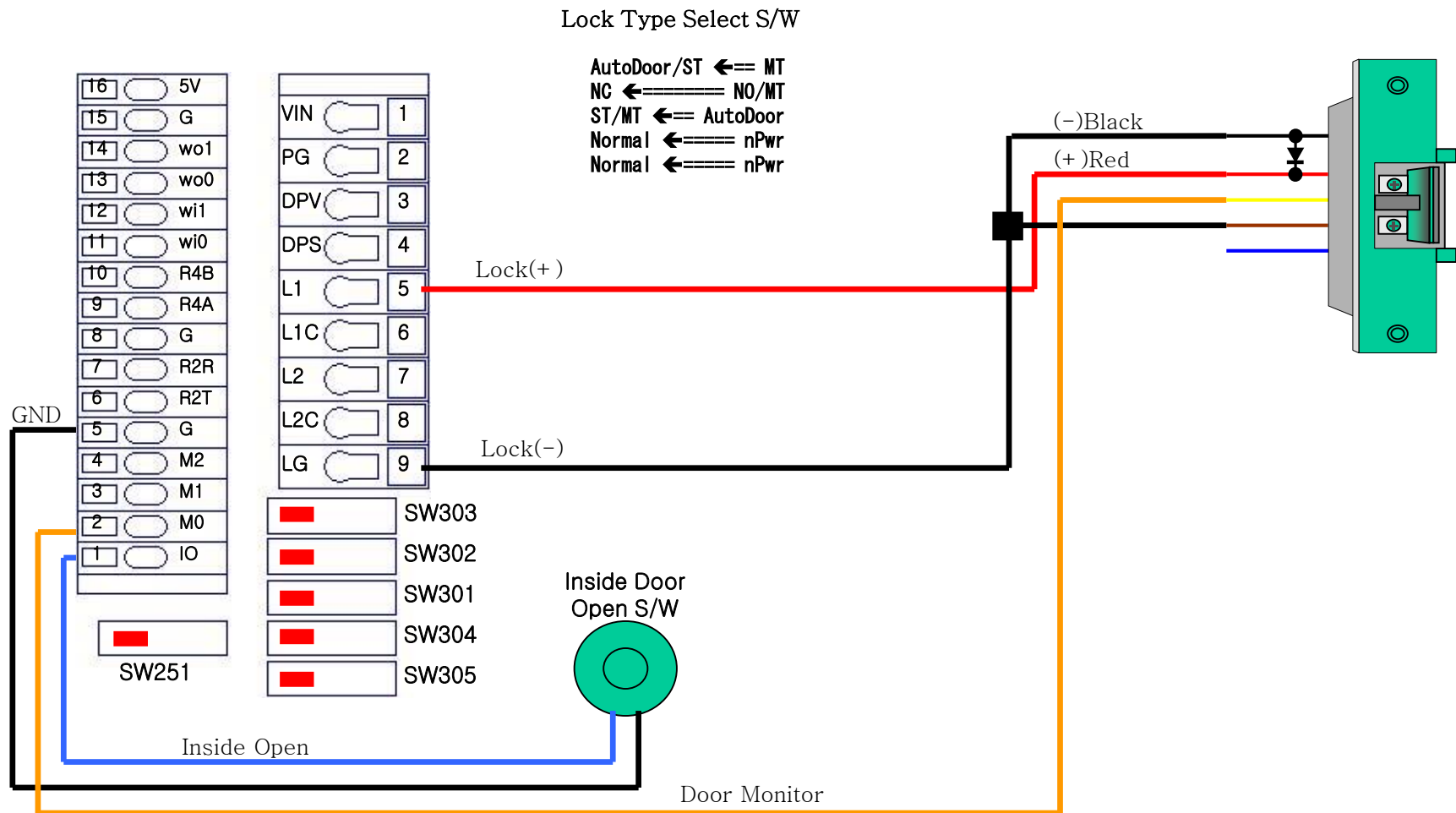
8. Connecting Dead-Bolt Type Door Lock (Fail Safe)

8.2. Connect with Two Systems/ One Lock



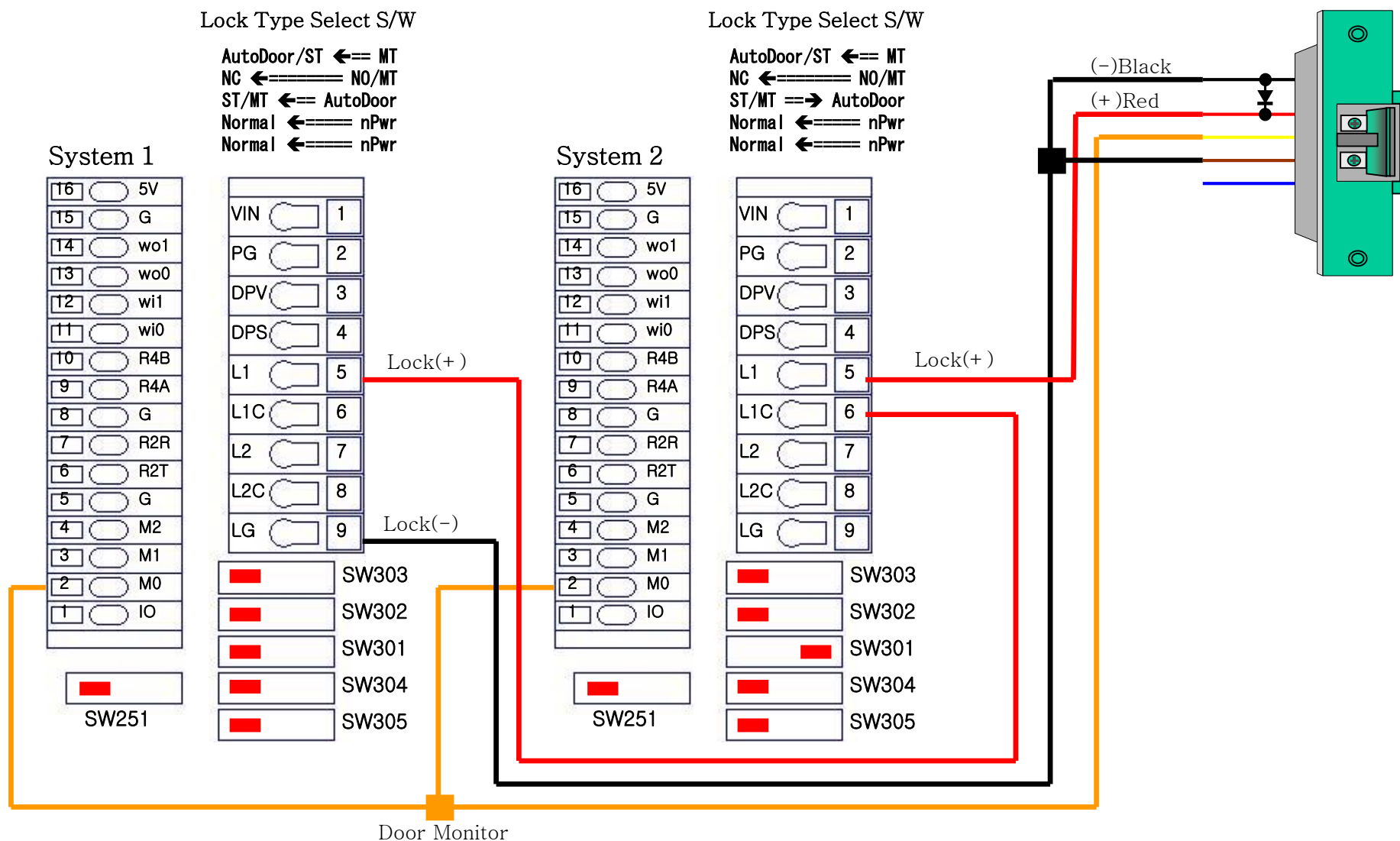
9. Connecting Strike Type Door Lock (Fail Safe)

9.1. Connect with One system/ One Lock



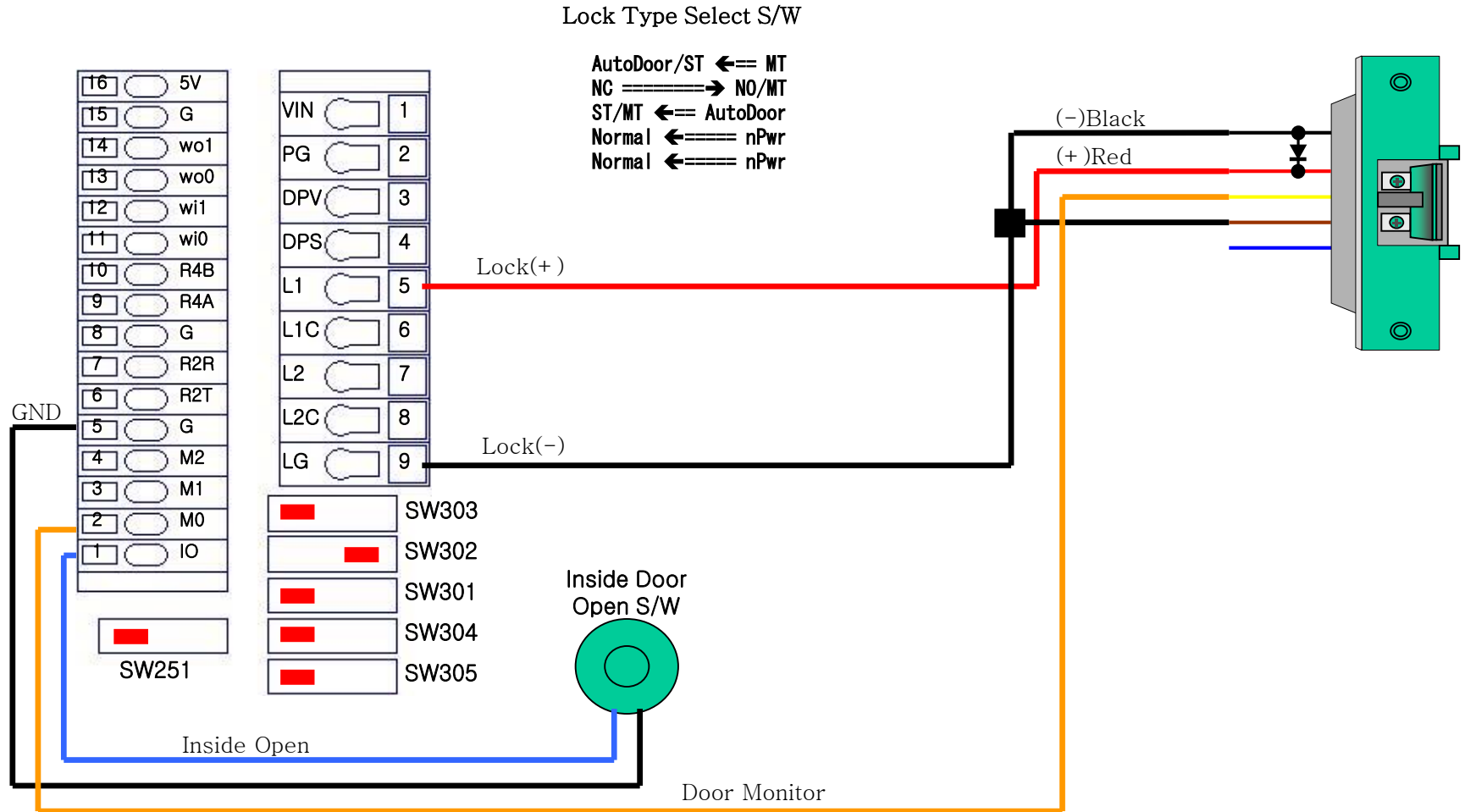
9. Connecting Strike Type Door Lock (Fail Safe)

9.2. Connect with Two systems/ One Lock



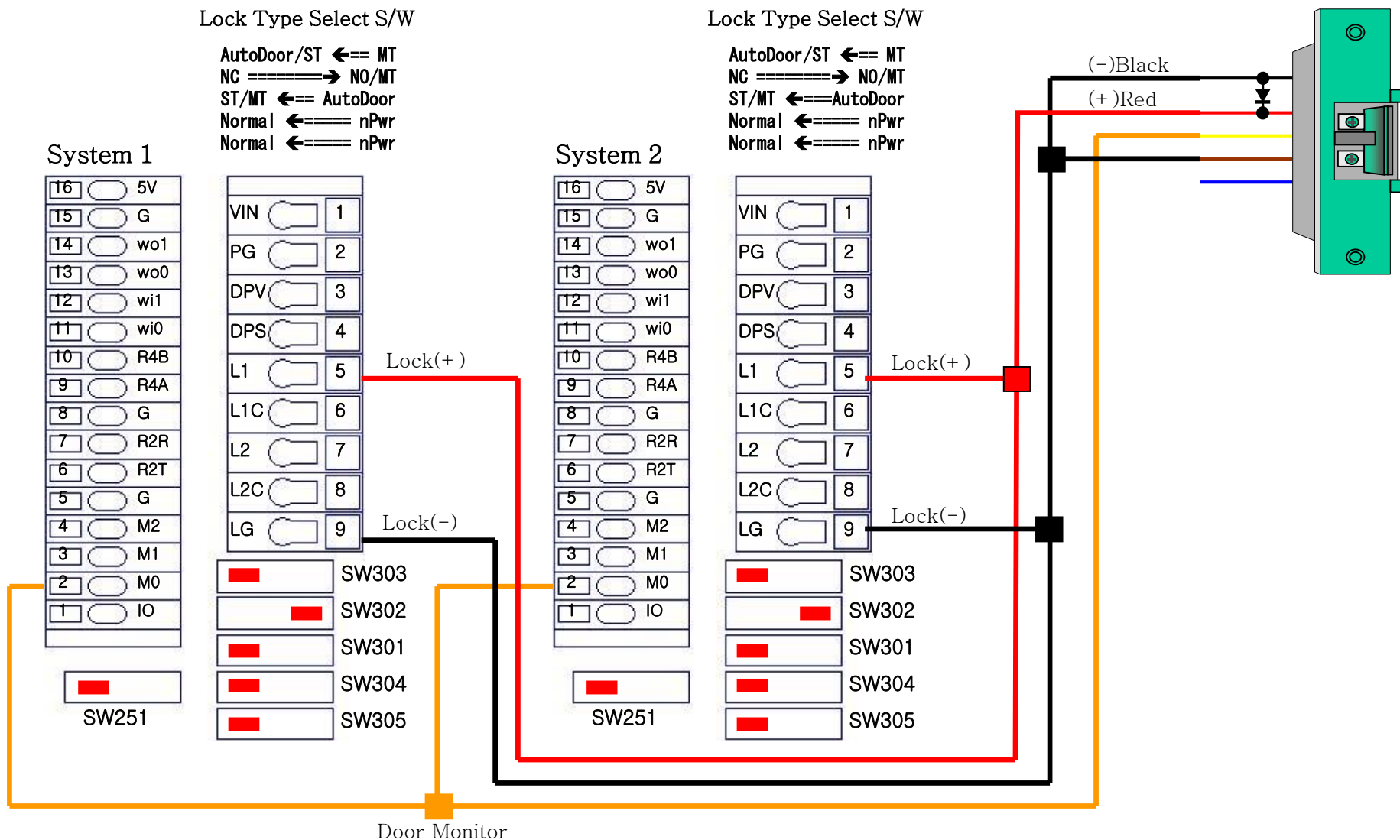
10. Connecting Strike Type Door Lock (Fail Secure)

10.1. Connect with One system/ One Lock



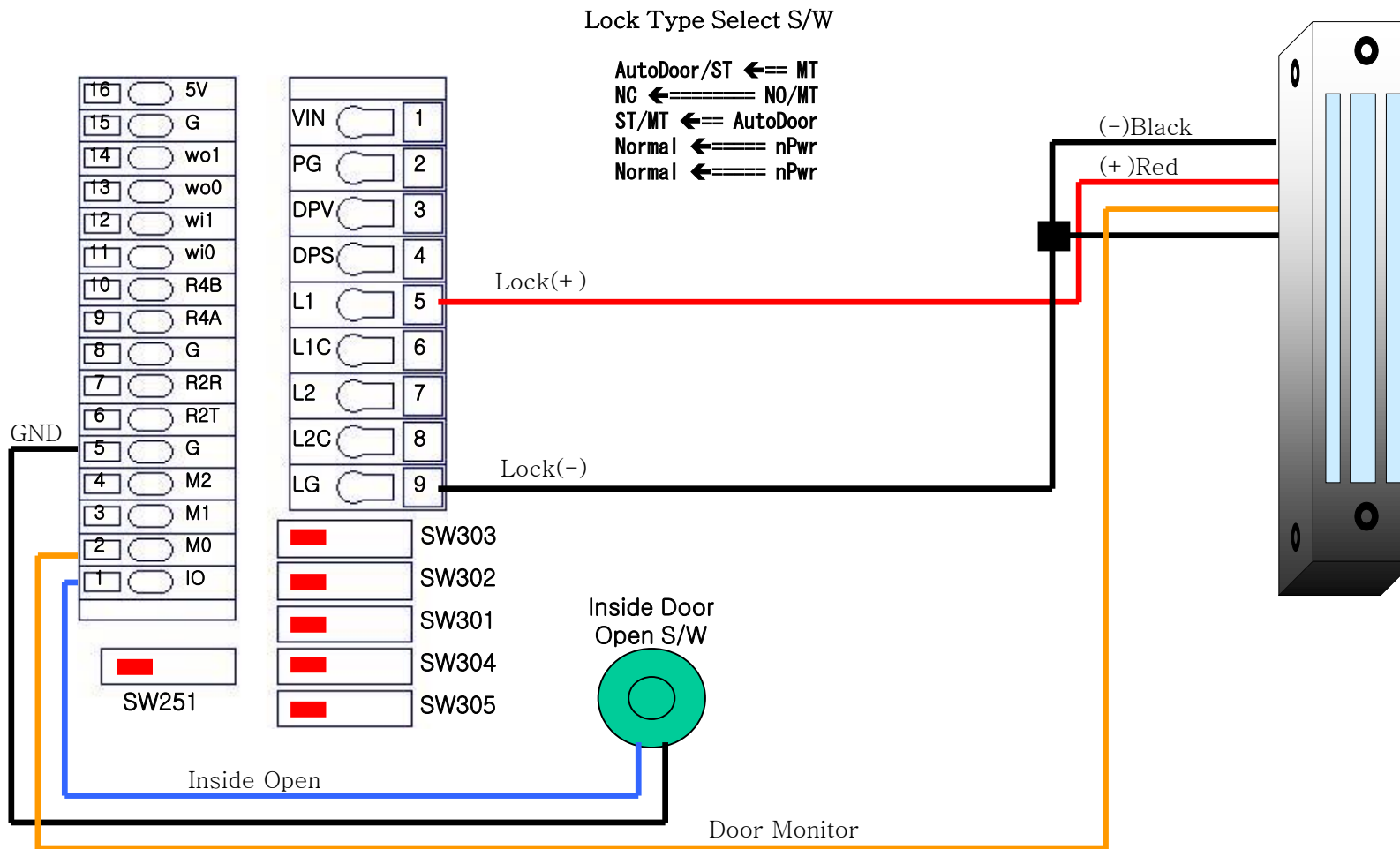
10. Connecting Strike Type Door Lock (Fail Secure)

10.2. Connect with Two systems/ One Lock



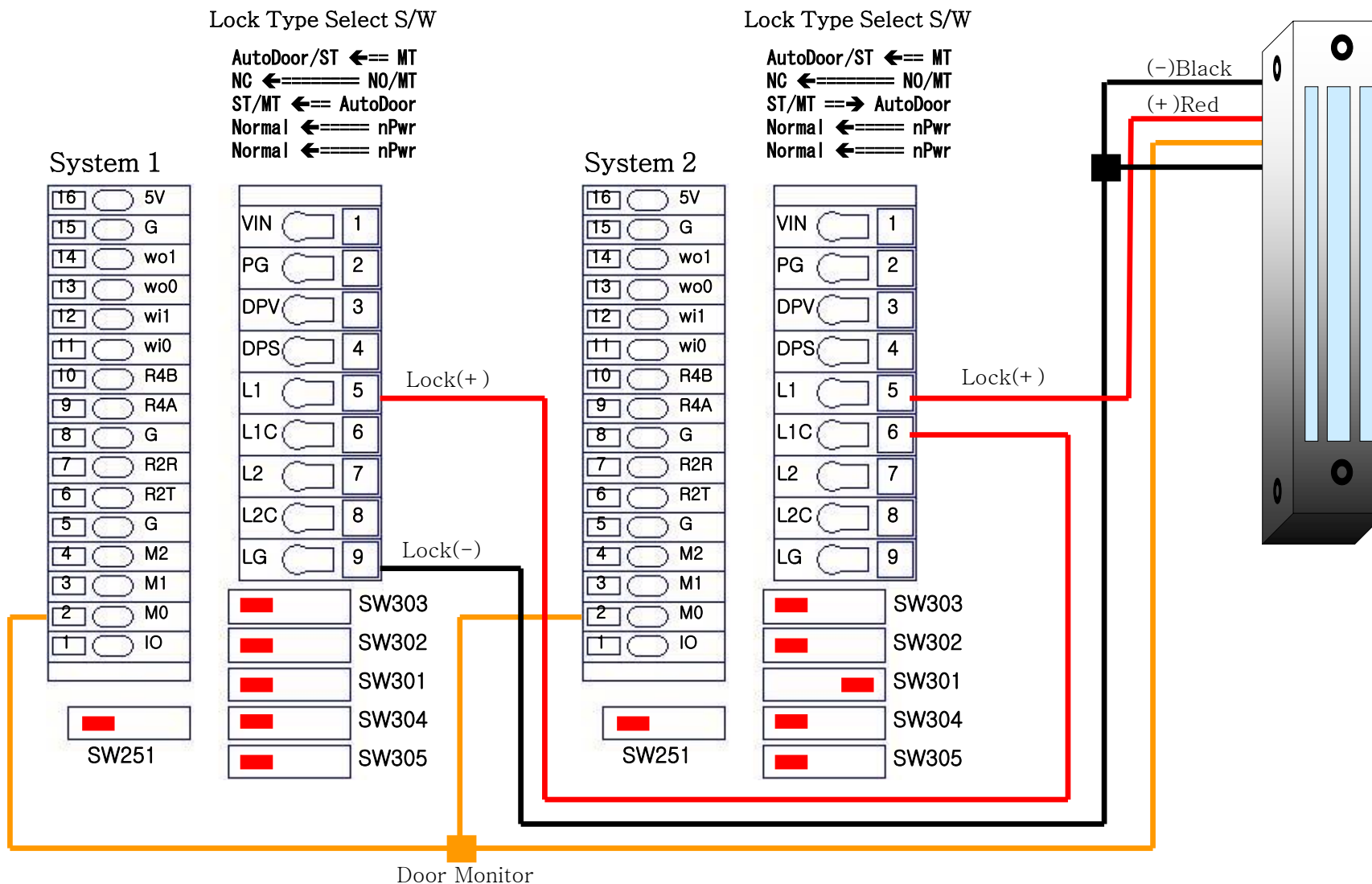
11. Connecting EM Type Door Lock (Fail Safe)

11.1. Connect with One system/ One Lock



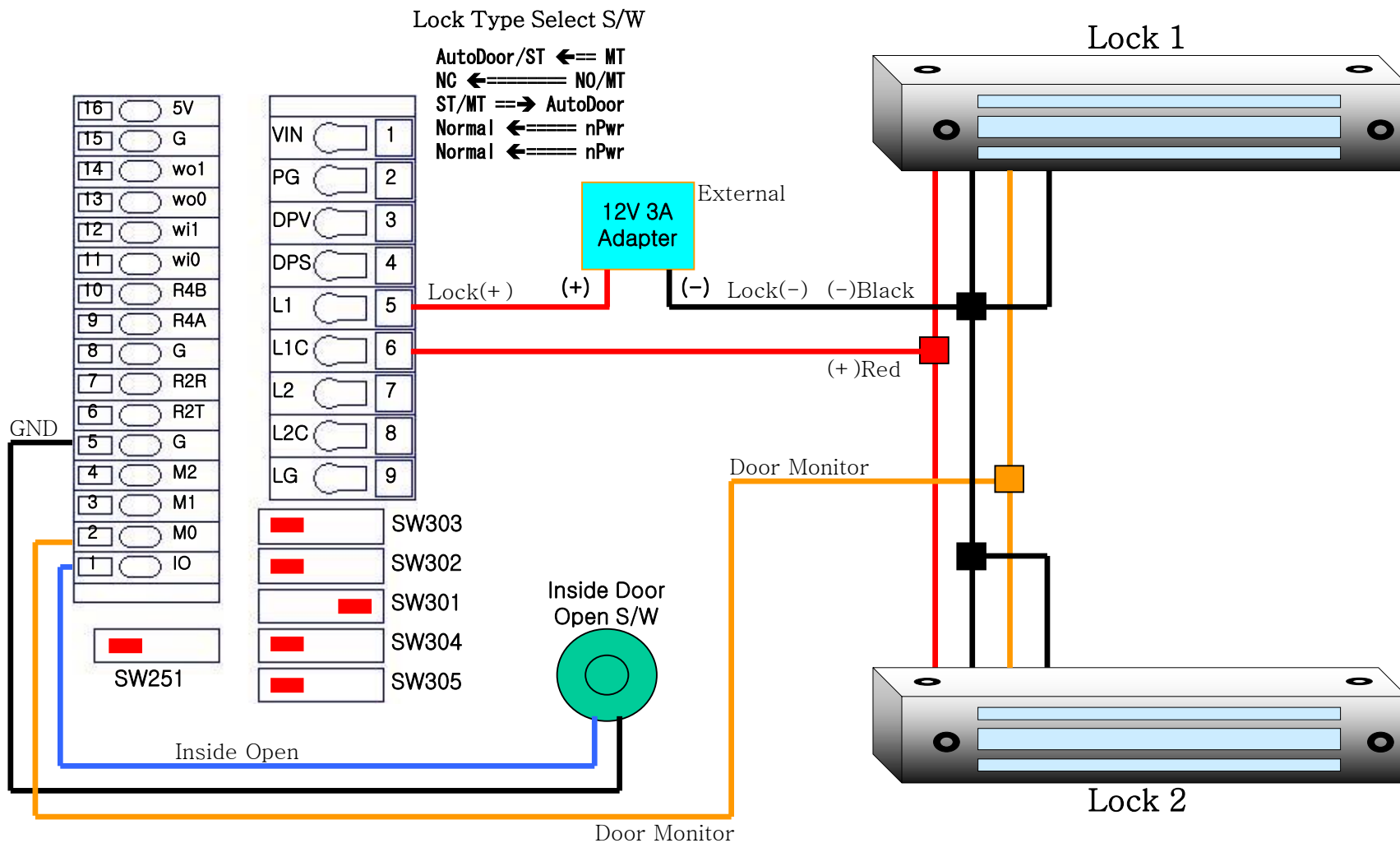
11. Connecting EM Type Door Lock (Fail Safe)

11.2. Connect with Two System/ One Lock



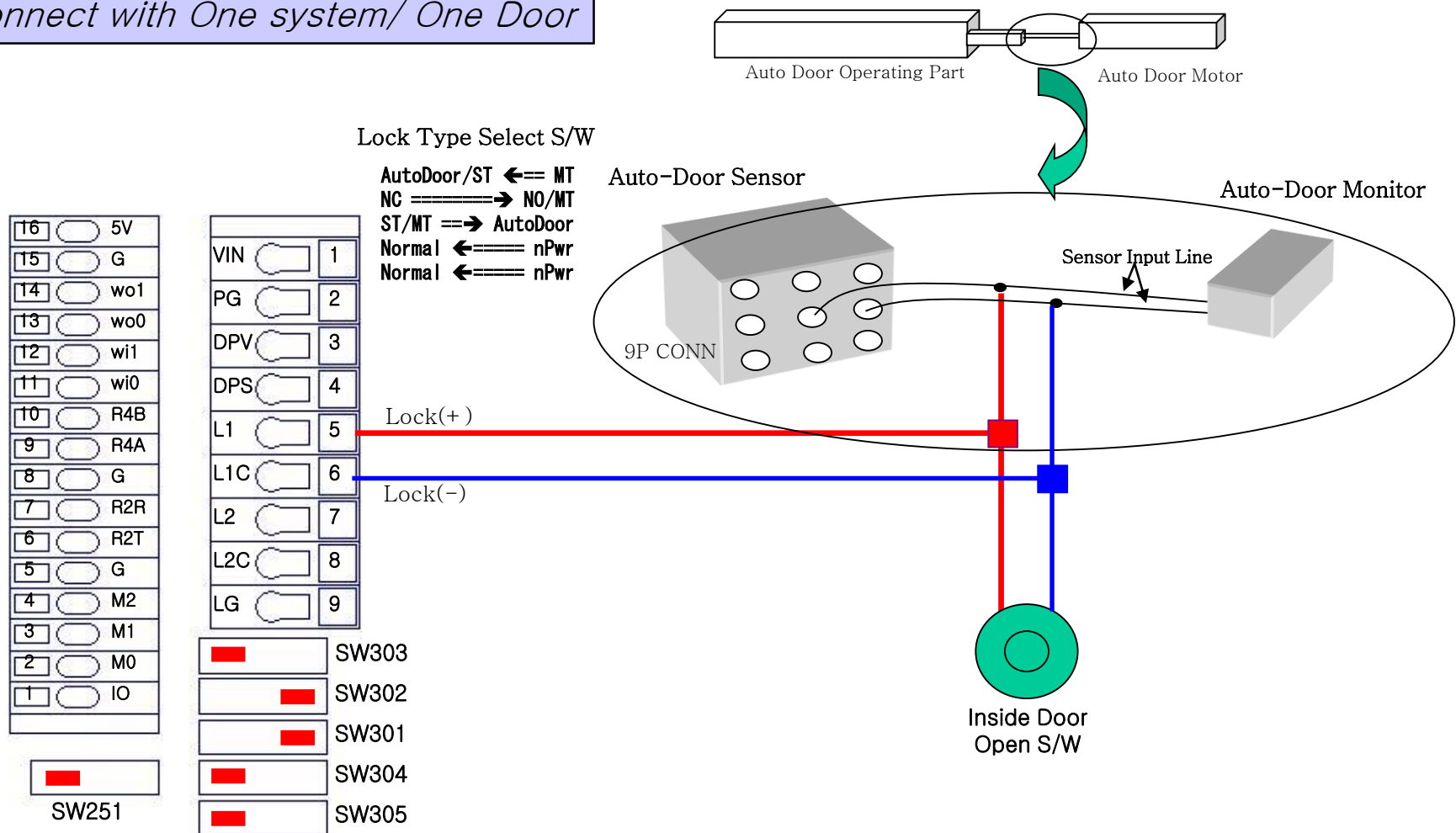
11. Connecting EM Type Door Lock (Fail Safe)

11.3. Connect with One system/ Two Locks ** Use external DC Power adapter



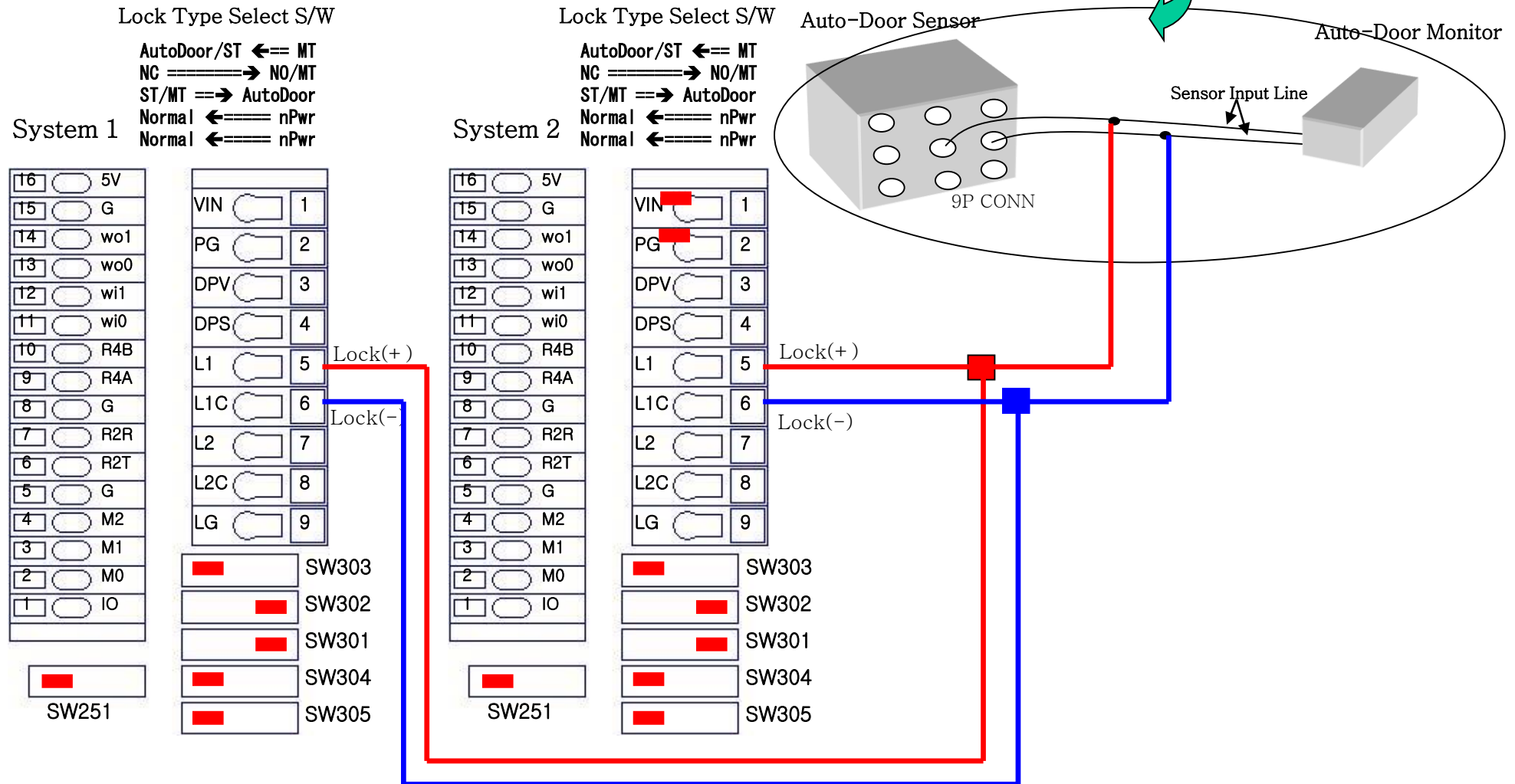
12. Connecting Auto-Door (Contact Control)

12.1. Connect with One system/ One Door



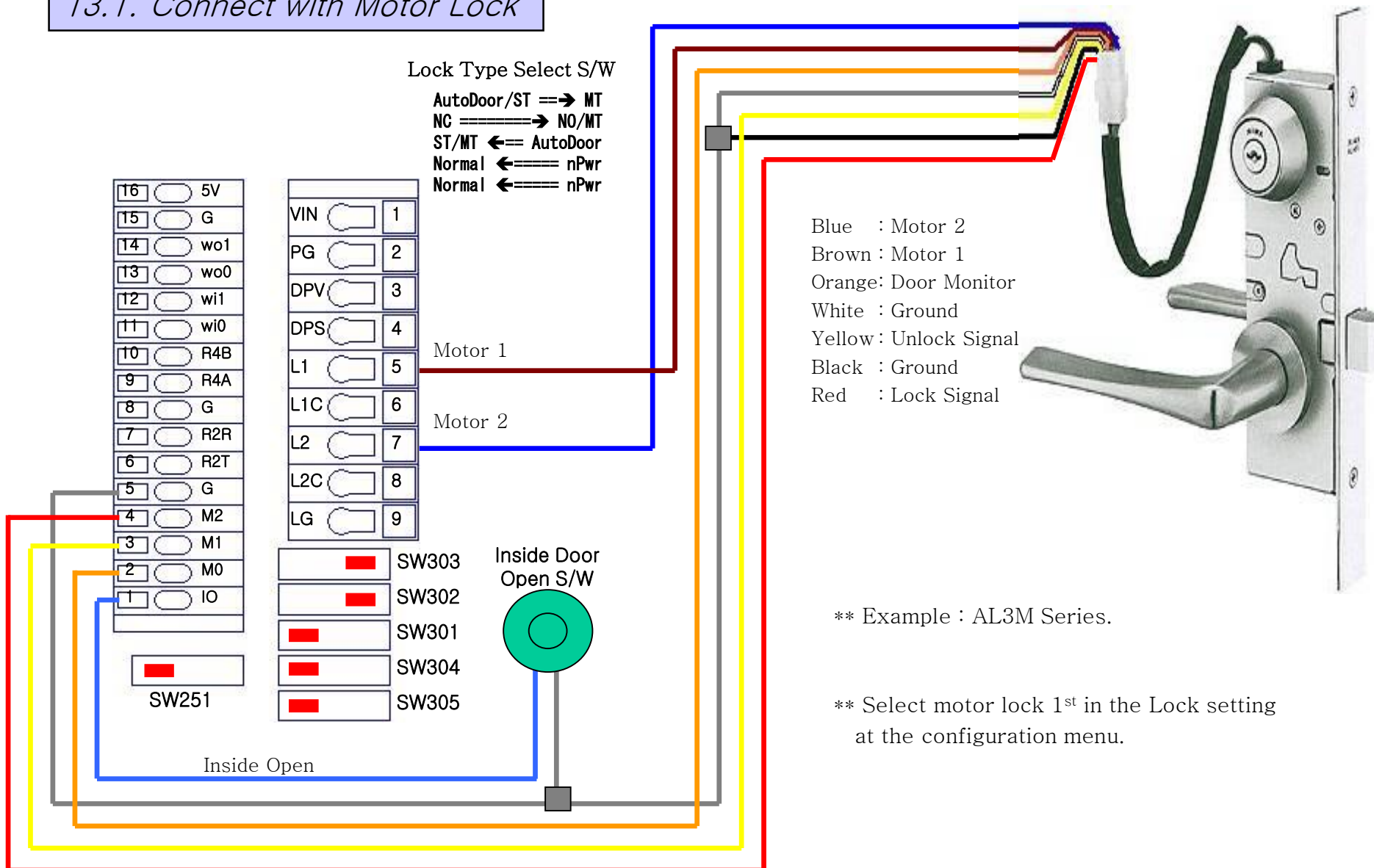
12. Connecting Auto-Door (Contact Control)

12.2. Connect with Two systems/ One Door



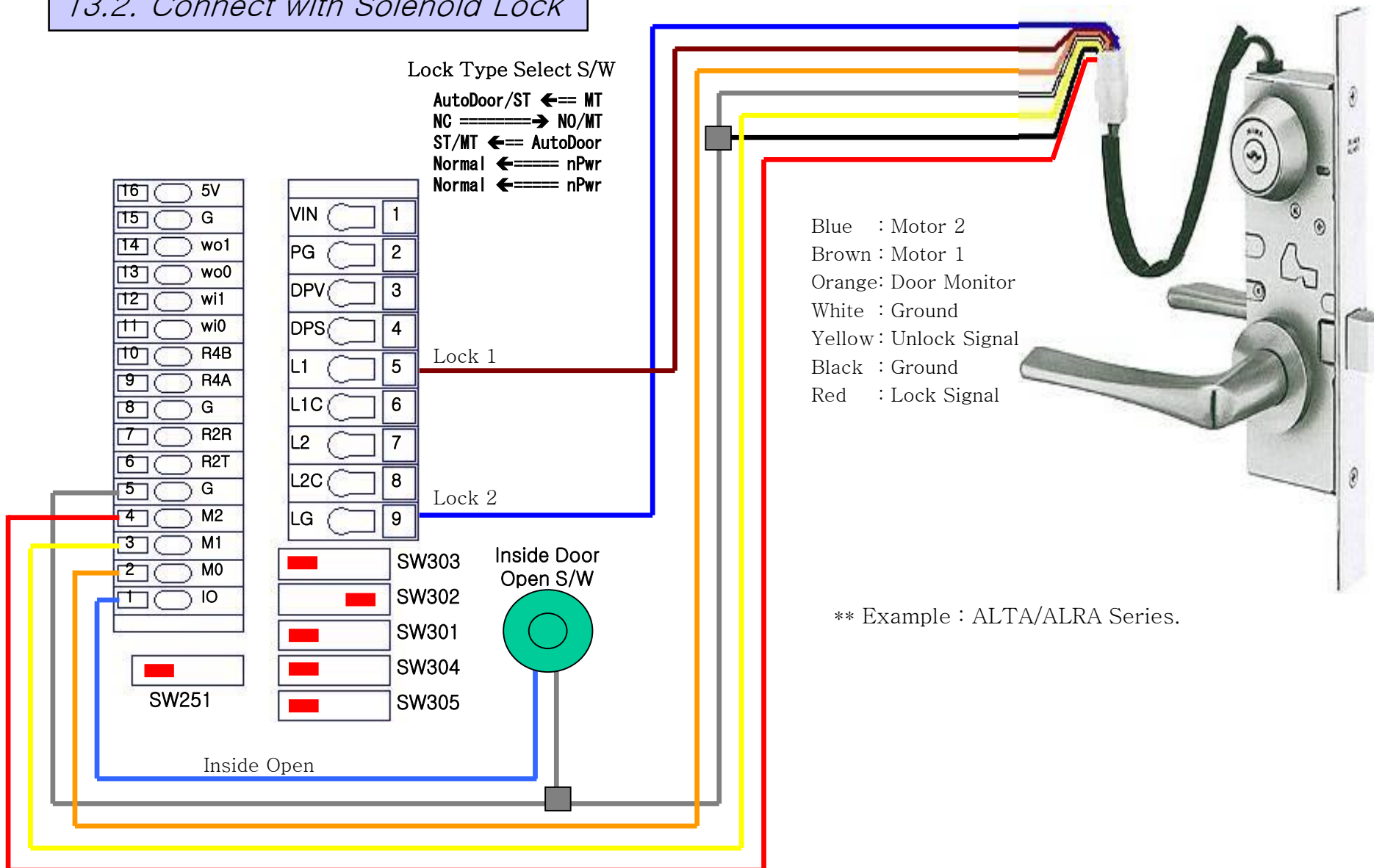
13. Connecting Mortise Lock

13.1. Connect with Motor Lock



13. Connecting Mortise Lock

13.2. Connect with Solenoid Lock



14. Connecting 2 Emergency Lamps

Lock Type Select S/W

AutoDoor/ST ←== MT
 NC =====> NO/MT
 ST/MT ←== AutoDoor
 Normal ←== nPwr
 Normal ←== nPwr

16	☐	5V
15	☐	G
14	☐	wo1
13	☐	wo0
12	☐	wi1
11	☐	wi0
10	☐	R4B
9	☐	R4A
8	☐	G
7	☐	R2R
6	☐	R2T
5	☐	G
4	☐	M2
3	☐	M1
2	☐	M0
1	☐	IO



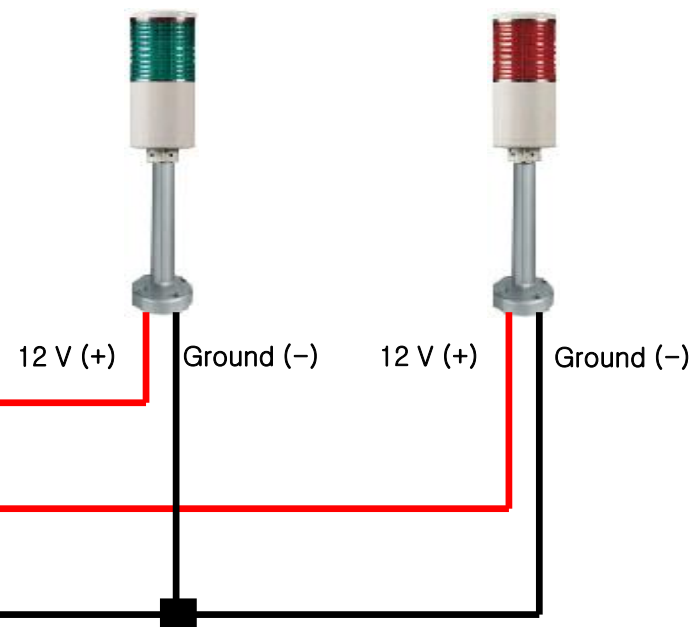
SW251

VIN	☐	1
PG	☐	2
DPV	☐	3
DPS	☐	4
L1	☐	5
L1C	☐	6
L2	☐	7
L2C	☐	8
LG	☐	9

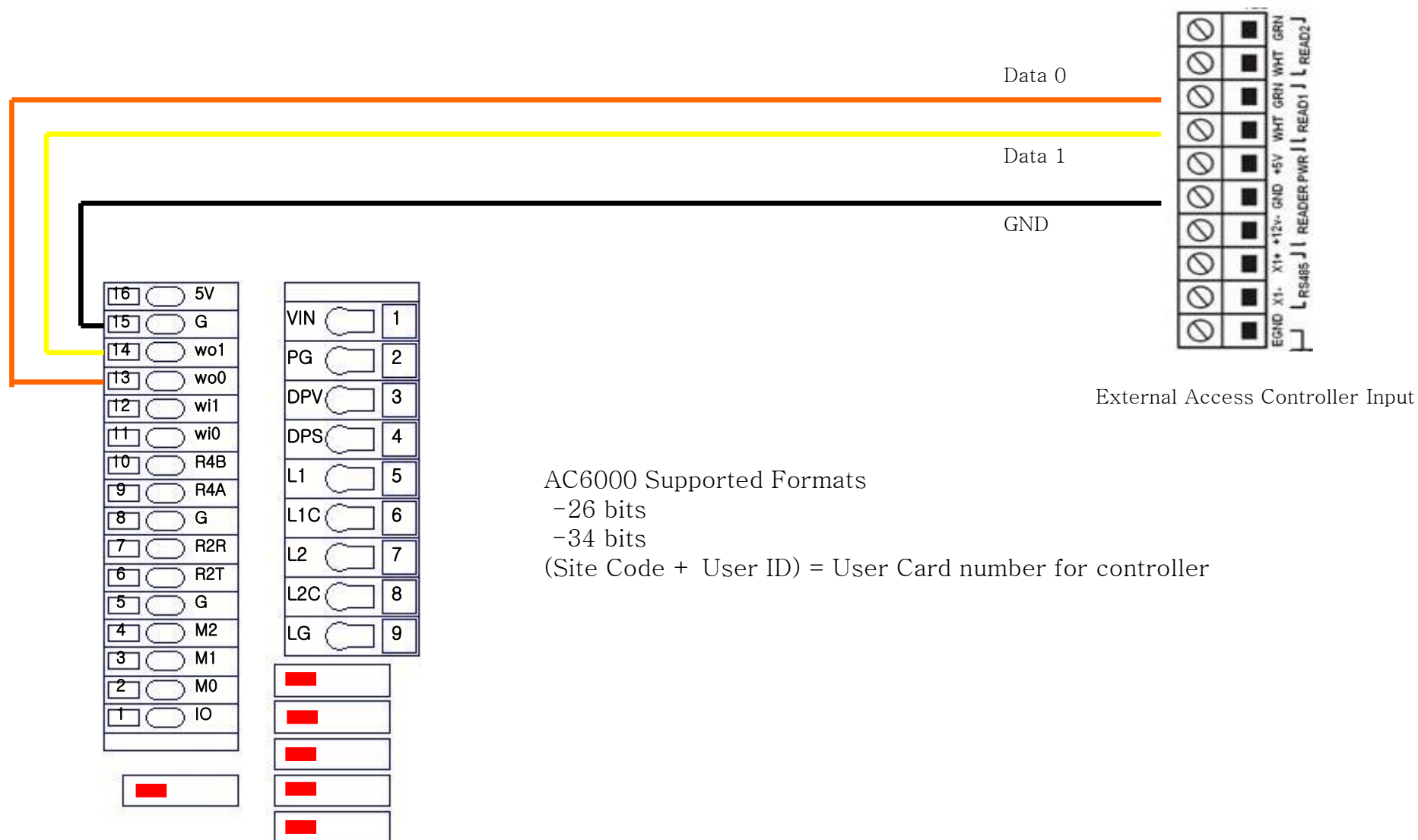
☐	SW303
☐	SW302
☐	SW301
☐	SW304
☐	SW305

Emergency
Lamp 1

Emergency
Lamp 2

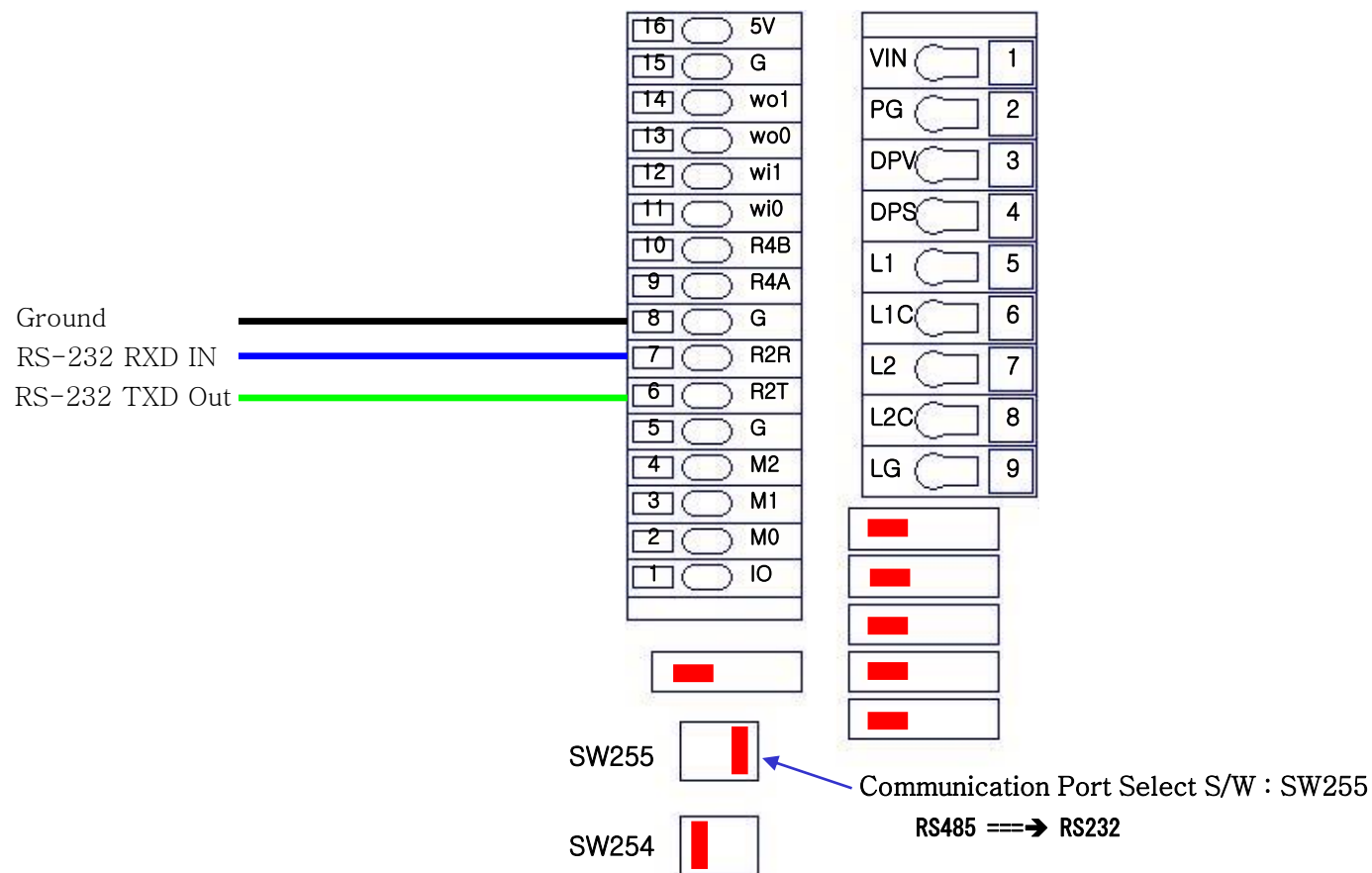


15. Connecting Wiegand Output to External Controller



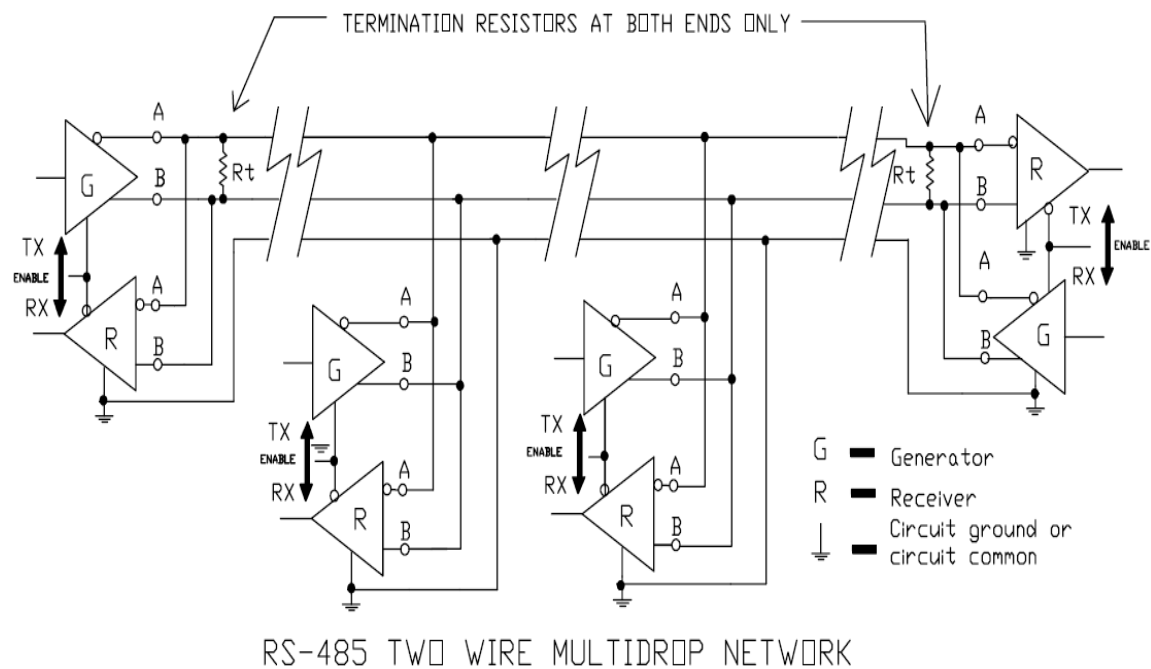
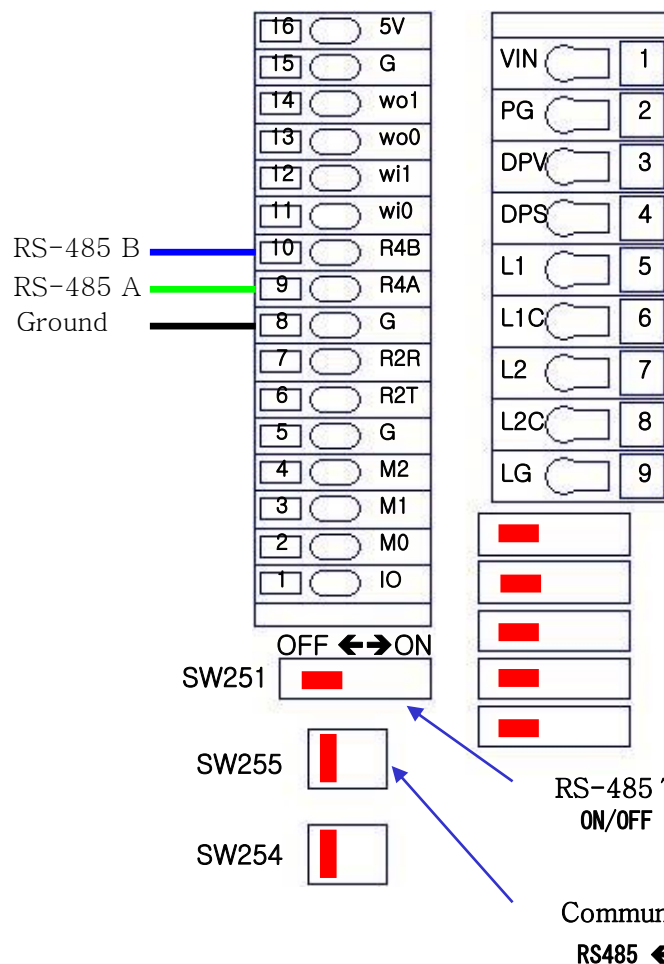
16. Appendix

16.1 RS-232 Interface



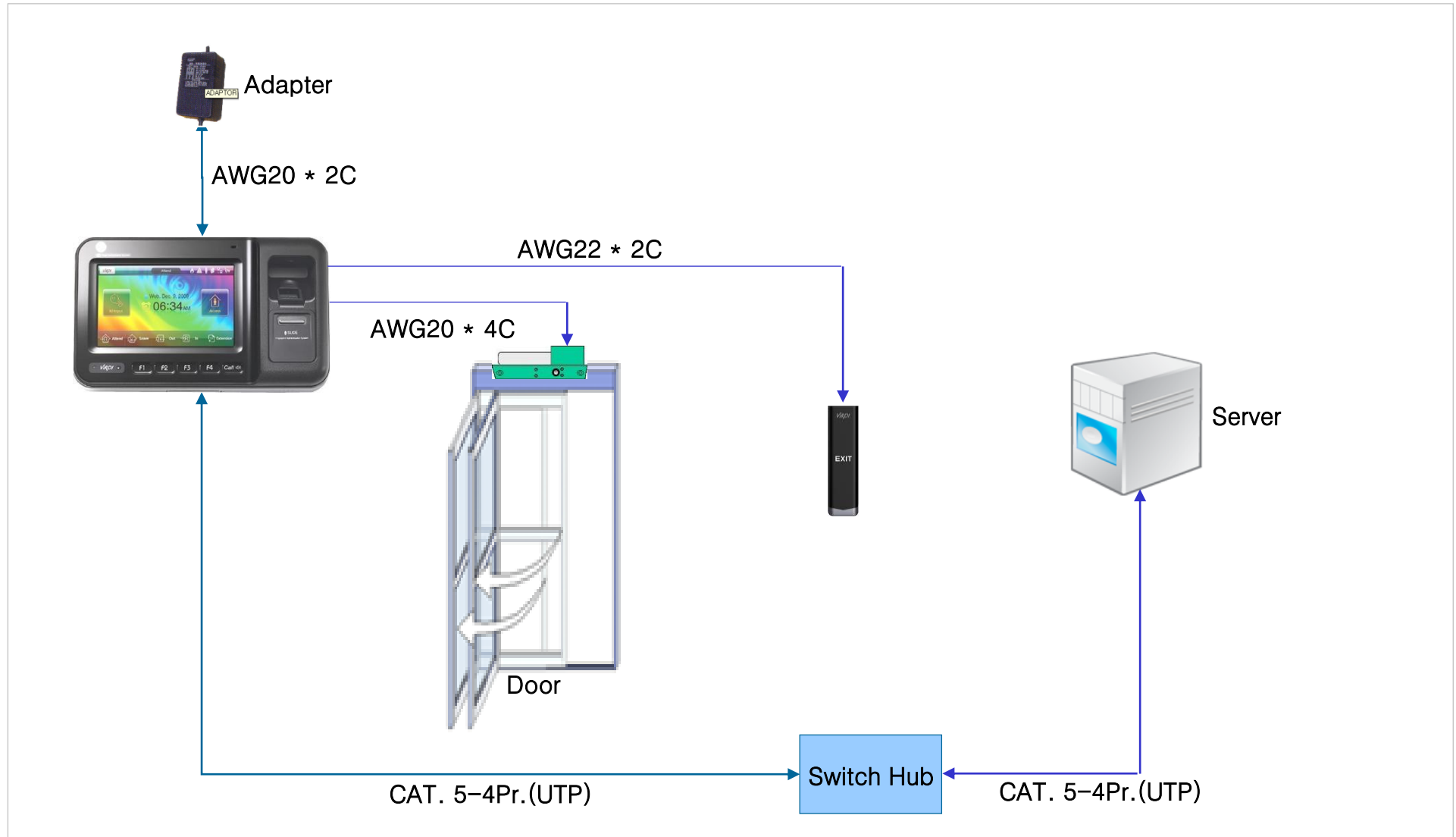
16. Appendix

16.2 RS-485 Interface



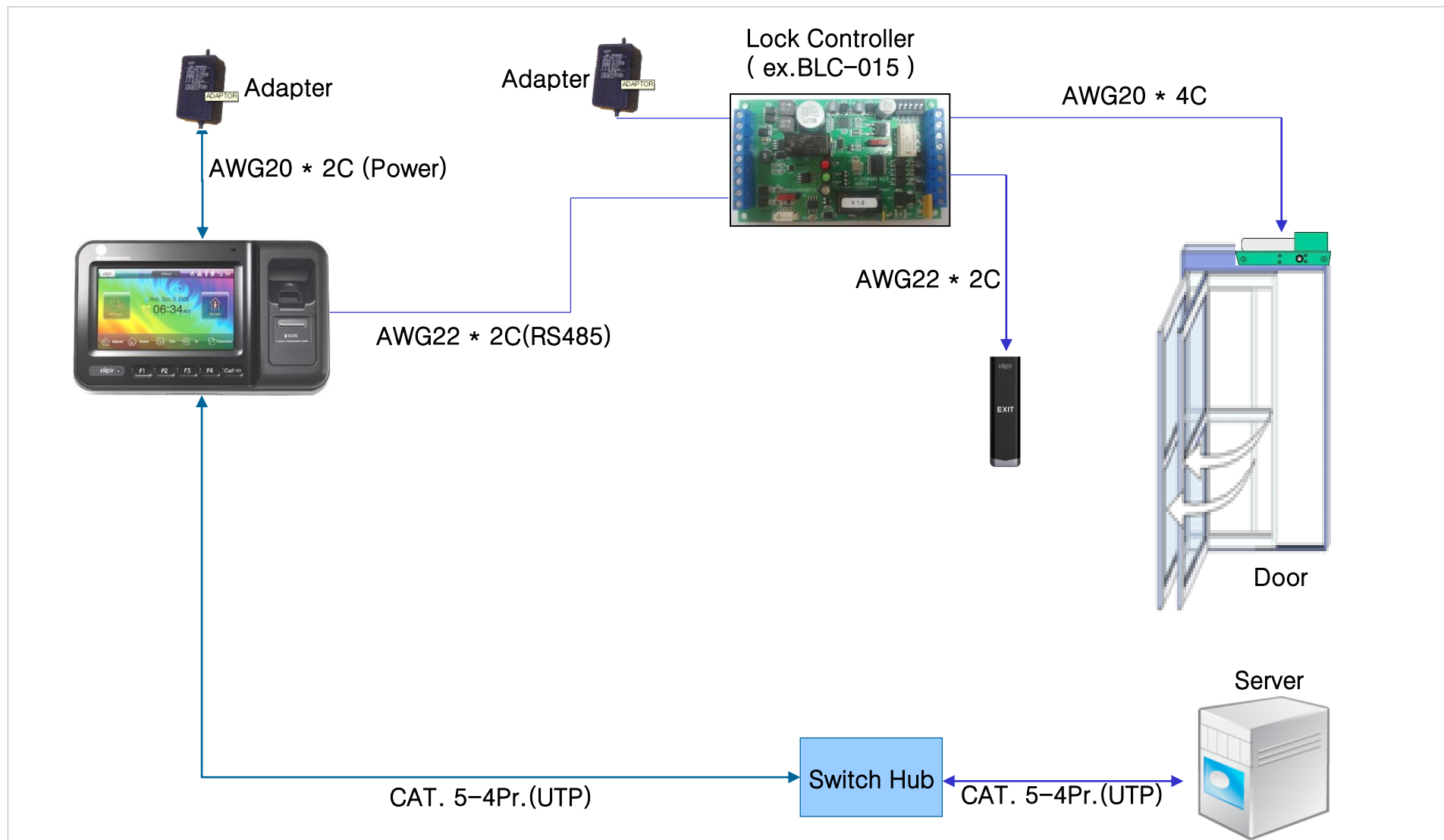
17. Wiring Guide

17.1 Terminal & Exit Button



17. Wiring Guide

17.2 Terminal & Exit Button w/Lock Controller



18. Ferrite Core Attachment on Adapter Cable

Attachment the Ferrite Ring Core 30x13x39 on the Adapter cable 2 times as below picture.

