

Installation Guide for AC-5000 V3.0

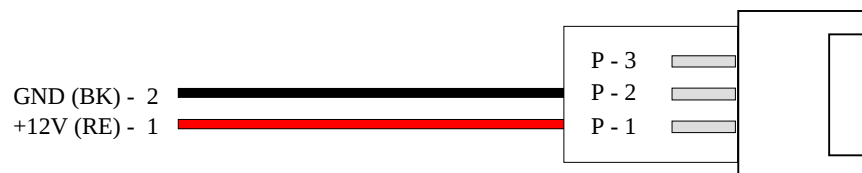
Fingerprint Identification Terminal



***AC-5000Plus
& AC-5100***

***Doc Ver1.4
September, 22, 2023
R&D Center
Union Community Co., Ltd.***

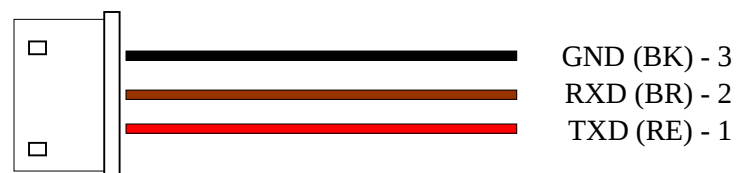
1. Description of External Cables



Power Adapter Cable

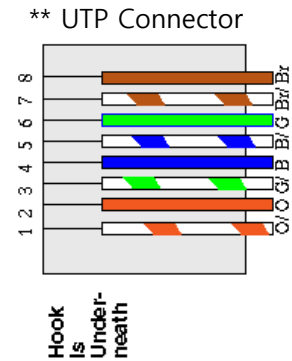
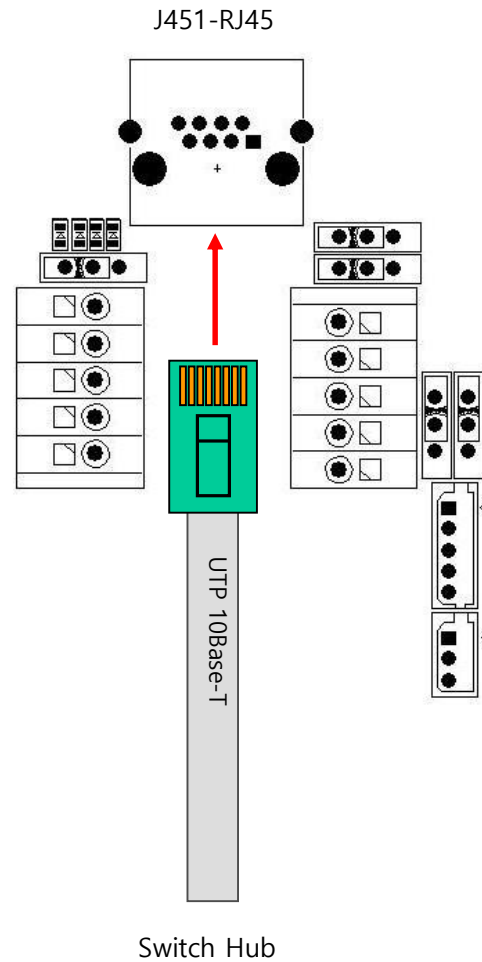


Wiegand Cable (5P)

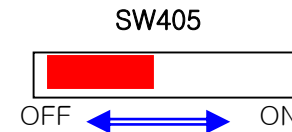
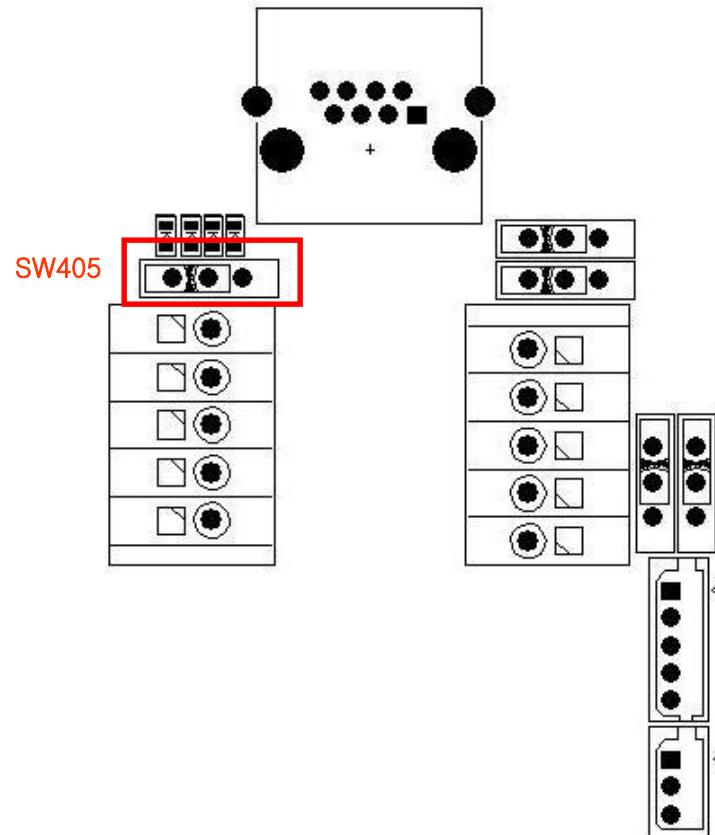


RS232 Cable (3P)

2. Connecting Ethernet (LAN) Cable

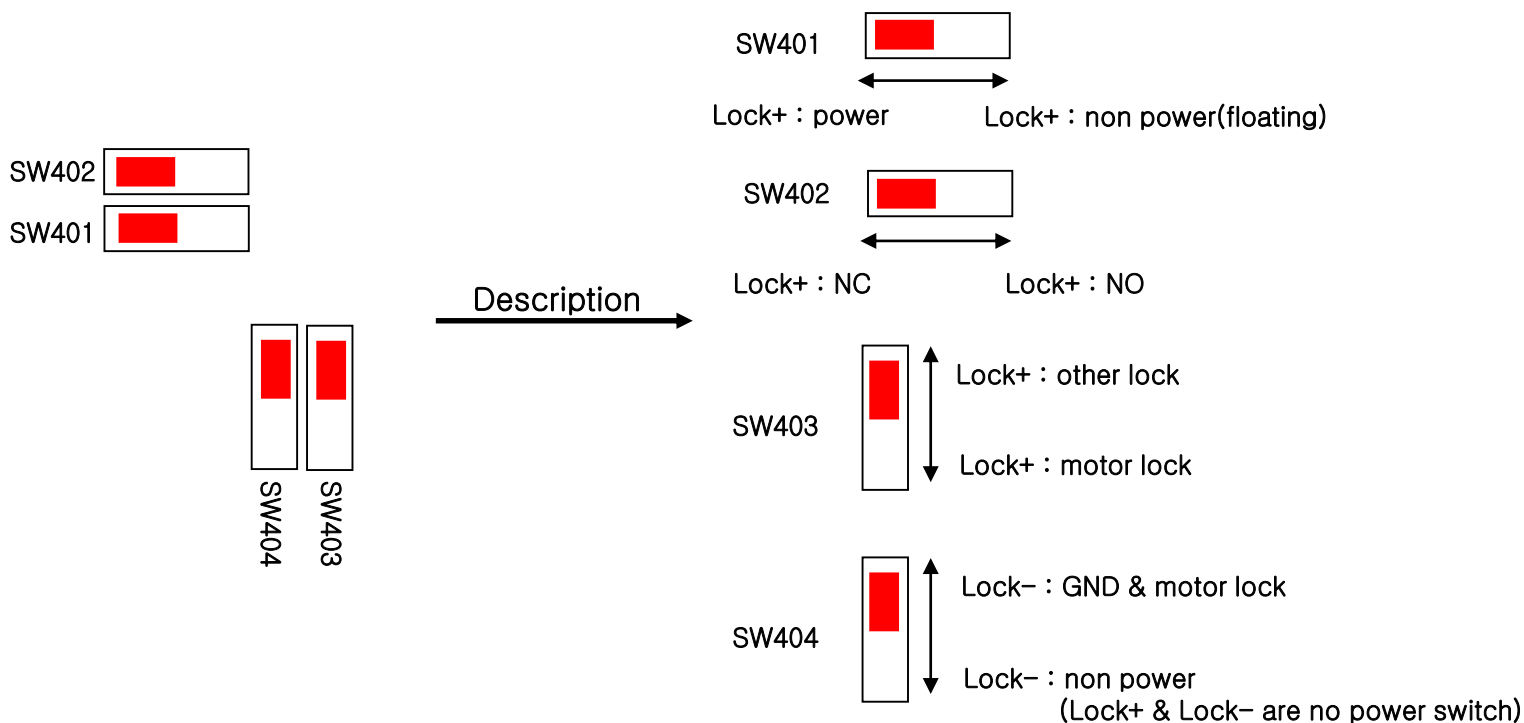


3. Resistor Setting for RS485 End Termination



- * Default Setting is off.
- * ON: 120 Ohm Resistor is connected between 485A and 485B

4. Description of the switch for setting lock



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Lock Type Select S/W (P, NC)

10

11

SW404

SW403

Door Signal: NC



Lock (+)	
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LOCK (-)




Door Monitor



ExitB

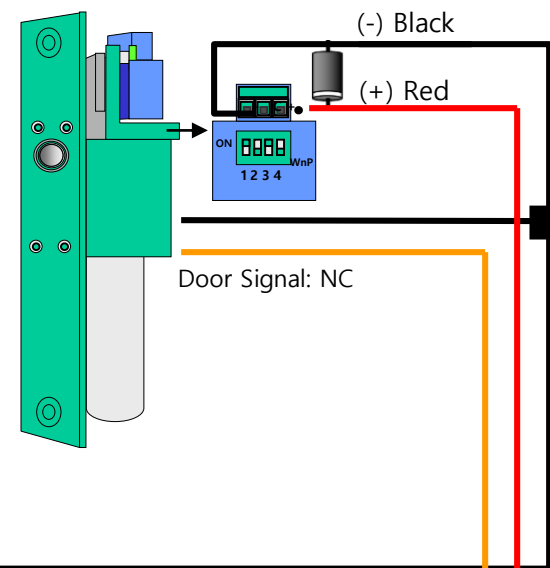
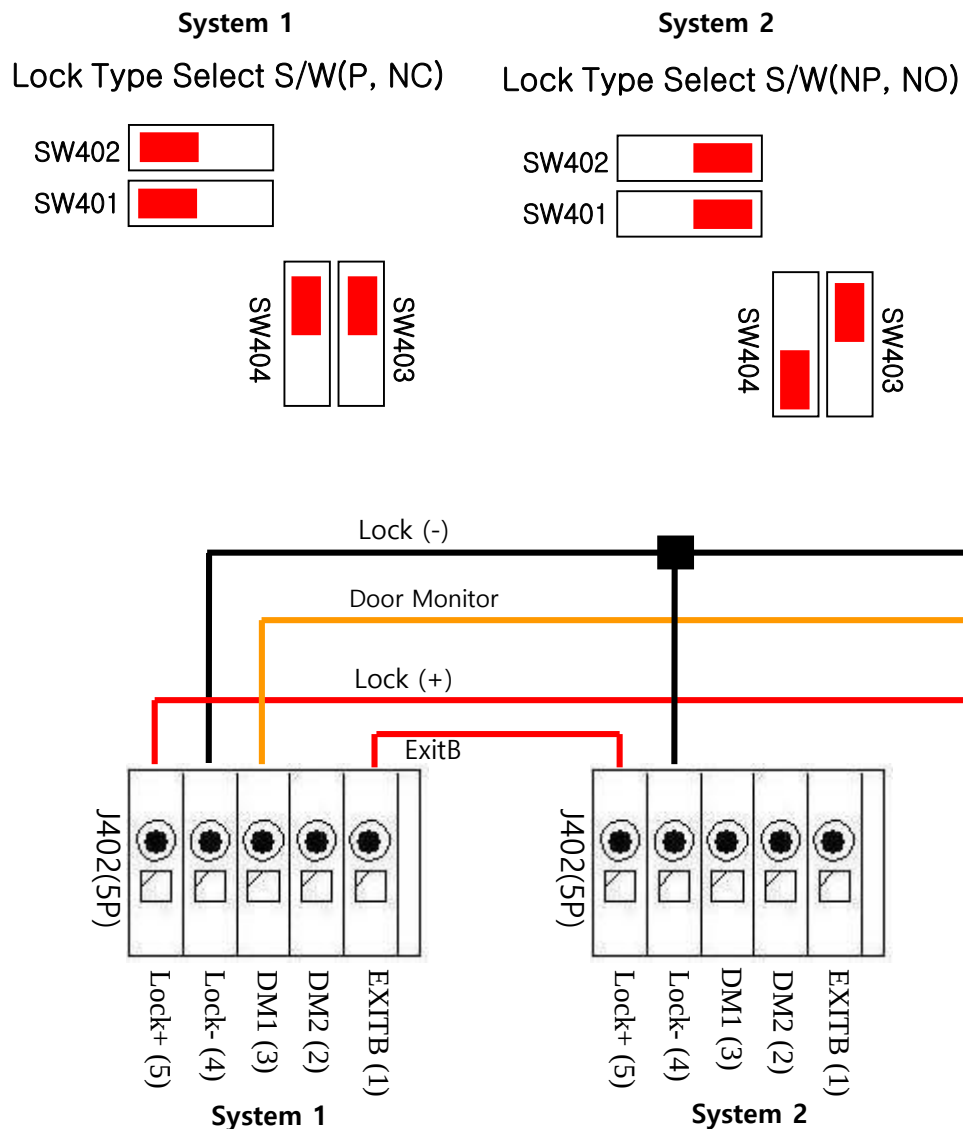
J402(5P)

Door Open S/W

- ✓ Install a diode at both sides of the door lock wire as shown in the figure to protect the relay from the reverse current, which occurs when the door lock operates.
- ✓ Take caution of the installation direction of the diode. Install the diode close to the door lock.

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

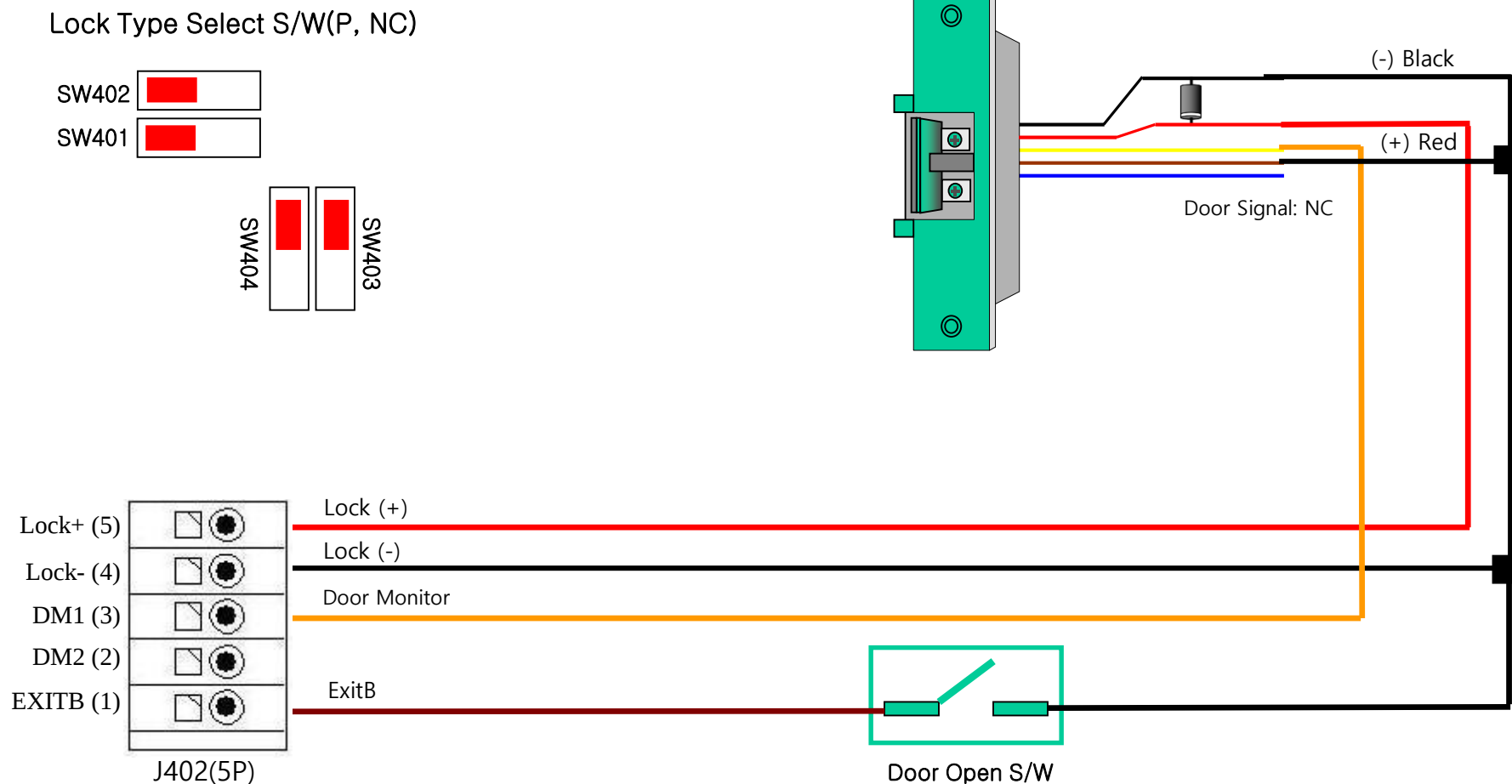
5.2. Connecting Two Systems/ One Lock



- ✓ Install a diode at both sides of the door lock wire as shown in the figure to protect the relay from the reverse current, which occurs when the door lock operates.
- ✓ Take caution of the installation direction of the diode. Install the diode close to the door lock.

6. Connecting a Strike Type Door Lock (Fail Safe)

6.1. Connecting One System/ One Lock

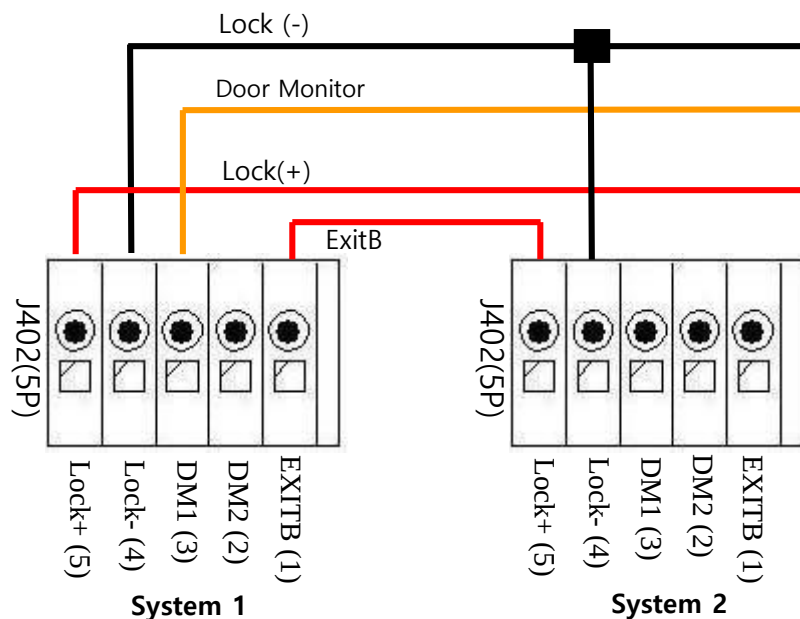
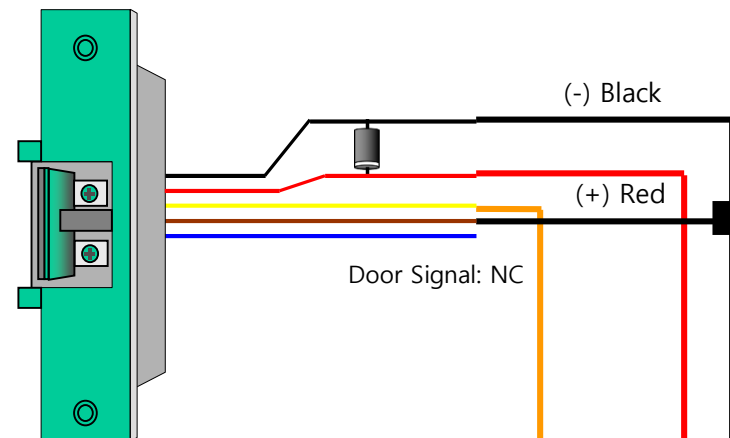
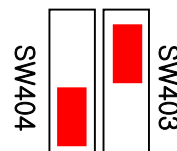
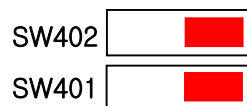
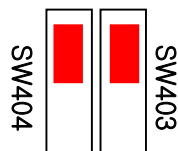
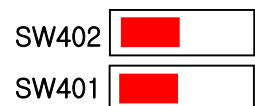


- ✓ Install a diode at both sides of the door lock wire as shown in the figure to protect the relay from the reverse current, which occurs when the door lock operates.
- ✓ Take caution of the installation direction of the diode. Install the diode close to the door lock.

6. Connecting a Strike Type Door Lock (Fail Safe)

6.2. Connecting Two Systems/ One Lock

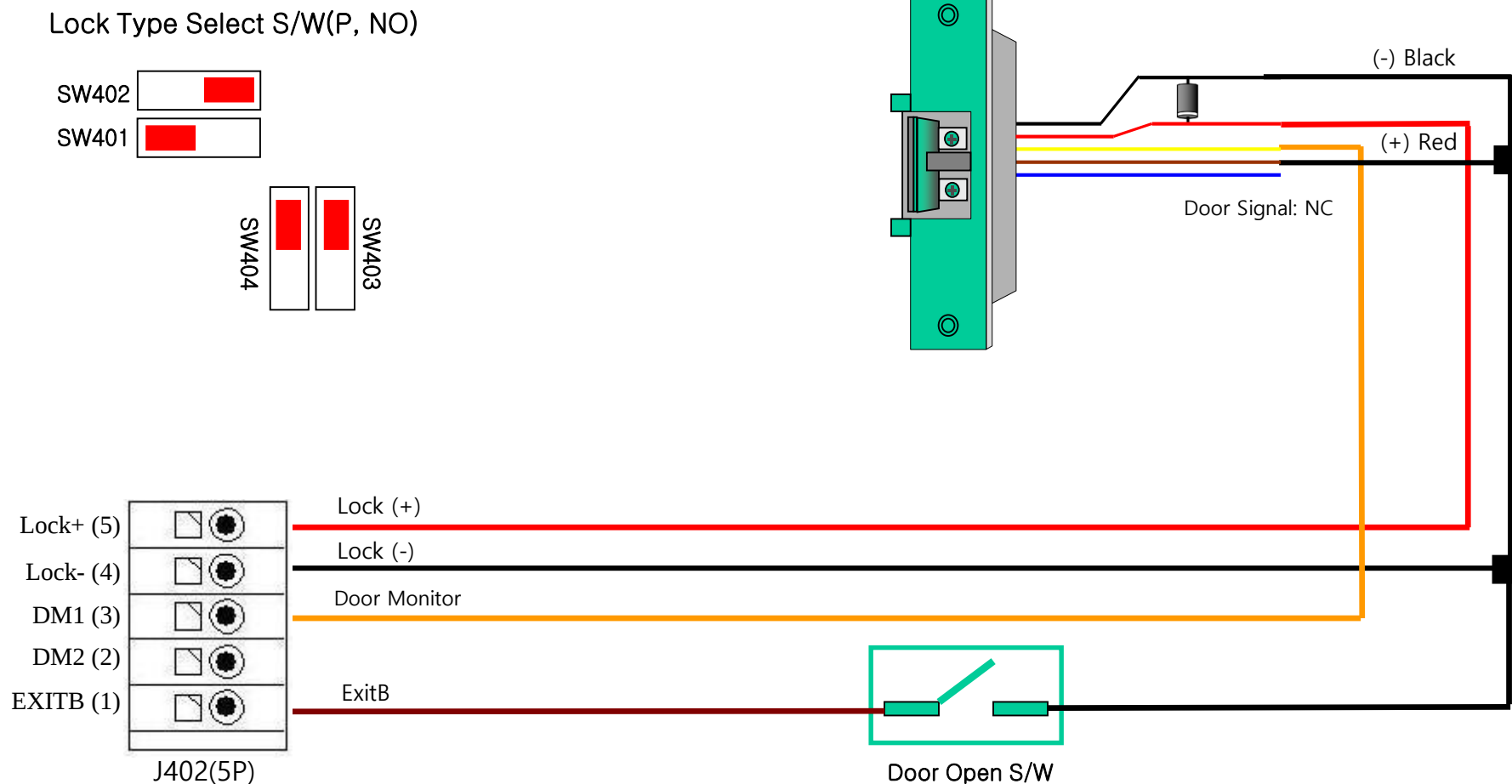
System 1 System 2
Lock Type Select S/W(P, NC) Lock Type Select S/W(NP, NO)



- ✓ Install a diode at both sides of the door lock wire as shown in the figure to protect the relay from the reverse current, which occurs when the door lock operates.
- ✓ Take caution of the installation direction of the diode. Install the diode close to the door lock.

7. Connecting a Strike Type Door Lock (Fail Secure)

7.1. Connecting One System/ One Lock

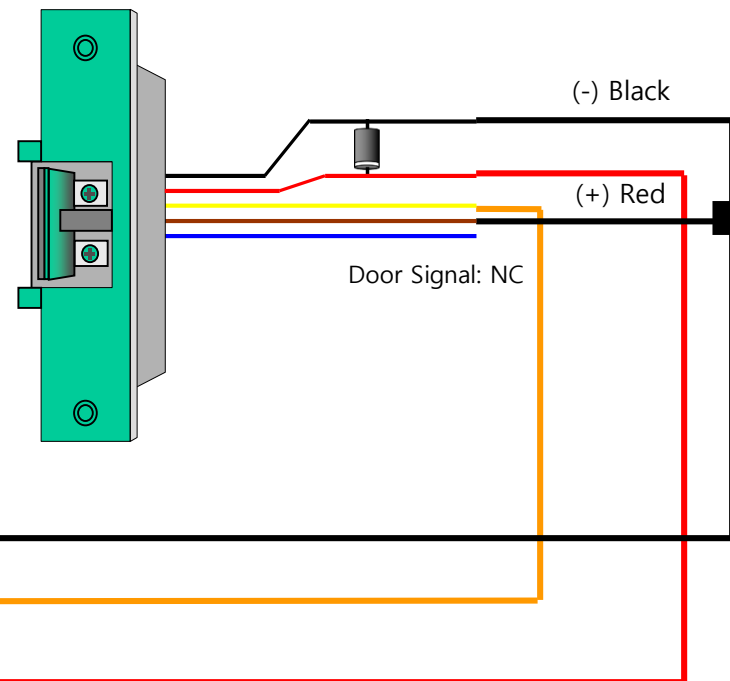
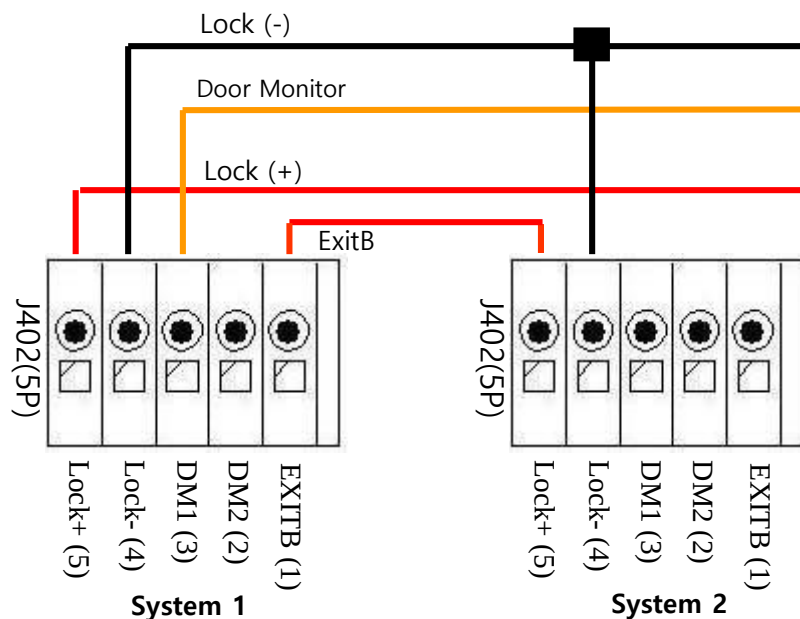
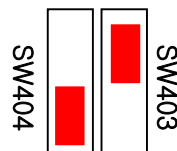
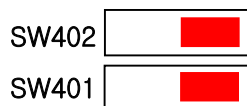
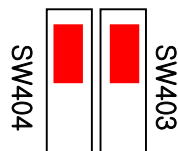
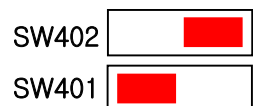


- ✓ Install a diode at both sides of the door lock wire as shown in the figure to protect the relay from the reverse current, which occurs when the door lock operates.
- ✓ Take caution of the installation direction of the diode. Install the diode close to the door lock.

7. Connecting a Strike Type Door Lock (Fail Secure)

7.2. Connecting Two Systems/ One Lock

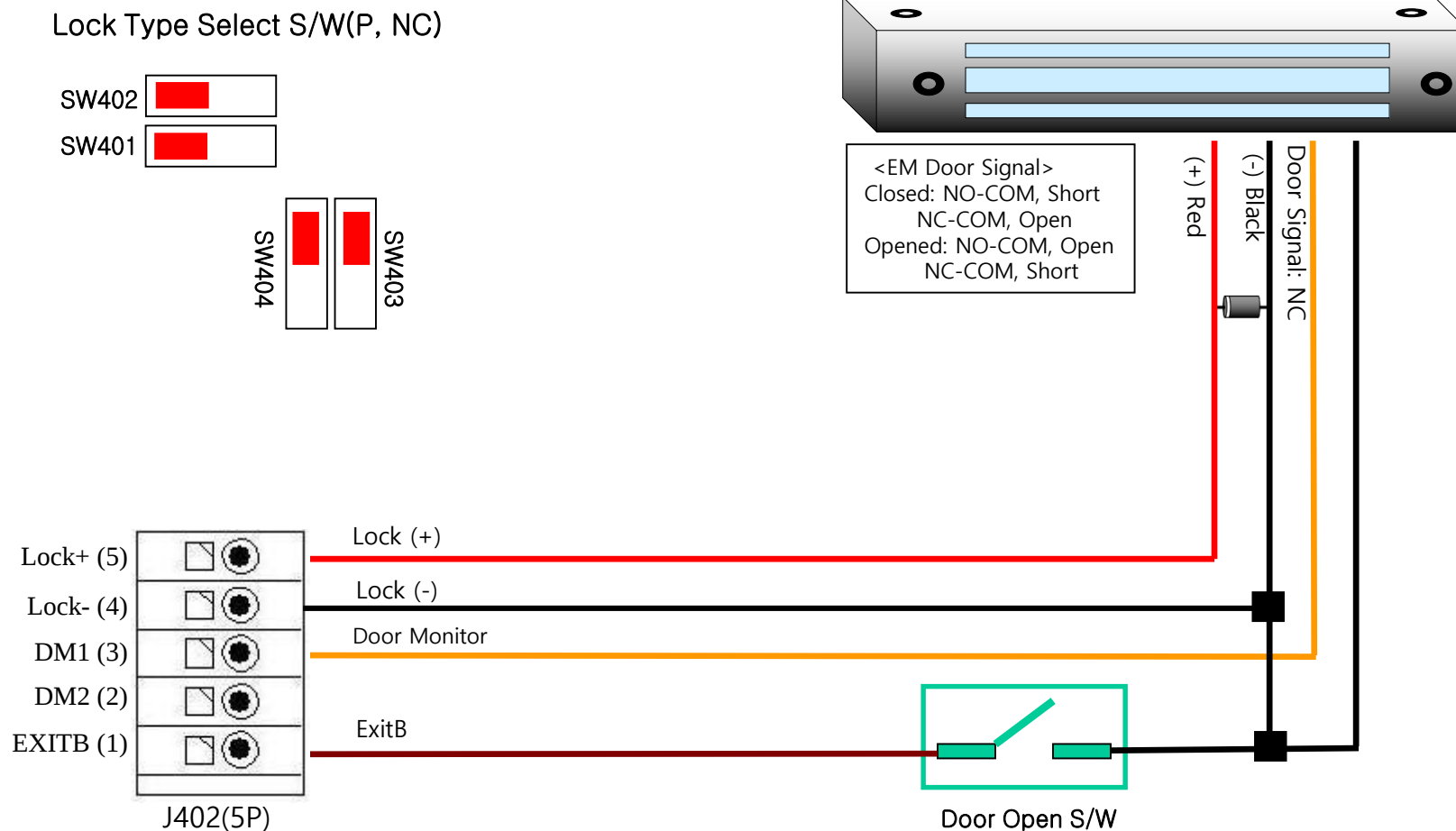
System 1 System 2
Lock Type Select S/W(P, NO) Lock Type Select S/W(NP, NO)



- ✓ Install a diode at both sides of the door lock wire as shown in the figure to protect the relay from the reverse current, which occurs when the door lock operates.
- ✓ Take caution of the installation direction of the diode. Install the diode close to the door lock.

8. Connecting an EM Type Door Lock (Fail Safe)

8.1. Connecting One System/ One Lock

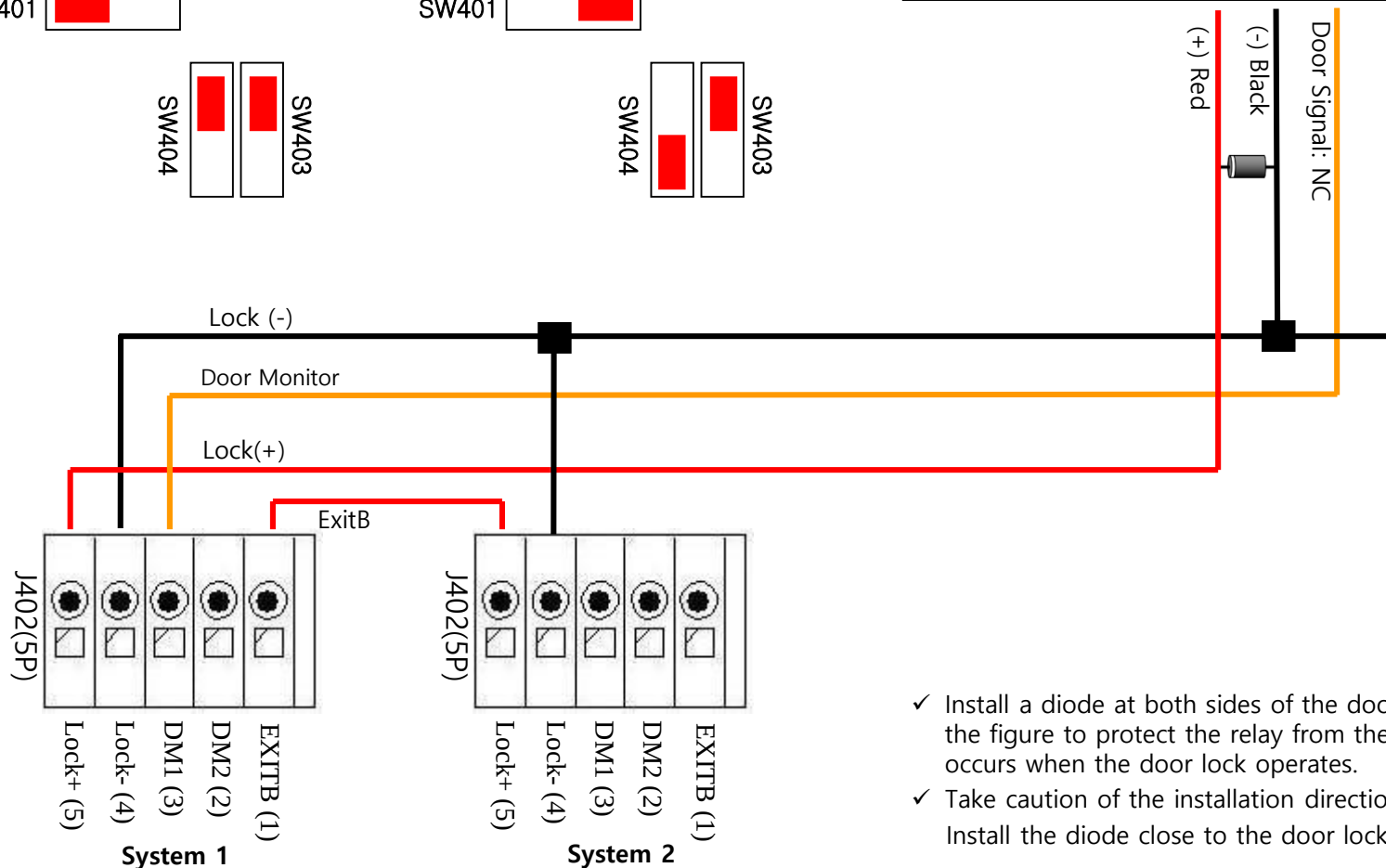
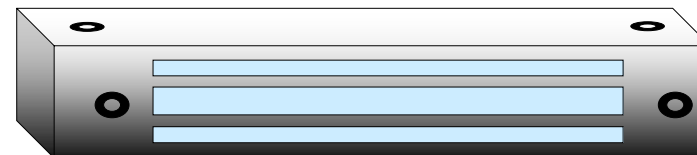
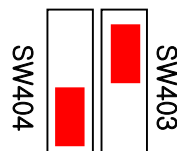
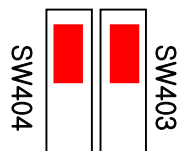
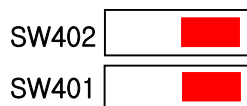
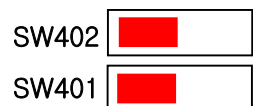


- ✓ Install a diode at both sides of the door lock wire as shown in the figure to protect the relay from the reverse current, which occurs when the door lock operates.
- ✓ Take caution of the installation direction of the diode. Install the diode close to the door lock.

8. Connecting an EM Type Door Lock (Fail Safe)

8.2. Connecting Two Systems/ One Lock

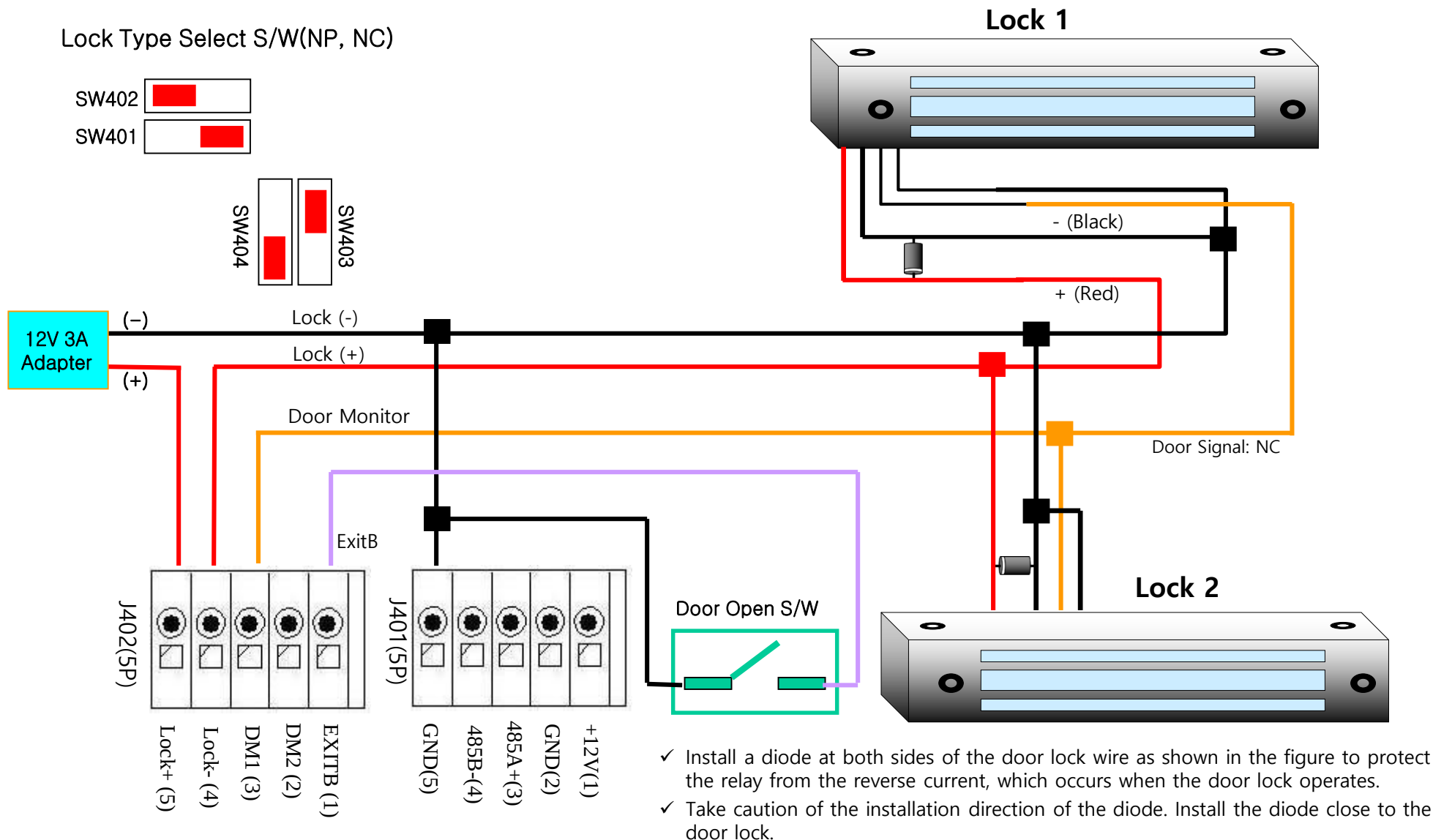
System 1 Lock Type Select S/W(P, NC) System 2 Lock Type Select S/W(NP, NO)



- ✓ Install a diode at both sides of the door lock wire as shown in the figure to protect the relay from the reverse current, which occurs when the door lock operates.
- ✓ Take caution of the installation direction of the diode. Install the diode close to the door lock.

8. Connecting an EM Type Door Lock (Fail Safe)

8.3. Connecting One System/ Two Locks “Use external DC Power adapter”



9. Connecting Auto-Door (Contact Control)

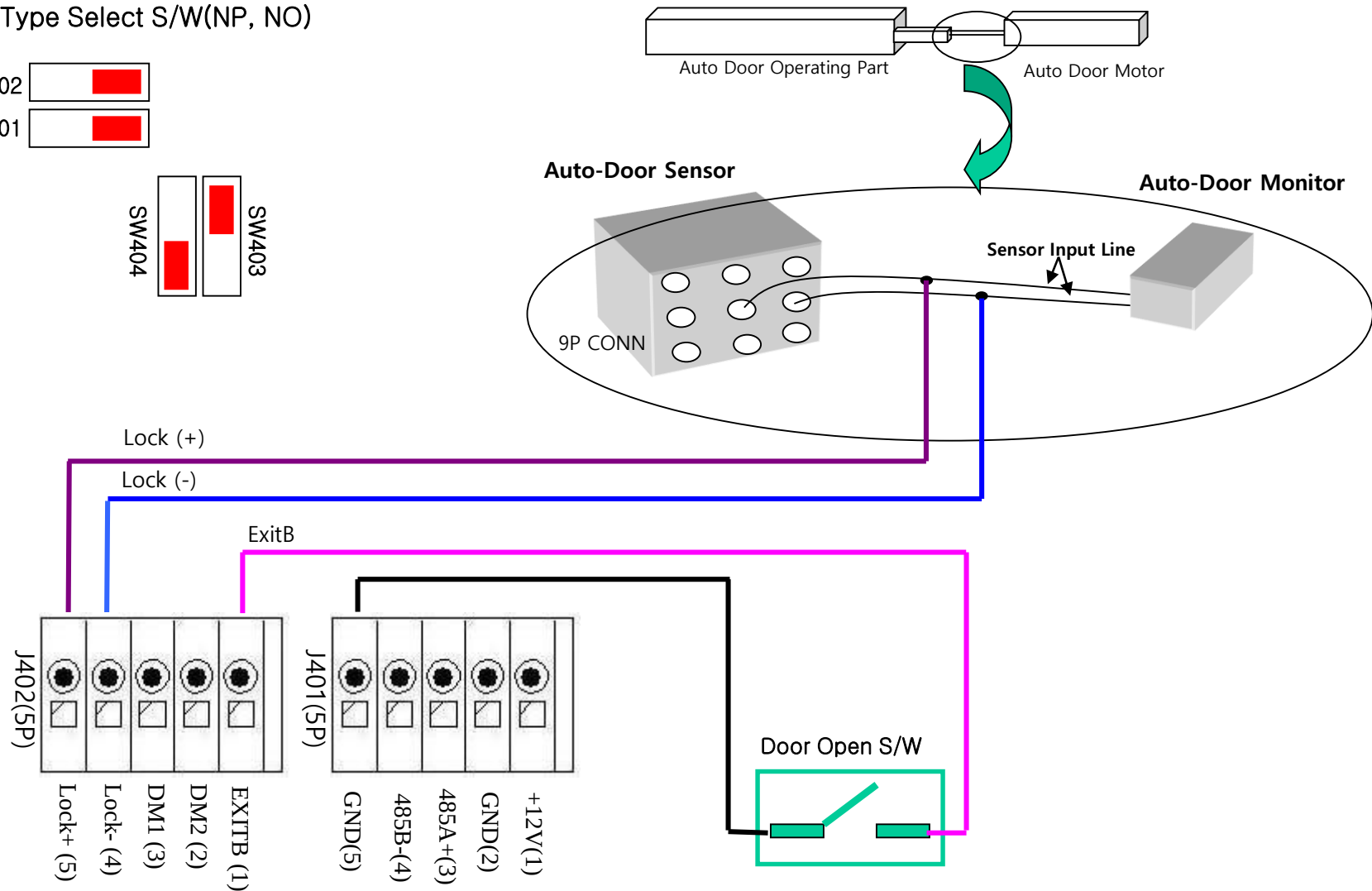
9.1. Connecting One System/ One Door

Lock Type Select S/W(NP, NO)

SW402 

SW401 

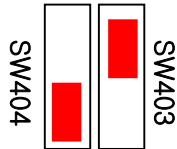
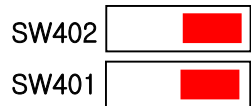
SW404  SW403 



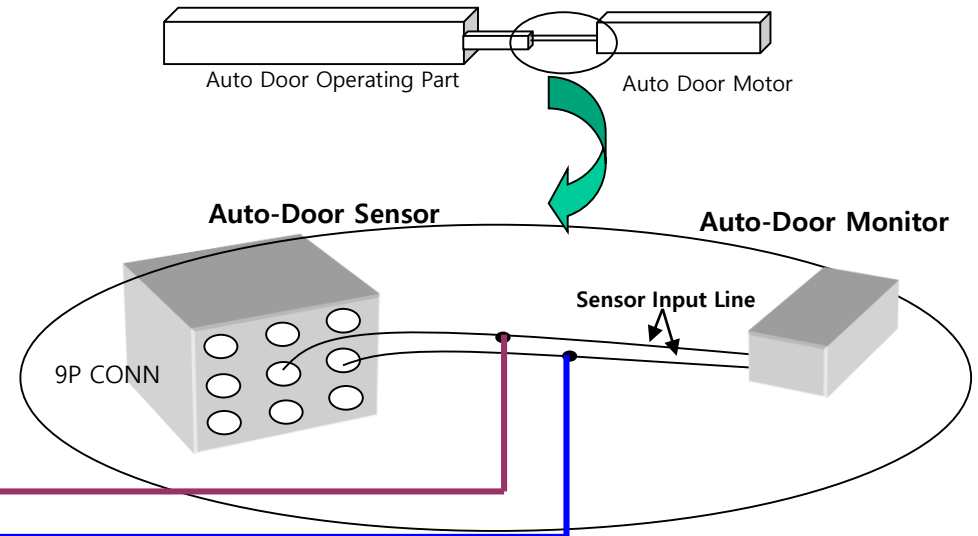
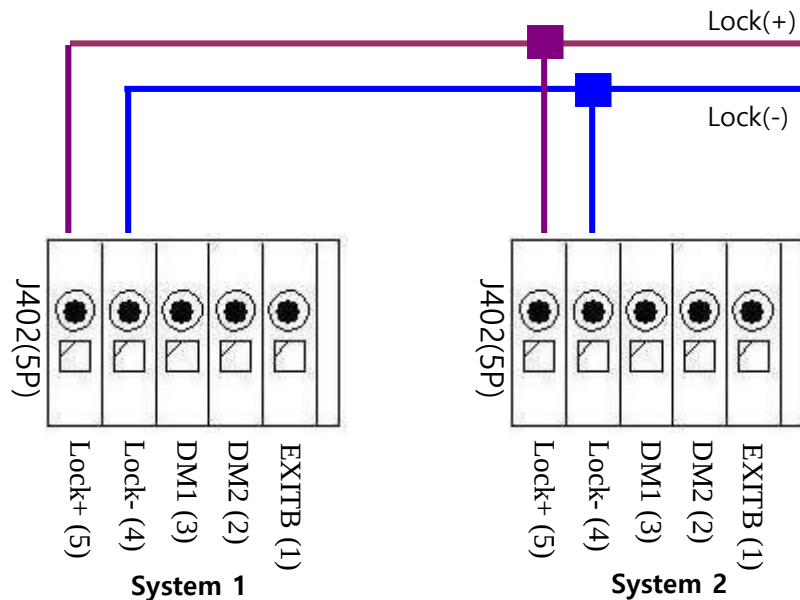
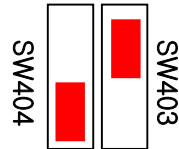
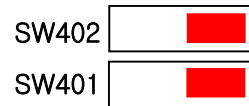
9. Connecting Auto-Door (Contact Control)

9.2. Connecting Two Systems/ One Door

System 1
Lock Type Select S/W(NP, NO) Lock Type Select S/W(NP, NO)



System 2



10. Connecting a Motorised Lock

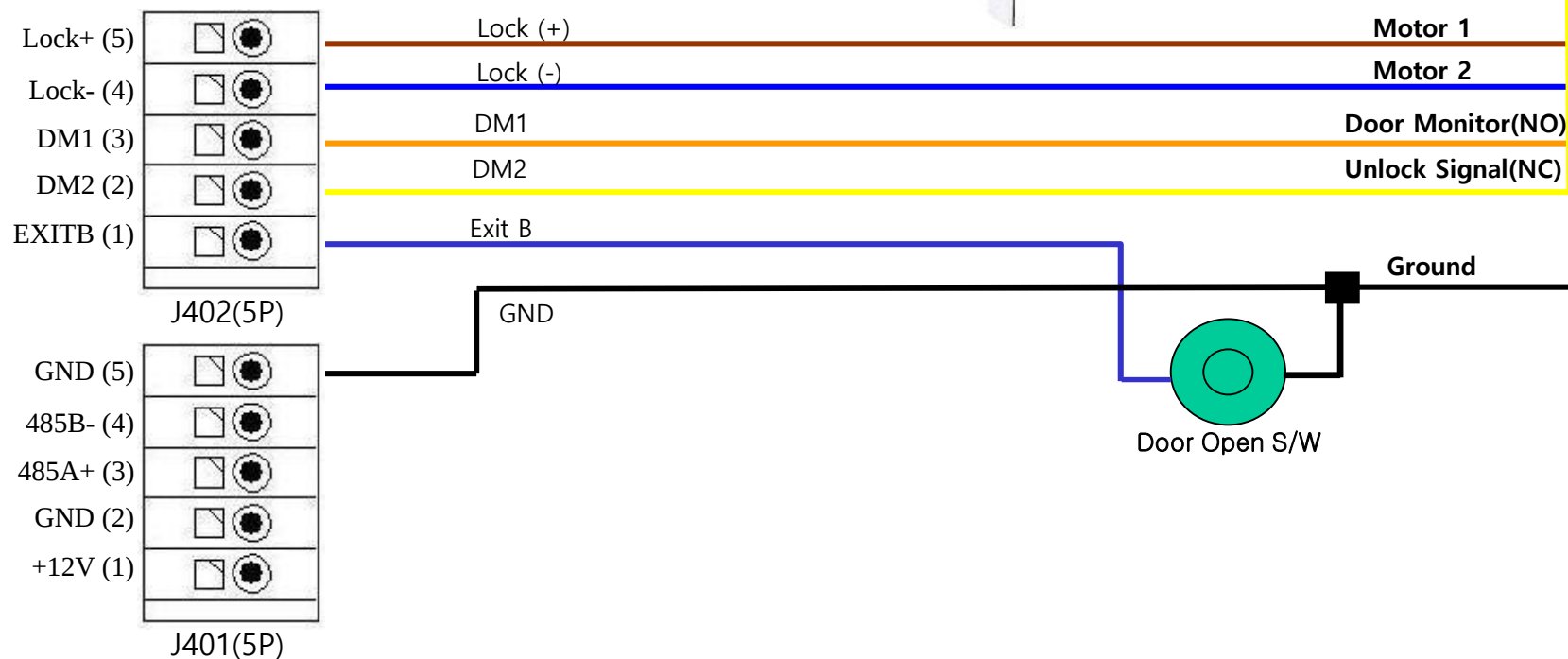
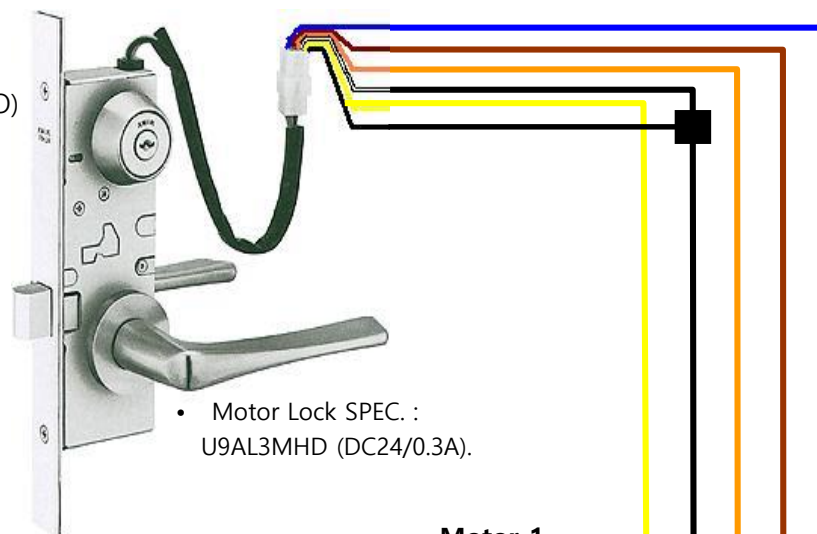
Lock Type Select S/W(P,M)

SW402 

SW401 

SW404  SW403 

Blue : Motor 2
Brown : Motor 1
Orange: Door Monitor(NO)
White : Ground
Yellow : Lock NC Signal
Black : Ground
Red : Lock NO Signal

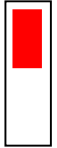


11. Connecting Two Emergency Lamps

Lock Type Select S/W(P, M)

SW402 

SW401 

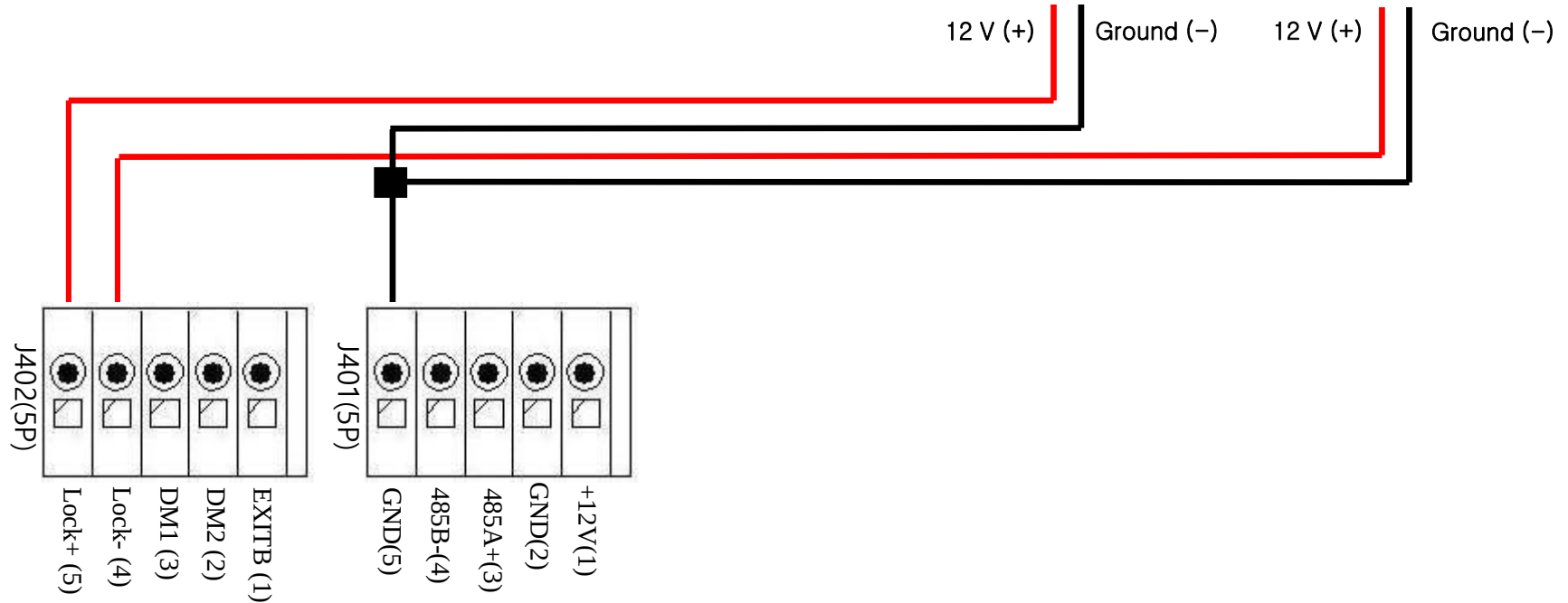
 SW404

 SW403

Emergency
Lamp 1

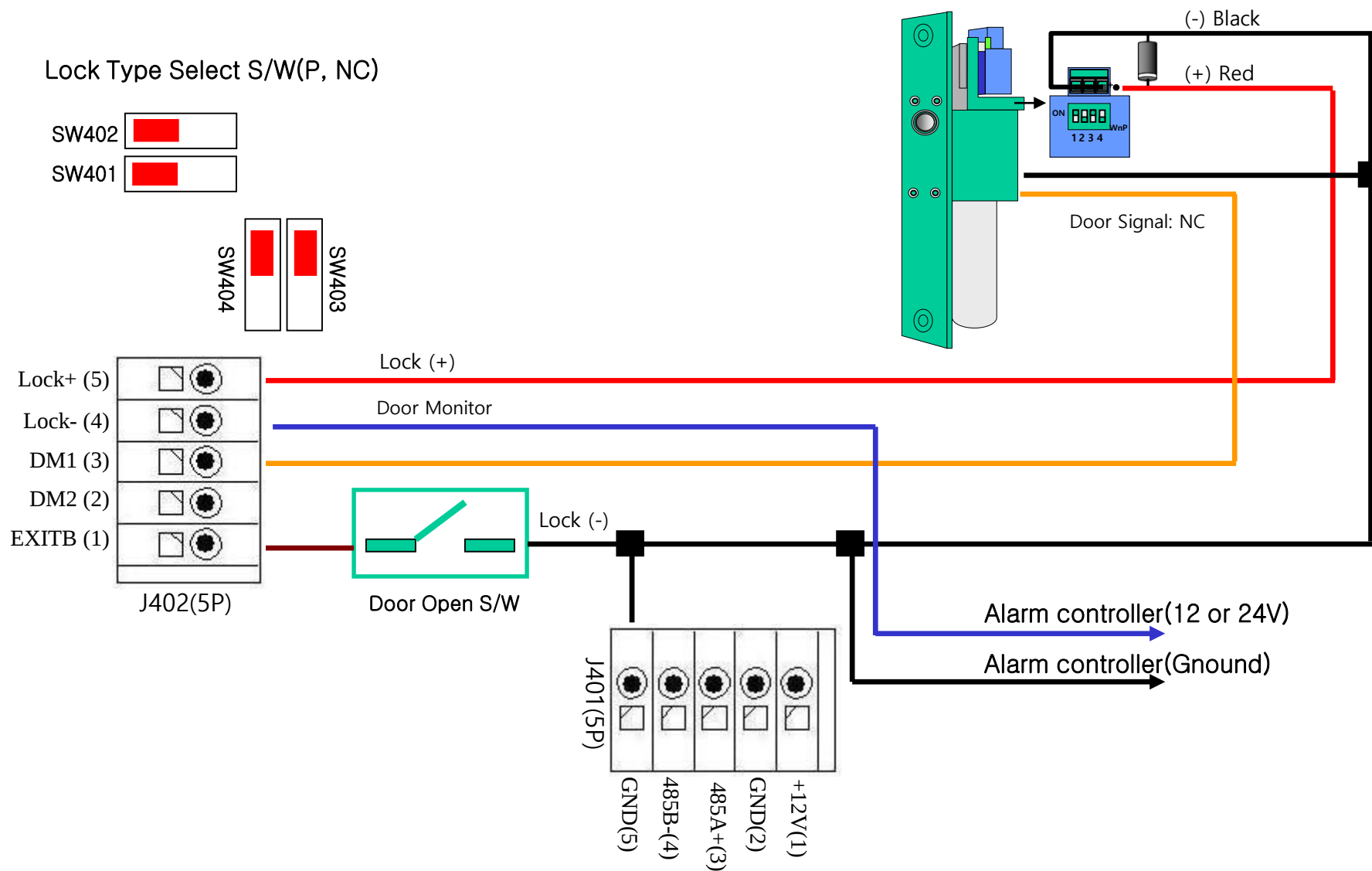


Emergency
Lamp 2



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COMMUNITY

Ex) Fail Safe



13.1 How to connect an external relay

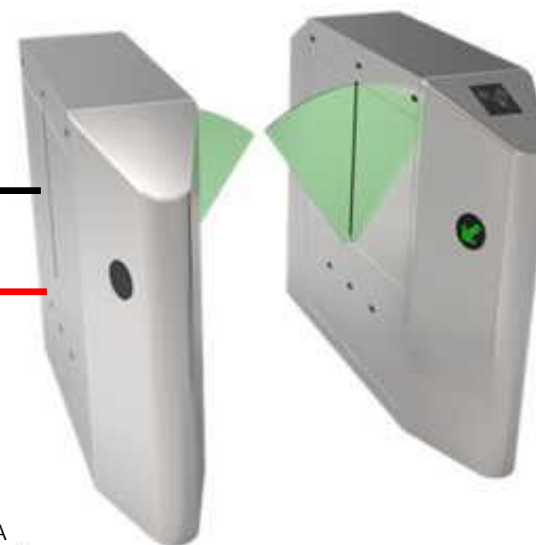
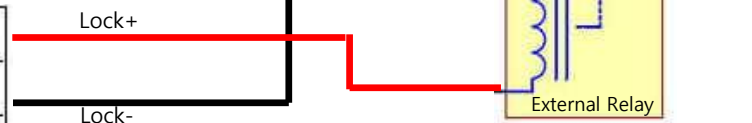
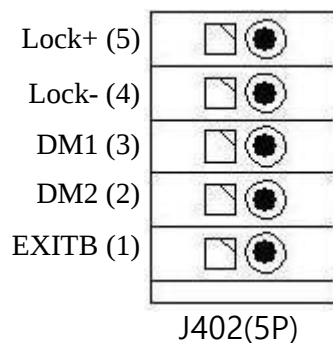
** It is recommended to connect an external relay if a problem occurs after connection with an external equipment such as a speed gate.

Lock Type Select S/W(P, NO)

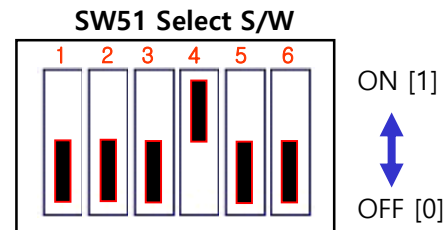
SW402 ☐

SW401 ☐

SW404 ☐ SW403 ☐



13.2 How to connect the VS-R20D RF Dummy Card Reader



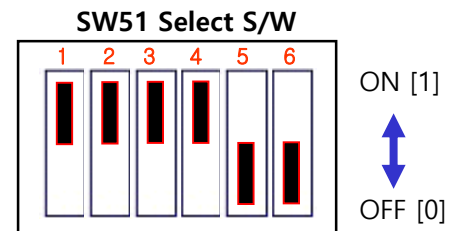
- * 1, 2, 3 OFF: 26Bit
- * 4 ON: Wiegand Mode



Wiegand Cable (5P)



13.3 How to connect the VS-R20D SC Dummy Card Reader



* 1, 2, 3 ON: 34Bit

* 4 ON: Wiegand Mode



Adapter

Wiegand Cable (5P)

