

# ***Installation Guide for AC-7000 V1.0***

## ***Face Recognition Terminal***



*Doc Ver1.4*  
*June.,18.2019*  
*R&D Center*  
***Union Community Co., Ltd.***

# 1. The maximum cable length & thickness for installation

## 1) Using 12V 3.5A Power Supply & AWG24



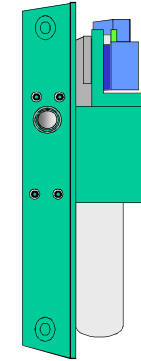
12V 3.5A Adapter

AWG24 10m



AC-7000

AWG24 5m



Dead-Bolt  
BEHOST BHL-700C  
(Standby:0.15A, Start:0.9A)

## 2) Using 12V 3.5A Power Supply & AWG22



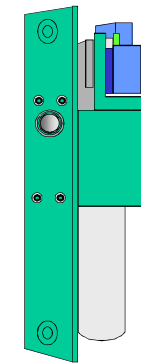
12V 3.5A Adapter

AWG22 15m



AC-7000

AWG22 10m



Dead-Bolt  
BEHOST BHL-700C  
(Standby:0.15A, Start:0.9A)

\* Caution: The data is the value when using the adapter and the dead-bolt supplied by the Union Community.

# 1. The maximum cable length & thickness for installation

## 3) Using 15V 4A Power Supply & AWG24



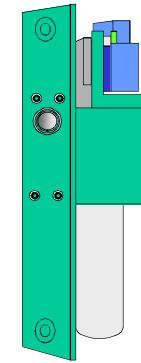
15V 4A Adapter

AWG24 15m



AC-7000

AWG24 10m



Dead-Bolt  
BEHOST BHL-700C  
(Standby:0.15A, Start:0.9A)

## 4) Using 15V 4A Power Supply & AWG22



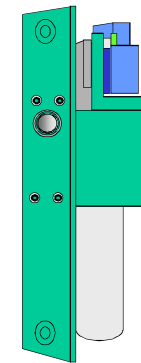
15V 4A Adapter

AWG22 30m



AC-7000

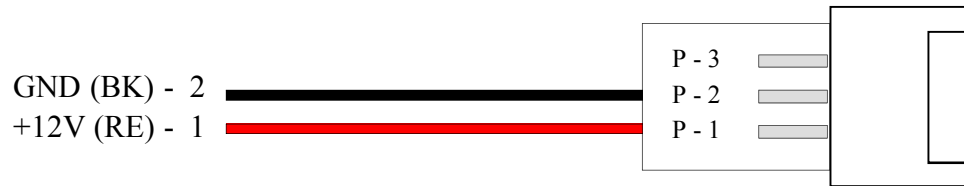
AWG22 20m



Dead-Bolt  
BEHOST BHL-700C  
(Standby:0.15A, Start:0.9A)

- \* Caution: 1. The data is the value when using the adapter and the dead-bolt supplied by the Union Community.
- 2. If using another dead-bolt, you should ensure that the dead-bolt works well with 15V power supply

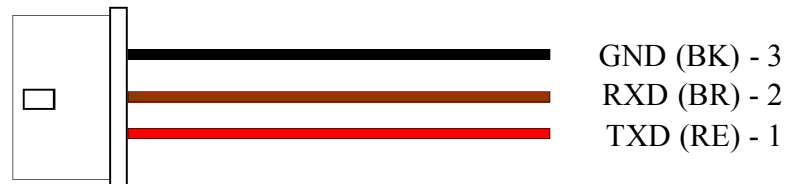
## 2. Description of External Cables



Power Adapter Cable



Wiegand Cable (5P)



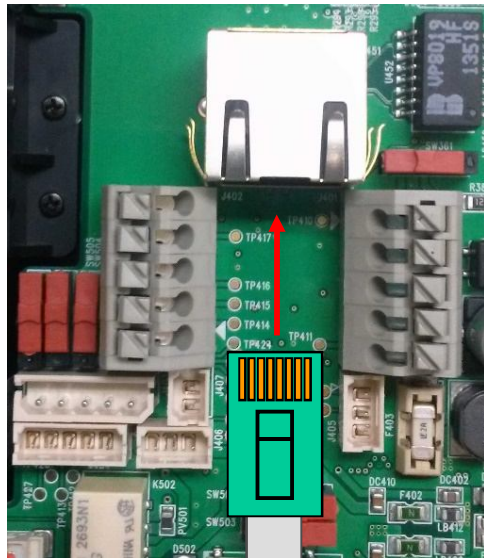
RS232 Cable (3P)



Lock Status Cable (5P)

# 3. Connecting Ethernet (LAN) Cable

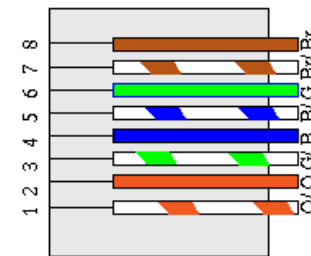
J451-RJ45



UTP 10Base-T

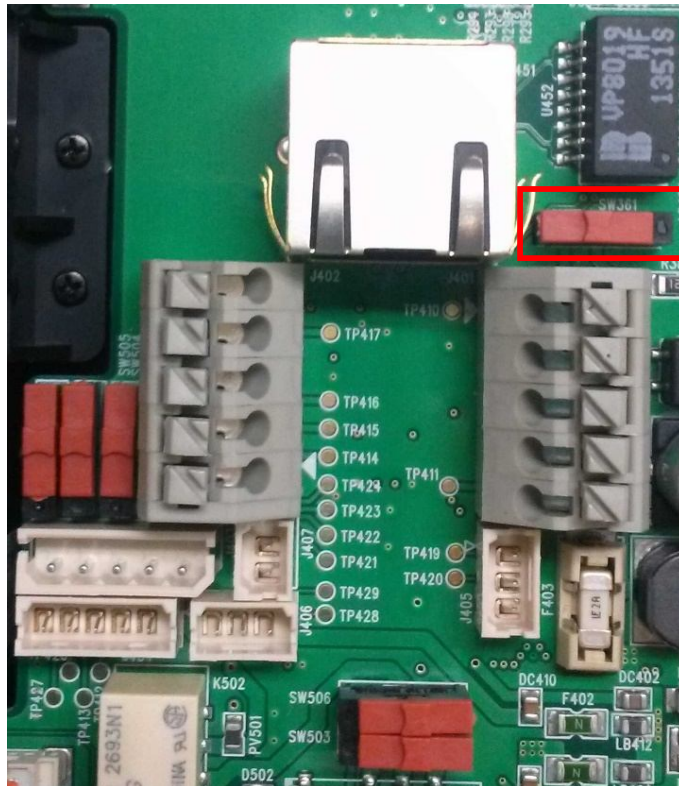
Switch Hub

\*\* UTP Connector

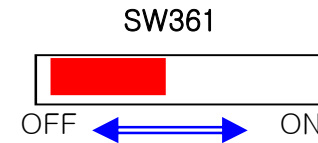


Hook  
is  
Under-  
neath

# 4. Resistor Setting for RS485 End Termination

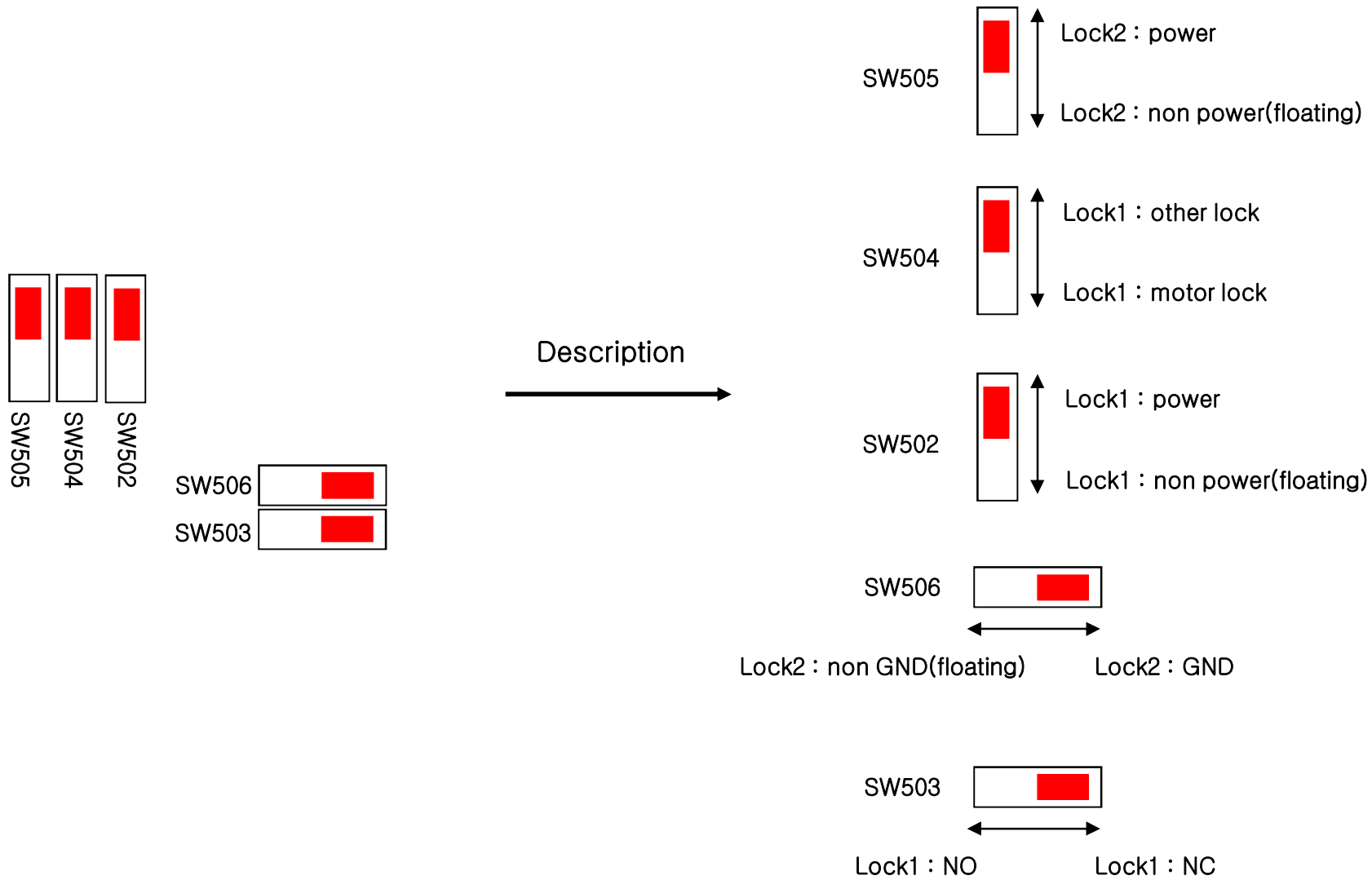


SW361



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

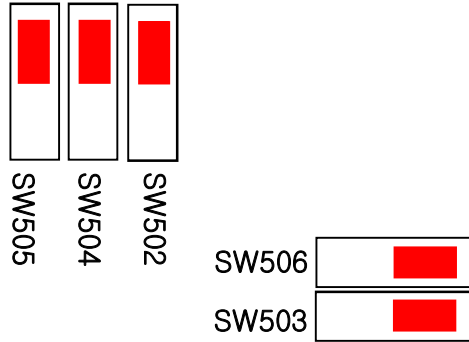
# 5. Description of the switch for setting lock



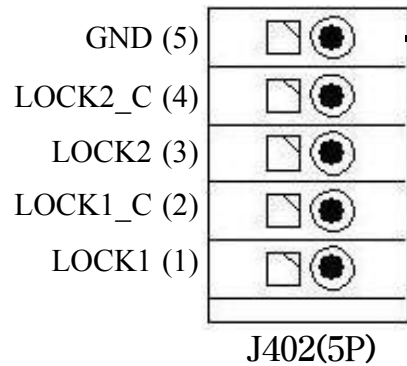
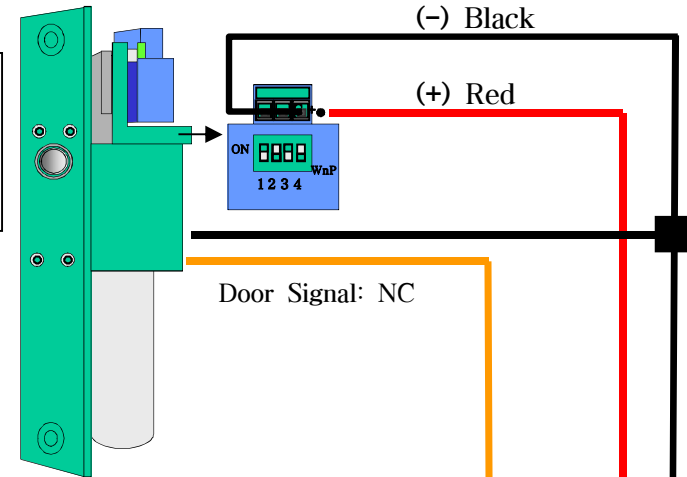
# 6. Connecting a Dead-Bolt Type Door Lock (Fail Safe)

## 6.1. Connecting One System/ One Lock

Lock Type Select S/W(P, NC)

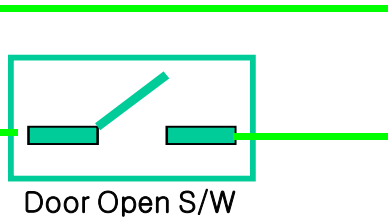
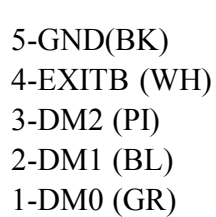


<DB Door Signal>  
Closed: NO-COM, Short  
          NC-COM, Open  
Opened: NO-COM, Open  
          NC-COM, Short



Lock (-)

Lock (+)



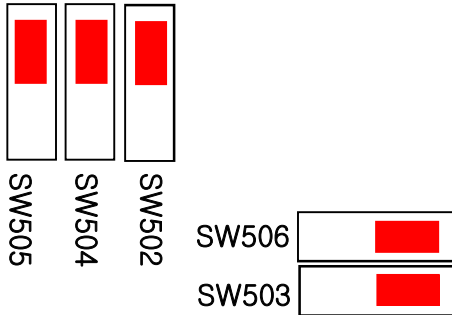
Door Monitor



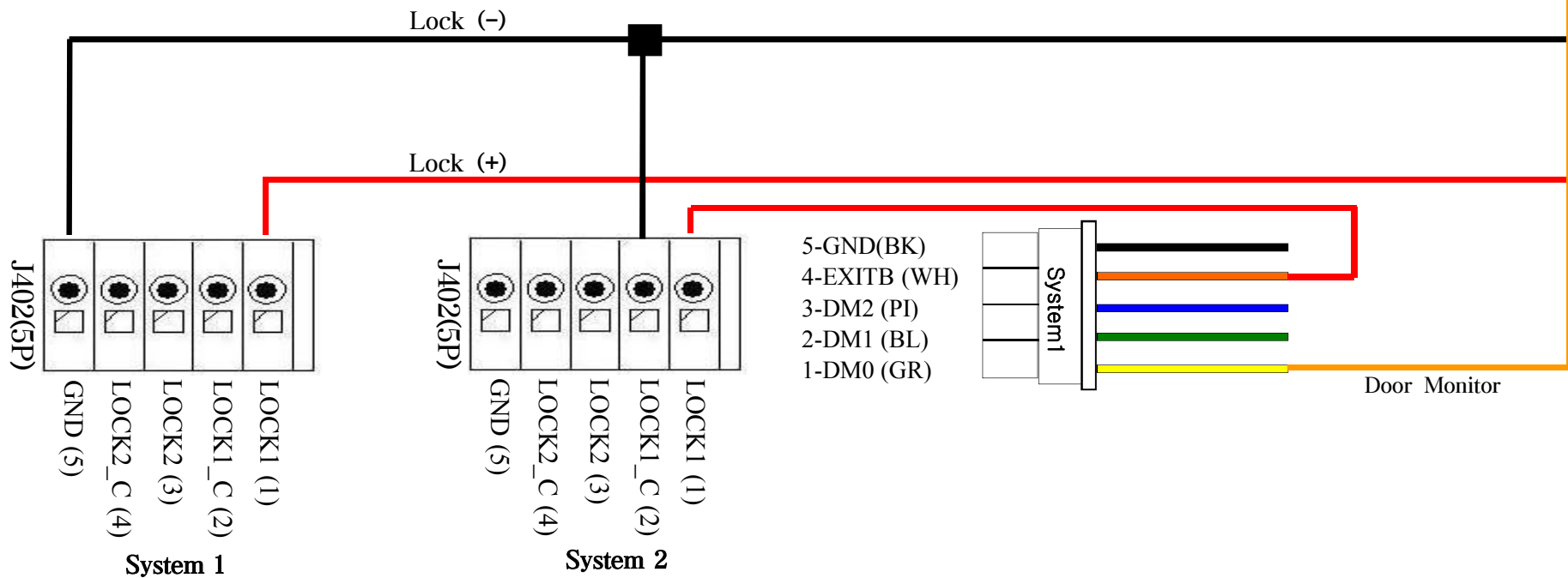
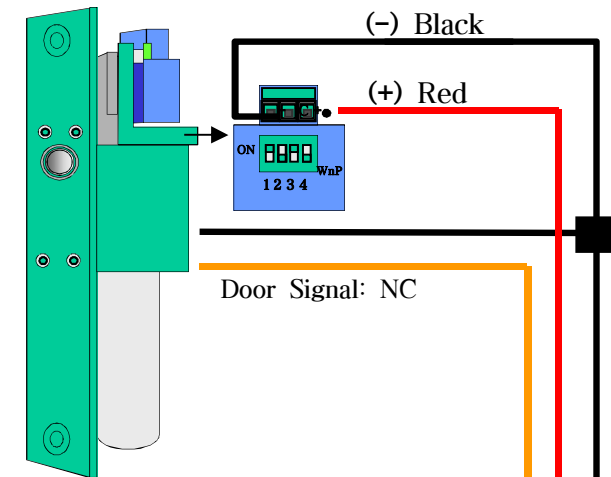
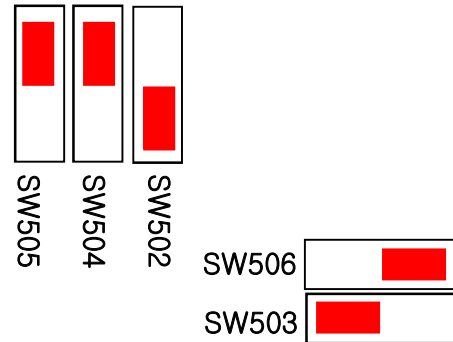
# 6. Connecting a Dead-Bolt Type Door Lock (Fail Safe)

## 6.2. Connecting Two Systems/ One Lock

**System 1**  
Lock Type Select S/W(P, NC)



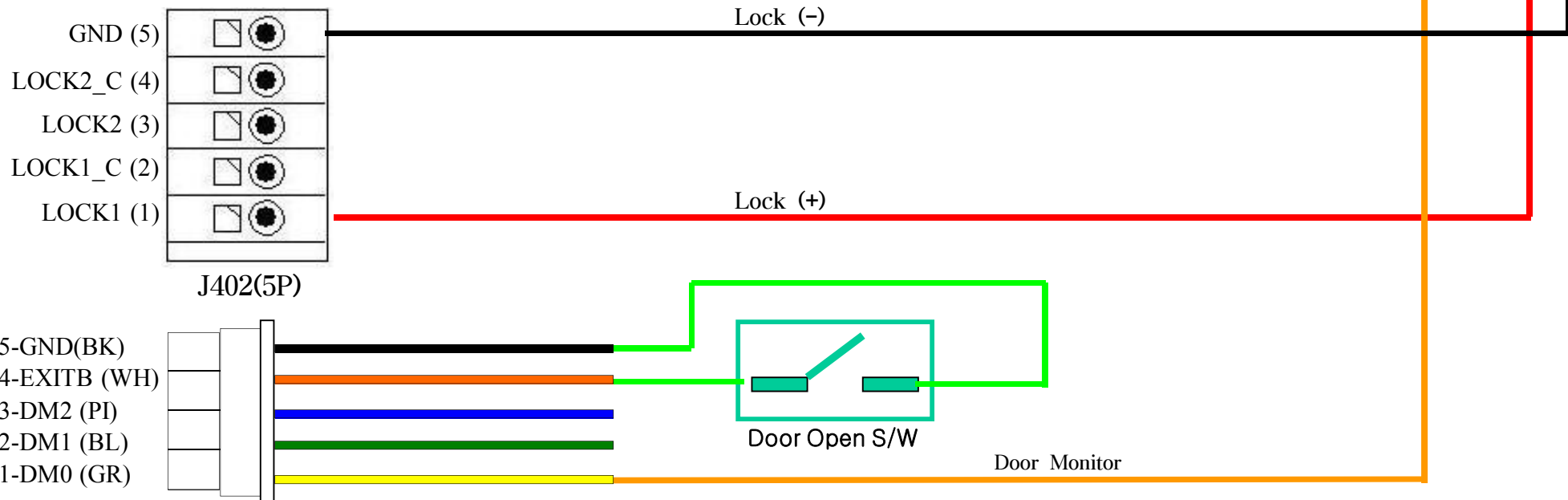
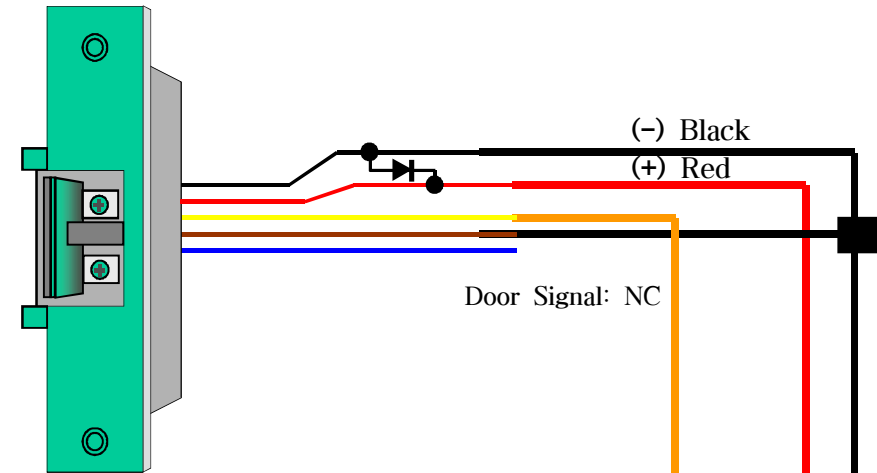
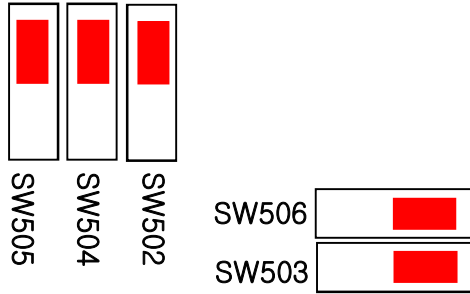
**System 2**  
Lock Type Select S/W(NP, NO)



# 7. Connecting a Strike Type Door Lock (Fail Safe)

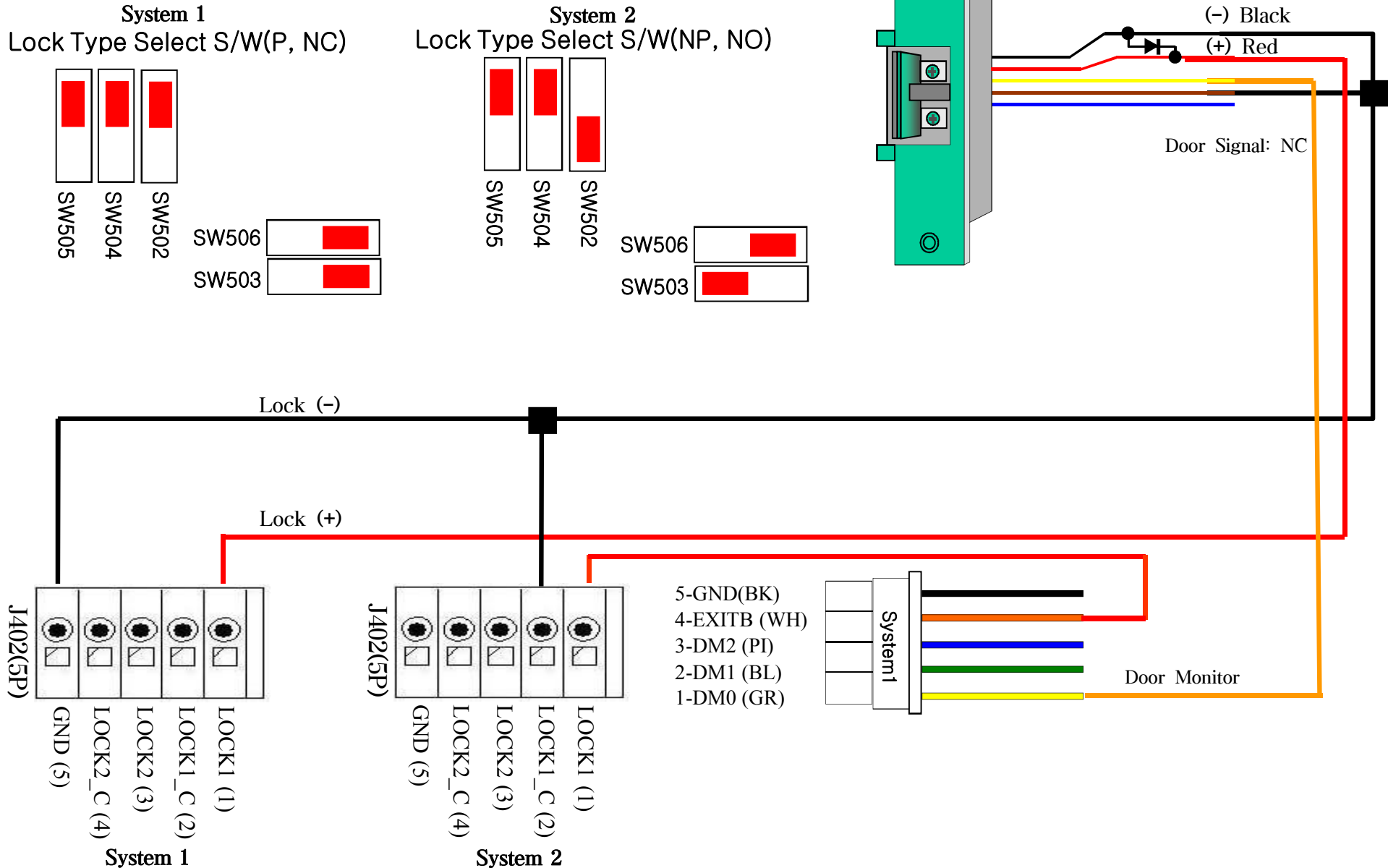
## 7.1. Connecting One System/ One Lock

Lock Type Select S/W(P, NC)



# 7. Connecting a Strike Type Door Lock (Fail Safe)

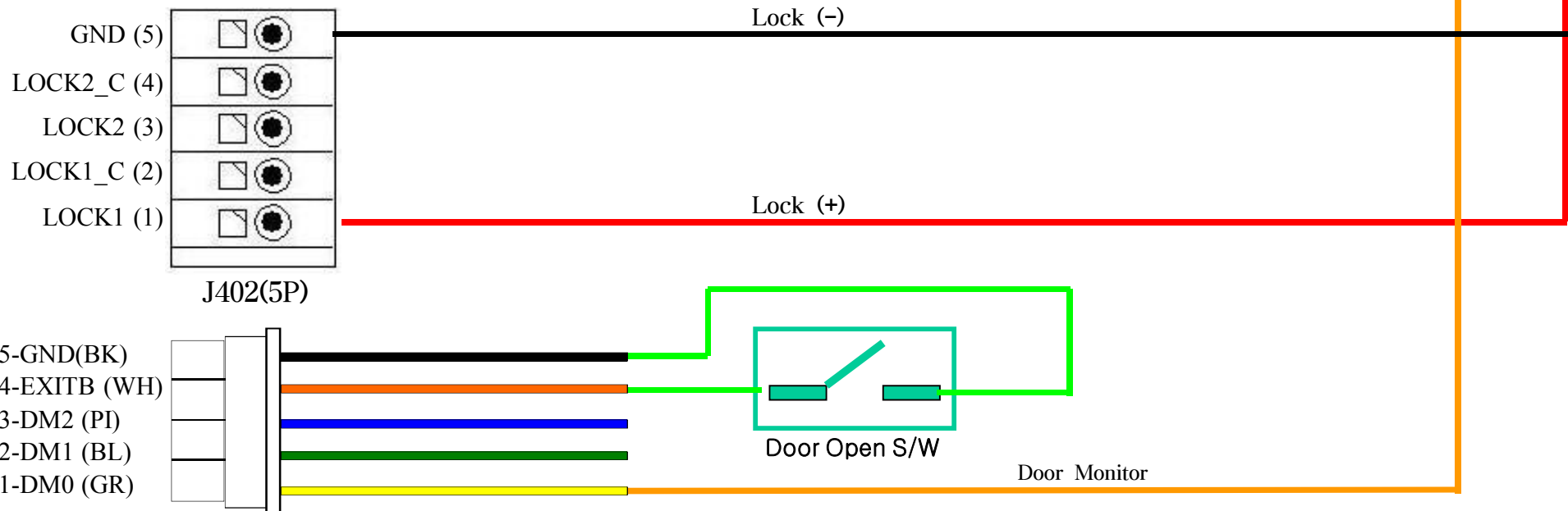
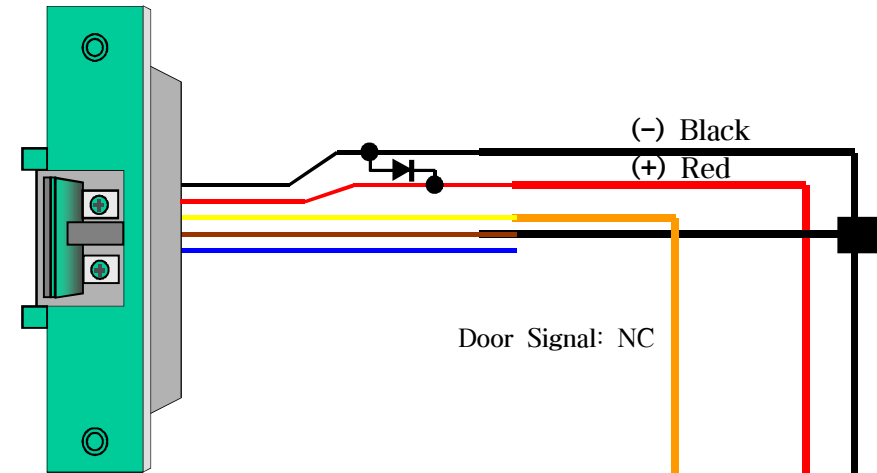
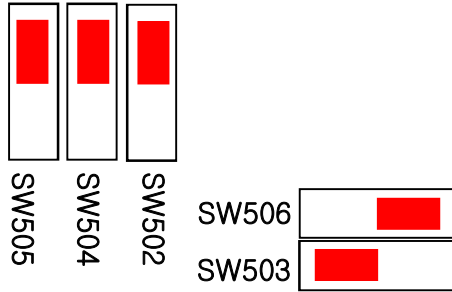
## 7.2. Connecting Two Systems/ One Lock



# 8. Connecting a Strike Type Door Lock (Fail Secure)

## 8.1. Connecting One System/ One Lock

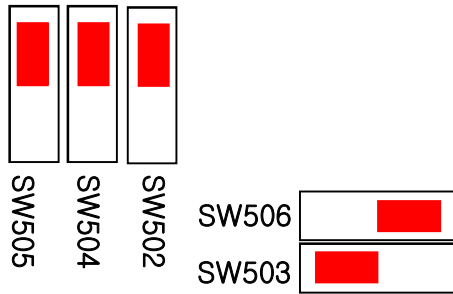
Lock Type Select S/W(P, NO)



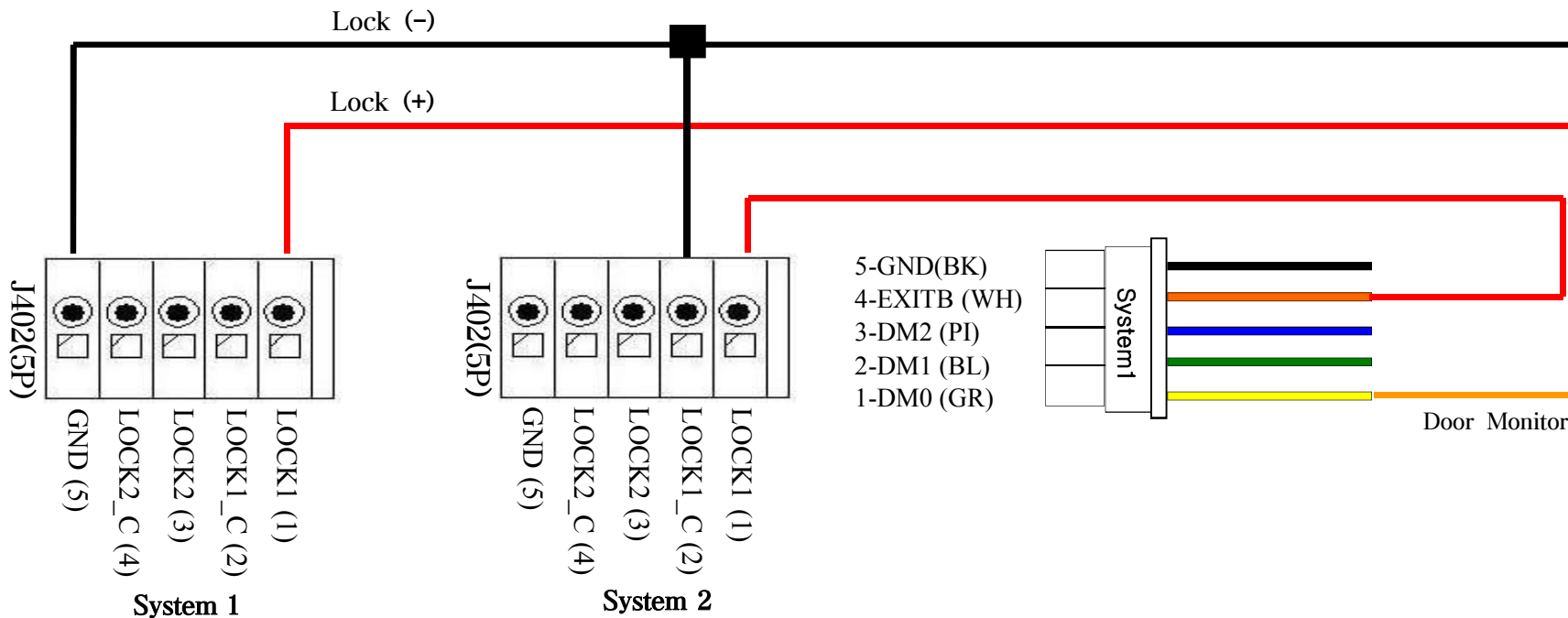
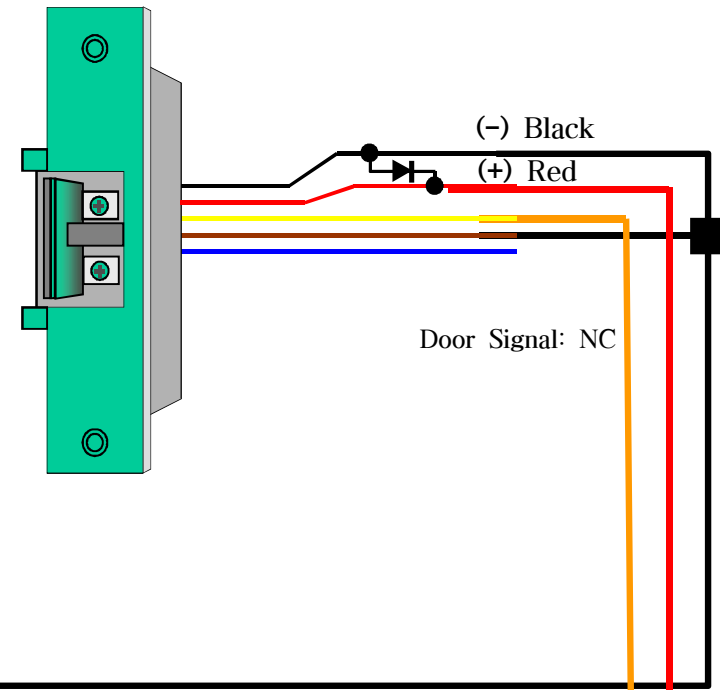
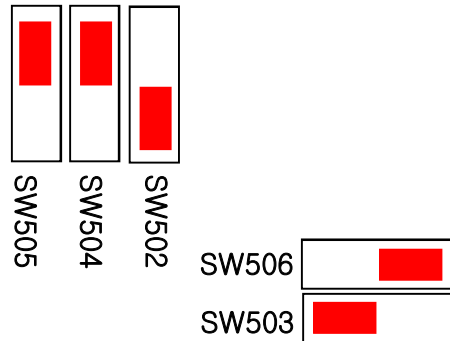
# 8. Connecting a Strike Type Door Lock (Fail Secure)

## 8.2. Connecting Two Systems/ One Lock

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



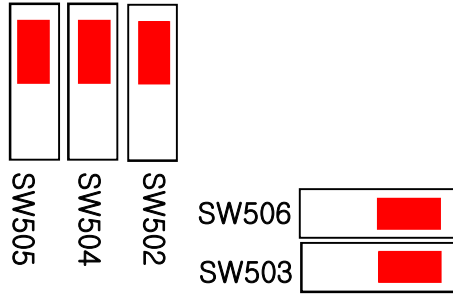
**System 2**  
Lock Type Select S/W(NP, NO)



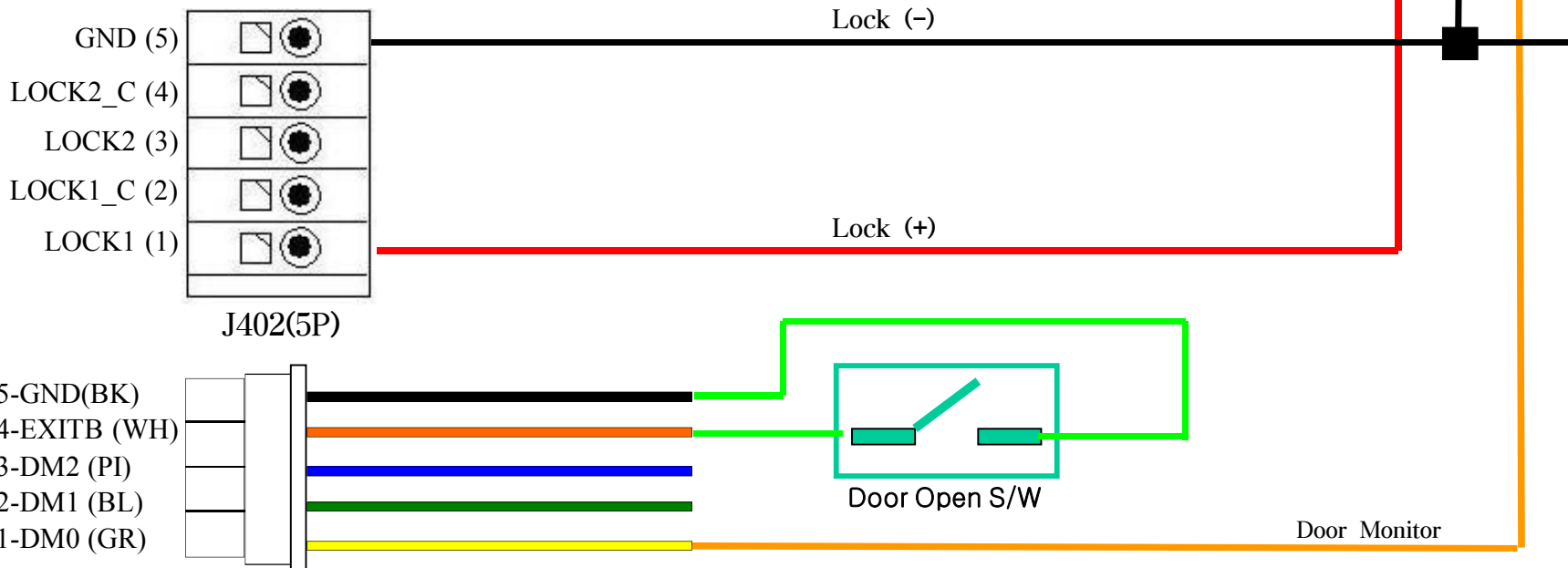
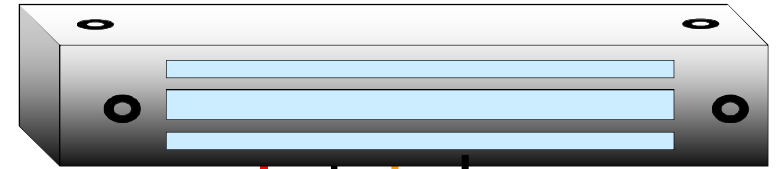
# 9. Connecting an EM Type Door Lock (Fail Safe)

## 9.1. Connecting One System/ One Lock

Lock Type Select S/W(P, NC)

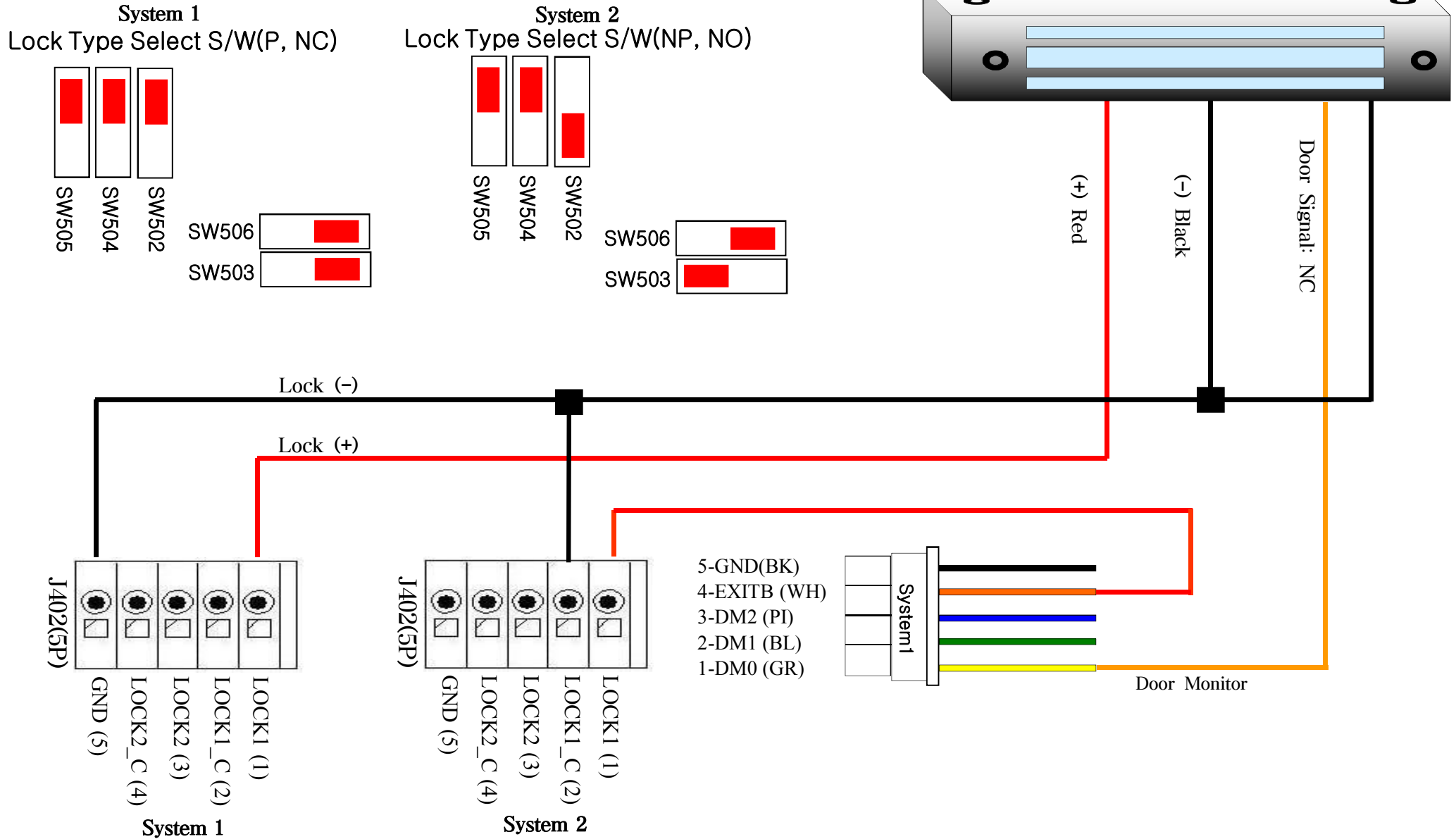


<EM Door Signal>  
 Closed: NO-COM, Short  
           NC-COM, Open  
 Opened: NO-COM, Open  
           NC-COM, Short



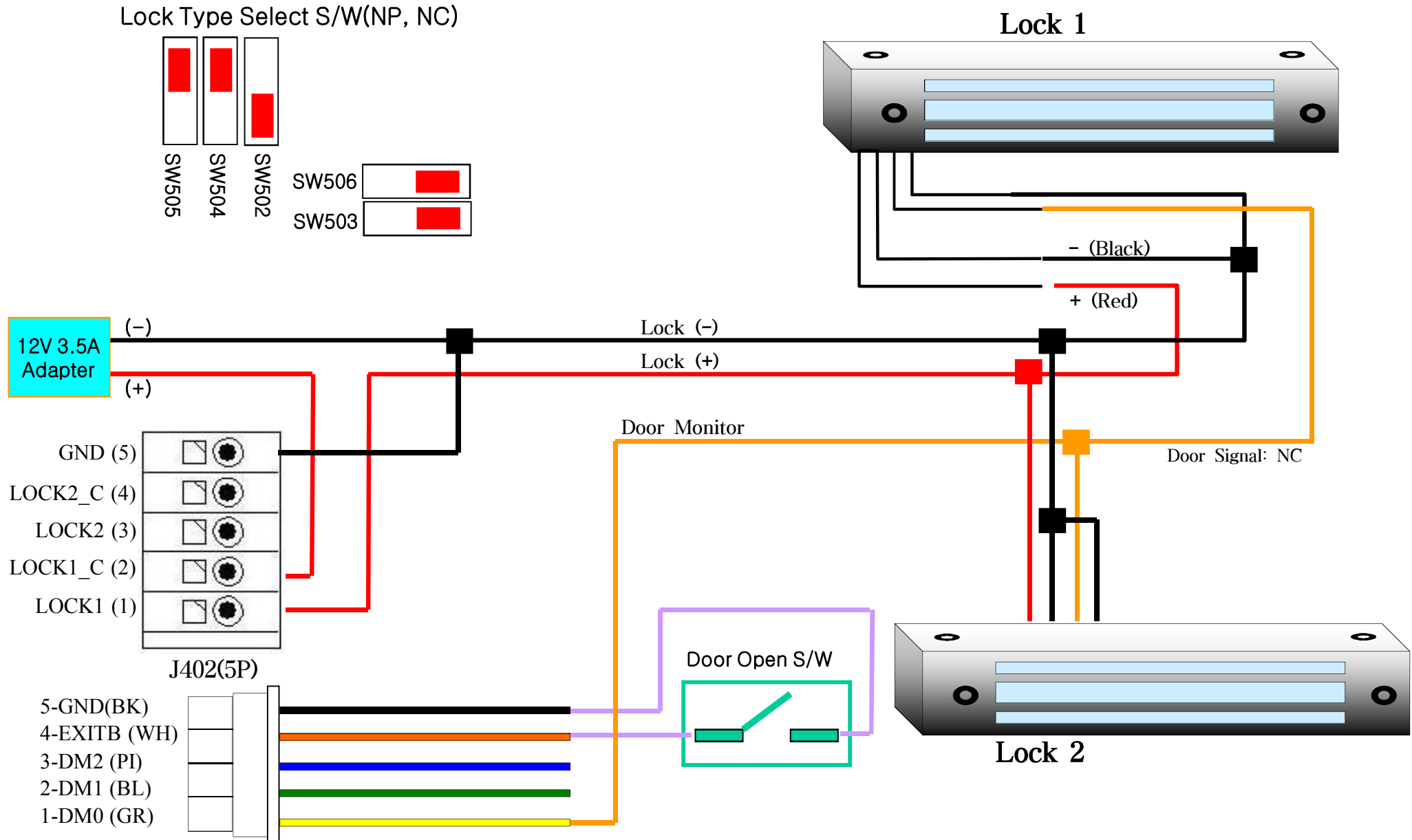
# 9. Connecting an EM Type Door Lock (Fail Safe)

## 9.2. Connecting Two Systems/ One Lock



# 9. Connecting an EM Type Door Lock (Fail Safe)

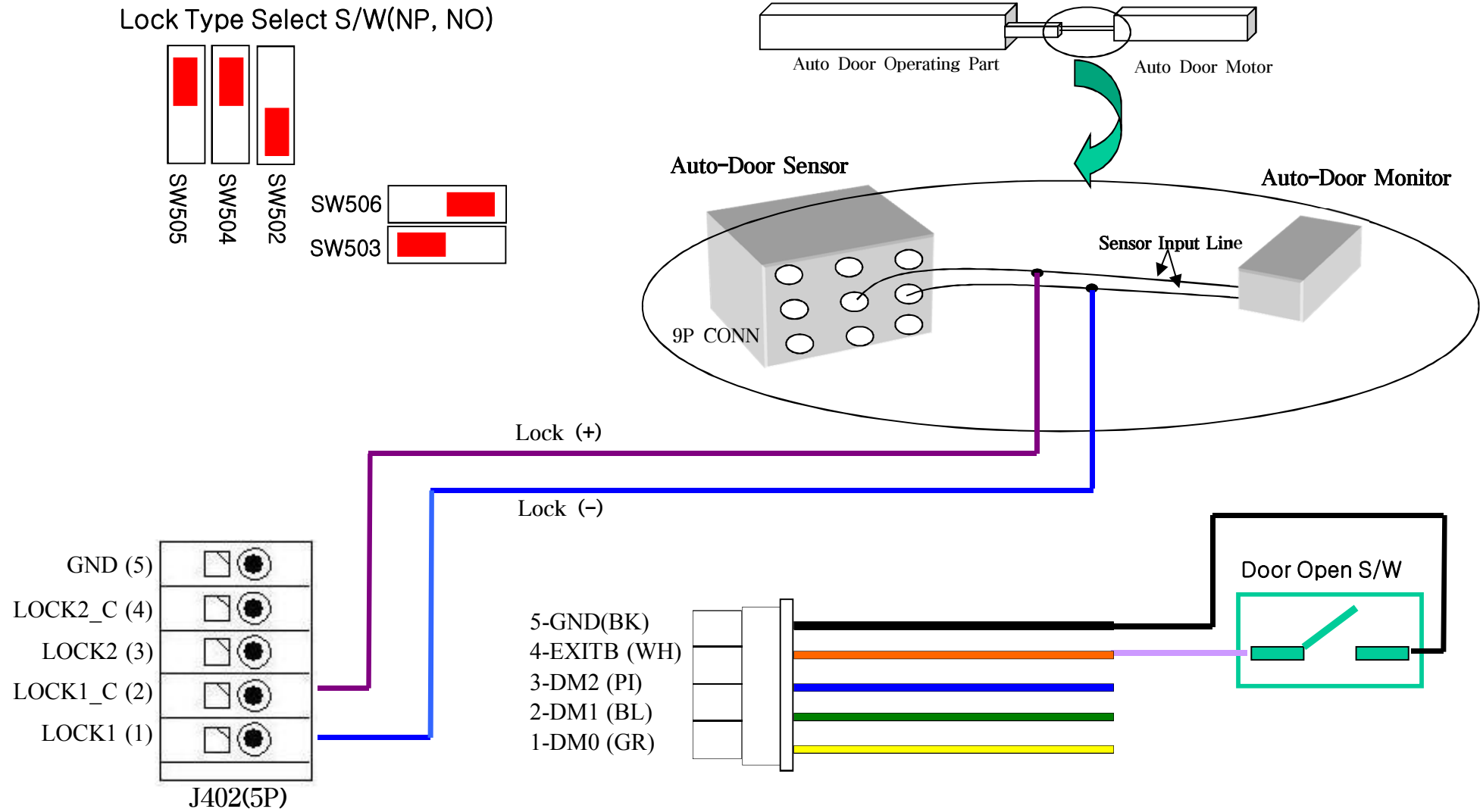
## 9.3. Connecting One System/ Two Locks “ Use external DC Power adapter”





# 10. Connecting Auto-Door (Contact Control)

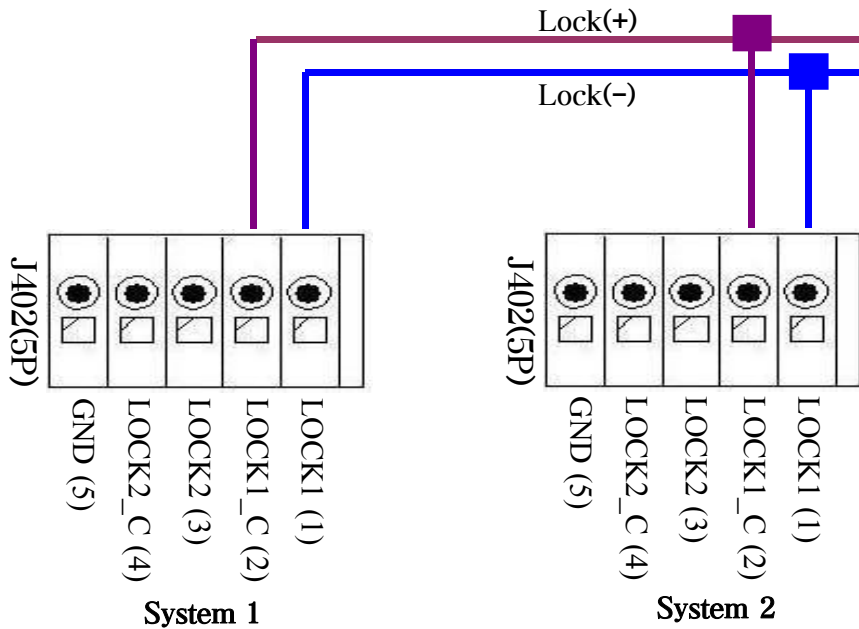
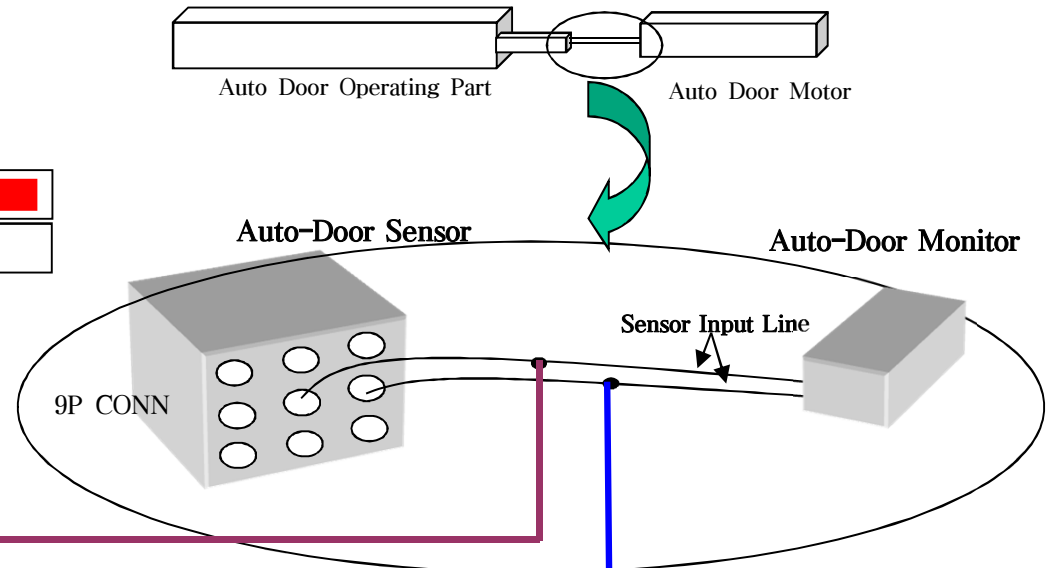
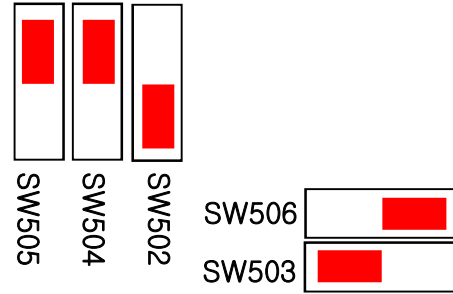
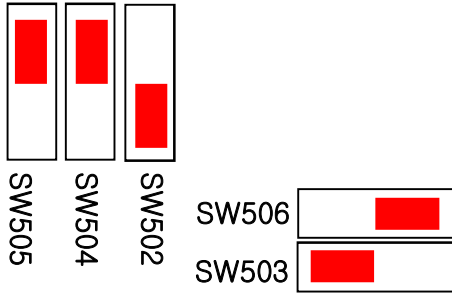
## 10.1. Connecting One System/ One Door



# 10. Connecting Auto-Door (Contact Control)

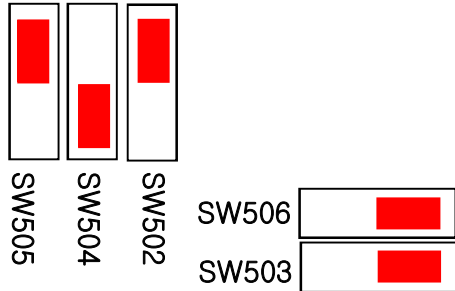
## 10.2. Connecting Two Systems/ One Door

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

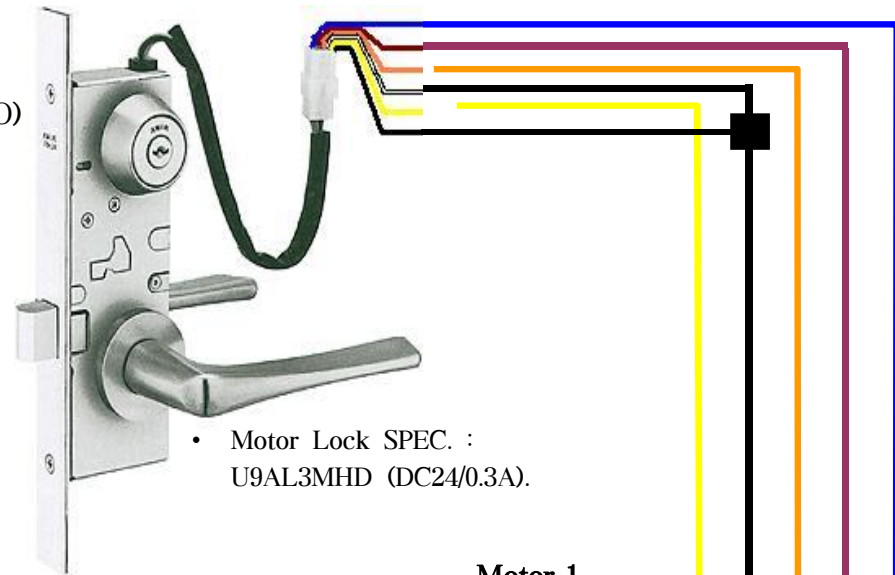


# 11. Connecting a Motorised Lock

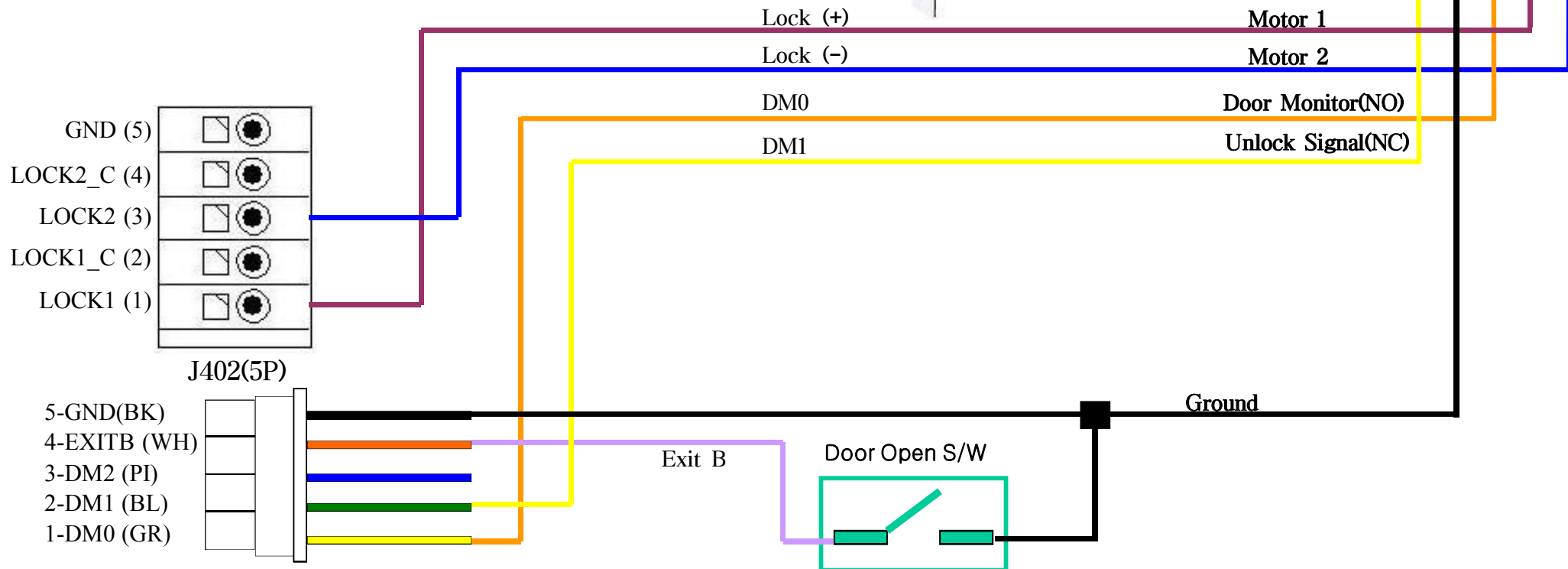
Lock Type Select S/W(P, M)



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

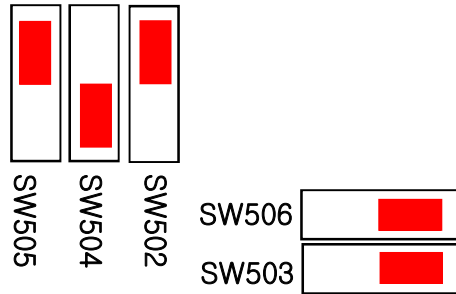


• Motor Lock SPEC. :  
U9AL3MHD (DC24/0.3A).



# 12. Connecting Two Emergency Lamps

Lock Type Select S/W(P, M)



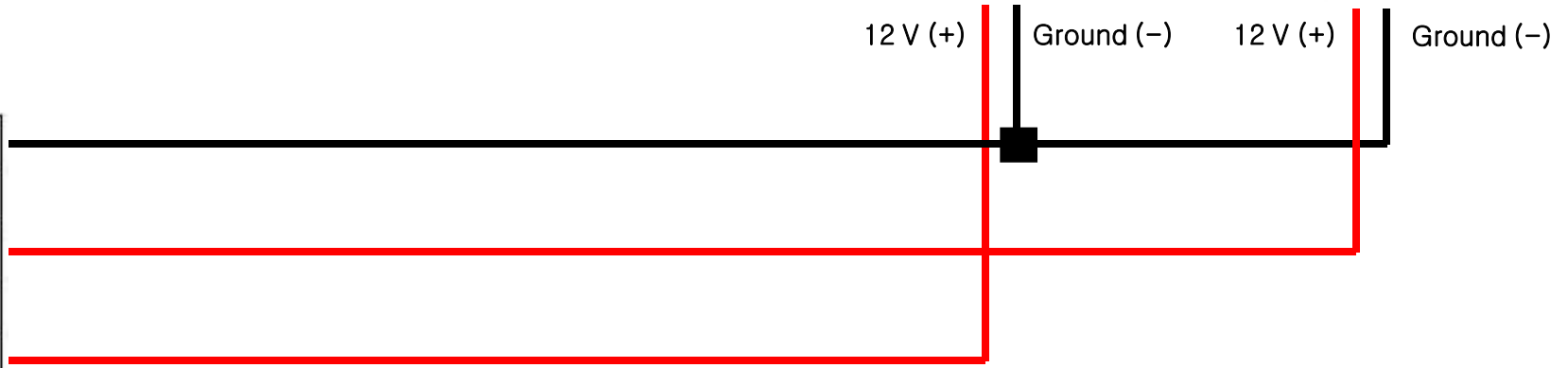
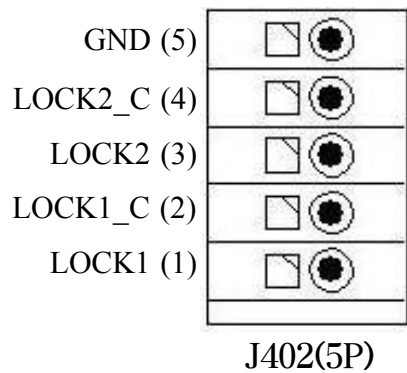
Emergency Lamp 1



Emergency Lamp 2



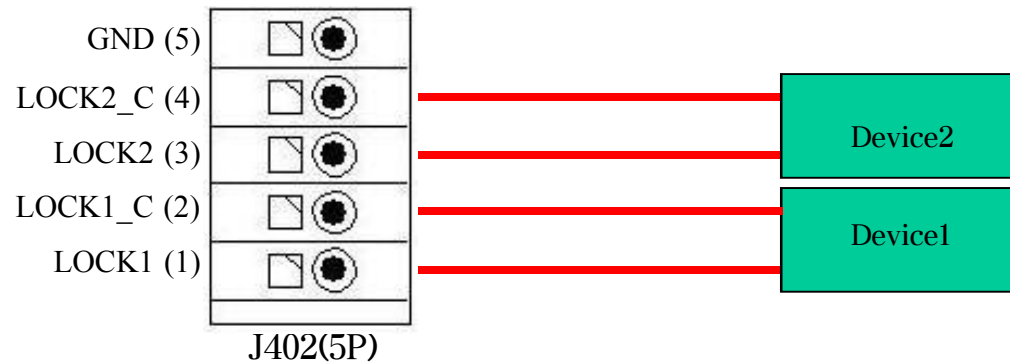
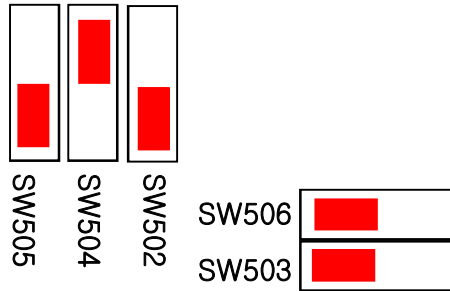
12 V (+) Ground (-) 12 V (+) Ground (-)



# 13. Connecting Two Non-powered contacts

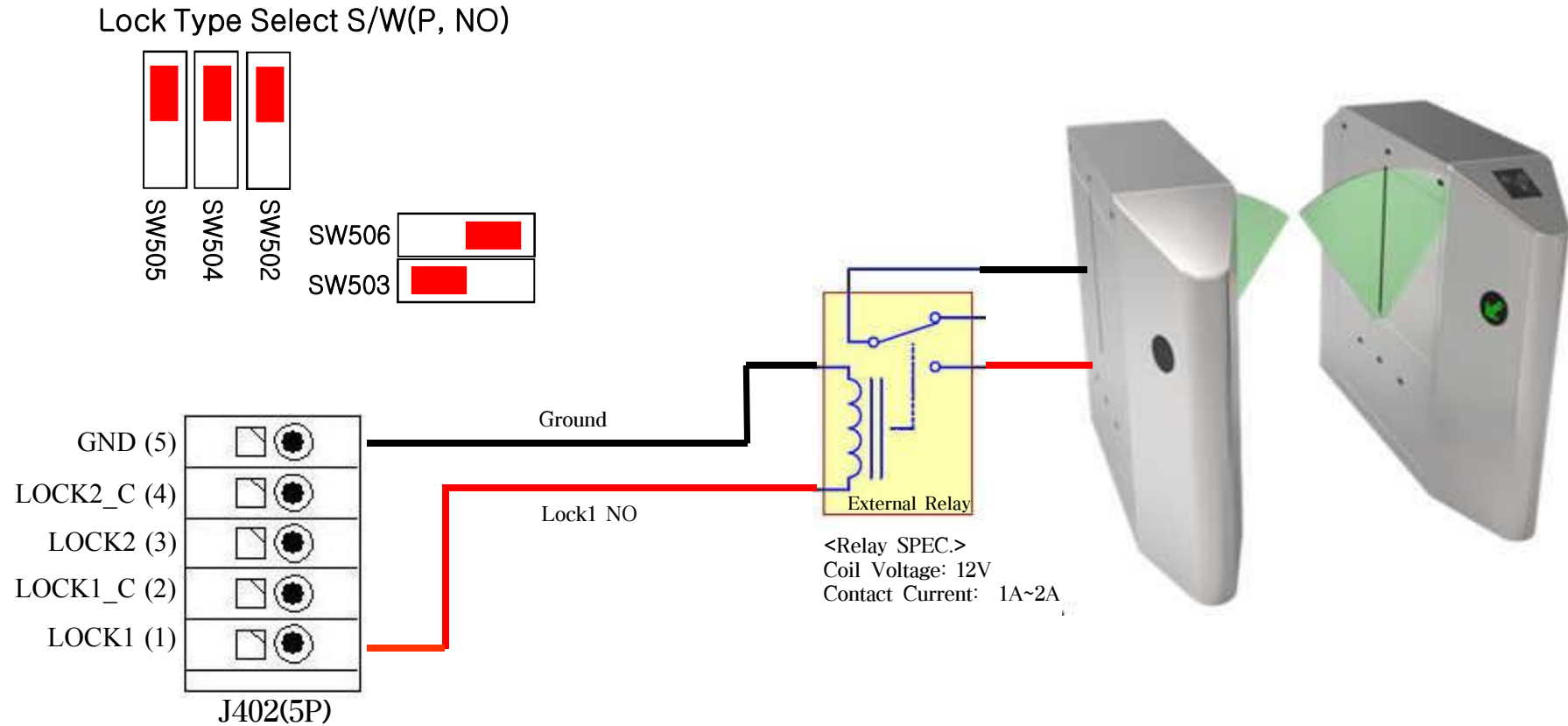
Normal Open Type

Lock Type Select S/W(NP, NO)

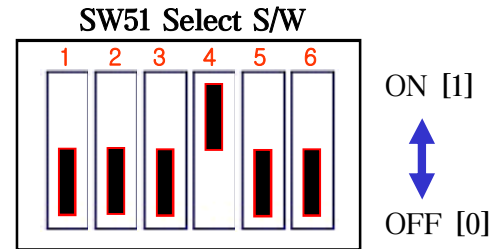


## 14.1 How to connect an external relay

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



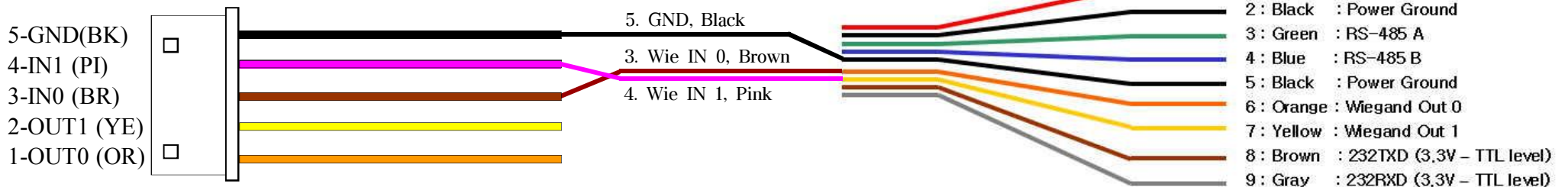
## 14.2 How to connect the VS-R20D RF Dummy Card Reader



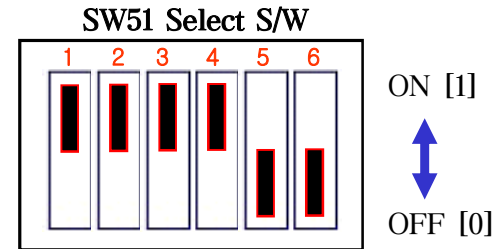
- \* 1, 2, 3 OFF: 26Bit
- \* 4 ON: Wiegand Mode



### Wiegand Cable (5P)



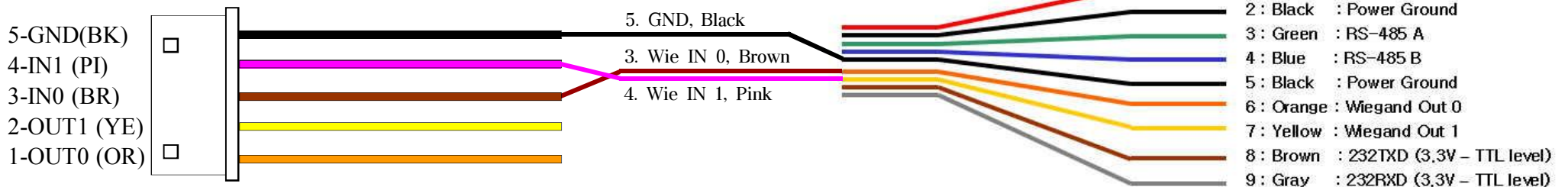
## 14.3 How to connect the VS-R20D SC Dummy Card Reader



- \* 1, 2, 3 ON: 34Bit
- \* 4 ON: Wiegand Mode

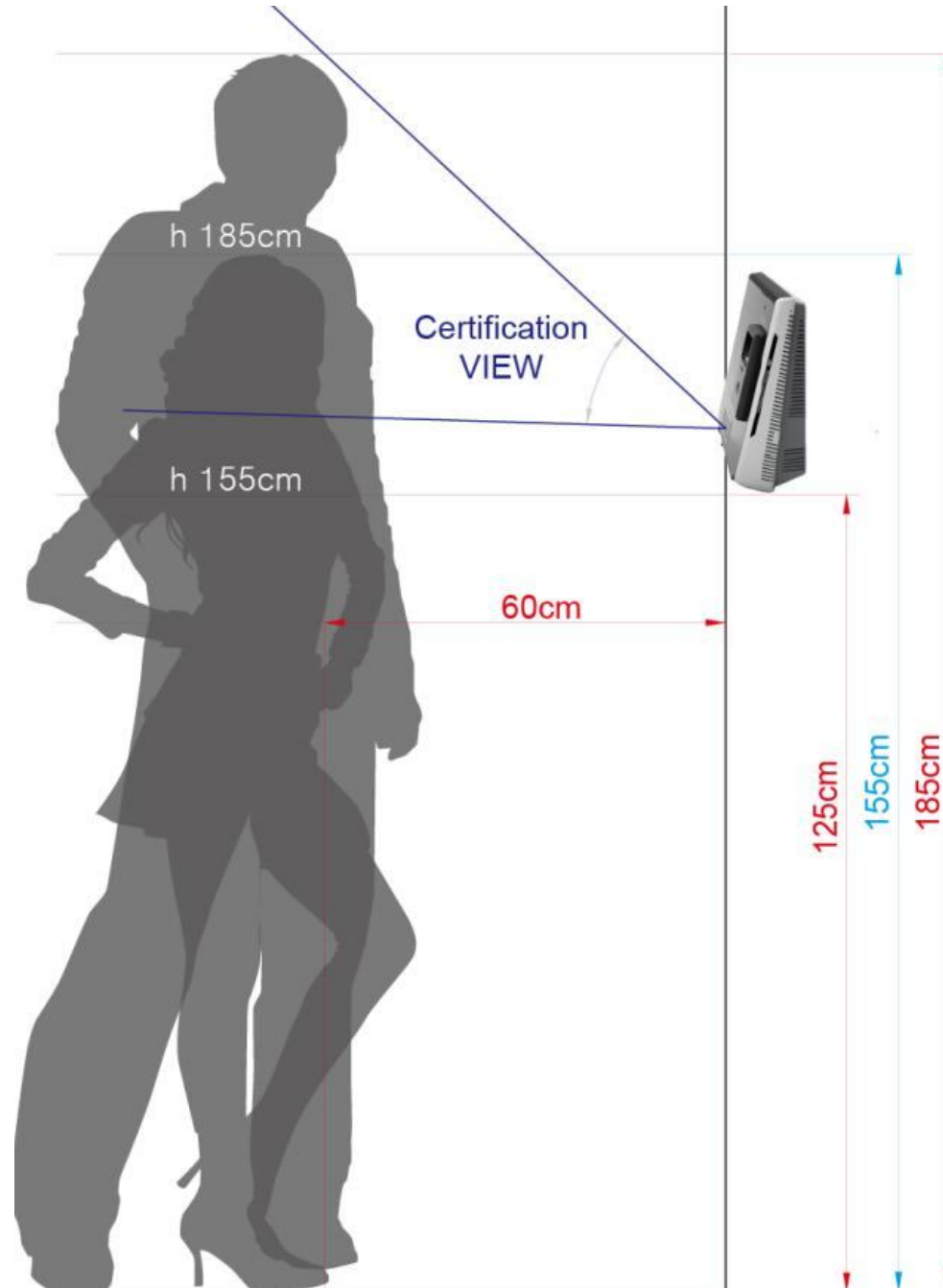


### Wiegand Cable (5P)





# \*\* Recommend installation guide



\*\* 190cm 이상은 앞으로 약간 숙여 인증