

# ***Installation Guide for UBio-X Pro2 V1.0***

## ***Walk Through Face Recognition Terminal***



*Doc Ver1.0*  
*July.,28.2020*  
*R&D Center*  
***Union Community Co., Ltd.***

# 1. The maximum cable length & thickness for installation

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



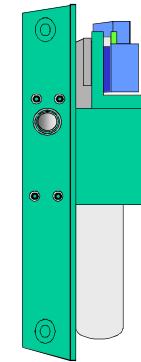
15V 4A Adapter

AWG24 10m



UBio-X Pro2

AWG24 10m



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

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



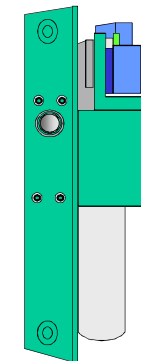
15V 4A Adapter

AWG22 20m



UBio-X Pro2

AWG22 10m



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

\* Caution: The above data are the measured values when using the adapters and the dead-bolts provided by the Union Community.

# 1. The maximum cable length & thickness for installation

1) Using 15V 4A Power Supply & AWG20



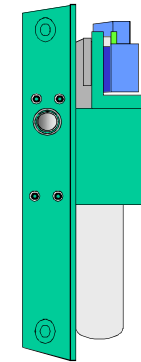
15V 4A Adapter

AWG20 40m



UBio-X Pro2

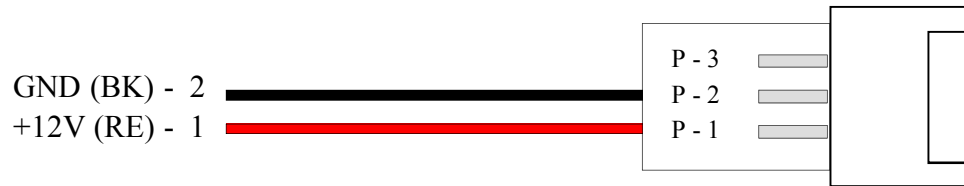
AWG20 10m



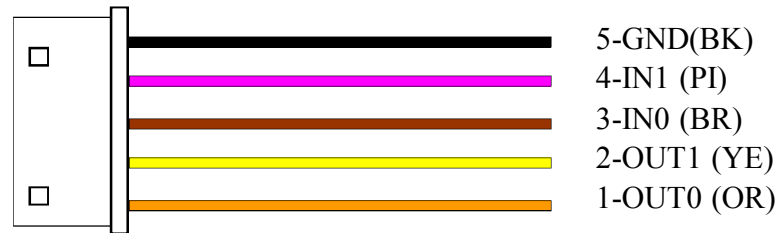
Dead-Bolt  
BEHOST BHL-700C  
(Standby:0.15A, Start:0.9A)

\* Caution: The above data are the measured values when using the adapters and the dead-bolts provided by the Union Community.

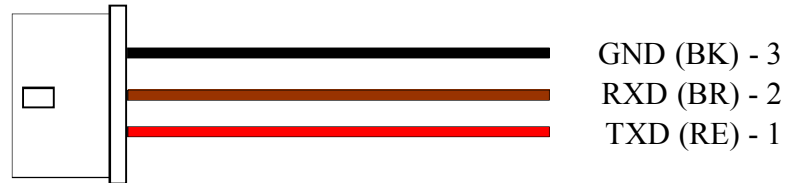
## 2. Description of External Cables



Power Adapter Cable



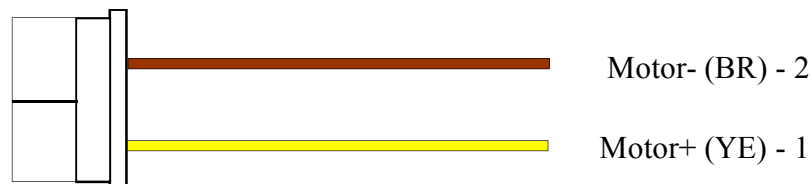
Wiegand Cable (5P)



RS232 Cable (3P)

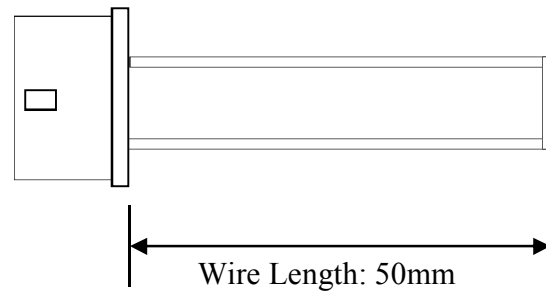


Lock Status Cable (5P)



Motor Lock Cable (2P)

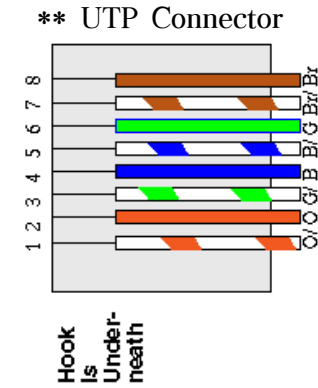
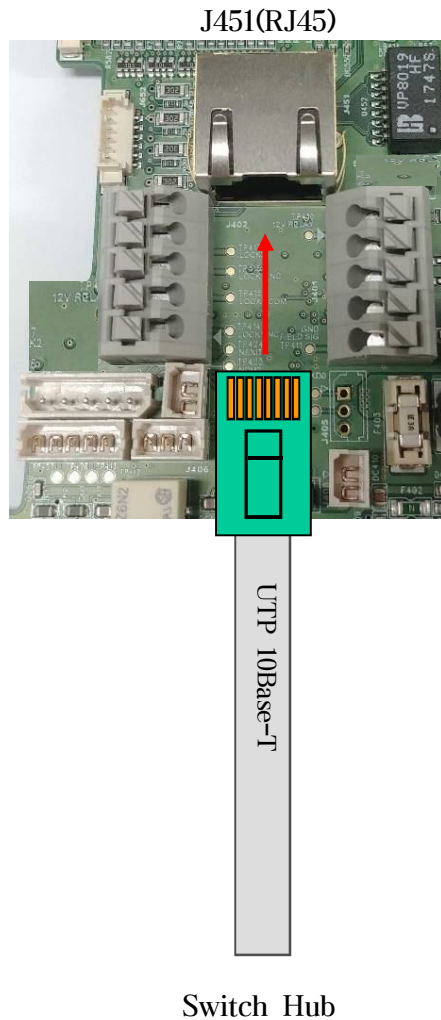
## 2. Description of External Cables



Lock1 Out(WH) - 2  
+12V (WH) - 1

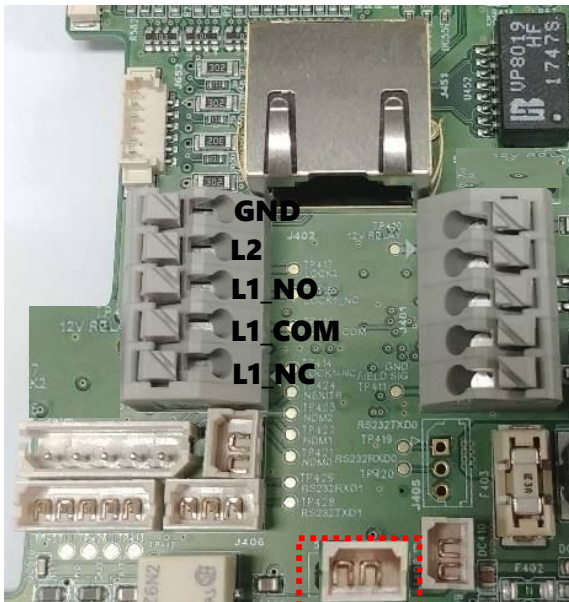
**Lock1 Power Cable (2P)**

# 3. Connecting Ethernet (LAN) Cable

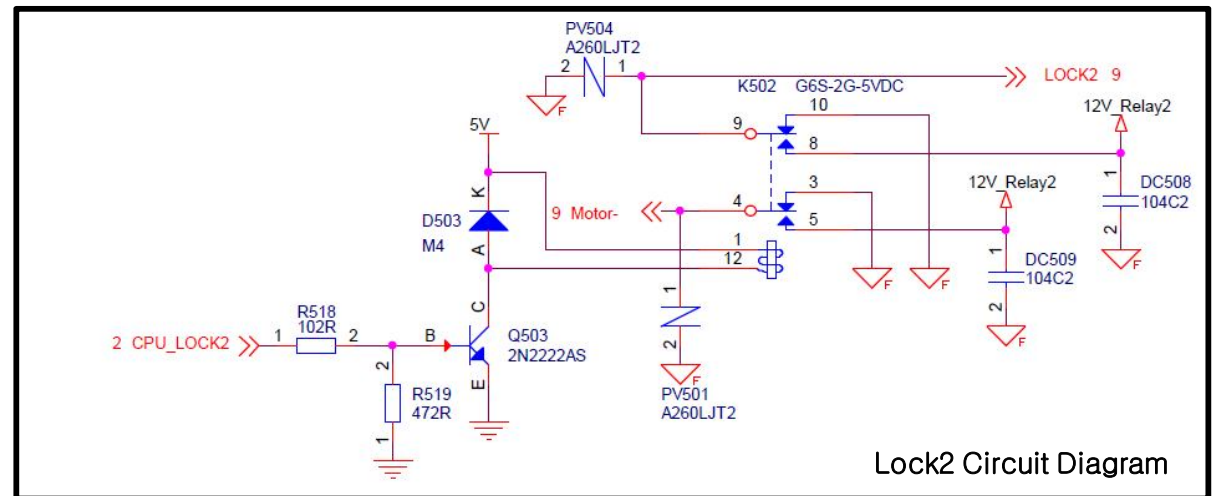
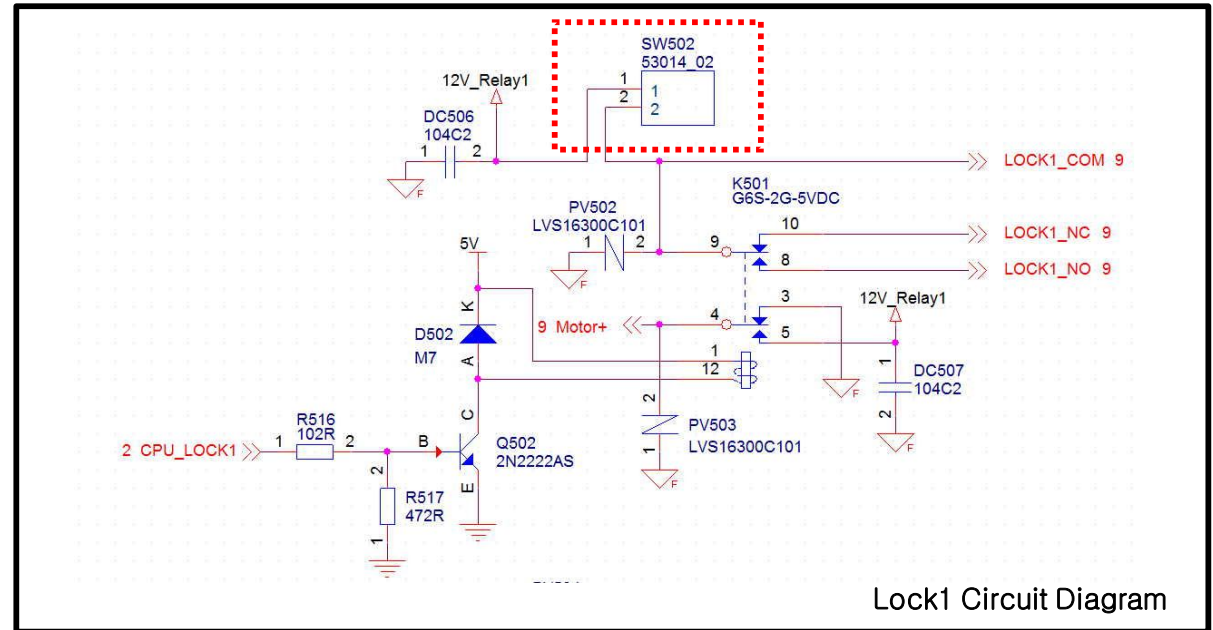


# 4. Description of the switch for setting lock

SW502  
Lock1 Power OFF(Cut) ↔ Lock1 Power ON(Connect)



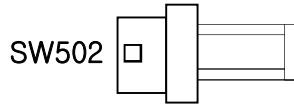
SW502



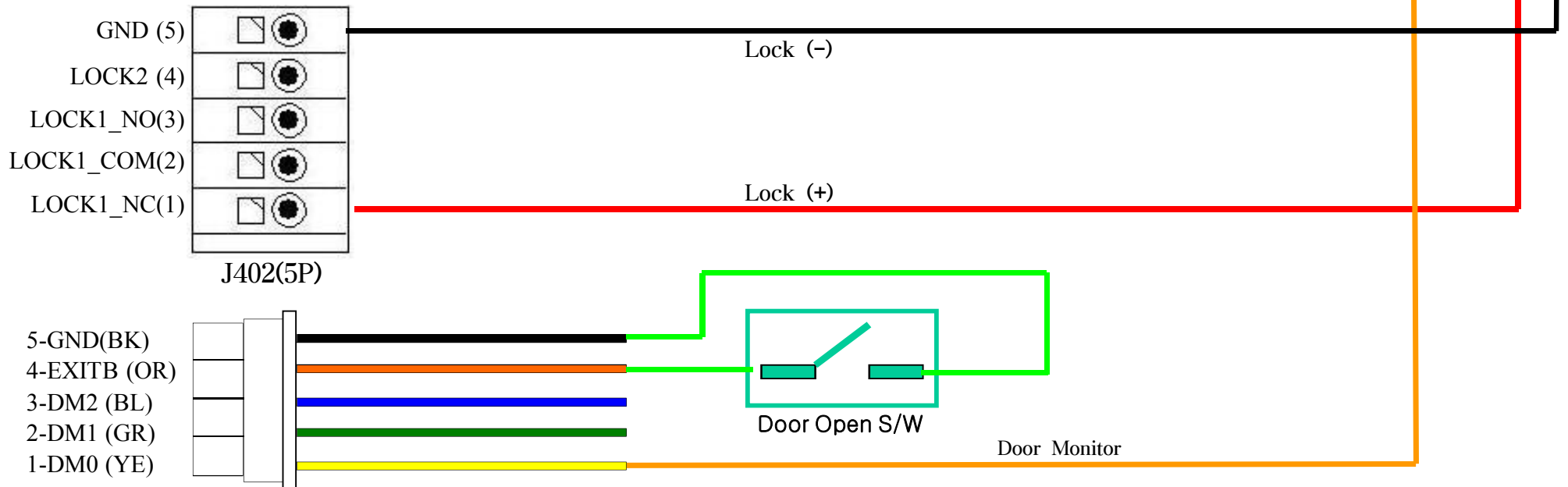
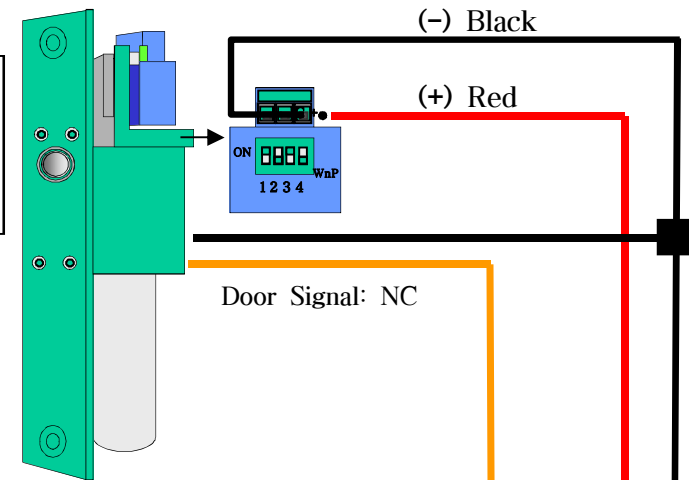
# 5. Connecting a Dead-Bolt Type Door Lock (Fail Safe)

## 5.1. Connecting One System/ One Lock

Lock Type Select S/W(P)



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

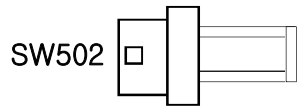




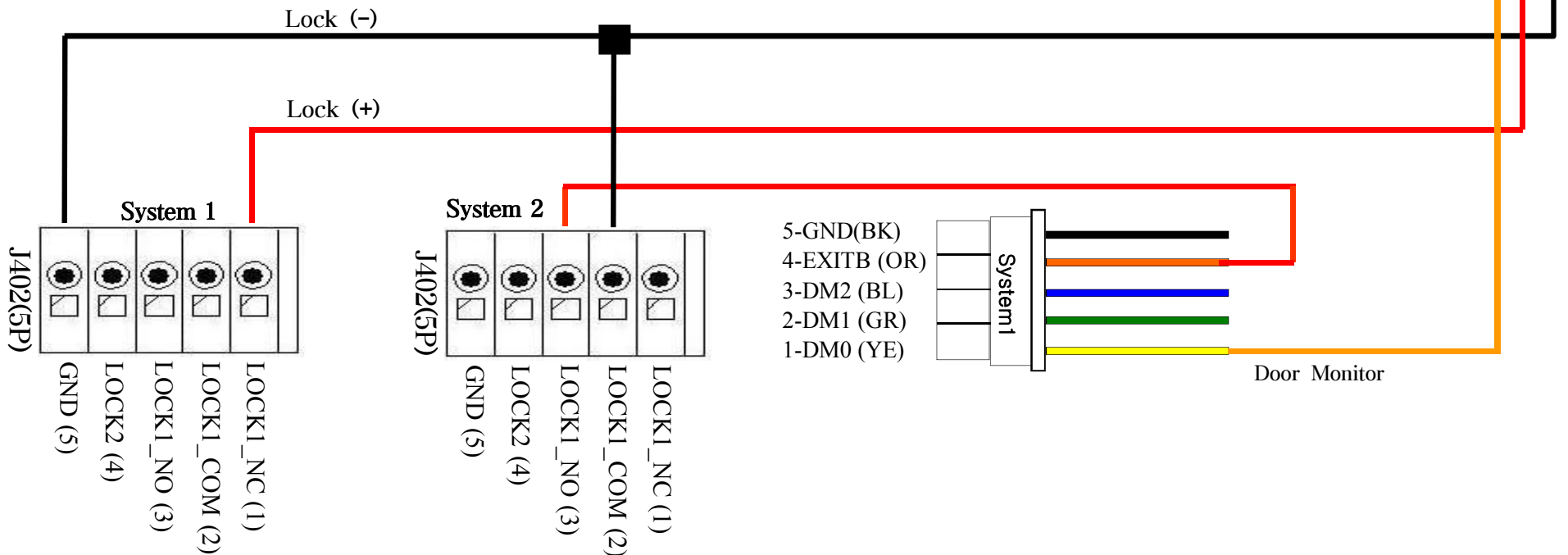
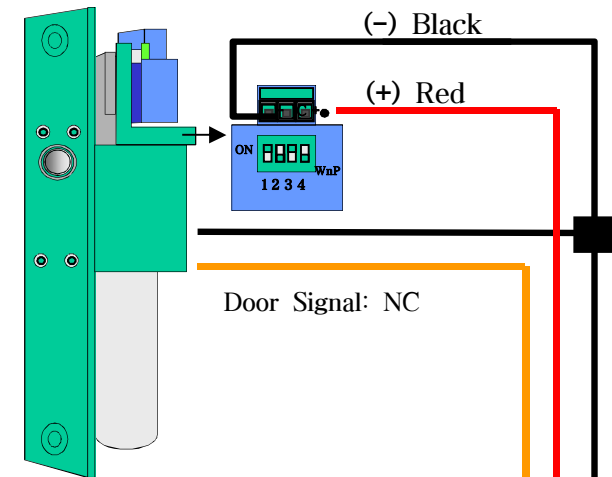
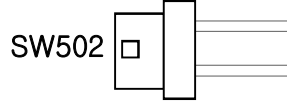
# 5. Connecting a Dead-Bolt Type Door Lock (Fail Safe)

## 5.2. Connecting Two Systems/ One Lock

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



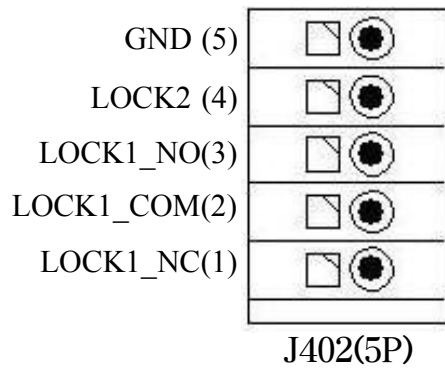
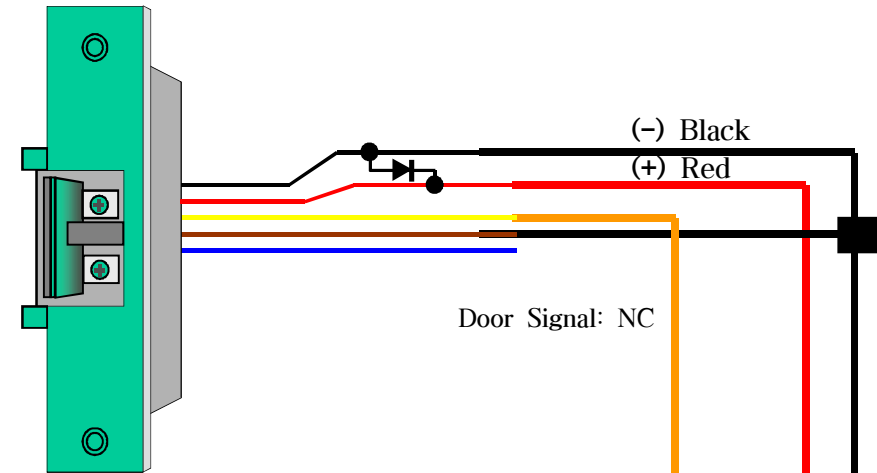
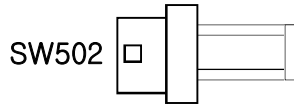
**System 2**  
Lock Type Select S/W(NP)



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

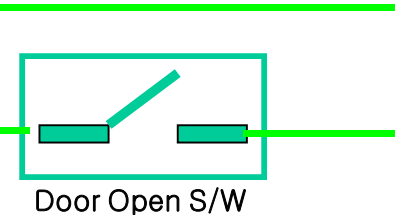
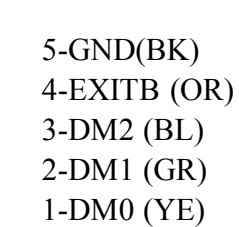
## 6.1. Connecting One System/ One Lock

Lock Type Select S/W(P)



Lock (-)

Lock (+)

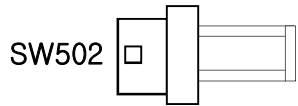


Door Monitor

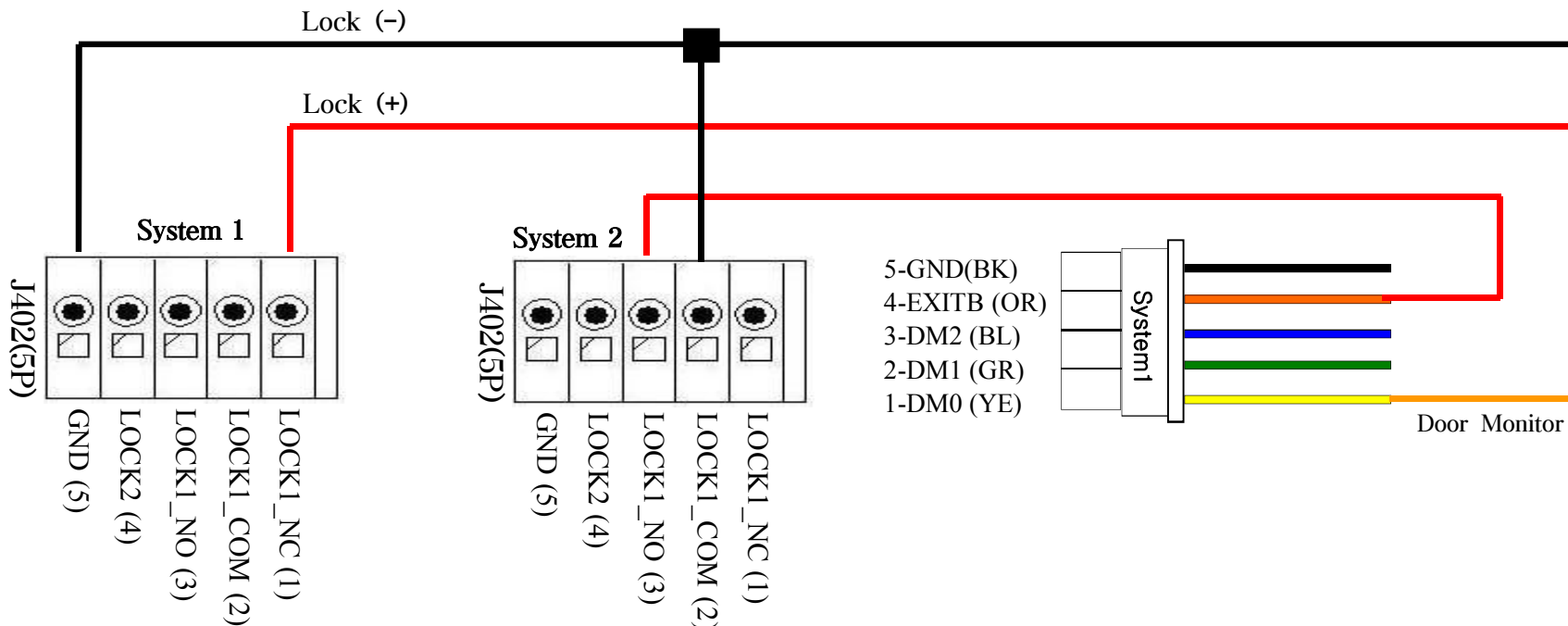
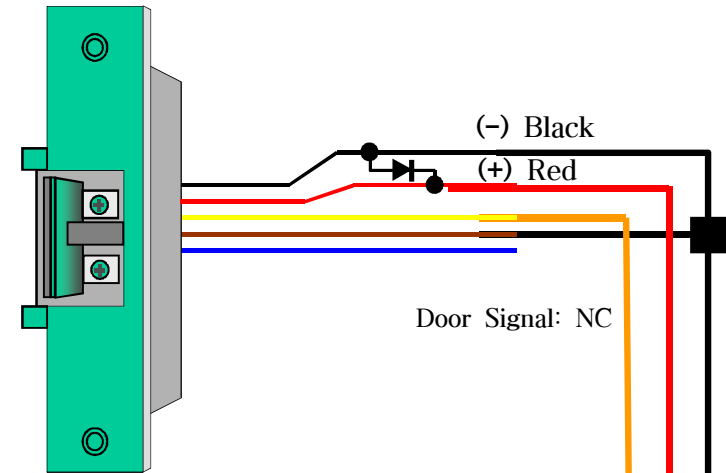
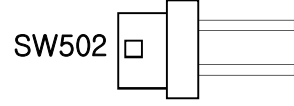
# 6. Connecting a Strike Type Door Lock (Fail Safe)

## 6.2. Connecting Two Systems/ One Lock

System 1  
Lock Type Select S/W(P)



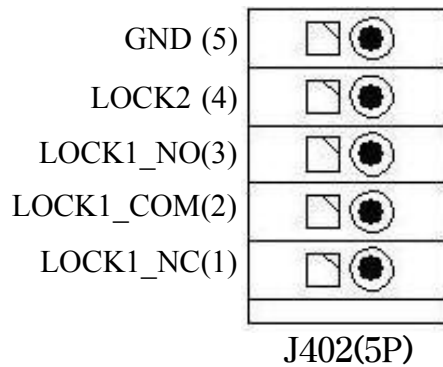
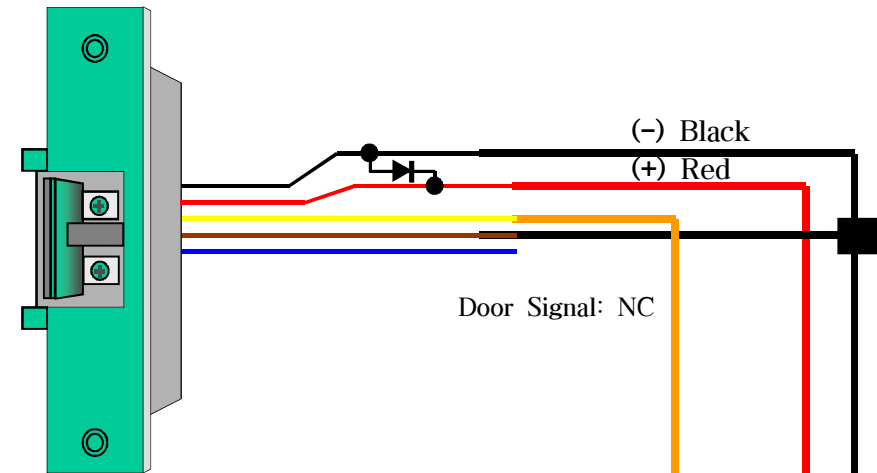
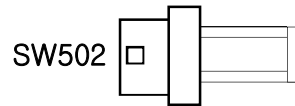
System 2  
Lock Type Select S/W(NP)



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

## 7.1. Connecting One System/ One Lock

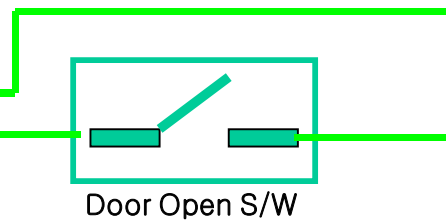
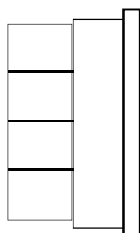
Lock Type Select S/W(P)



Lock (-)

Lock (+)

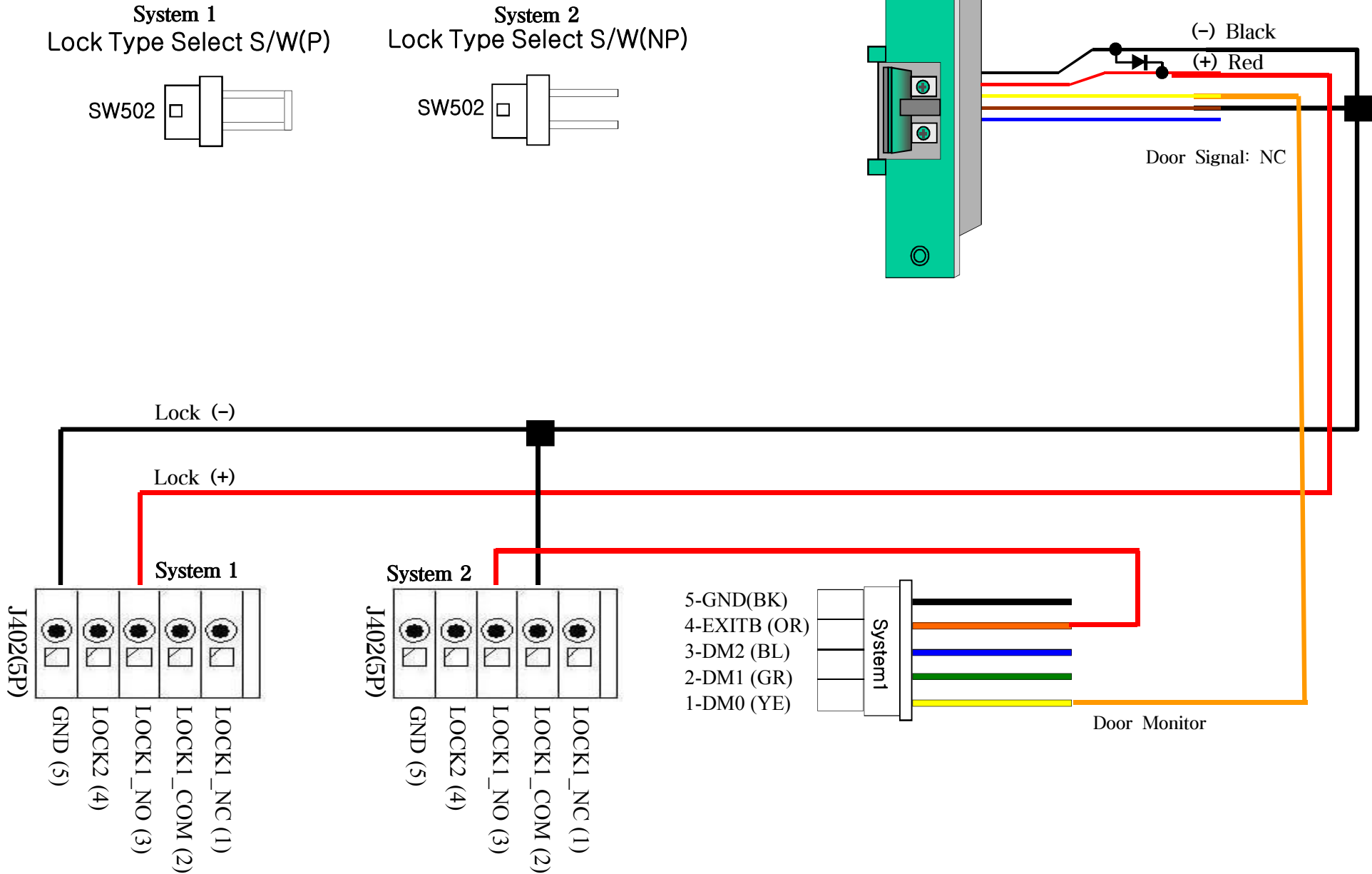
5-GND(BK)  
4-EXITB (OR)  
3-DM2 (BL)  
2-DM1 (GR)  
1-DM0 (YE)



Door Monitor

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

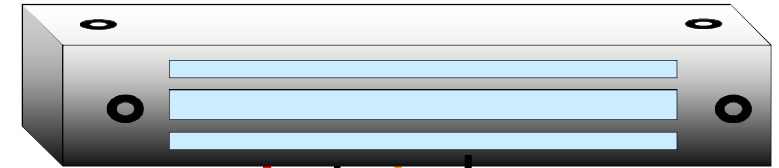
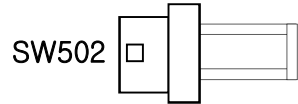
## 7.2. Connecting Two Systems/ One Lock



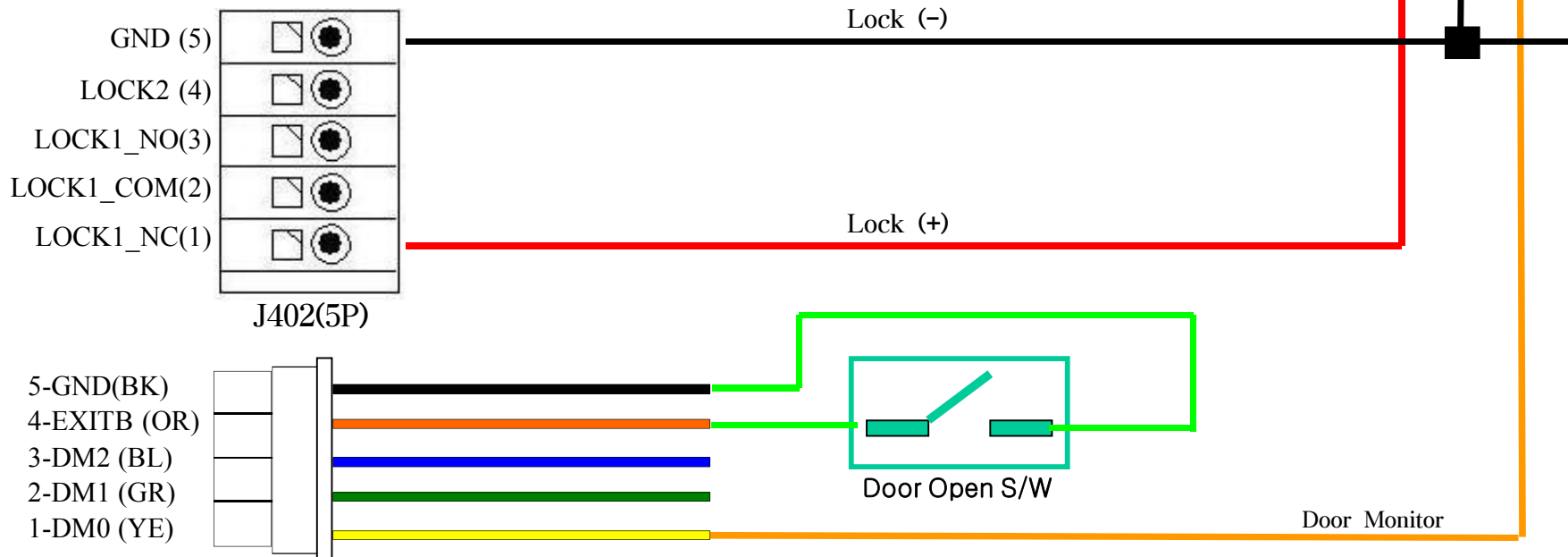
# 8. Connecting an EM Type Door Lock (Fail Safe)

## 8.1. Connecting One System/ One Lock

Lock Type Select S/W



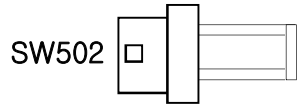
<EM Door Signal>  
Closed: NO-COM, Short  
          NC-COM, Open  
Opened: NO-COM, Open  
          NC-COM, Short



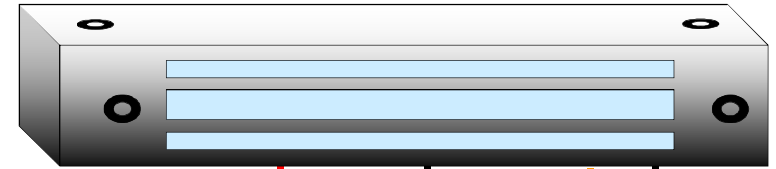
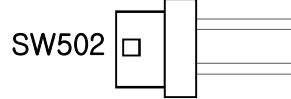
# 8. Connecting an EM Type Door Lock (Fail Safe)

## 8.2. Connecting Two Systems/ One Lock

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



**System 2**  
Lock Type Select S/W(NP)



(+) Red

(-) Black

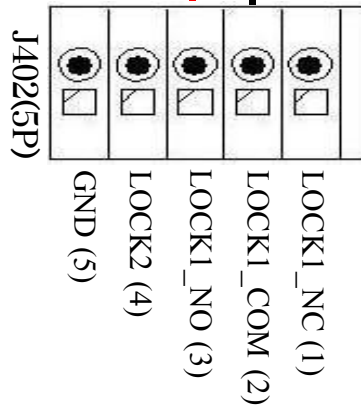
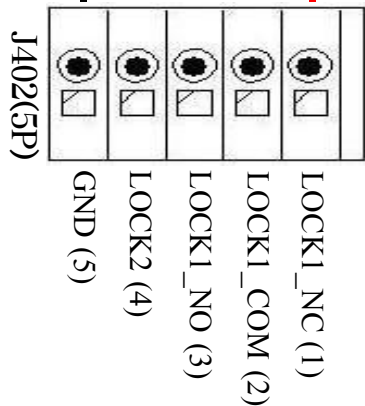
Door Signal: NC

Lock (-)

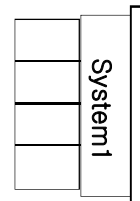
Lock (+)

**System 1**

**System 2**



- 5-GND(BK)
- 4-EXITB (OR)
- 3-DM2 (BL)
- 2-DM1 (GR)
- 1-DM0 (YE)

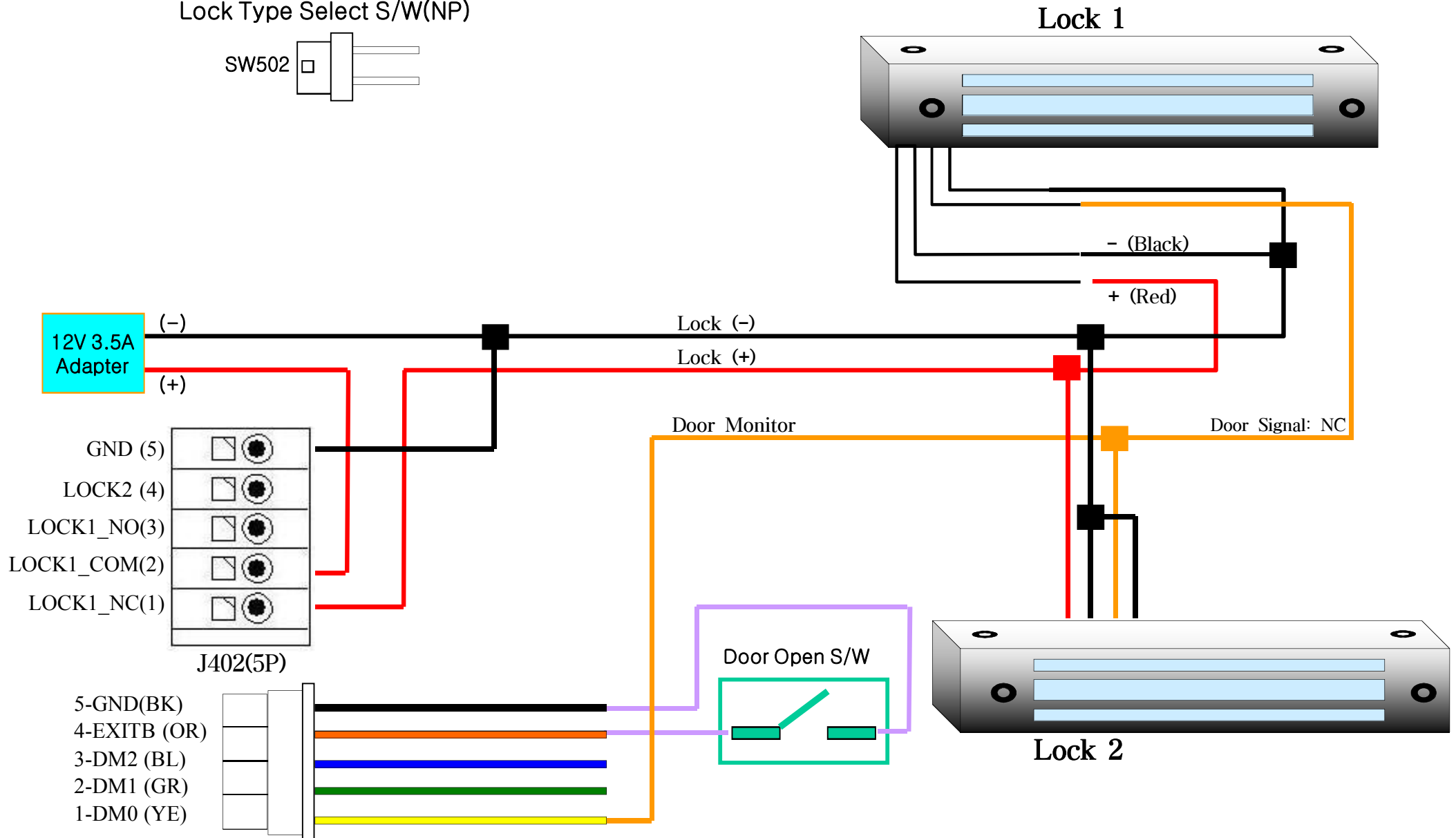
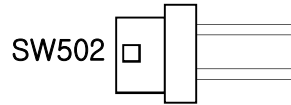


Door Monitor

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

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

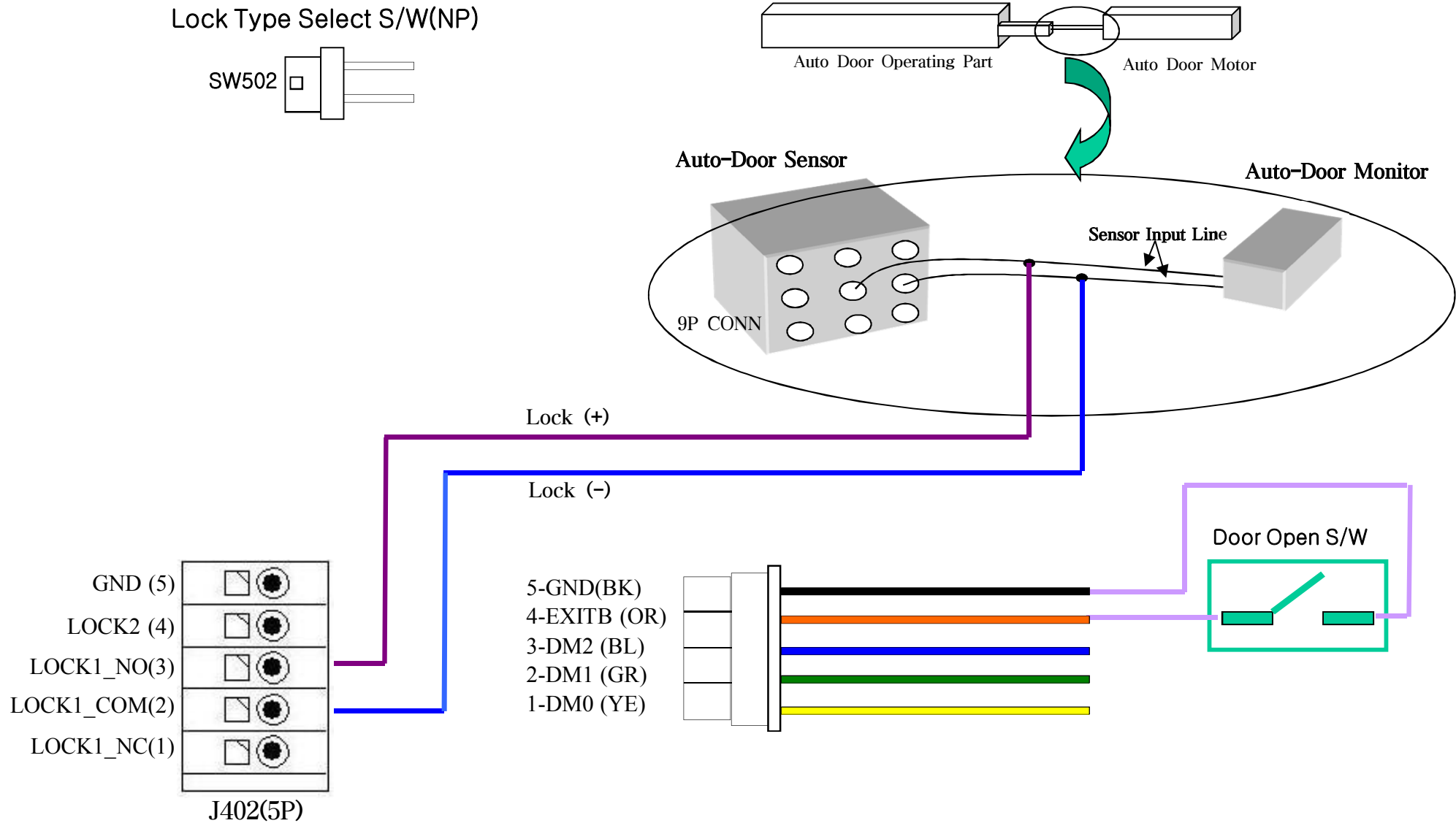
Lock Type Select S/W(NP)





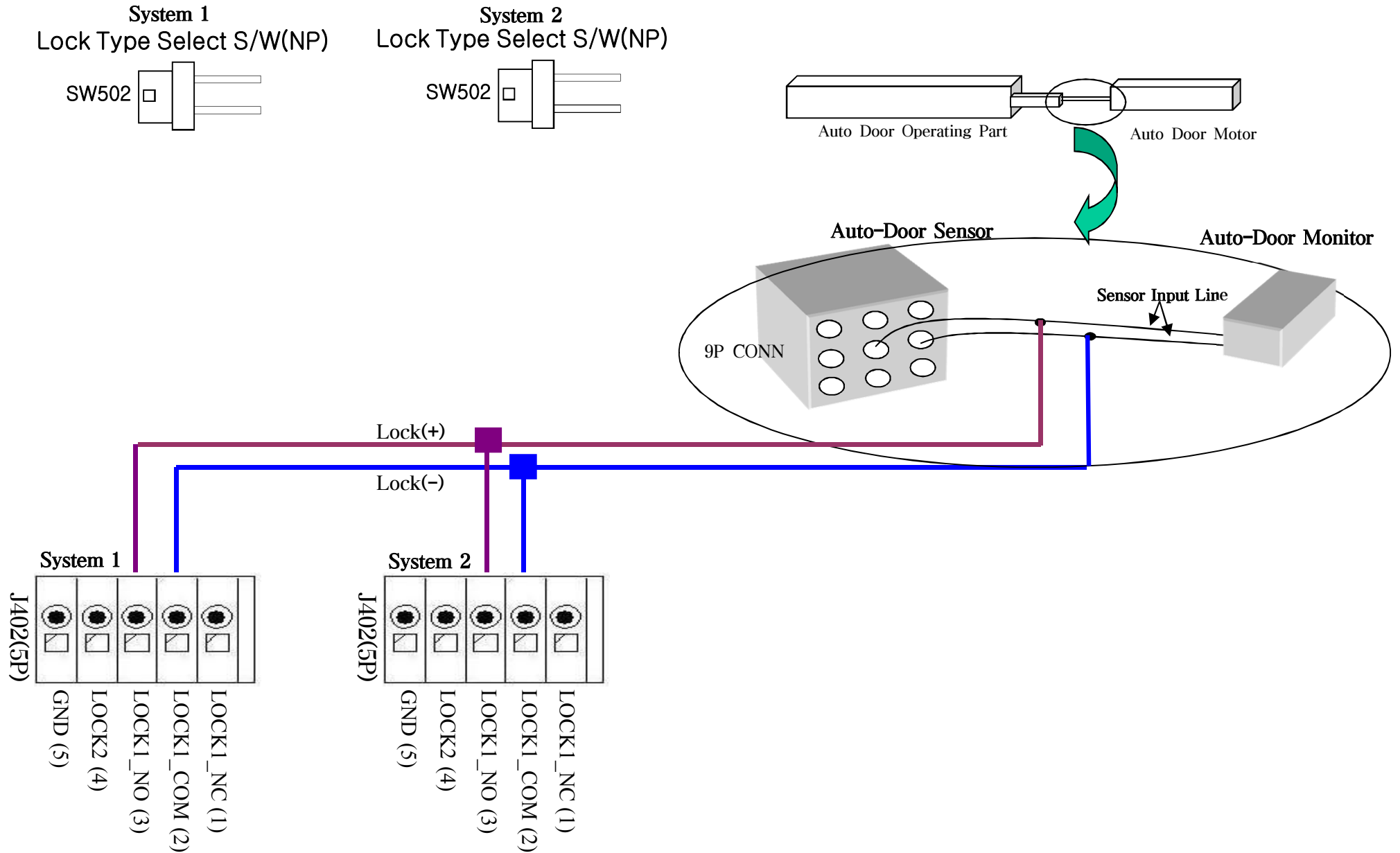
# 9. Connecting Auto-Door (Contact Control)

## 9.1. Connecting One System/ One Door

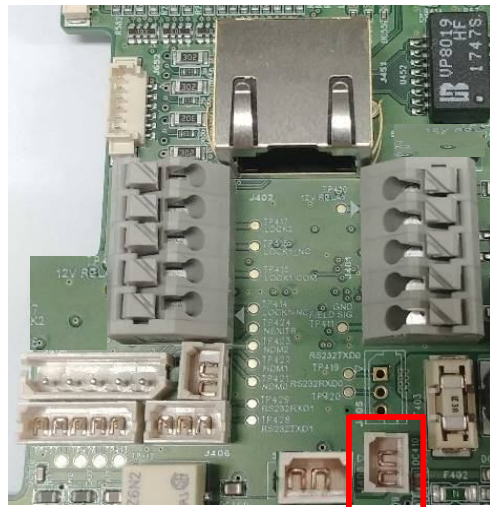


# 9. Connecting Auto-Door (Contact Control)

## 9.2. Connecting Two Systems/ One Door

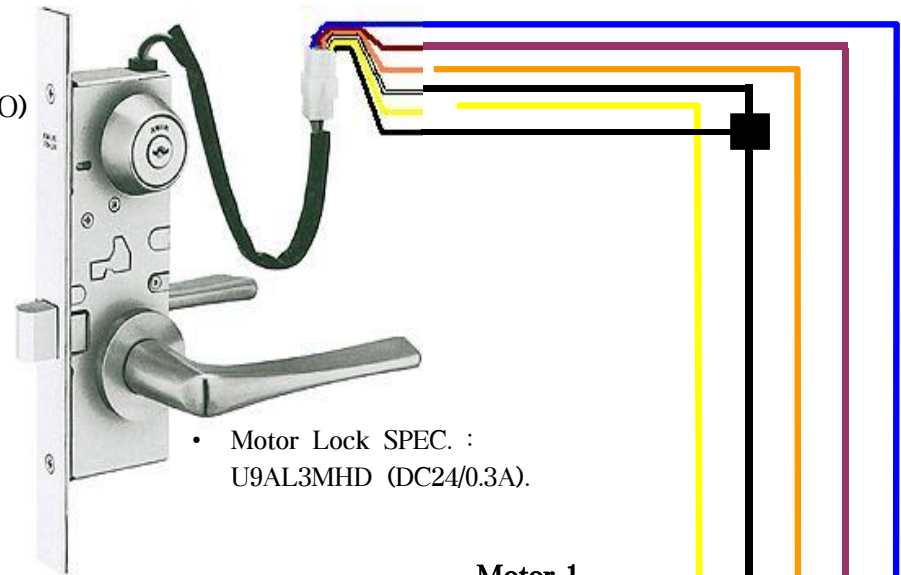


# 10. Connecting a Motorised Lock

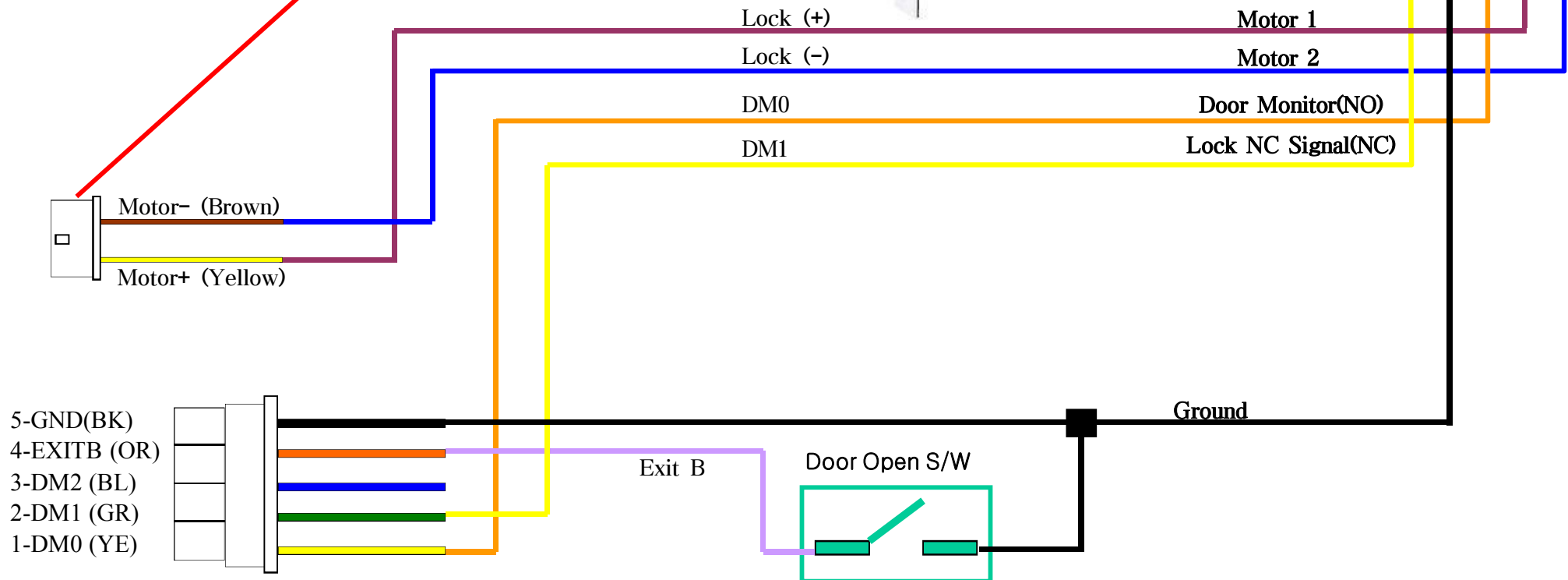


J408

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

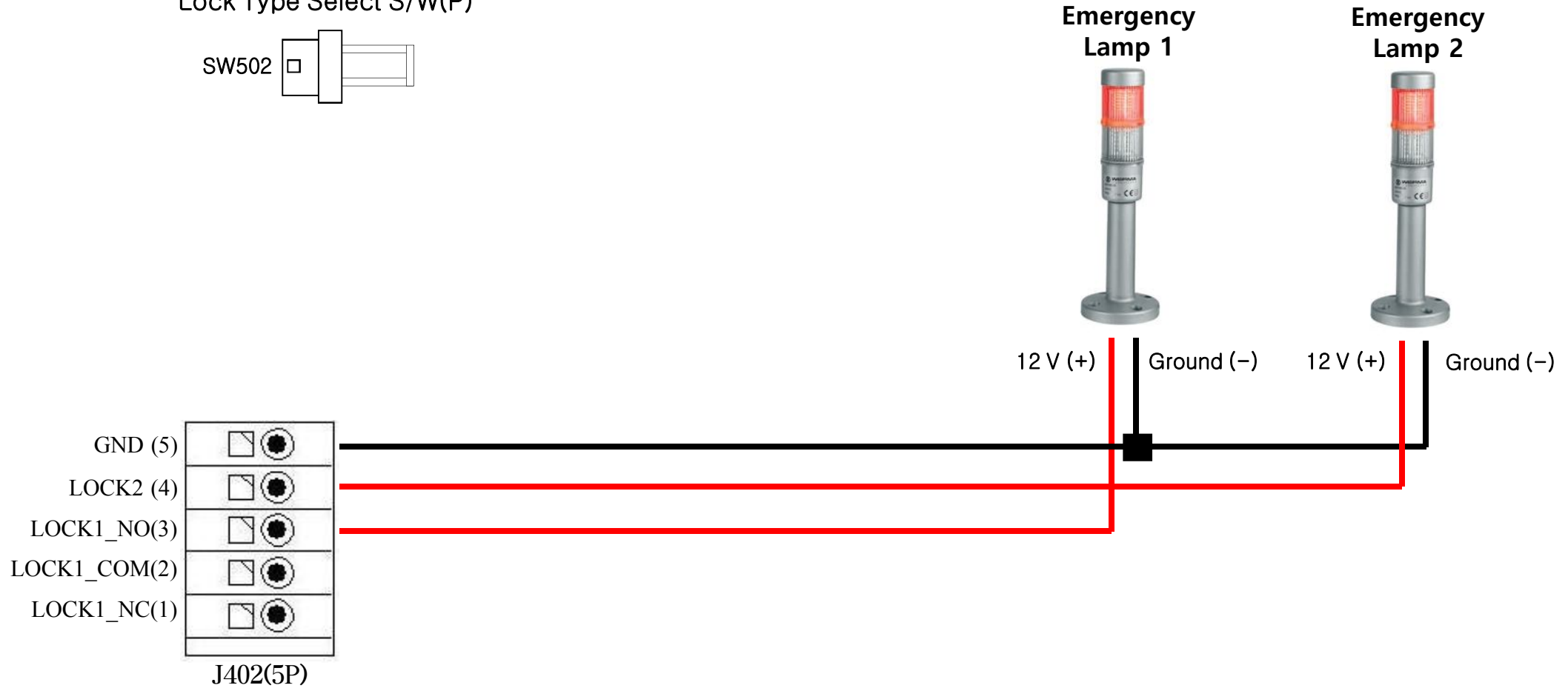
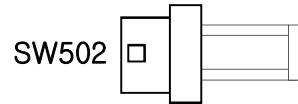


• Motor Lock SPEC. :  
U9AL3MHD (DC24/0.3A).



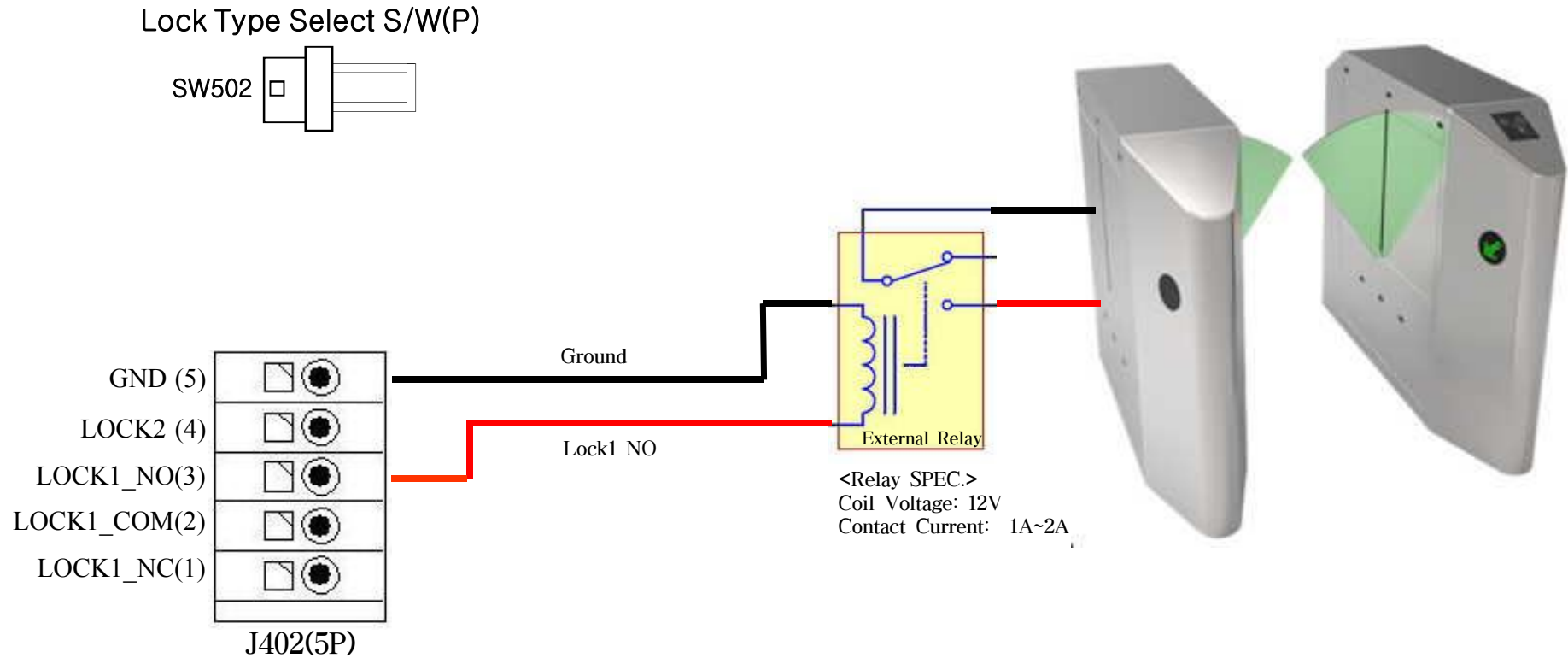
# 11. Connecting Two Emergency Lamps

Lock Type Select S/W(P)

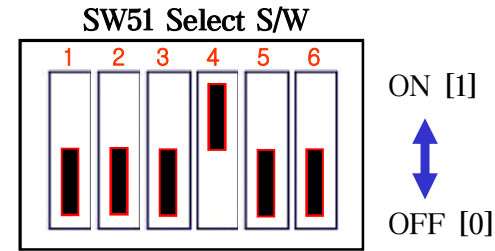


## 12.1 How to connect an external relay

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



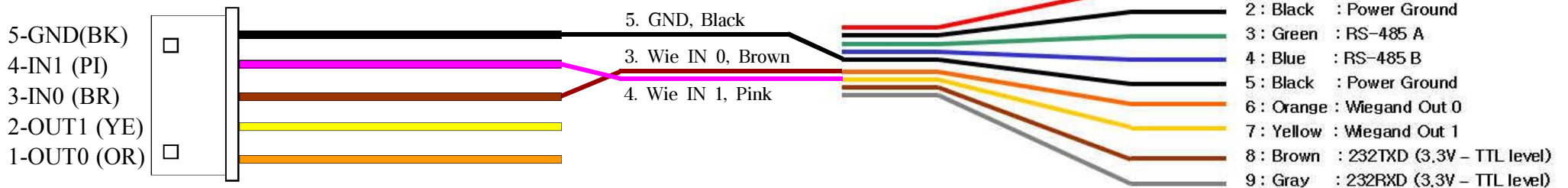
## 12.2 How to connect the VS-R20D RF Dummy Card Reader



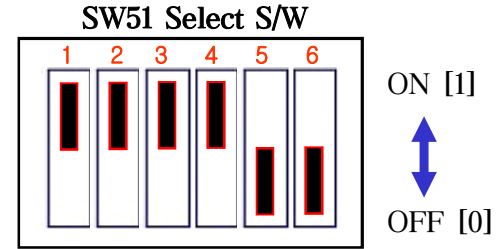
- \* 1, 2, 3 OFF: 26Bit
- \* 4 ON: Wiegand Mode



### Wiegand Cable (5P)



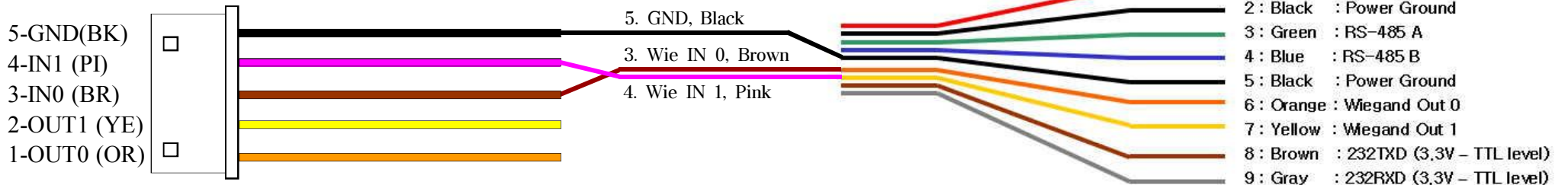
## 12.3 How to connect the VS-R20D SC Dummy Card Reader



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



### Wiegand Cable (5P)



## **\*\* Recommend installation guide1 (RF & SC Card)**



\*\* In order to prevent RF / SC card antenna interference between products, install at least 10cm apart from each other.

\*\* Card recognition distance may be reduced when installed within 10cm.



# \*\* Recommend installation guide 2

