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# Installation & Wiring Guide

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## FingerPrint Terminal

### AC-2000 & AC-2100PLUS

*Doc. Ver. : V1.1*

*JUN.,24.2019*

*R&D Center*

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

# 1. Cable Descriptions



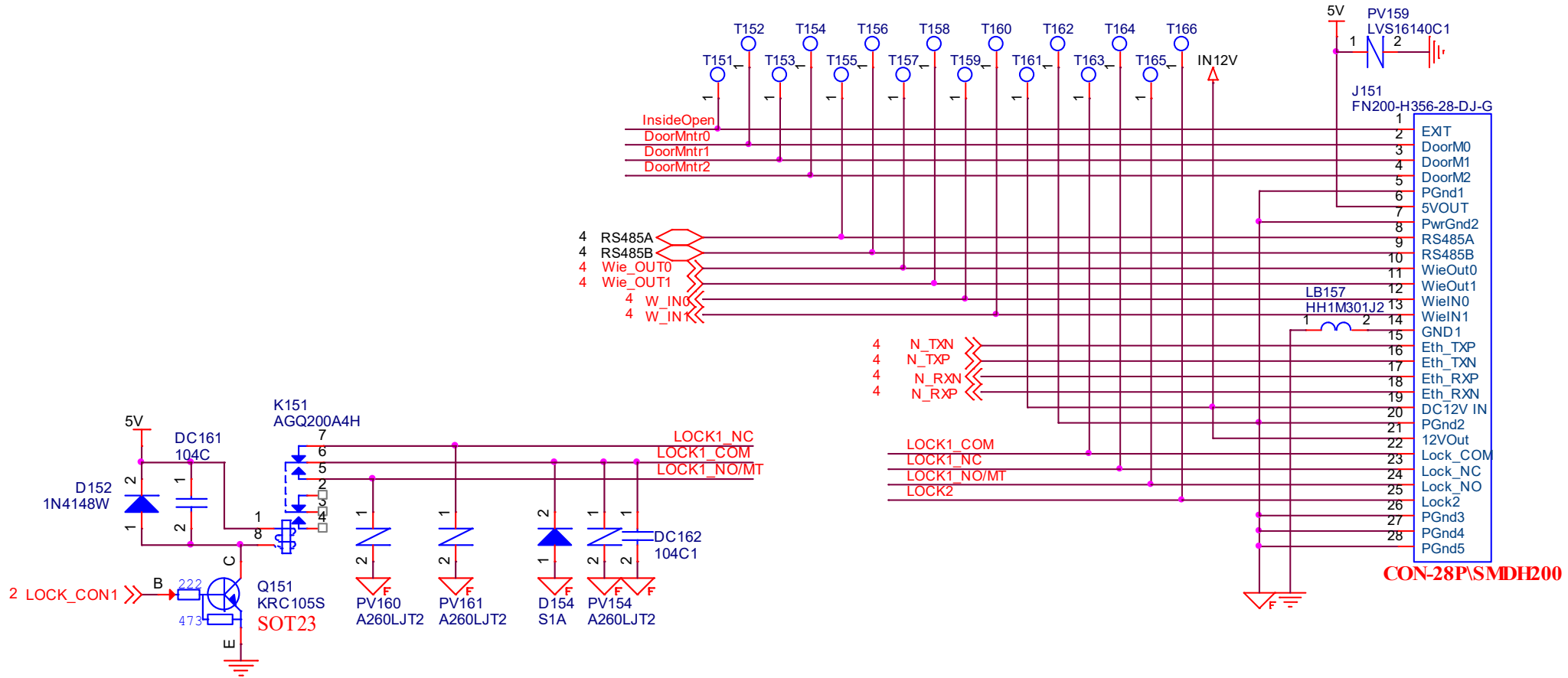
- 1. Orange : EXIT : EXT
- 2. Yellow : DM0 : DM0
- 3. Green : DM1 : DM1
- 5. Black : Gnd : GND
- 6. Red : 5V : 5V
- 7. Black : Gnd : GND
- 8. Green : RS485A : R4A
- 9. Blue : RS465B : R4B

- 10. Orange : WieOut0 : WO0
- 11. Yellow : WieOut1 : WO1
- 12. Brown : WieIN0 : WI0
- 13. Pink : WieIN1 : WI1
- 14. Black : Gnd : GND
- 15. Black : E\_TXP
- 16. Blue: E\_TXN
- 17. Yellow : E\_RXP
- 18. Green : E\_RXN
- 19. Red : 12V IN : 12V
- 20. Black : Gnd : GND

- 21.Red : 12V Out : 12V
- 22.Gray : Lock 1 Com : L1C
- 23.Brown : Lock 1 NC : L1NC
- 24.White : Lock 1 NO : L1NO
- 26. Black : Gnd : GND
- 27. Black : Gnd : GND
- 28. Black : Gnd : GND

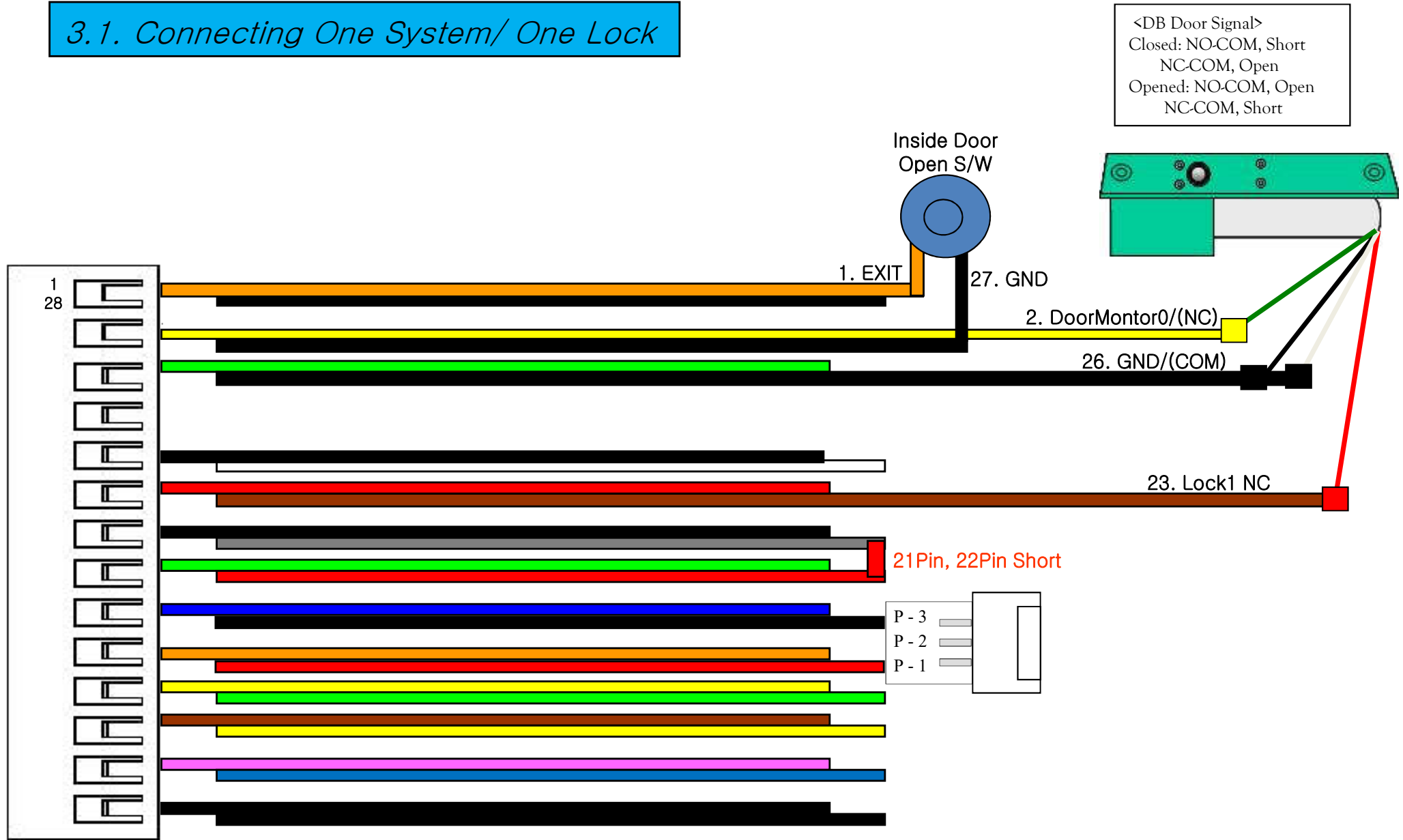
H3	Color	H1
P1	Black	I5
P2	Blue	I6
P3	Yellow	I7
P4	-	-
P5	-	-
P6	Green	I8
P7	-	-
P8	-	-

# 2. Schematic for Door Lock Interface



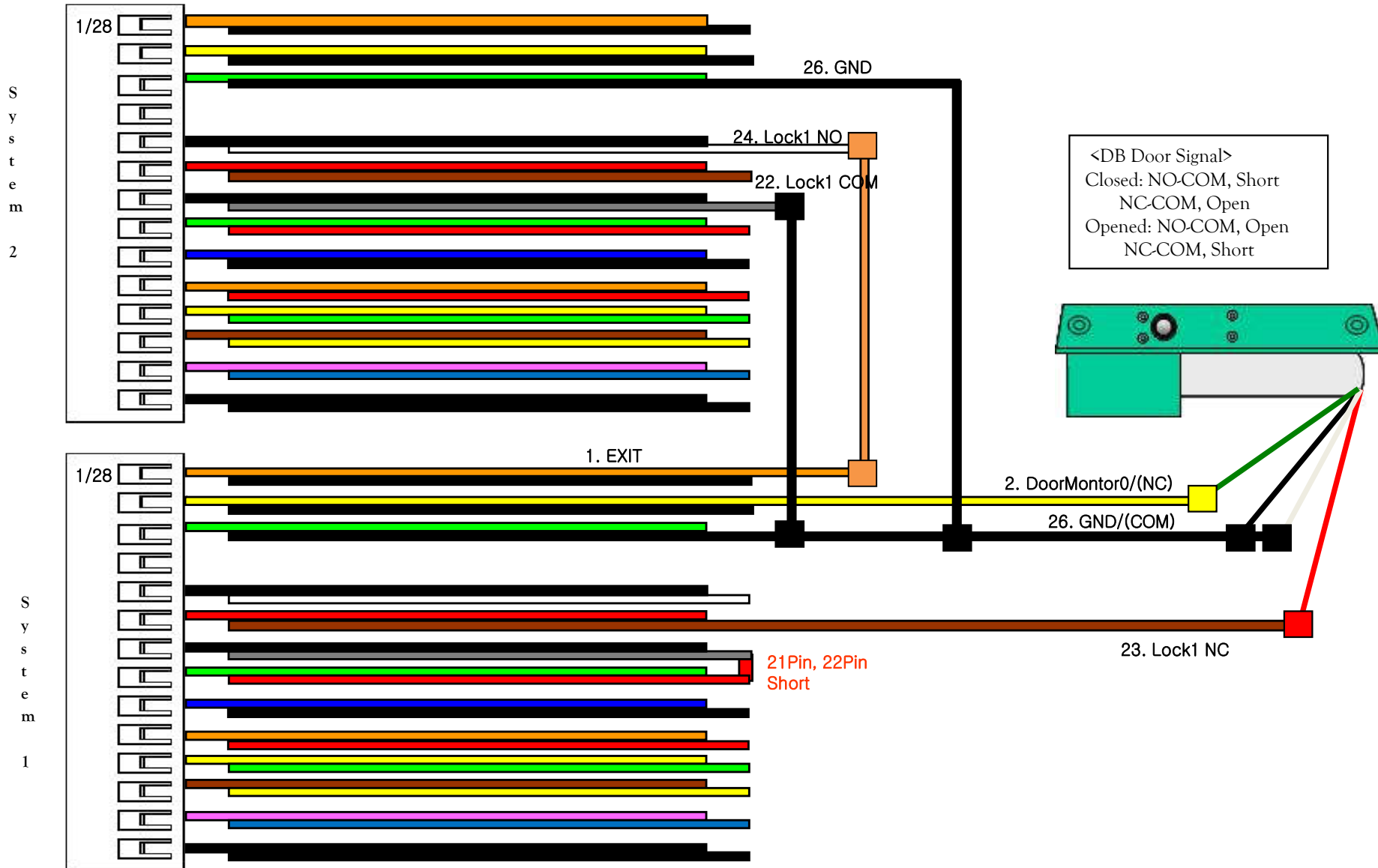
# 3. Connecting Dead-Bolt Type Door Lock (Fail Safe)

## 3.1. Connecting One System/ One Lock



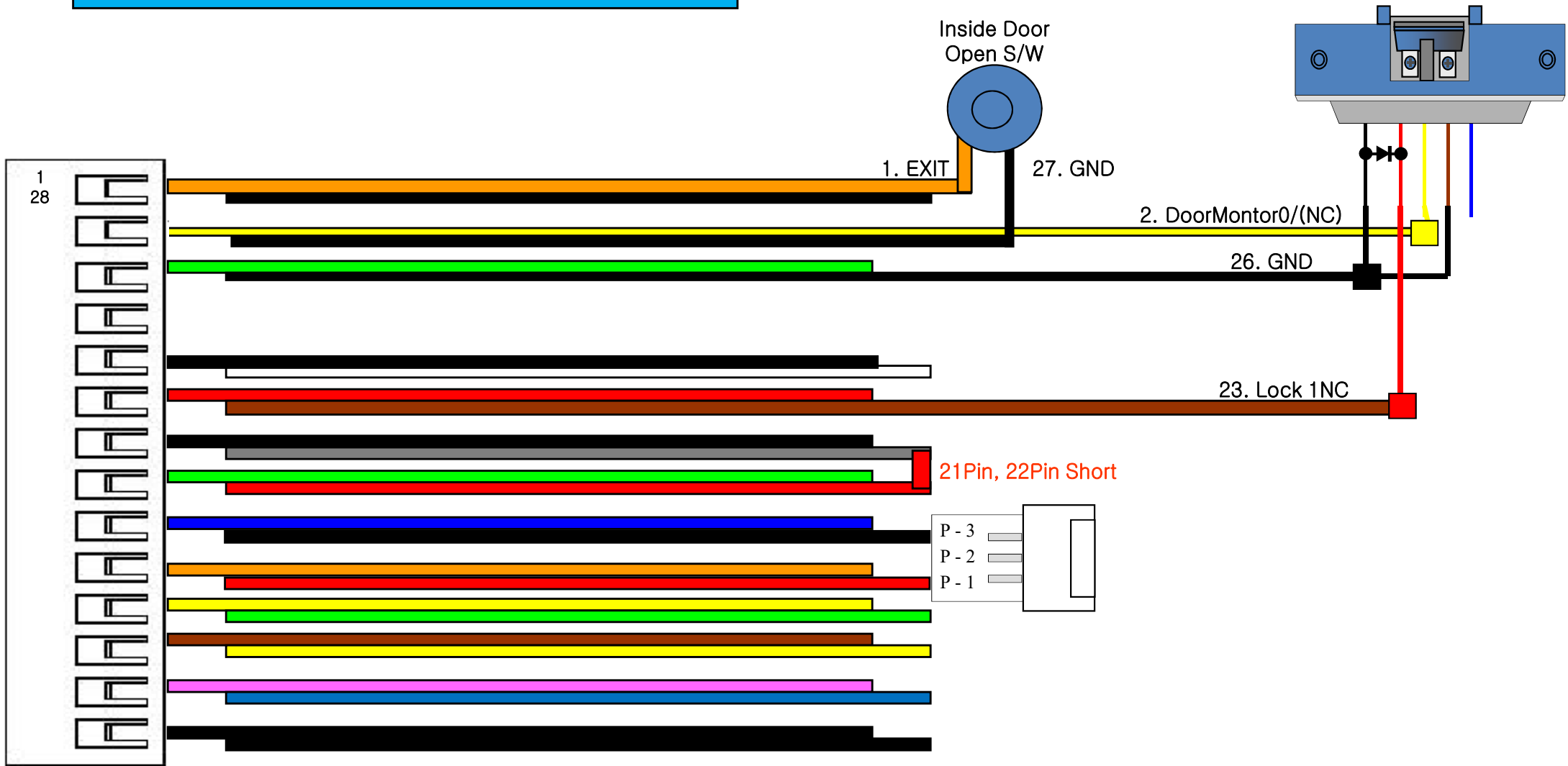
# 3. Connecting Dead-Bolt Type Door Lock (Fail Safe)

## 3.2. Connecting Two Systems/ One Lock



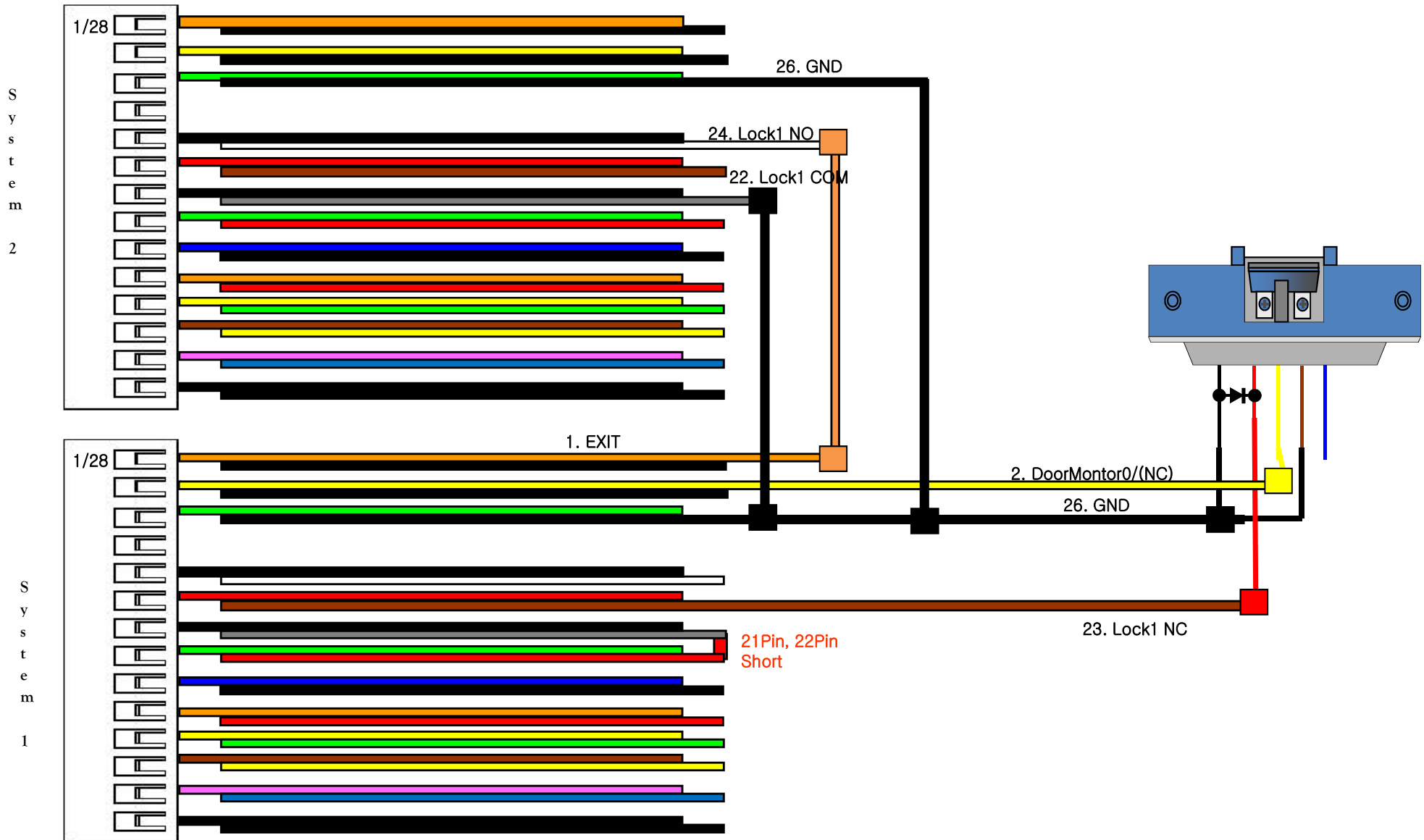
# 4. Connecting Strike Type Door Lock (Fail Safe)

## 4.1. Connecting One System/ One Lock



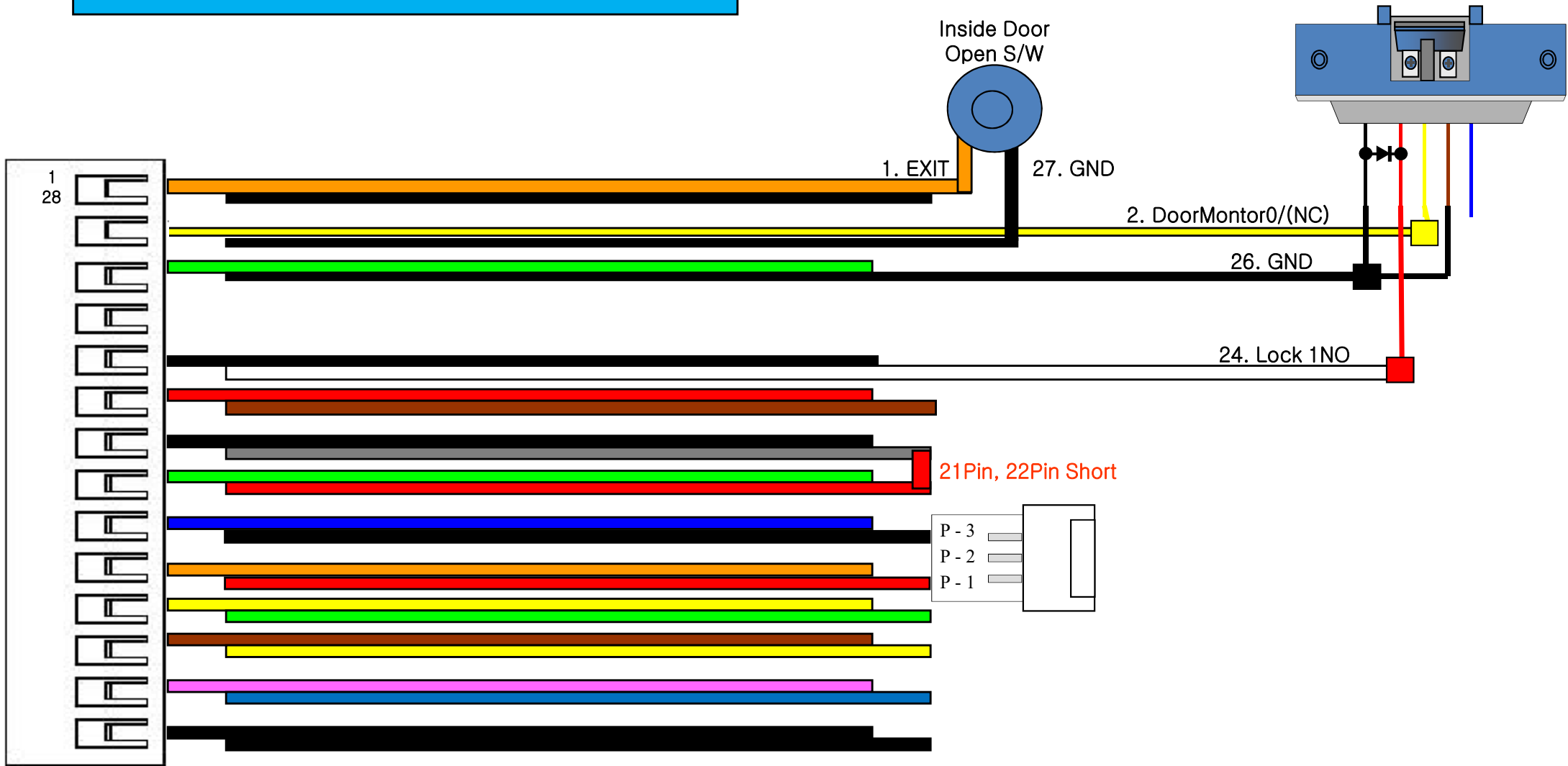
# 4. Connecting Strike Type Door Lock (Fail Safe)

## 4.2. Connecting Two Systems/ One Lock



# 5. Connecting Strike Type Door Lock (Fail Secure)

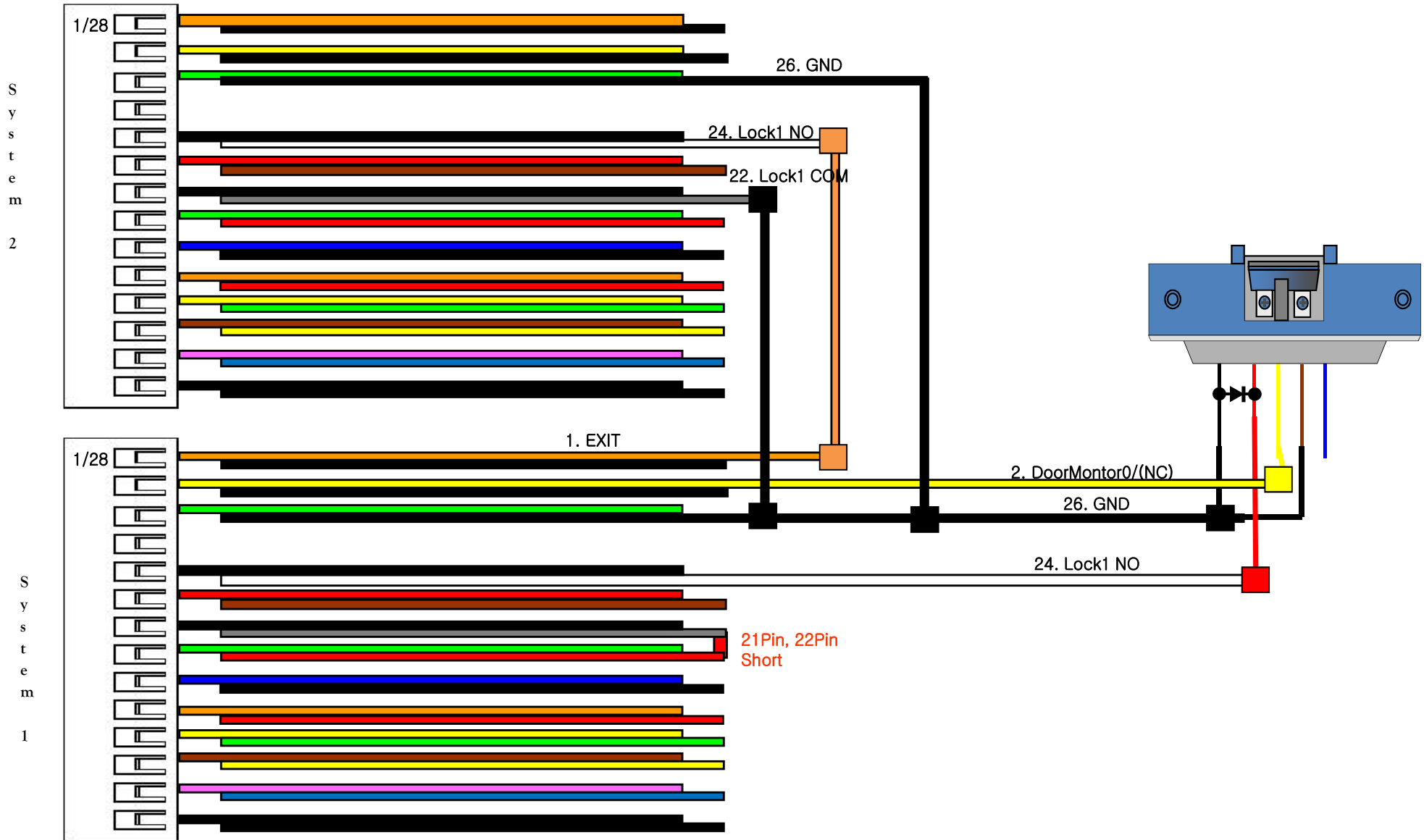
## 5.1. Connecting One System/ One Lock





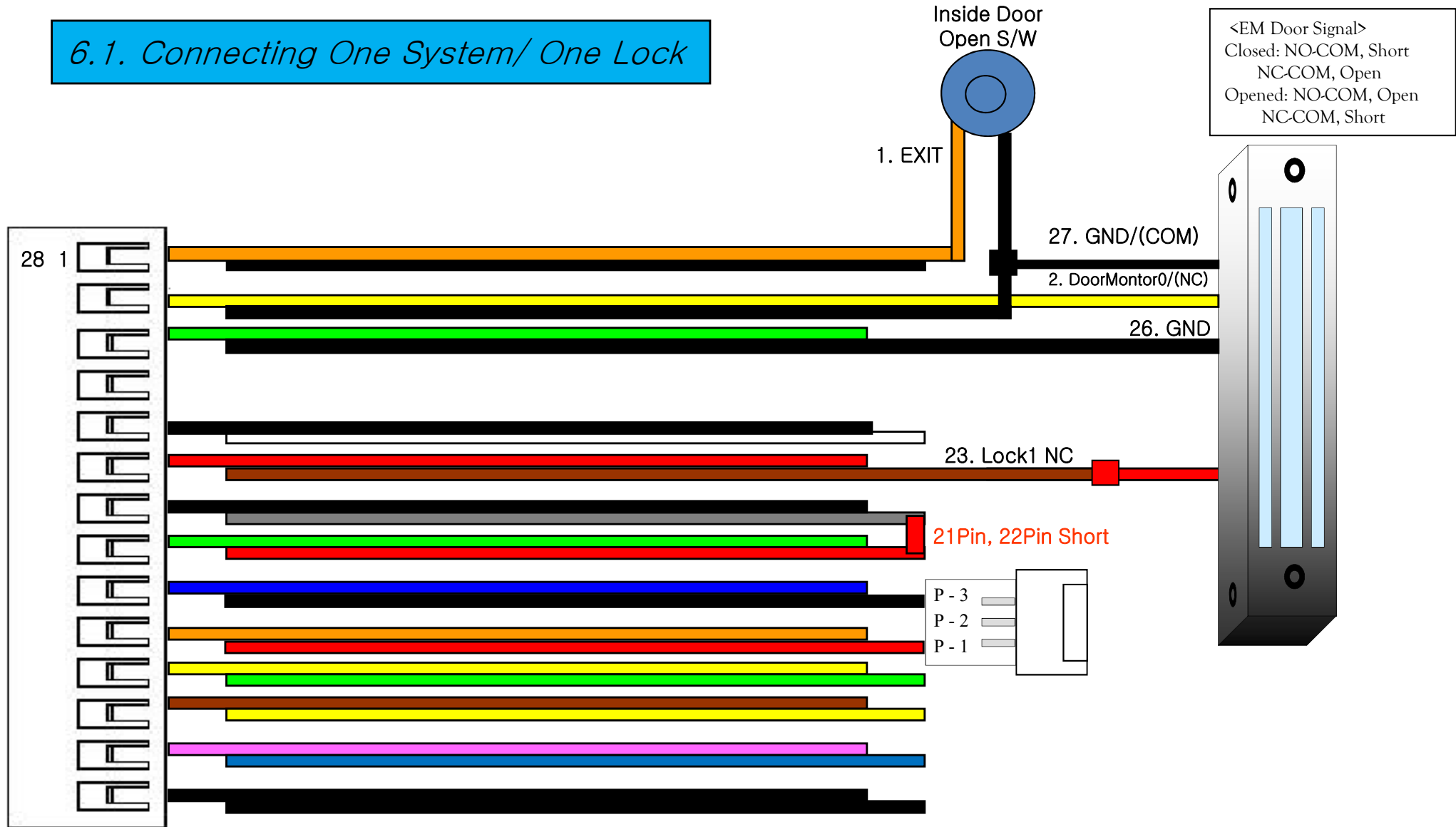
# 5. Connecting Strike Type Door Lock (Fail Secure)

## 5.2. Connecting Two Systems/ One Lock



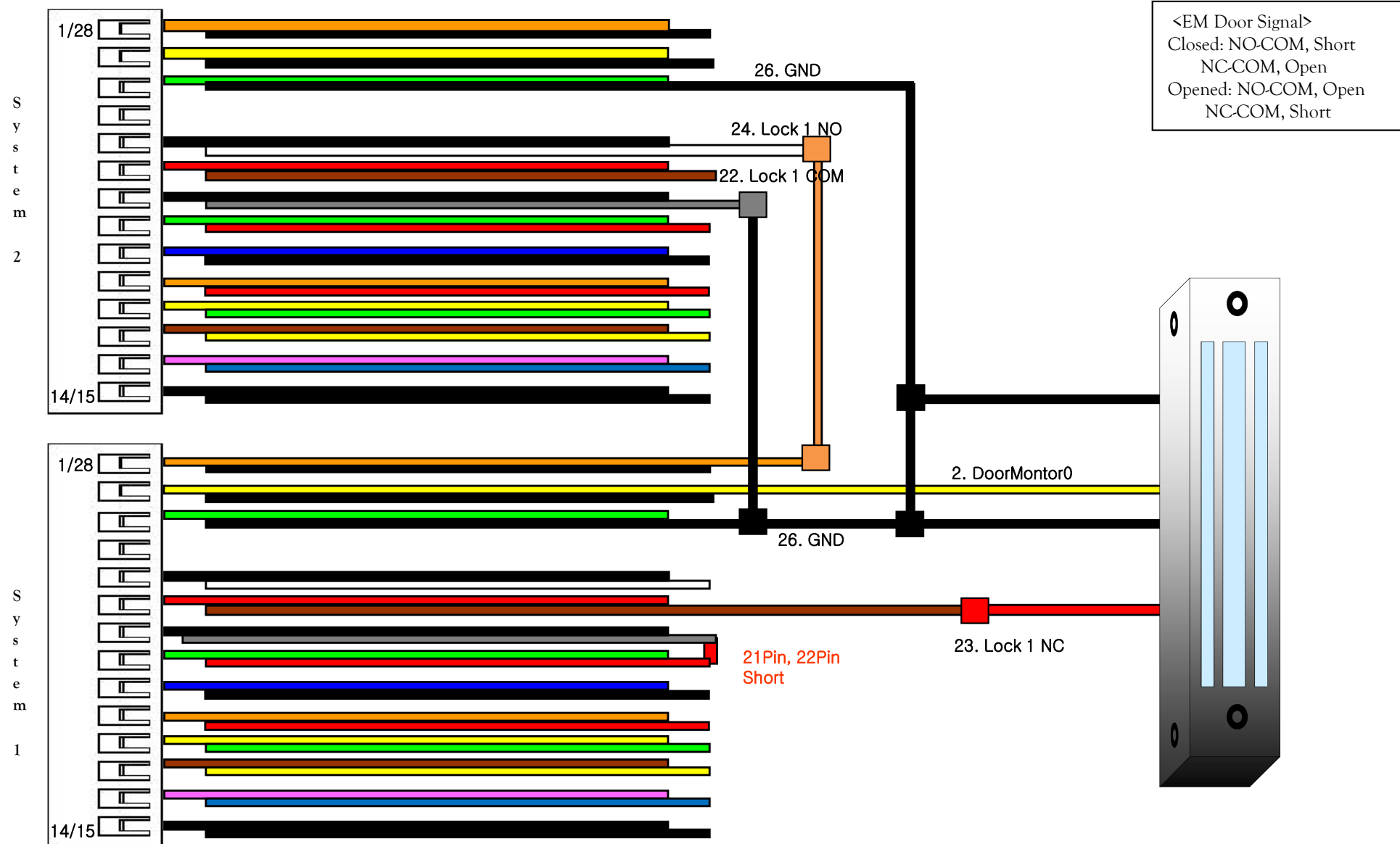
# 6. Connecting an EM Type Door Lock (Fail Safe)

## 6.1. Connecting One System/ One Lock



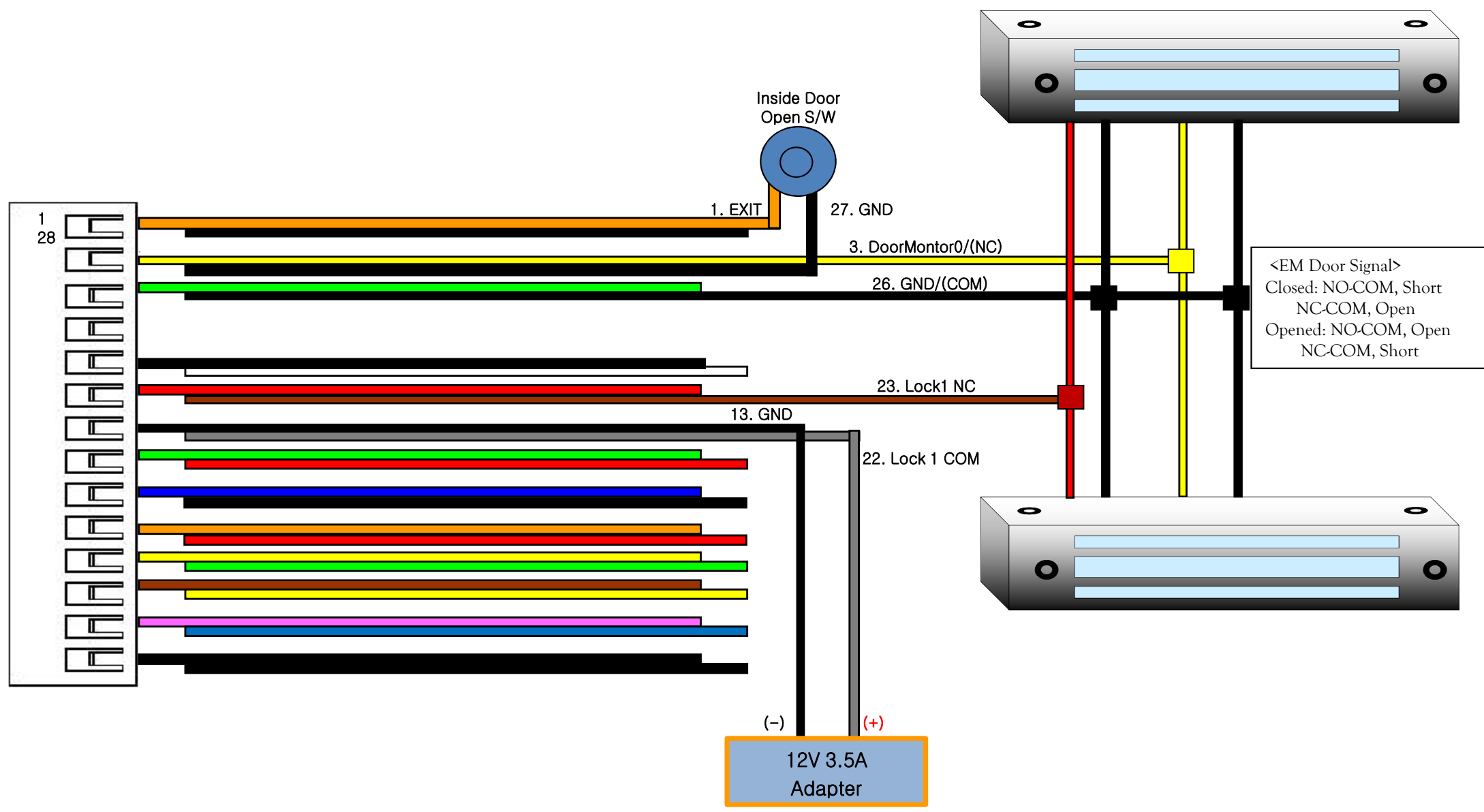
# 6. Connecting an EM Type Door Lock (Fail Safe)

## 6.2. Connecting Two Systems/ One Lock



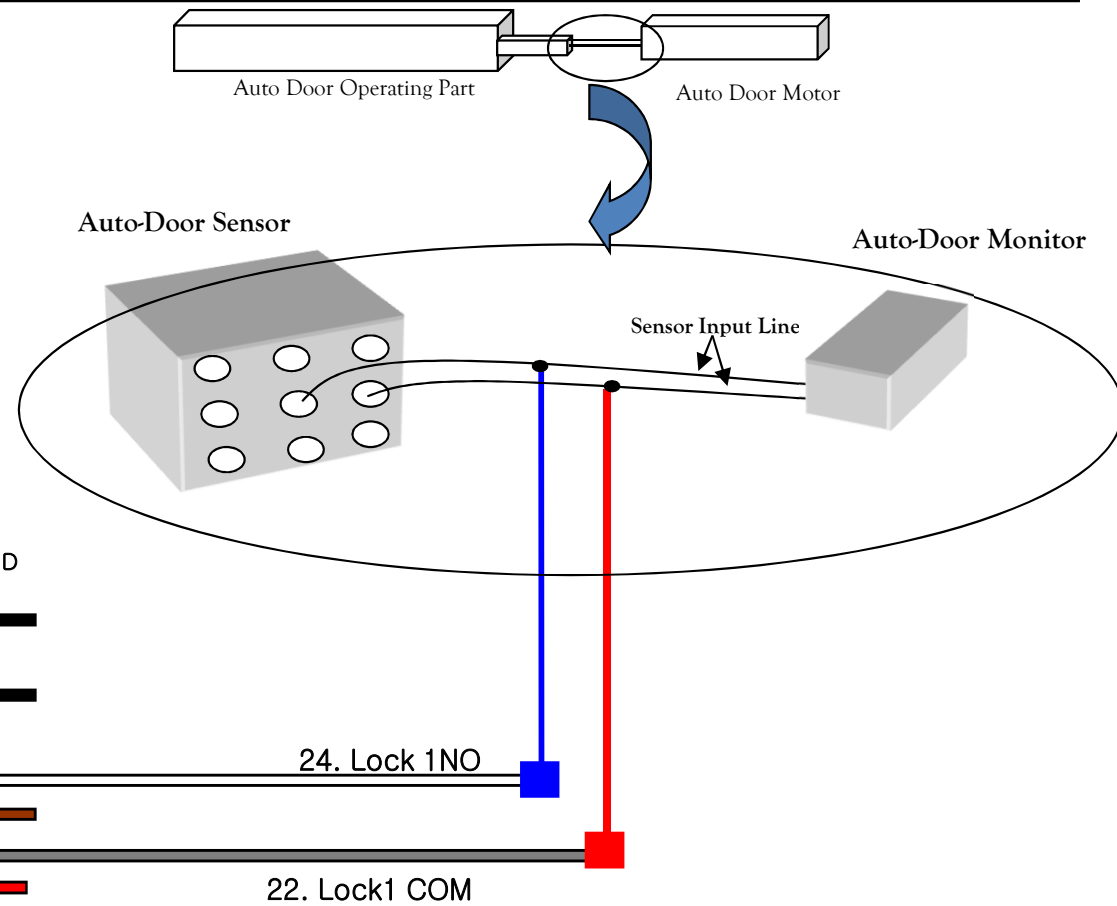
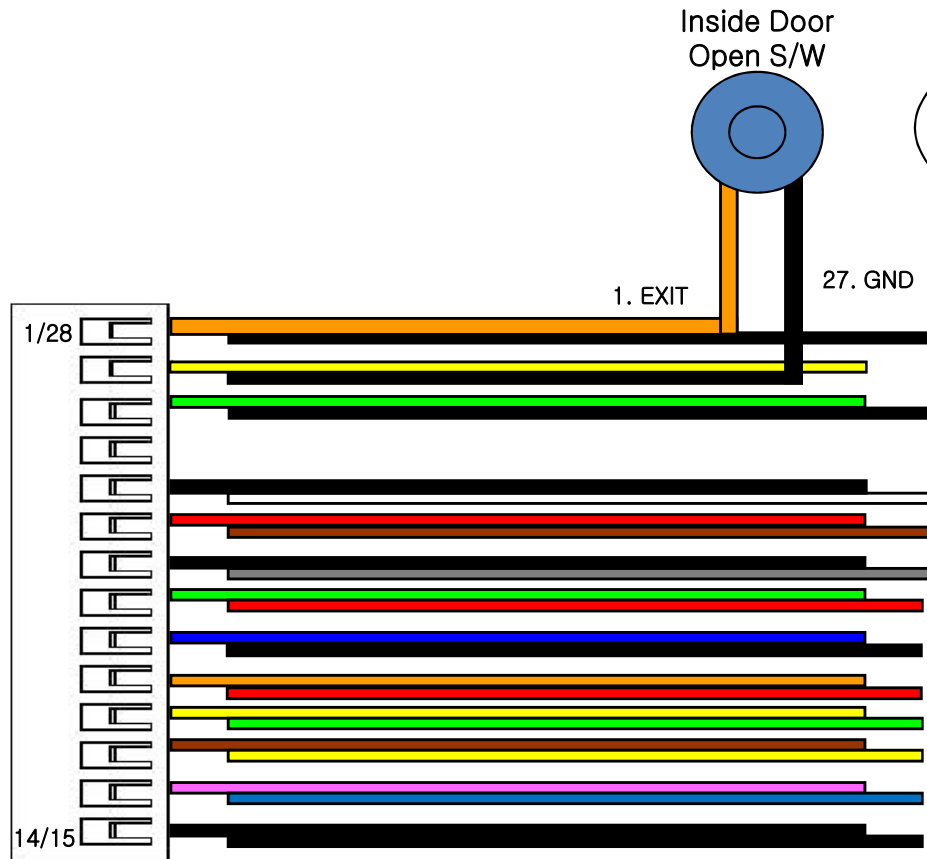
# 6. Connecting an EM Type Door Lock (Fail Safe)

## 6.3. Connecting One System/ Two Locks "Use external DC Power adapter"



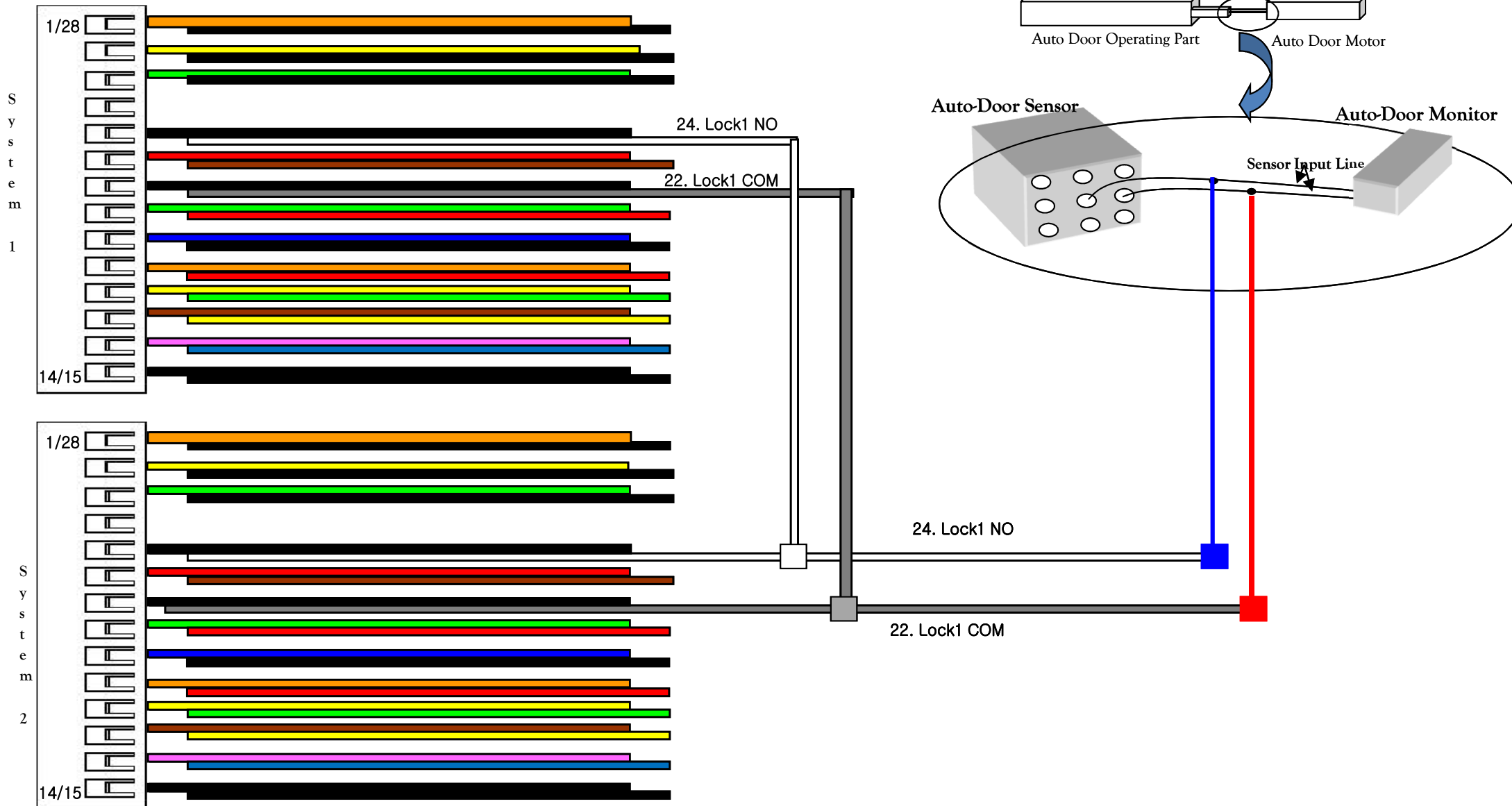
# 7. Connecting Auto-Door (Contact Control)

## 7.1. Connecting One System/ One Door

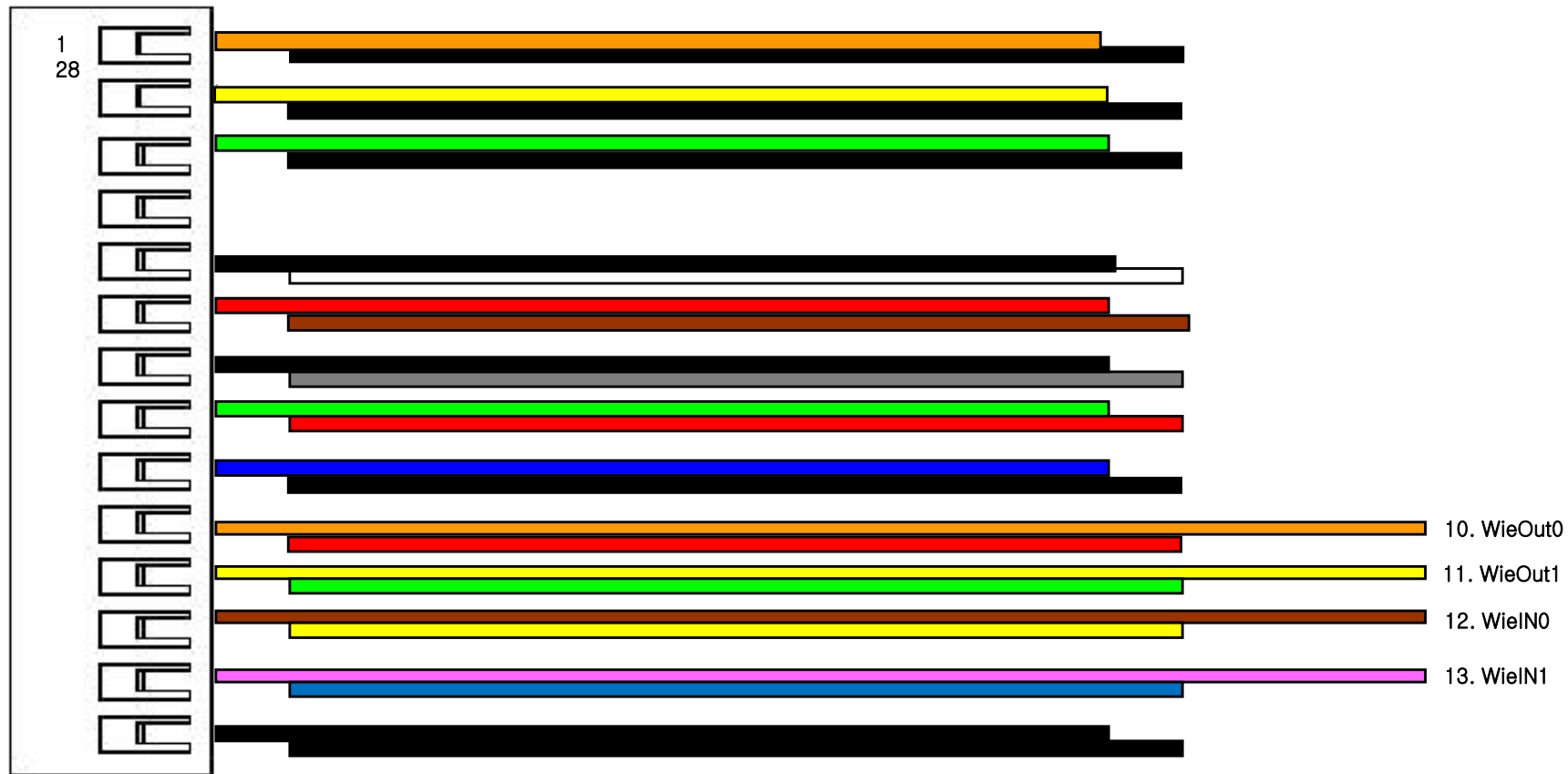


# 8. Connecting Auto-Door (Contact Control)

## 7.2. Connecting Two Systems/ One Lock

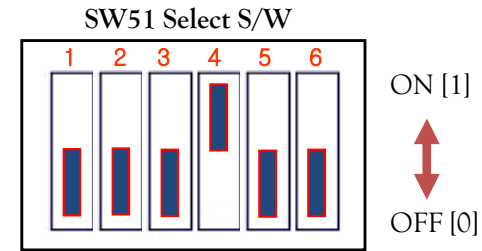


# 9. Connecting Wiegand IN/OUT to External Controller

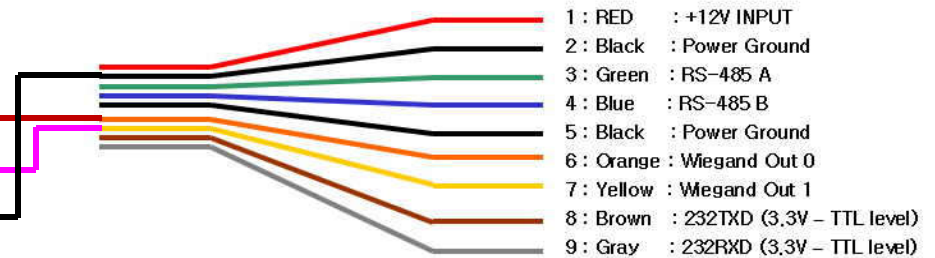


# 10. Appendix

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



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

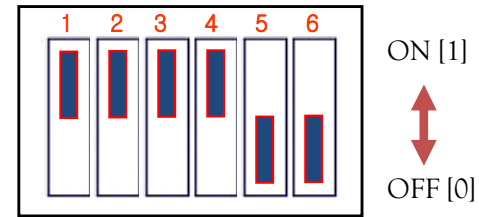




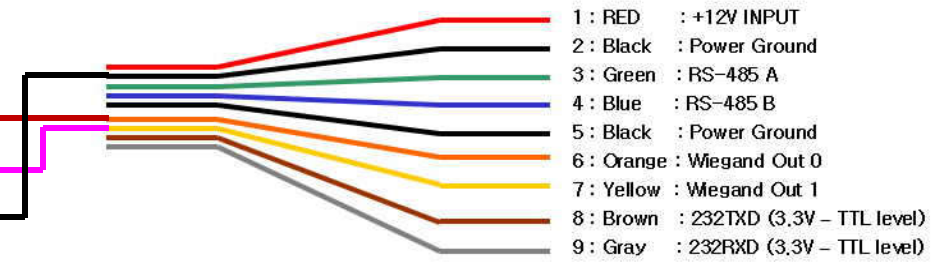
# 10. Appendix

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

SW51 Select S/W

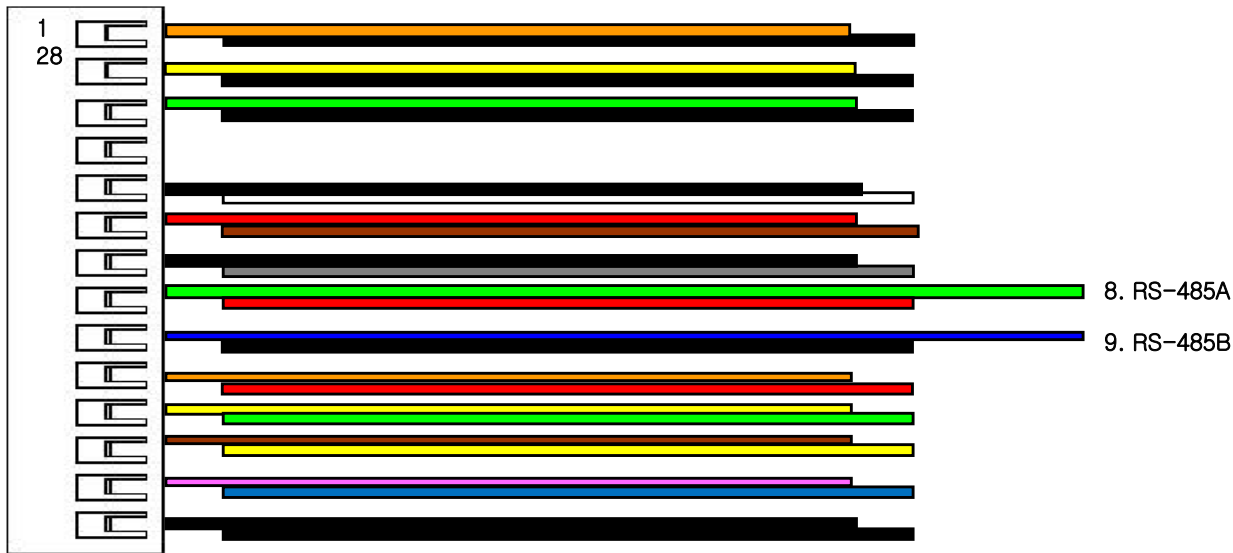


- \* 1, 2, 3 ON: 34Bit
- \* 4 ON: Wiegand Mode

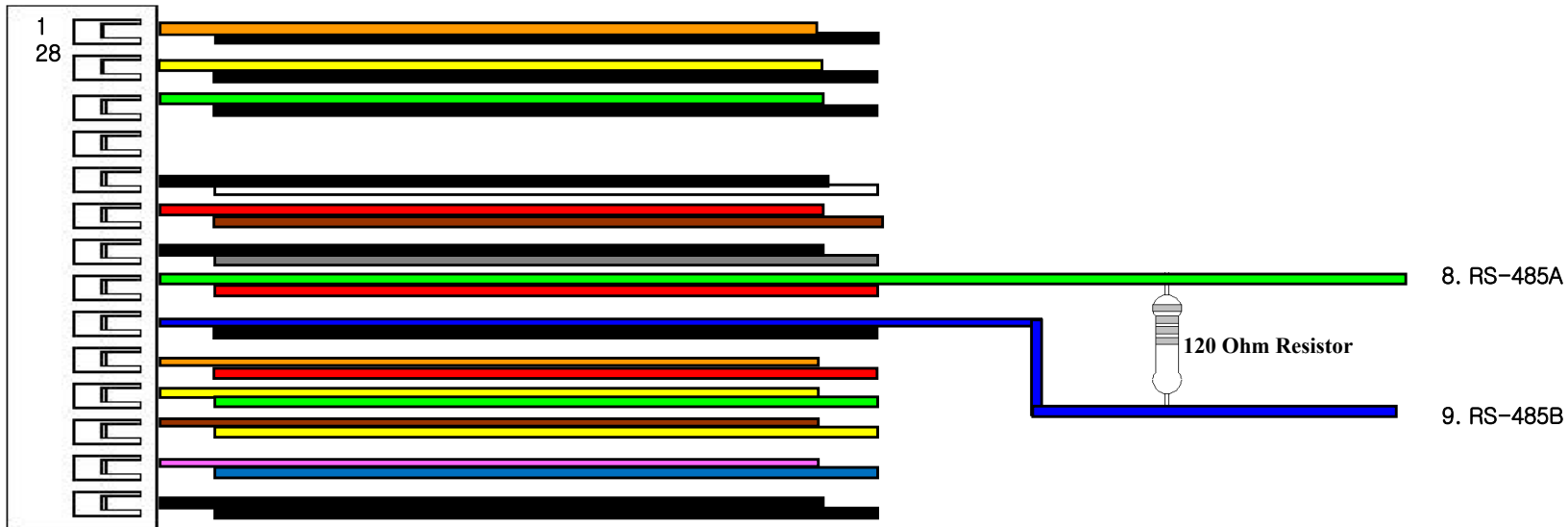


# 11. Resistor Setting for RS485 End Termination

## 11.1 RS-485 Setting : Default Setting is off.



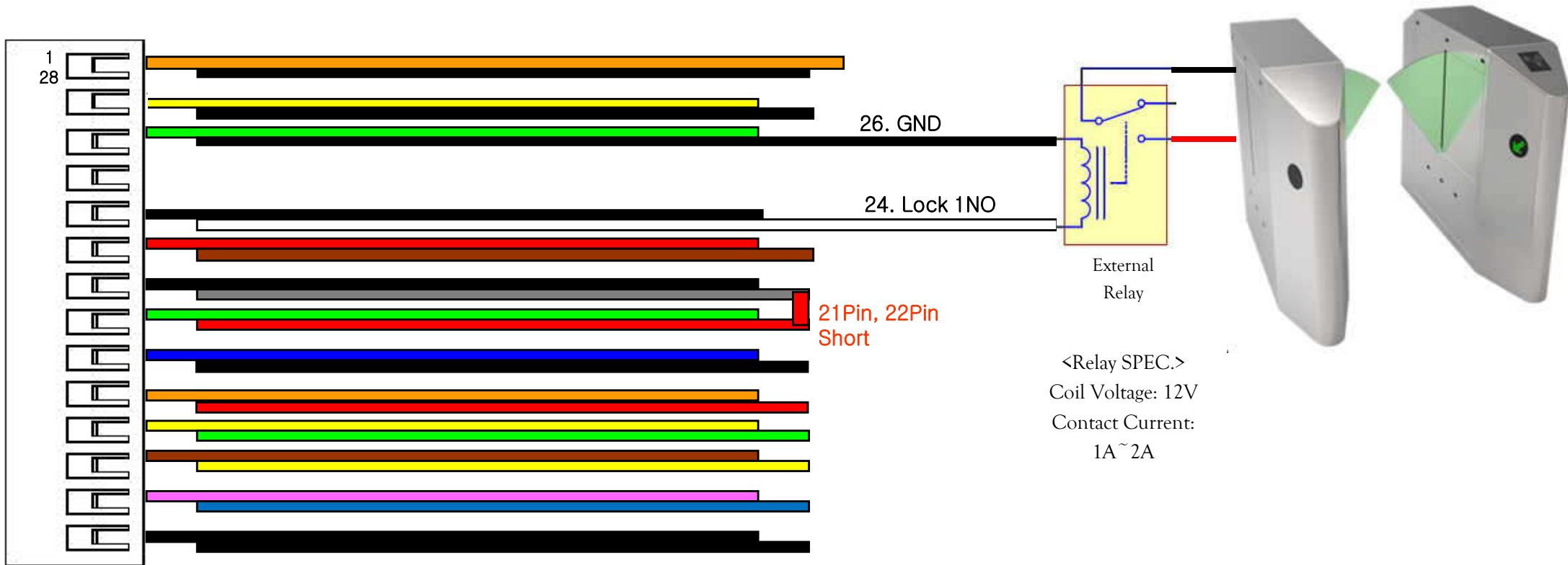
## 11.2 RS-485 Setting : ON: 120 Ohm Resistor is connected between 485A and 485B



# 12. Appendix

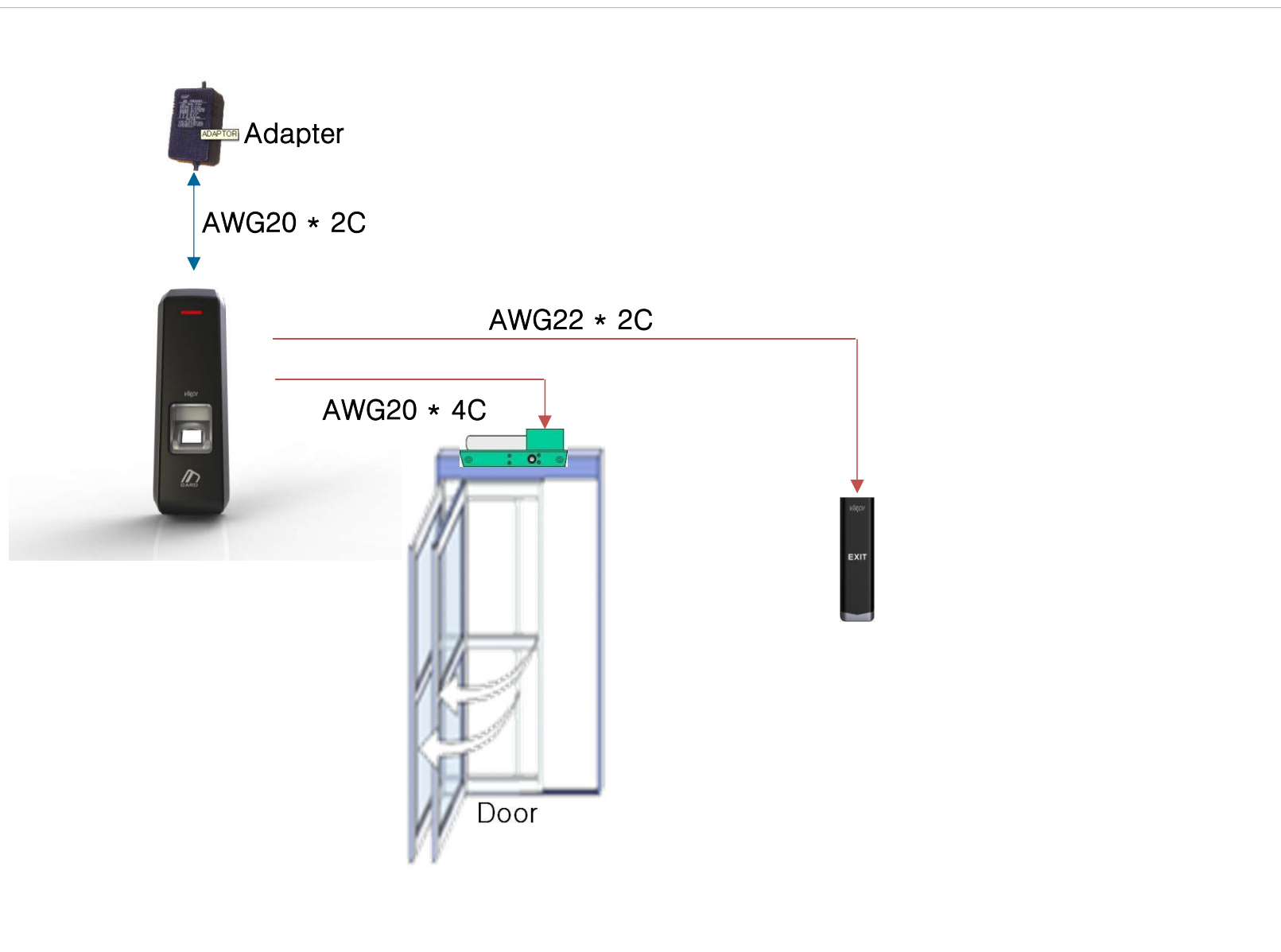
## 12. How to connect an external relay

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



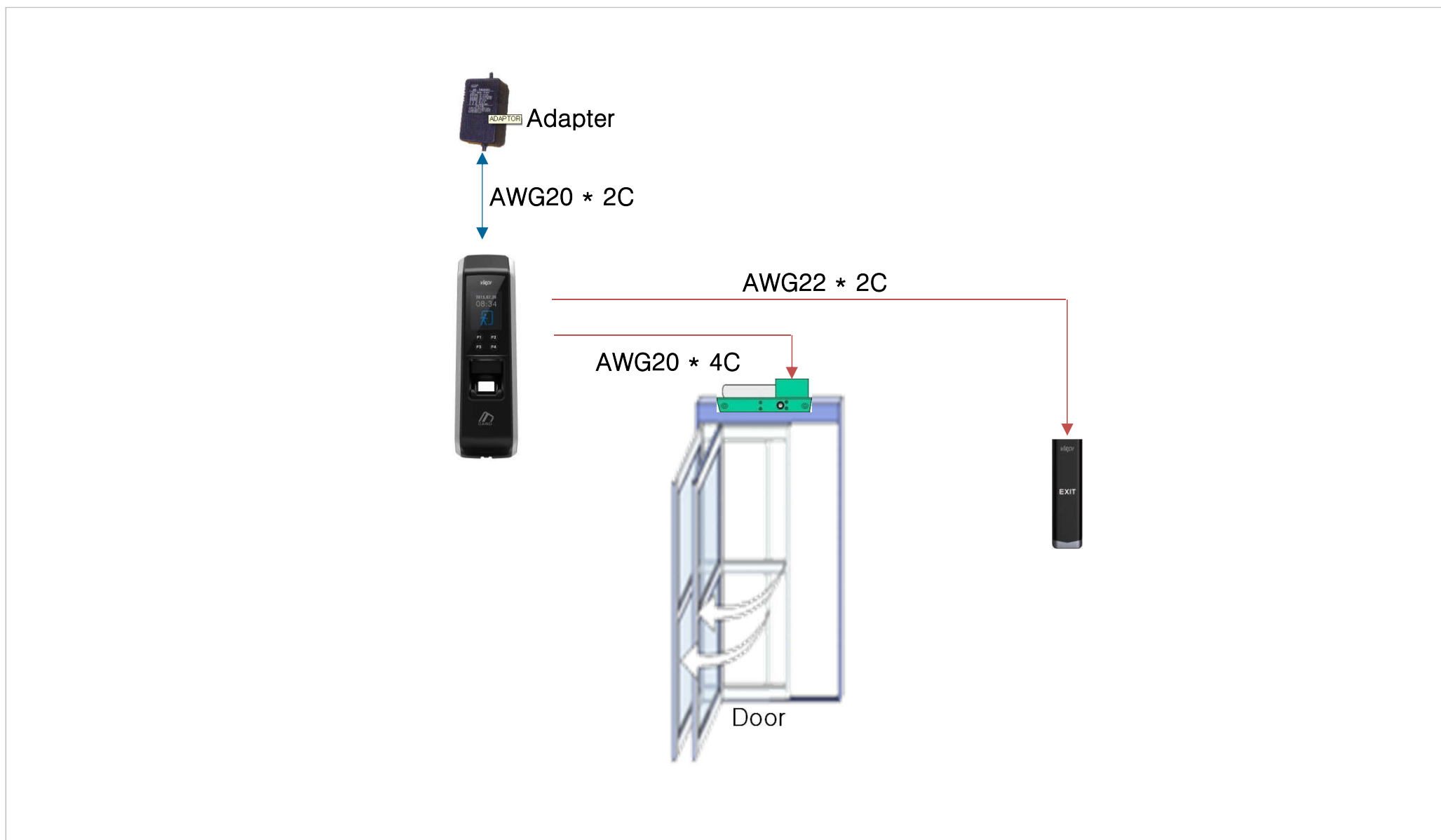
# 13. Wiring Guide

## 13.1 Terminal & Exit Button



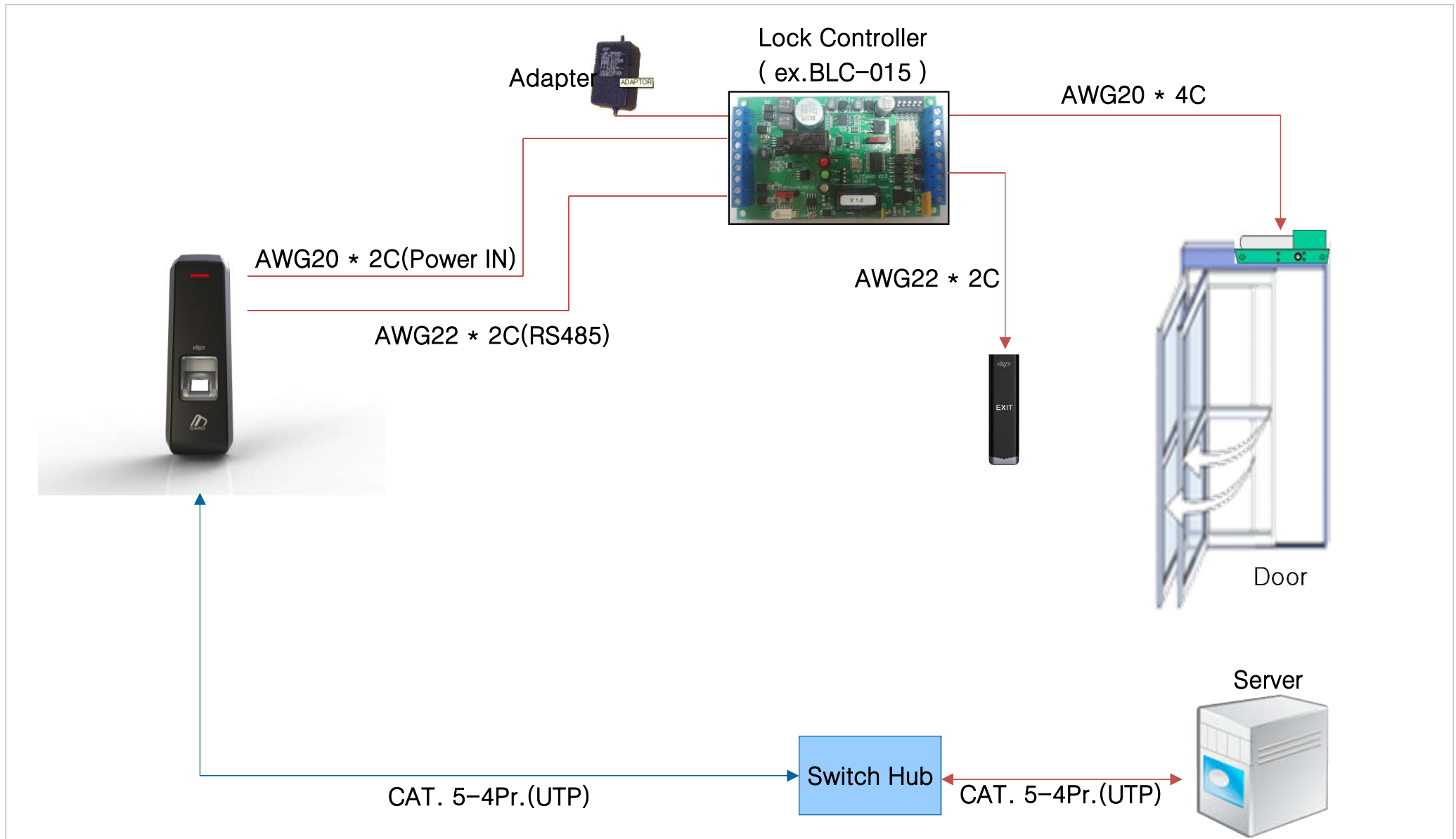
# 13. Wiring Guide

## 13.2 Terminal & Exit Button



# 13. Wiring Guide

## 13.3 Terminal & Exit Button



# 13. Wiring Guide

## 13.4 Terminal & Exit Button

