



BEWH

Compact Outdoor Fingerprint Reader/Controller

Operation Description

www.supremainc.com

Components

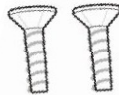
- Basic Components



BioEntry W



Wall Mount Screws (2)



Main Unit Mounting Screws (2)



Wall Mounting bracket (1)



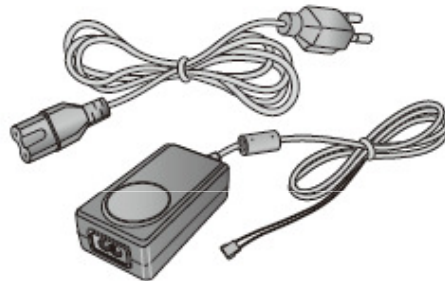
Software CD (1)

Components

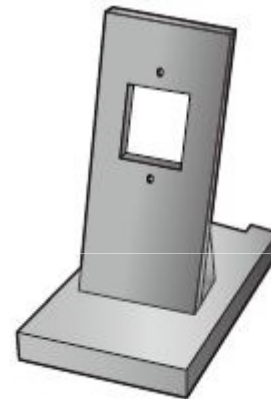
- Optional Accessories



Secure I/O



12VDC Power Adaptor



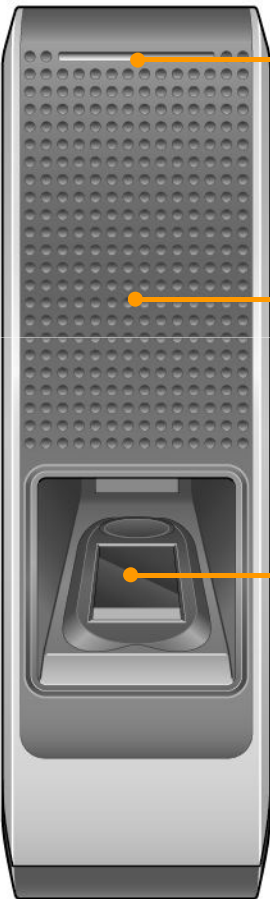
Plastic Stand



USB Fingerprint Scanner

Product Description

■ Front



LED
• Displays the current status with various colors.

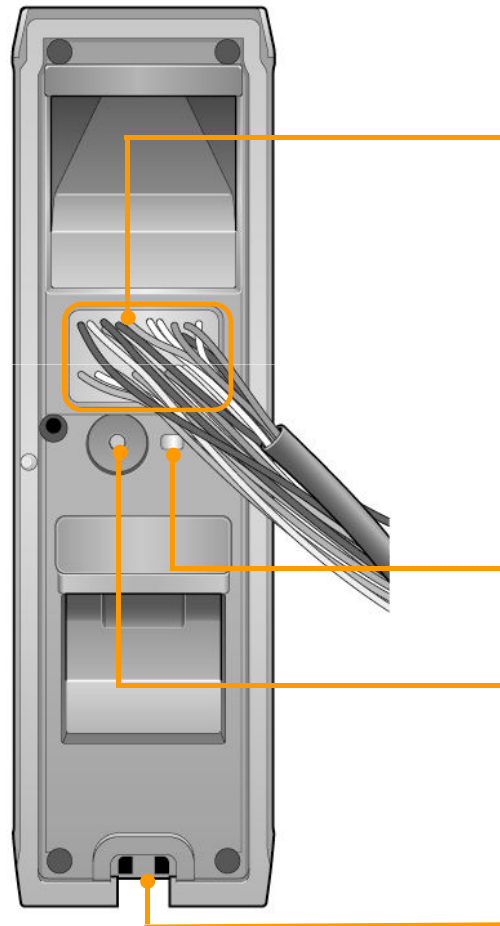
RFID Scanner
• Place an RFID card over the scanner.

Fingerprint Sensor
• Place a finger on the surface of the sensor.

LED	Device Status
Green	Successful Authentication
Red	Failed Authentication
Pink	Processing
Flicker Blue/Sky-Blue Color per 2sec	Standard Operation
Flicker Red/Pink Color per 2sec	Device Locked
Flicker Blue/Red Color per 2sec	Discharged Internal Battery
Flicker Blue/Yellow Color per 2sec	Unable to Acquire an IP Address from the DHCP Server.
Flicker Red Color per 2sec	Unit Malfunction. Contact Your Suprema Dealer/Distributor.
Flicker Yellow Color per 2sec	Waiting for an Input
Flicker Yellow Color per 1sec	Requesting IP Address from the DHCP Server.

Product Description

■ Rear and Bottom



Cables

- Wiegand Input/Output Cables
- Power Cables
- RS485 Cables
- Ethernet Connector
- Input Cables
- Relay Cables

LED

- Network Status LED

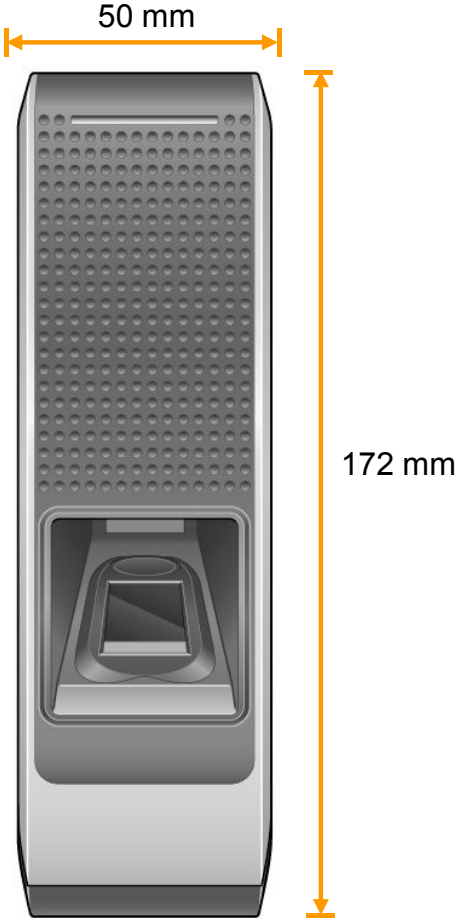
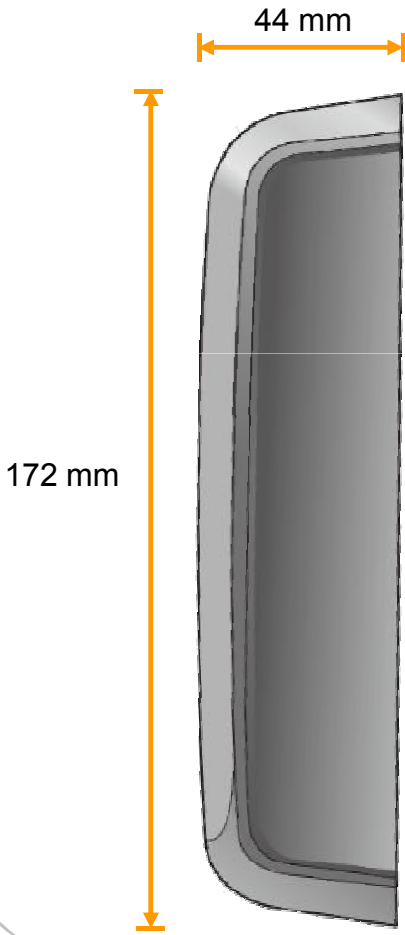
Network Reset Switch

- See "Resetting Network Settings (page 28)" for more details.

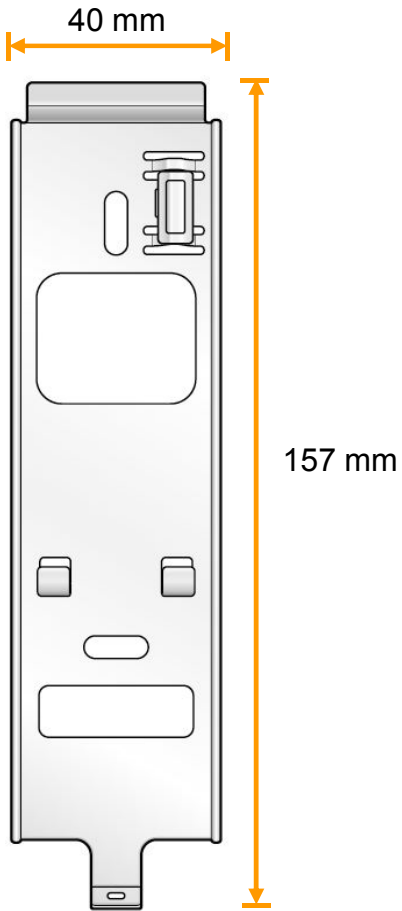
Star-shaped screw hole for fixing a body to a metal bracket

Dimensions

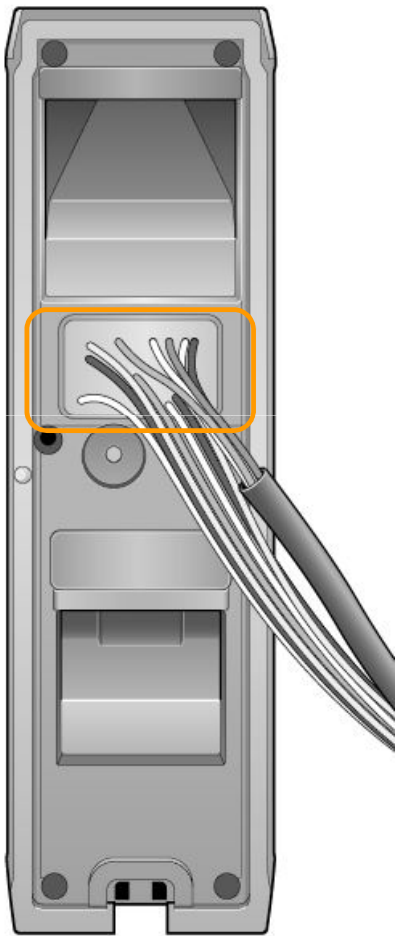
■ BioEntry W



■ Wall Mounting Bracket



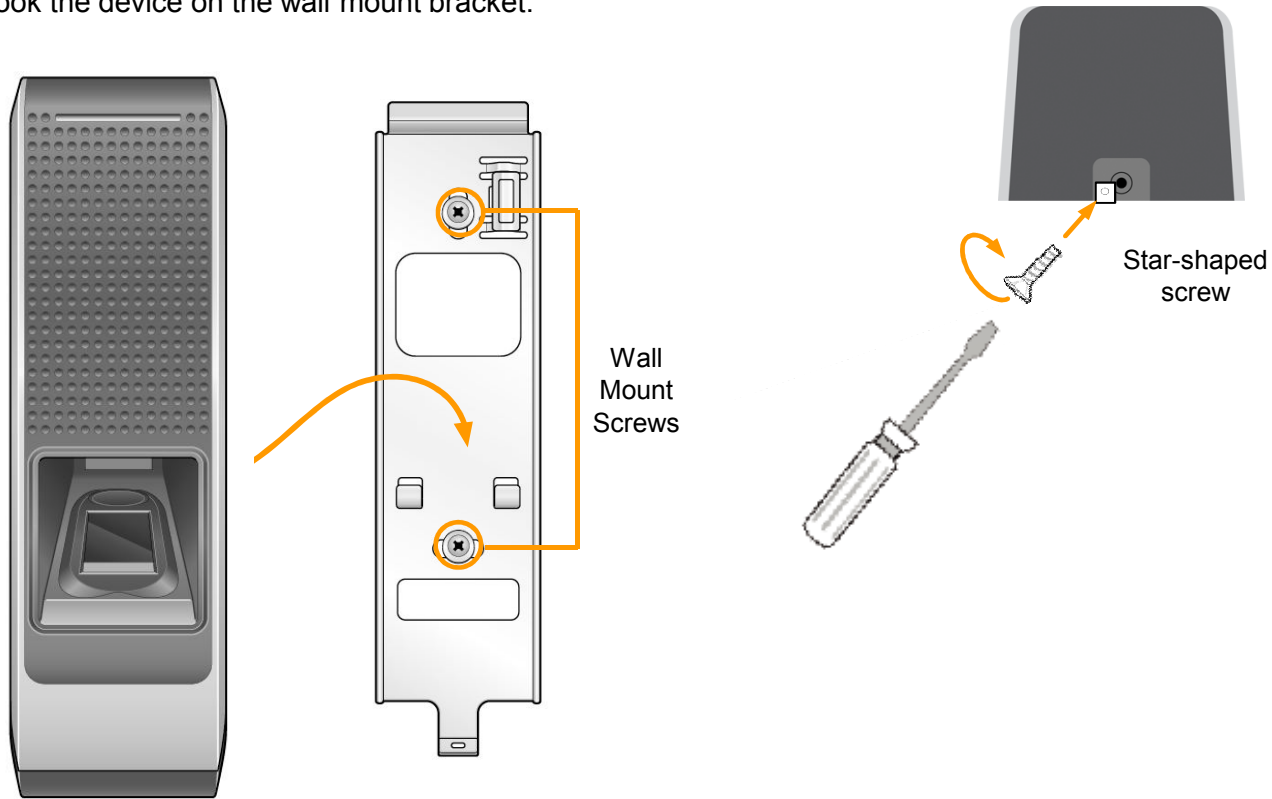
Cable Specifications



PIN	Description	Color
1	SWIN1	BROWN
2	SWIN0	PURPLE
3	ETH TXP	WHITE
4	ETH TXN	ORANGE
5	ETH RXP	BLACK
6	ETH RXN	YELLOW
7	POWER IN	RED
8	POWER GND	BLACK
9	PoE VB2	BLUE
	PoE VB2	BROWN
10	PoE VB1	RED
	PoE VB1	GREEN
11	485 TRXN	YELLOW/WHITE STRIPE
12	485 TRXP	BLUE/WHITE STRIPE
13	485 GND	BLACK/WHITE STRIPE
14	WIEGAND GND	WHITE/BLACK STRIPE
15	WIEGAND D1	WHITE
16	WIEGAND D0	GREEN
17	NC	PINK
18	RELAY NC	ORANGE/WHITE STRIPE
19	RELAY COM	GREEN/WHITE STRIPE
20	RELAY NO	GRAY/WHITE STRIPE

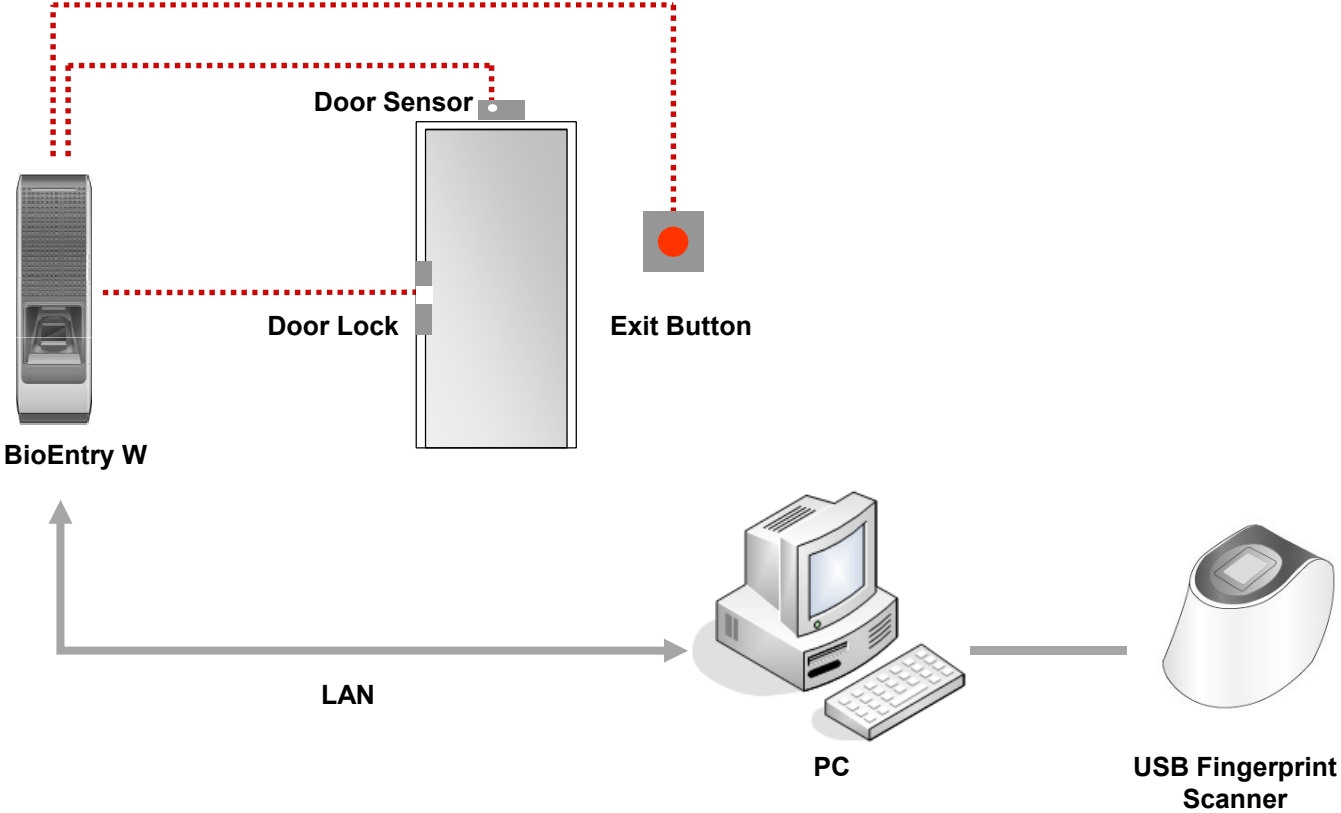
Installation

1. Fix the wall mounting bracket on a wall by using wall mounting screws.
2. Hook the device on the wall mount bracket.
3. Fix the device to the wall mounting bracket using the star-shaped screws.



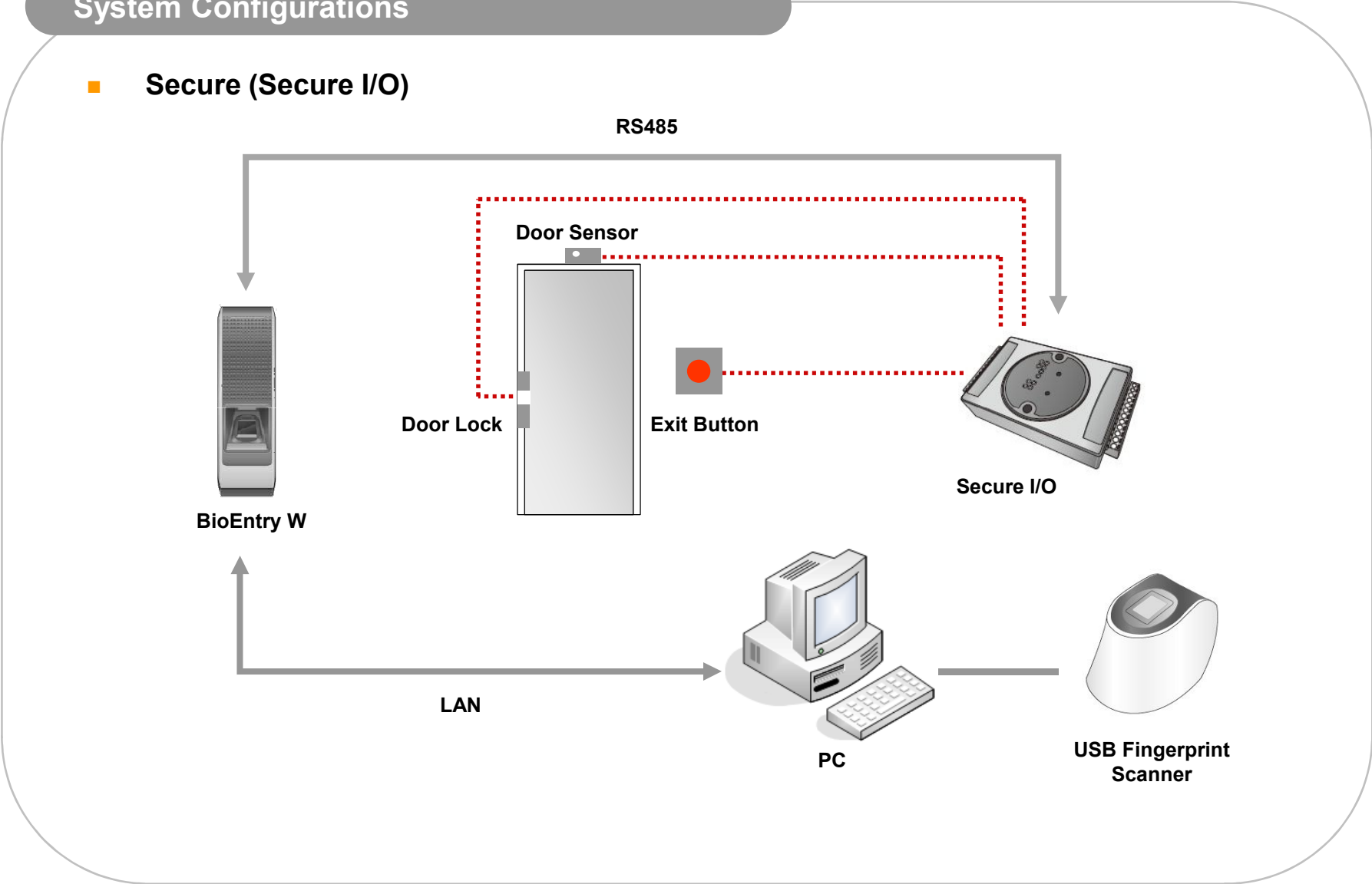
System Configurations

- Standard



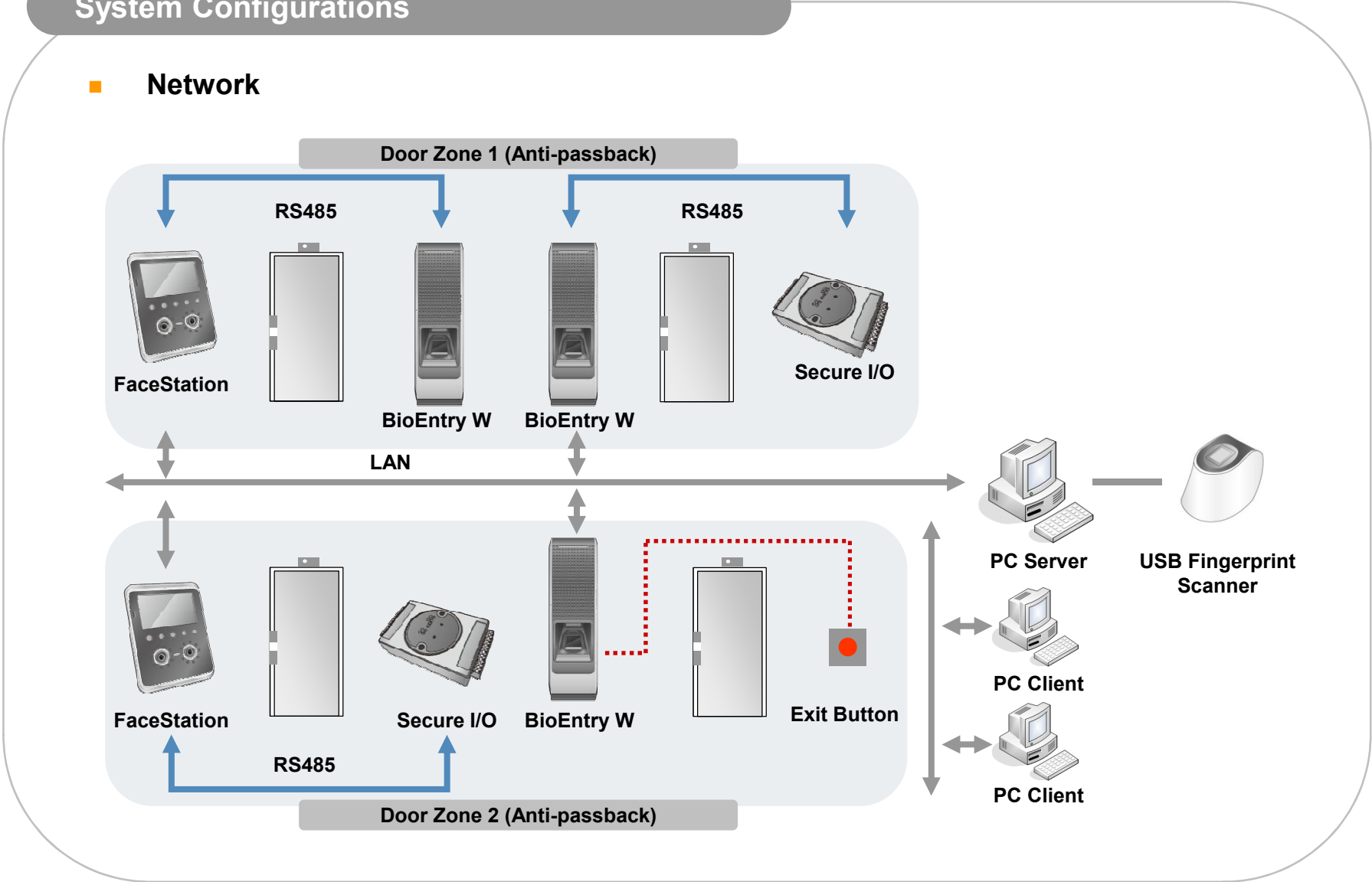
System Configurations

- Secure (Secure I/O)



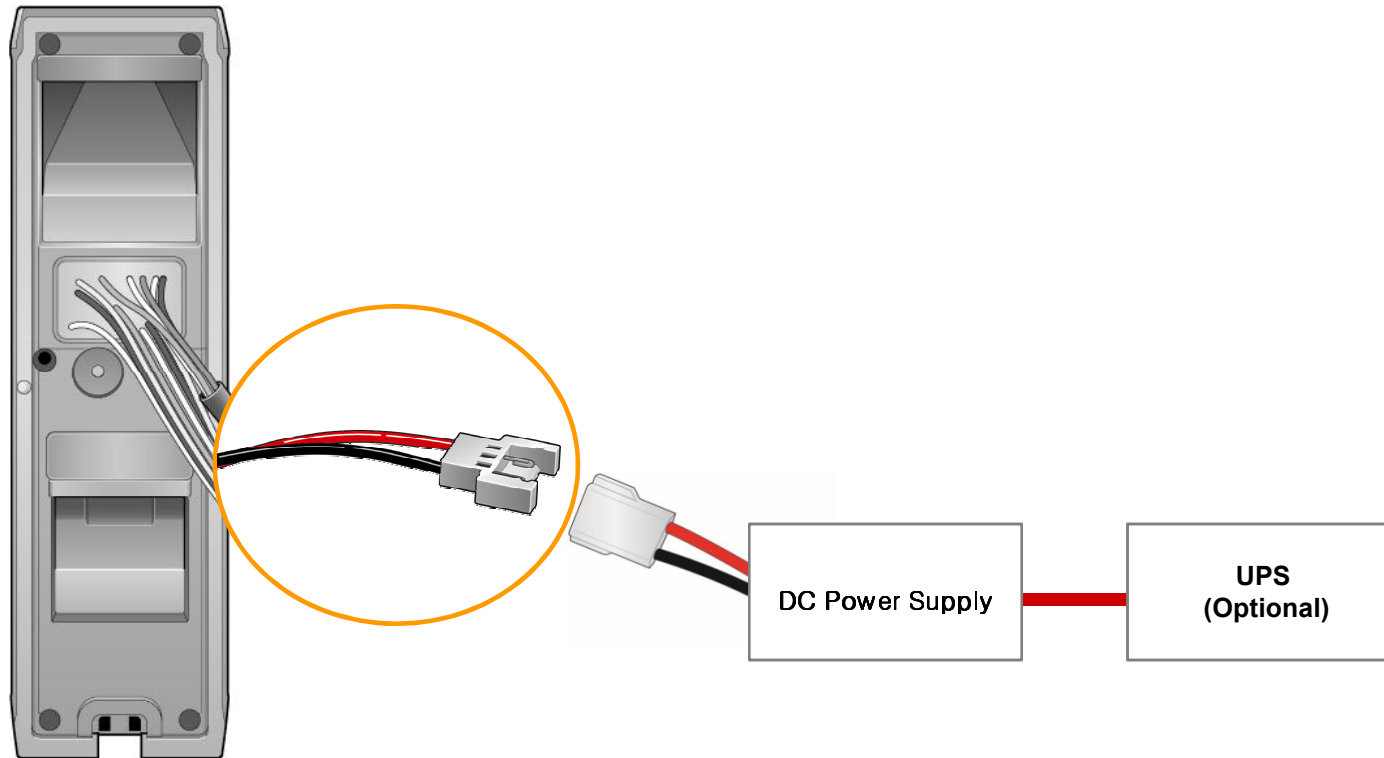
System Configurations

Network



Connections

■ Power Connection



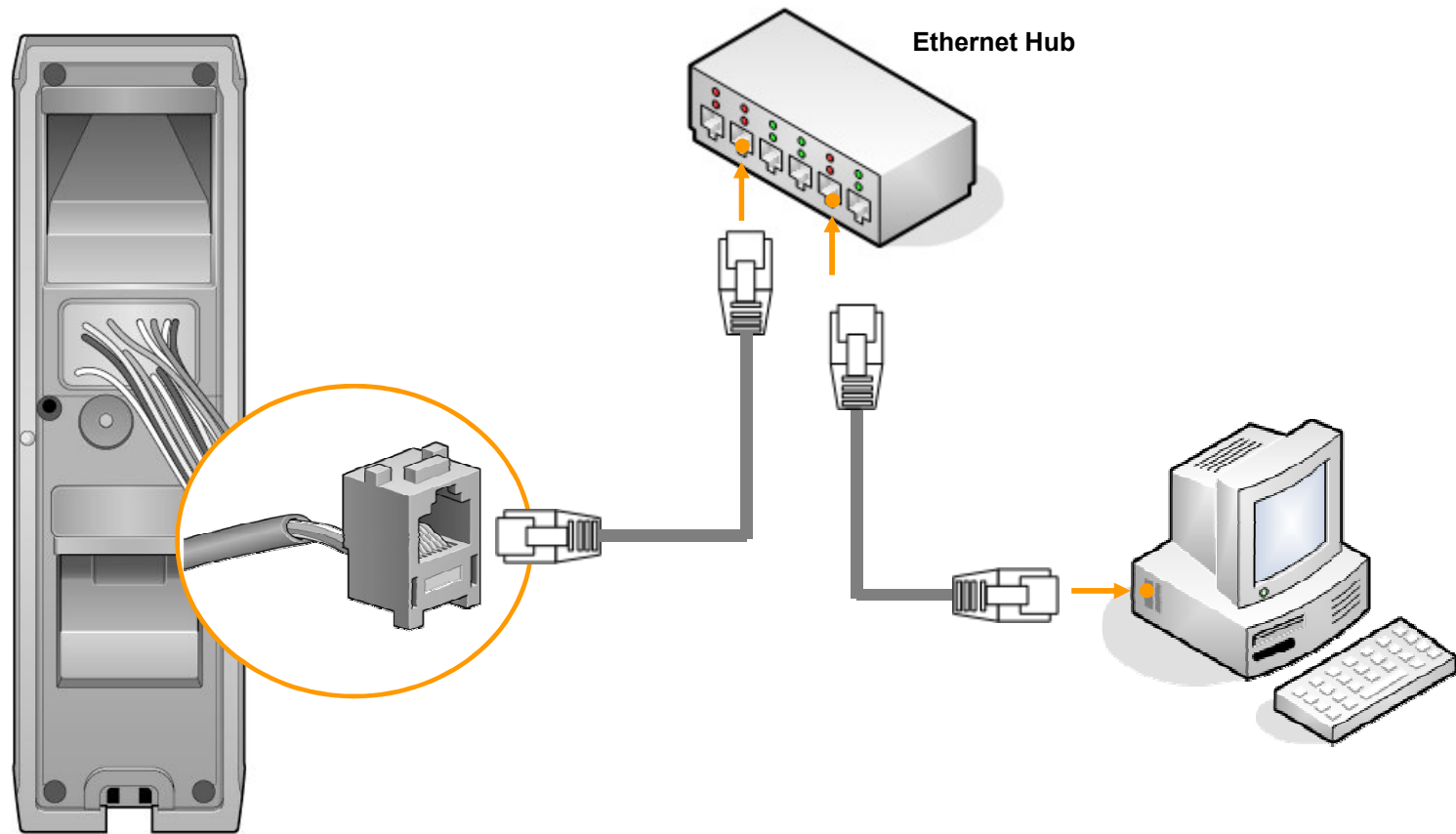
☰ Recommended Power Specifications

- 12V ± 10%, at least 500mA.
- Comply with standard IEC/EN 60950-1.
- When sharing power with other devices, use a power supply with a higher current rating.

Connections

- **Ethernet Connection (Connection with HUB)**

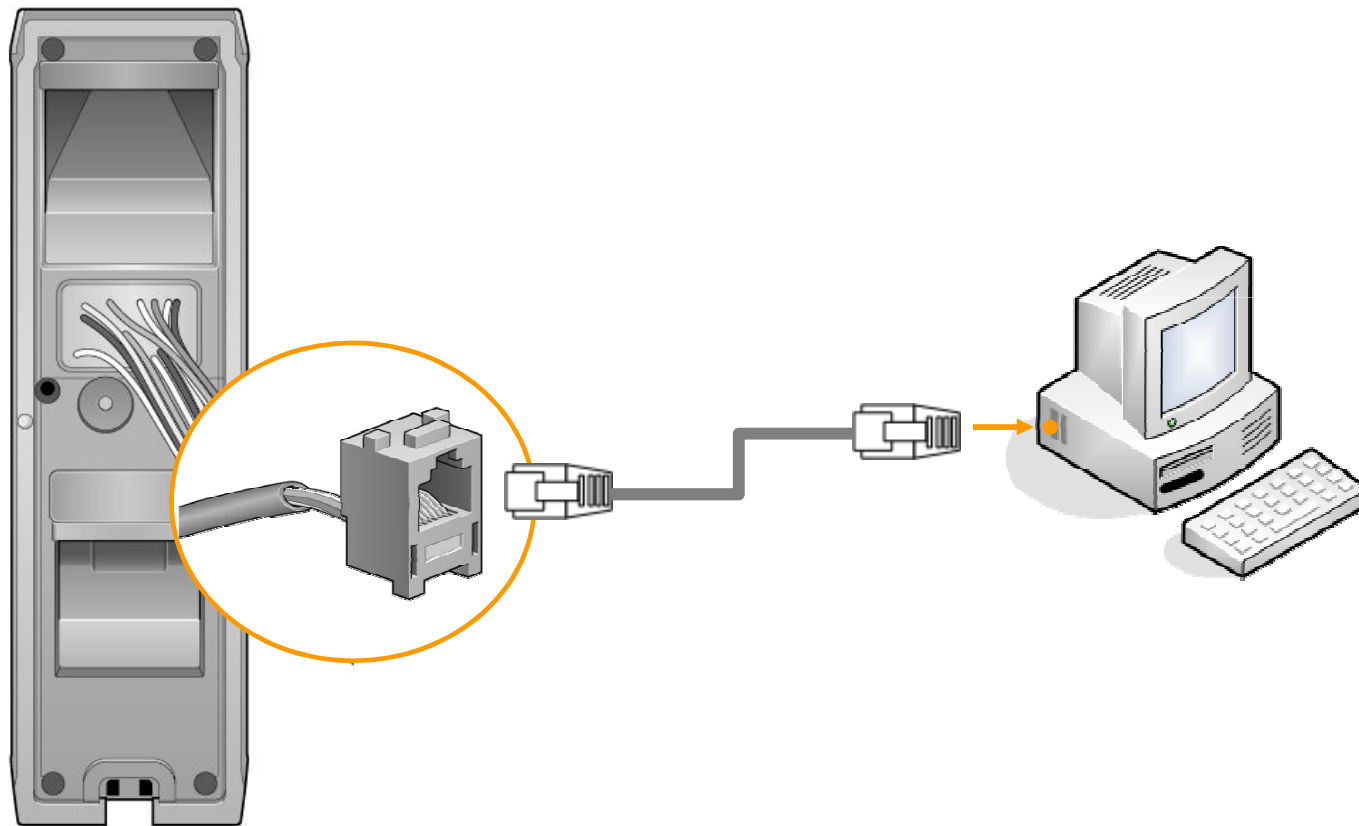
The device can be connected with a regular hub or PoE hub by connecting the Ethernet cable to the Ethernet terminal. PoE(Power over Ethernet) is an Ethernet connection of which the power is supplied from PSE(Power Sourcing Equipment) satisfying the IEEE802.3af standard.



Connections

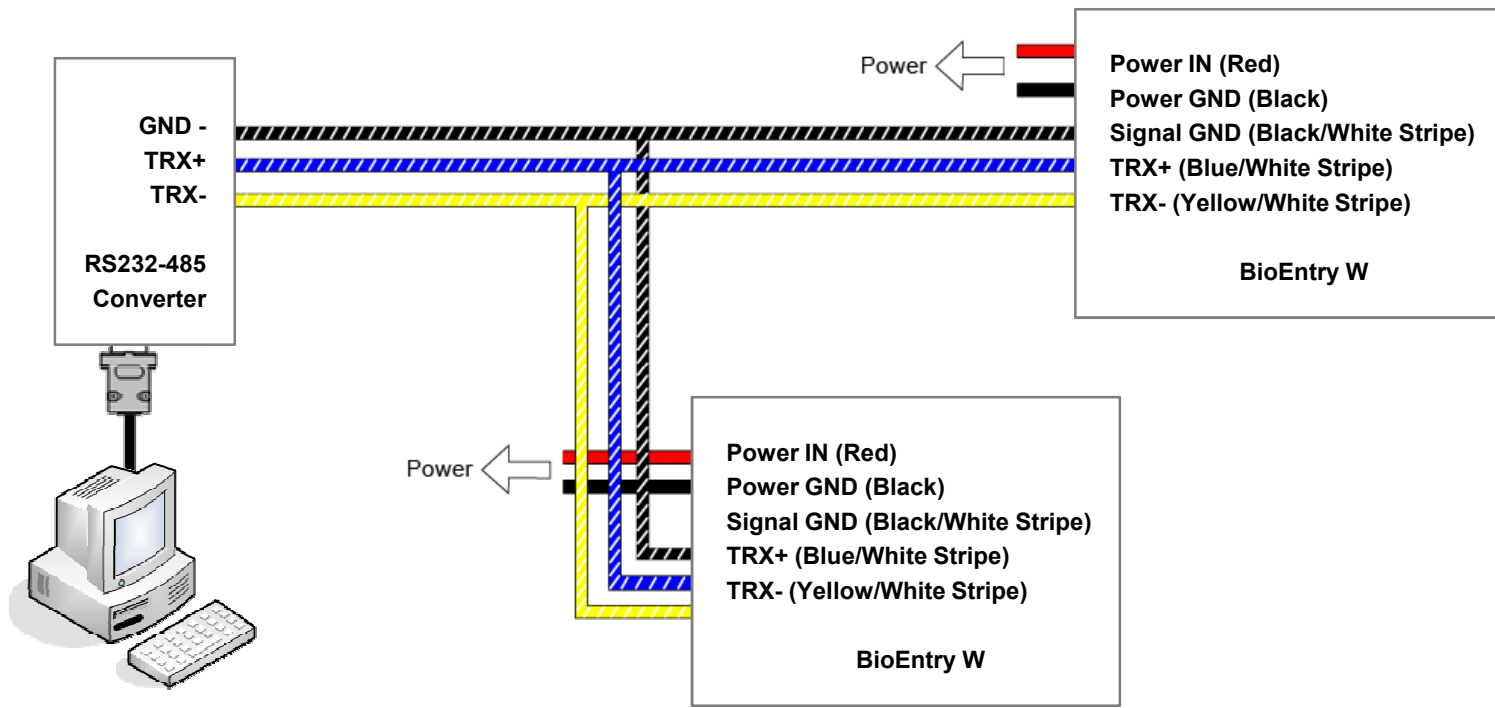
- **Ethernet Connection (Direct connection with PC)**

Use a standard CAT-5 cable to connect the device directly to a PC. BioEntry W supports auto MDI/MDIX, therefore a crossover cable is not necessary.



Connections

■ RS485 Connection for Host Communication

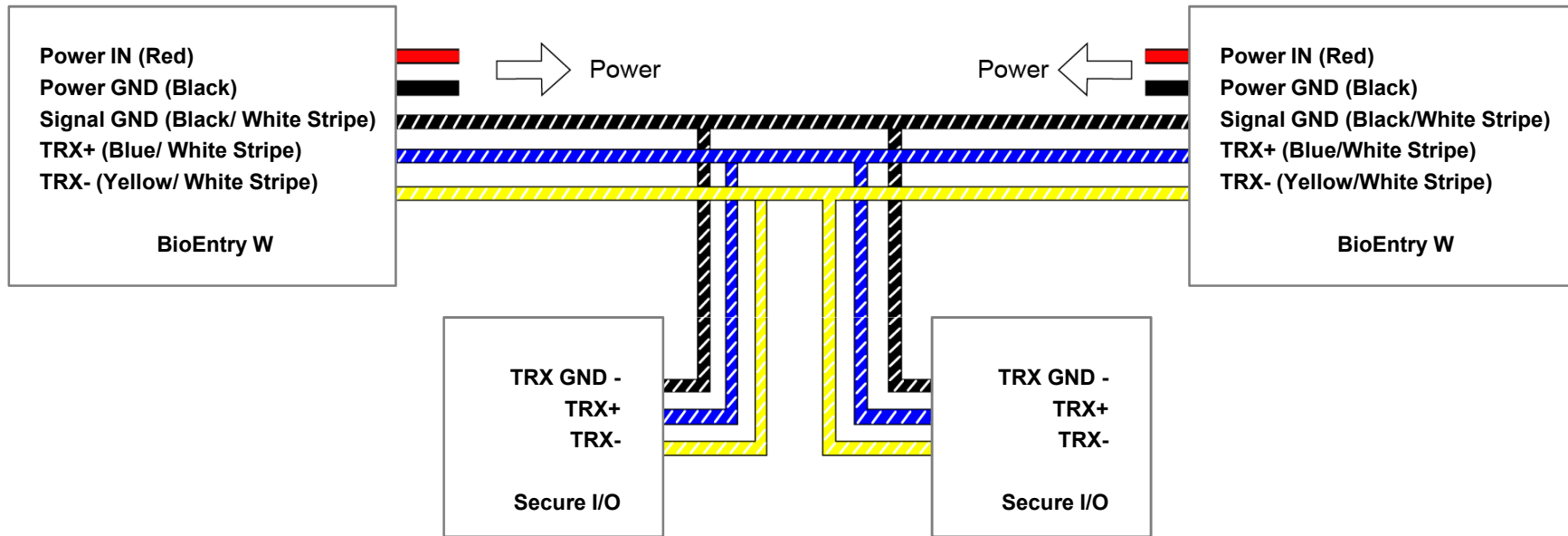


☰ Notes

- Only the devices at the both ends of the bus should be terminated. To enable termination on the RS232-485 converter, refer to the converter's manual.
- Adjust the communication speed as needed. The signal quality vary depending on wiring conditions, and it may be necessary to lower the baudrates.
- The GND signal may be omitted if and only if the GND potential difference is less than $\pm 5V$.

Connections

■ RS485 Connection for Secure I/O

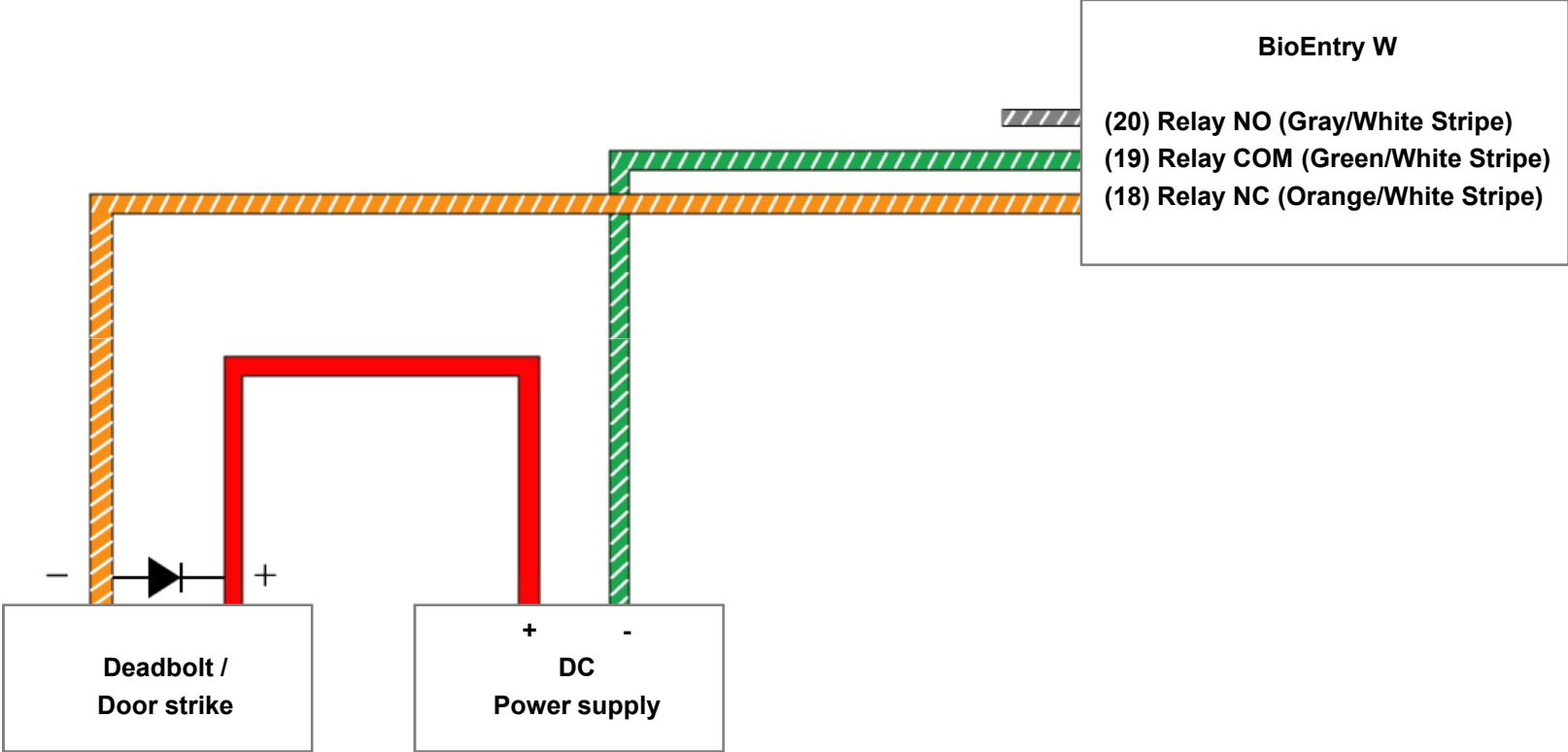


☰ Notes

- For bus termination, only the devices at both ends of the bus should be terminated.
- Maximum numbers of devices in an RS485 loop are two(2) Suprema devices and four Secure I/Os.

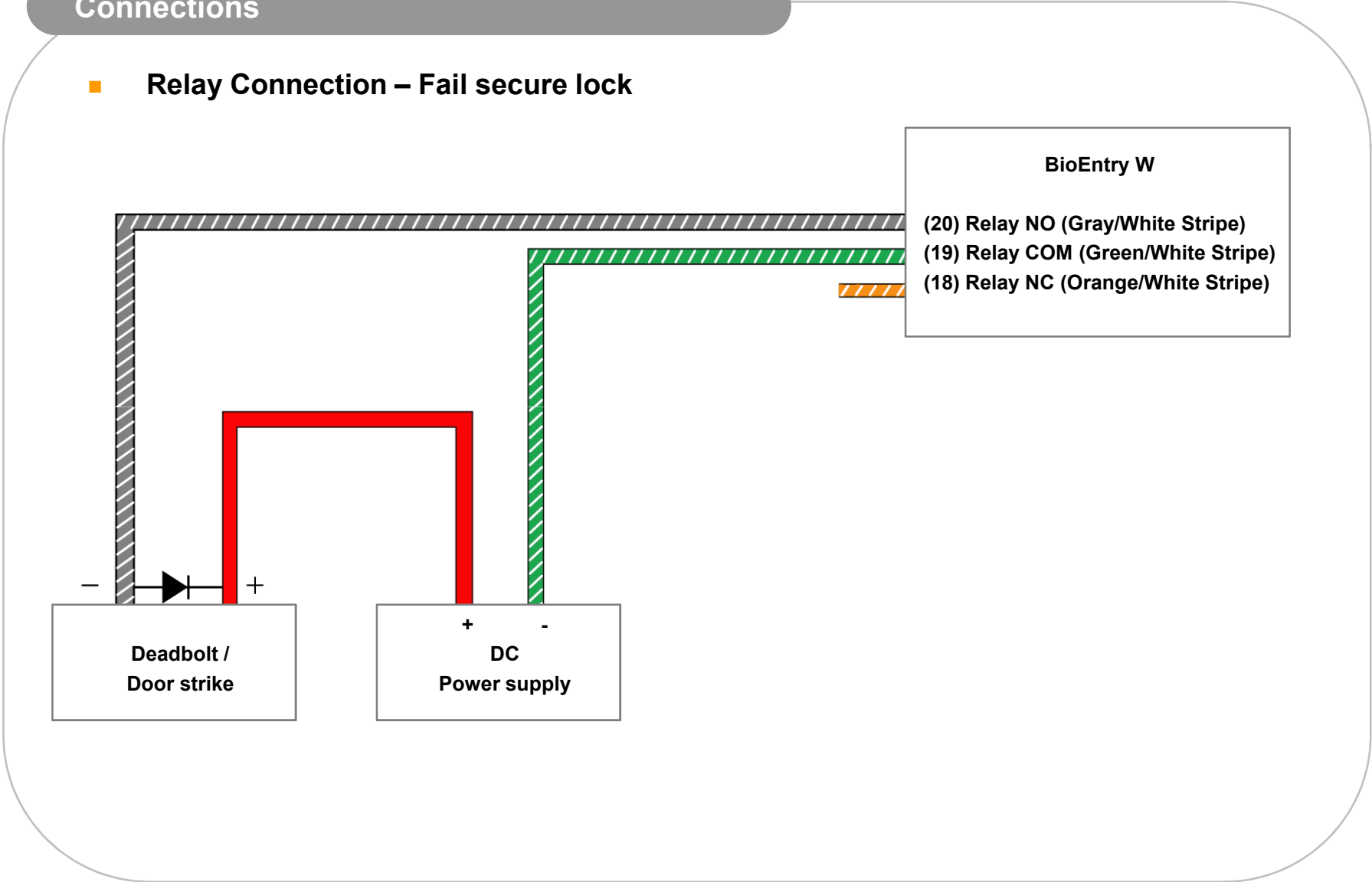
Connections

- Relay Connection – Fail safe lock



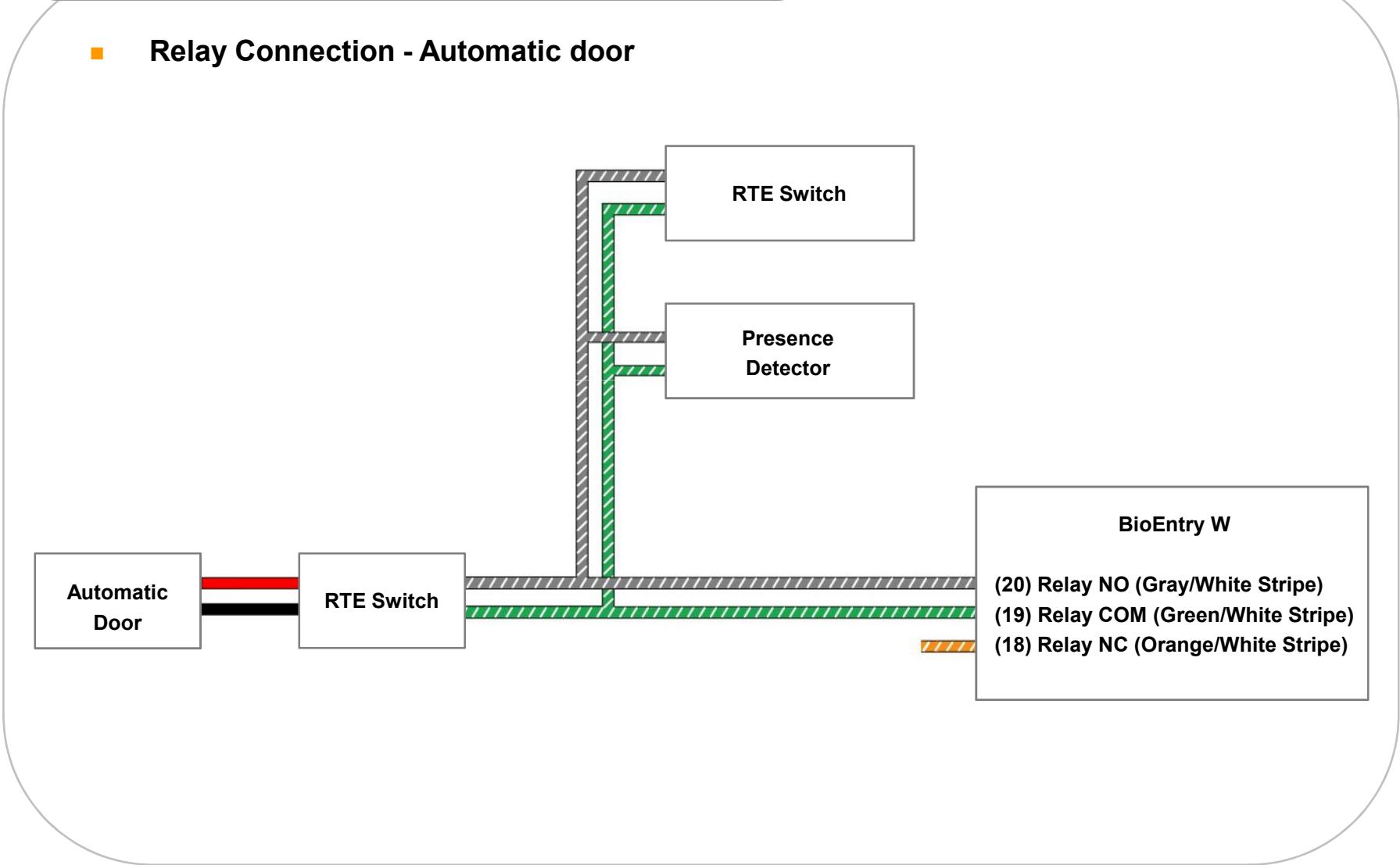
Connections

- Relay Connection – Fail secure lock



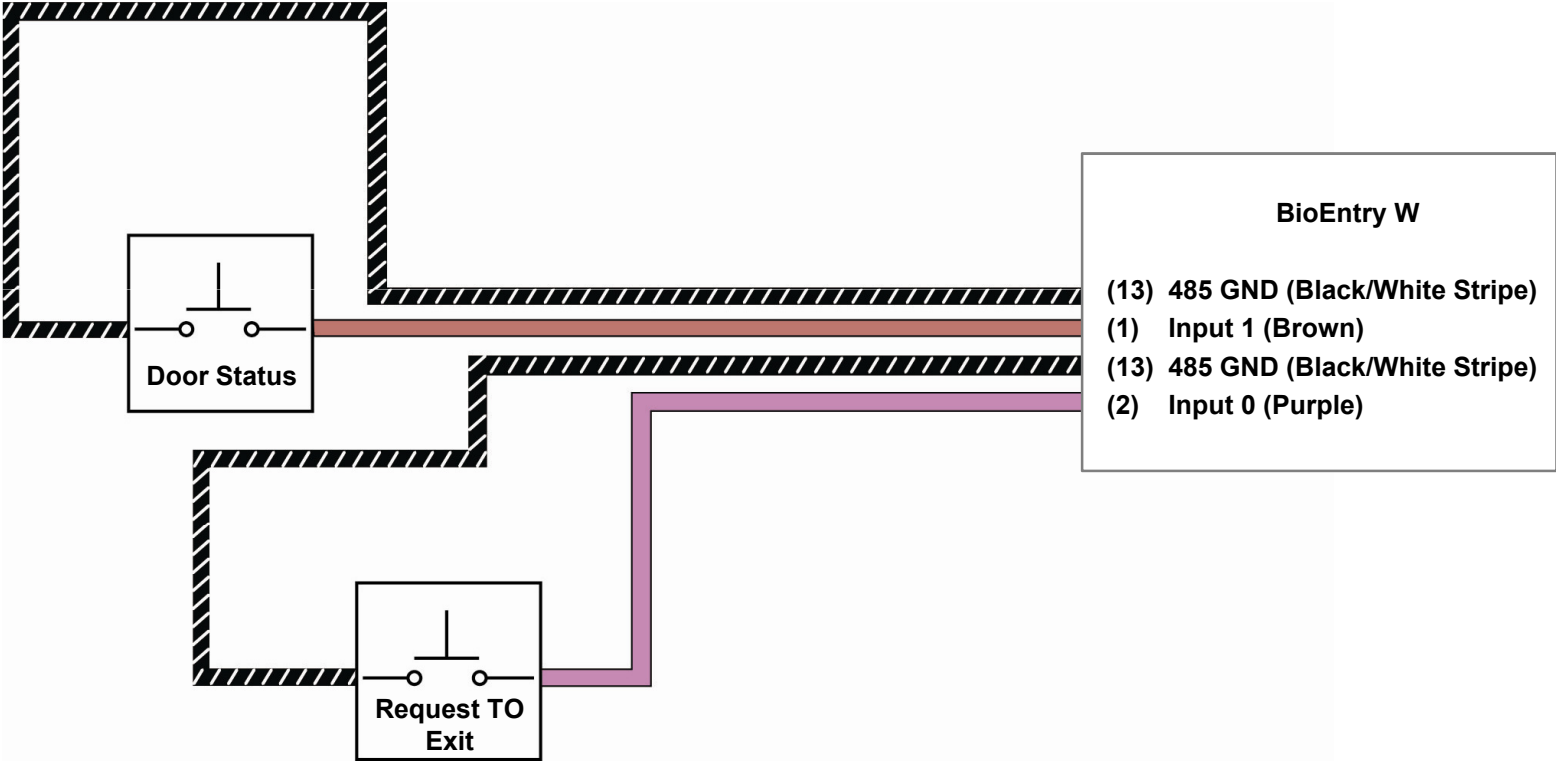
Connections

- Relay Connection - Automatic door



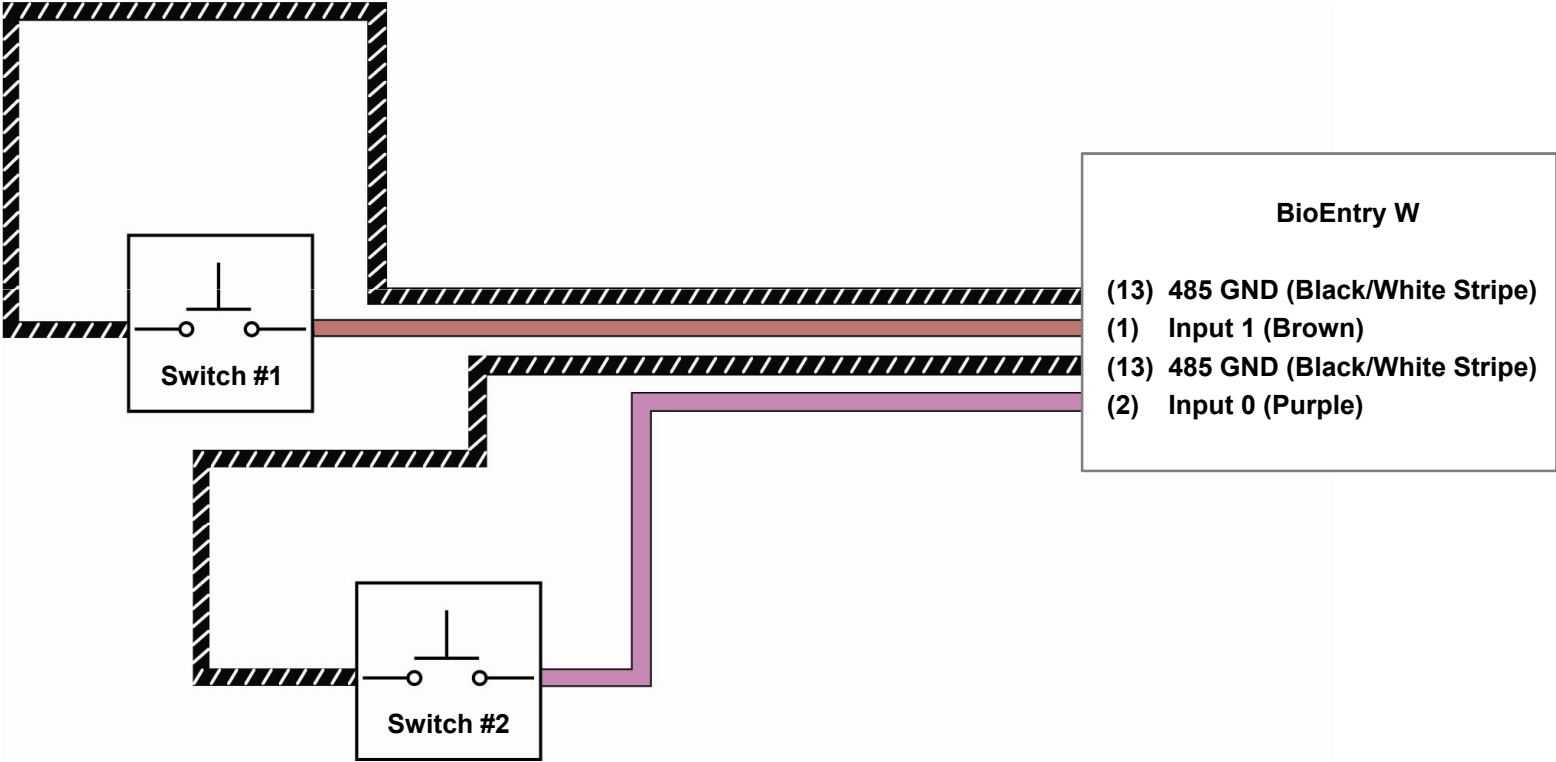
Connections

- Digital Input Connection (RTE/ Door sensor)



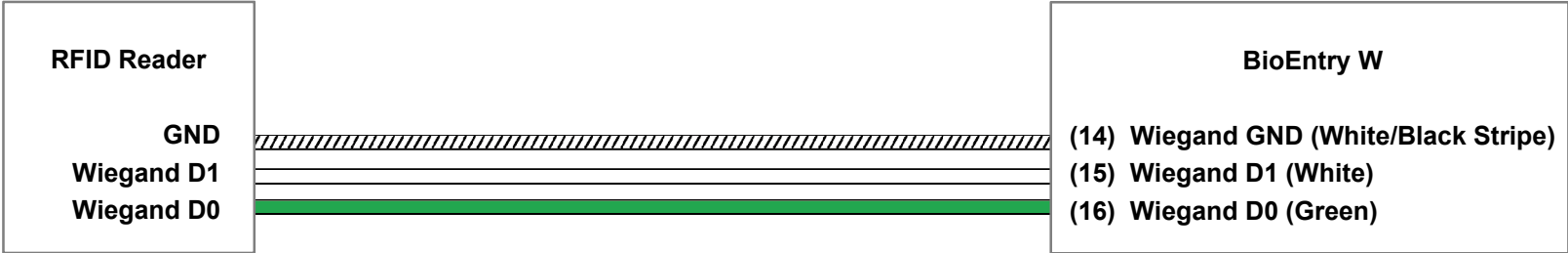
Connections

- Digital Input Connection (Alarm/ Emergency switch)

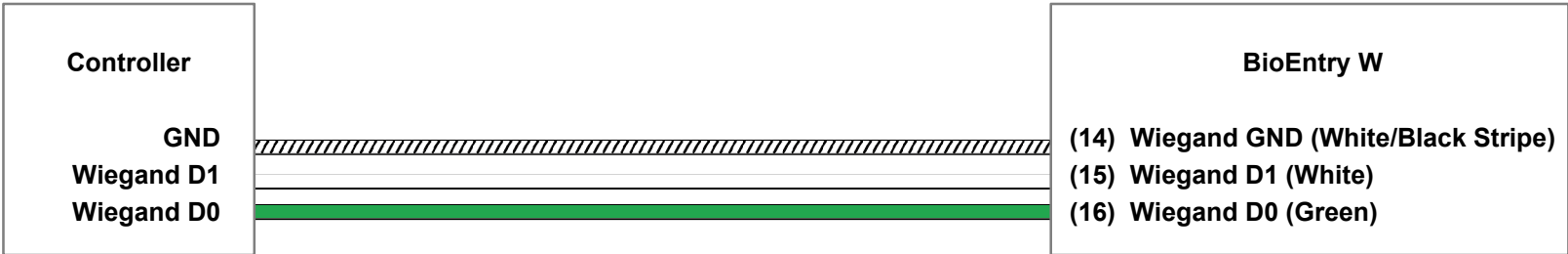


Connections

- **Wiegand Input**



- **Wiegand Output**



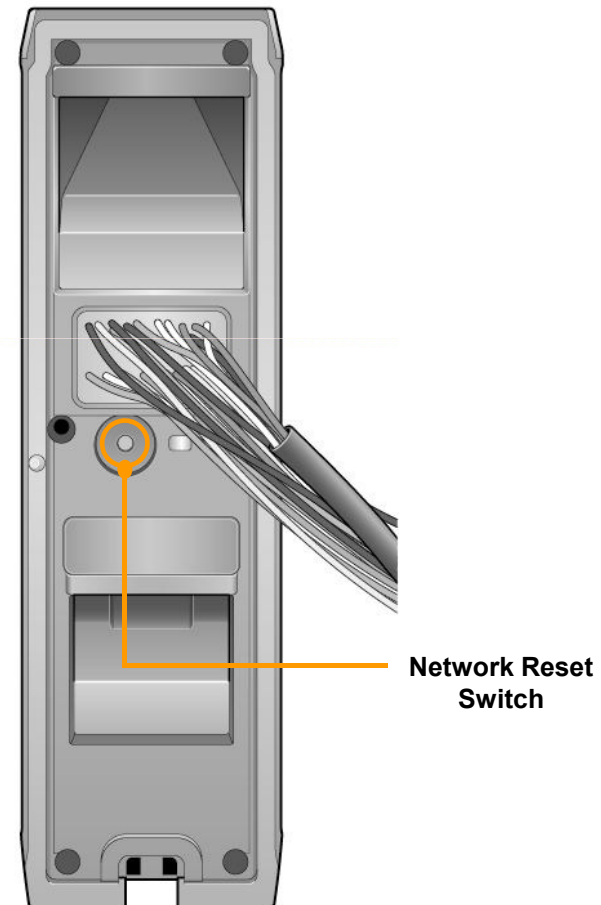
Resetting Network Settings

In case of forgetting network setting of the device (TCP/IP or RS-485 setting) during installation or using the device, you can initialize network setting (TCP/IP or RS-485 setting) by using the network reset switch on the back panel of the device. Please refer to the figures as below.

1. Turn on the device.
2. Press and hold the network reset switch until the device turns off. (Then, the device will restart.)

Network Default Setting

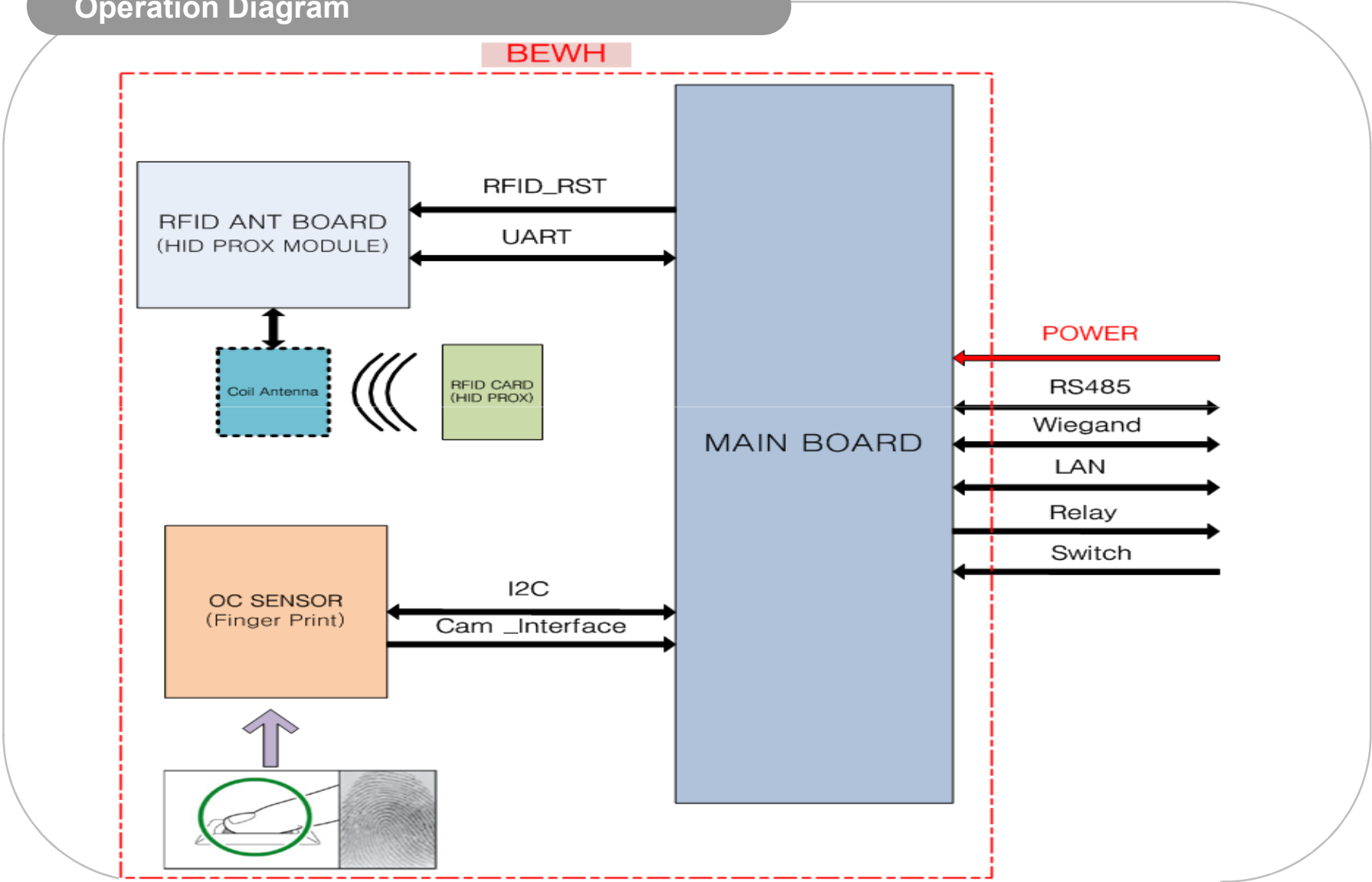
- TCP/IP Address : 192.168.0.1
 - Not checked "Use Server"
 - RS-485 : PC Connection, 115200bps
3. Modify then save the TCP/IP or RS485 settings.
 4. Reboot the device.
 5. Confirm the new settings.



Electrical Specifications

		Min.	Typ.	Max.	Notes
Power	Voltage (V)	10.8	12	13.2	Use regulated DC power adaptor only.
	Current (mA)	-		250	
Switch Input	V _{IH} (V)	-	TBD	-	
	V _{IL} (V)	-	TBD		
	Pull-up resistance (Ω)	-	4.7k	-	The input ports are pulled up with 4.7k resistors.
TTL/ Wiegand Output	V _{OH} (V)	-	5	-	
	V _{OL} (V)	-	0.8	-	
	Pull-up resistance (Ω)	-	4.7k	-	The outputs ports are open drain type, pulled up with 4.7k resistors internally.
Relay	Switching capacity (A)	-	-	1	30V DC
				0.3	125V AC
	Switching power (resistive)	-	-	30W	DC
				37.5VA	AC
Switching voltage (V)	-	-	-	110	DC
				125	AC

Operation Diagram





Suprema Inc.

16F Parkview Tower, 6 Jeongja, Bundang, Seongnam, Gyeonggi, 463-863 Korea

Tel: +82-31-783-4502 | Fax: +82-31-783-4503

Email: sales@supremainc.com | Homepage: www.supremainc.com