Safety precautions



Do not install the device in a place subject to direct sun light, humidity, dust or soot.



Do not place the device next to heating equipments.



Do not place a magnet near the product.

lt may cause a damage or a failure to the product.



In cleaning, do not splash water on the device but wipe it out with smooth cloth or towel.



Be careful not to let liquid like water, drinks or chemicals leak inside the device.

It may cause a failure.



Clean the device often to remove dust on it.



Safety precautions



Do not drop the device.



Do not disassemble, repair or alter the device.

The warranty does net apply to any product damage cause by an arbitrary installation or repair.



Do not let children touch the device without supervision.



Do not use the device for any other purpose than specified.



Do not damage the device.



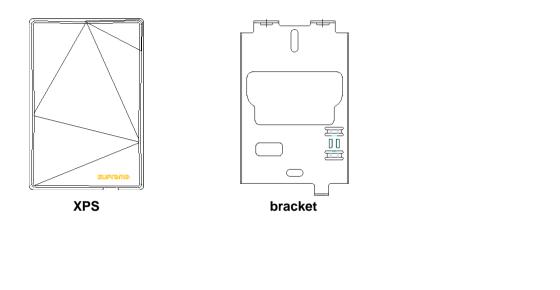
Contact your nearest dealer in case of a trouble or problem.

The list above is to keep user's safety and prevent any loss. Please read safety precautions carefully before use.

Product components

Basic components

Wall mounting screws



(2 ea) (2 ea)

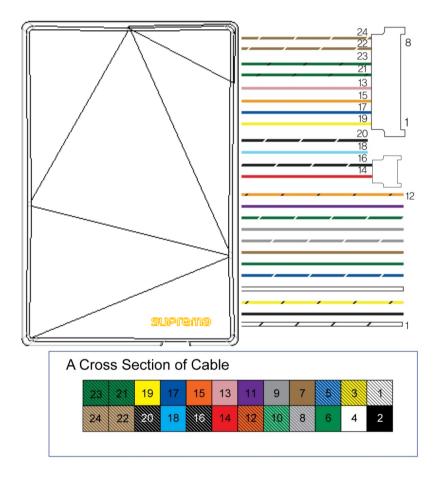
Knife Blocks

The components shown above may differ depending on the installation environment.

Shrinkable Tubes

Software CD

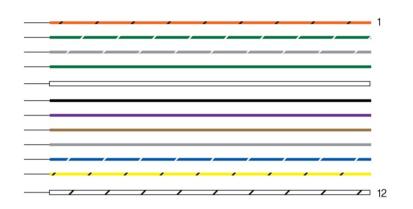
Cables and Connectors



No	Pin Name	Full Name	Color
1	485 GND	485 GND	White (black string)
2	WGD GND	Wiegand- GND	Black
3	485 -	485 -	Yellow (black string)
4	WGD D1	Wiegand- 1	White
5	485 +	485 +	Blue (white string)
6	WGD D0	Wiegand- 0	Green
7	IN 1	Input- 1	Brown
8	RLY NO	Relay Open	Gray (white string)
9	IN GND	Input- GND	Gray
10	RLY COM	Relay Com	Green (white string)
11	IN 0	Input- 0	Purple
12	RLY NC	Relay Close	Orange (black string)
13	TX+	TX+ (LAN)	Pink
14	PWR IN+	Power IN+	Red
15	TX-	TX- (LAN)	Orange
16	PWR IN-	Power IN-	Black (white string)
17	RX+	RX+ (LAN)	Blue
18	PWR OUT+	Power OUT+	Light Blue
19	RX-	RX- (LAN)	Yellow
20	PWR OUT-	Power OUT-	Black (white string)
21	VB1	VB1	Green (black string)
22	VB2	VB2	Brown (white string)
23	VB1	VB1	Green (black string)
24	VB2	VB2	Brown (white string)

Cables and Connectors

Cable Specification



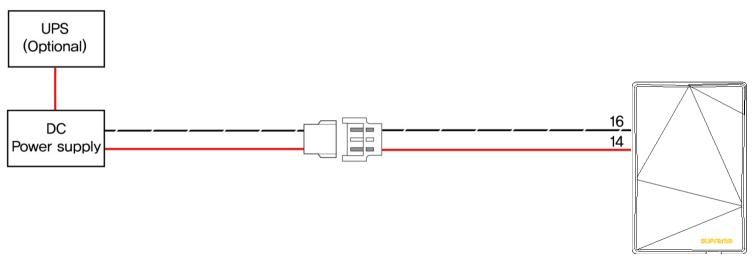
Cable		Pin Name	Color
1		RLY NC	Orange (black string)
2	Relay	RLY COM	Green (white string)
3		RLY NO	Gray (white string)
4		WGD D0	Green
5	Wiegand	WGD D1	White
6		WGD GND	Black
7		IN 0	Purple
8	Switch	IN 1	Brown
9		IN GND	Gray
10		485+	Blue (white string)
11	485	485-	Yellow (black string)
12		485 GND	White (black string)



Adaptor Connector		Pin Name	Color
	POWER OUT -	Black (white string)	
	Power	POWER OUT +	Light Blue
3		POWER IN -	Black (white string)
1		POWER IN +	Red

Power Connection 1

Pin	Pin Name	Color
14	PWR IN+	Red
16	PWR IN-	Black (white string)



Recommended power supply

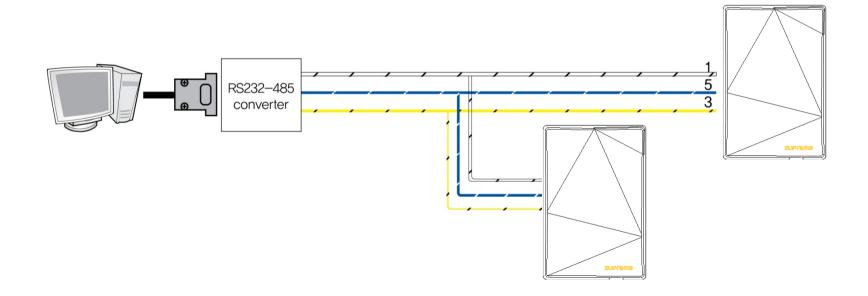
12V \pm 10%, at least 1500mA.

Comply with standard IEC/EN 60950-1.

To share the power with other devices, use a power supply with higher current ratings.

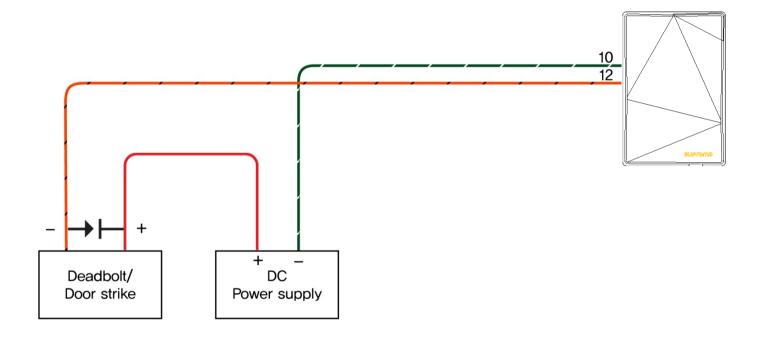
RS485 Connection for Host Communication

Pin	Pin Name	Color
1	485 GND	White (black string)
3	485 -	Yellow (black string)
5	485 +	Blue (white string)



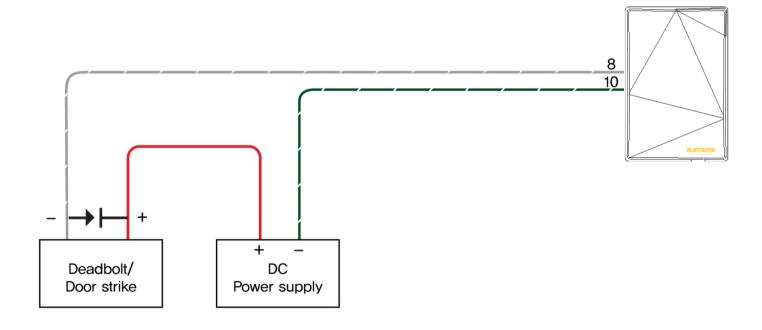
Relay Connection – Fail safe lock

Pin	Pin Name	Color
10	RLY COM	Green (white string)
12	RLY NC	Orange (black string)



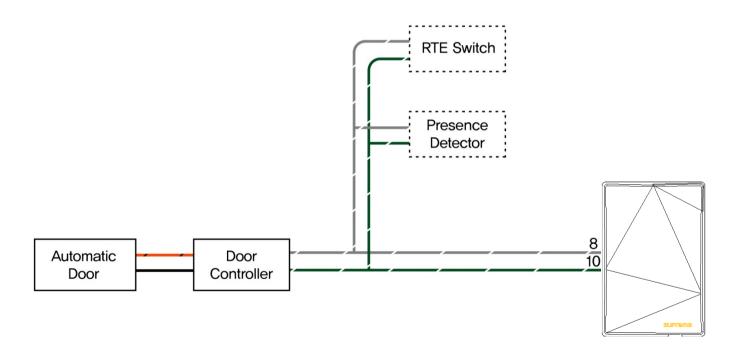
Relay Connection – Fail secure lock

Pin	Pin Name	Color
8	RLY NO	Gray (white string)
10	RLY COM	Green (white string)

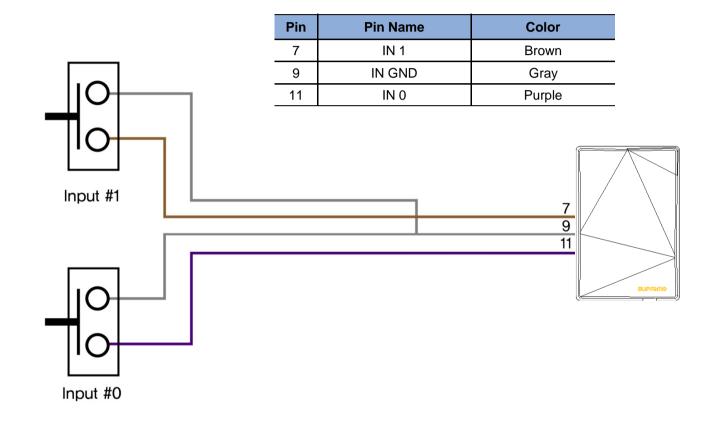


Relay Connection - Automatic door

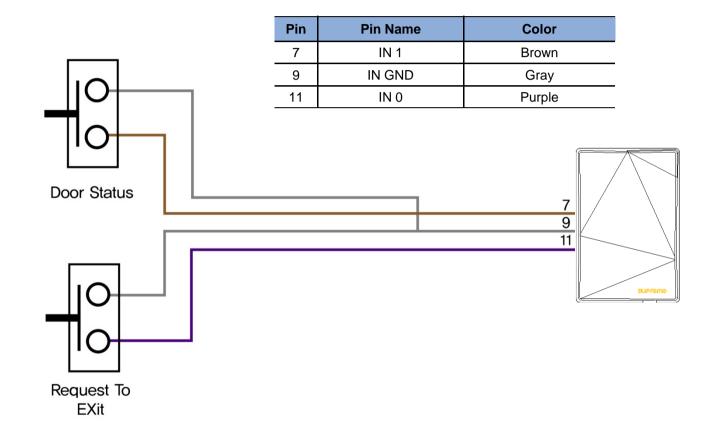
Pin	Pin Name	Color
8	RLY NO	Gray (white string)
10	RLY COM	Green (white string)



Digital Input Connection (Alarm, Emergency S/W)



Digital Input Connection (RTE, Door sensor)



Wiegand Input/Output

Wiegand Input

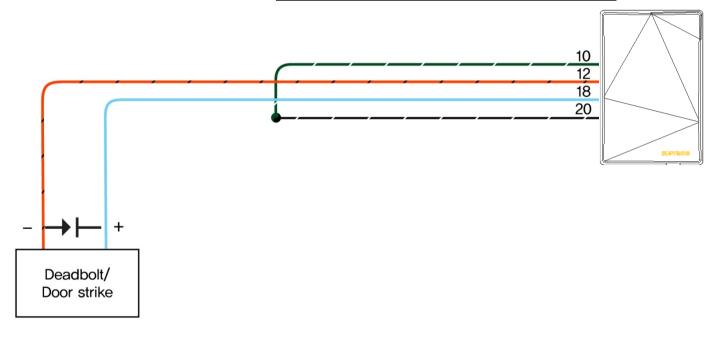


Wiegand Output

jand Output		Pin Name	Color	
	2	WGD GND	Black	_
	4	WGD D1	White	_
	6	WGD D0	Green	
Controller				
Wiegand GND				2
Wiegand Input, Data 1				4
Wiegand Input, Data 0				6

Output

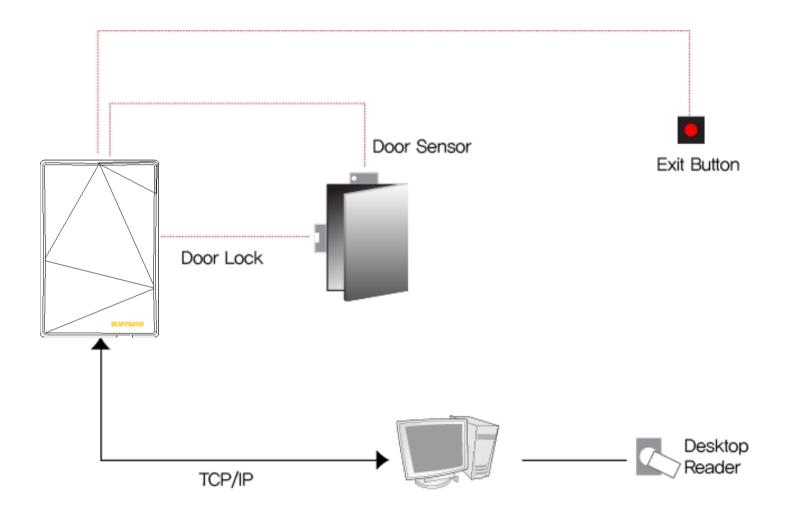
Pin	Pin Name	Color
10	RLY COM	Green (white string)
12	RLY NC	Orange (black string)
18	PWR OUT +	Light Blue
20	PWR OUT -	Black (white string)



Caution: Max. 700mA is supplied using adapter for the external output.

Be careful to satisfy the power capacity in use.

Installation Reference 1 - Stand alone



Specification

CPU	32 bit Micro-processor	
Memory	8MB FLASH + 16MB SDRAM	
RF Card	13.56 MHz Mifare (XPSM)	
User Capacity	40000 user	
Log Capacity	50000 log	
Network interfaces	TCP/IP, RS485	
IP Rate	IP 65 class	
Sound Multi-tone buzzer		
LED	LED Multi-color LED	
I/O	Relay x 1 Tamper x 1 Switch input x 2 Wiegand x 1	
Power	12Vdc	
Operating Temperature	-20 ~ 50°C	
Size	80 x 120 x 11mm (W x H x D)	
Certificates	CE, FCC, KCC, IP65	

1

Caution for RTC Battery

It may be occurred the risk of explosion for improper replacement of battery. Please use the specified battery according to proper instruction.

Electrical Specification

	Min.	Тур.	Max.	Notes	
	Power				
Voltage (V)	10.8	12	13.2	Use regulated DC power adaptor only	
Current (mA)	-	200	1500		
			Sw	itch Input	
VIH (V)	-	TBD	-		
VIL (V)	-	TBD			
Pull-up resistance (Ω)	-	4.7k	-	The input ports are pulled up with 4.7k resistors	
			TTL/Wi	egand Output	
VOH (V)	-	5	-		
VOL (V)	-	8.0	-		
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 0.3	30V DC 125V AC	
Switching power (resistive)	-	-	30W 37.5V A	DC AC	
Switching voltage (V)	-	-	110 125	DC AC	

FCC Rules

Caution

Changes or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment.

Warning

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interface, and (2) this device must accept any interface received, including interference that may cause undesired operation.

Information to User

This equipment has been tested and found to comply with the limit of a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, user and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation; if this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more the following measures:

- 1. Reorient / Relocate the receiving antenna.
- 2. Increase the separation between the equipment and receiver.
- 3. Connect the equipment into an outlet on a circuit difference from that to which the receiver is connected.
- 4. Consult the dealer or an experienced radio/TV technician for help



Suprema Inc.

16F Parkview Office Tower, Jeongja-dong, Bundang-gu,
Seongnam, Gyeonggi, 463-863 Korea
E-mail: support@supremainc.com

Website: www.supremainc.com