



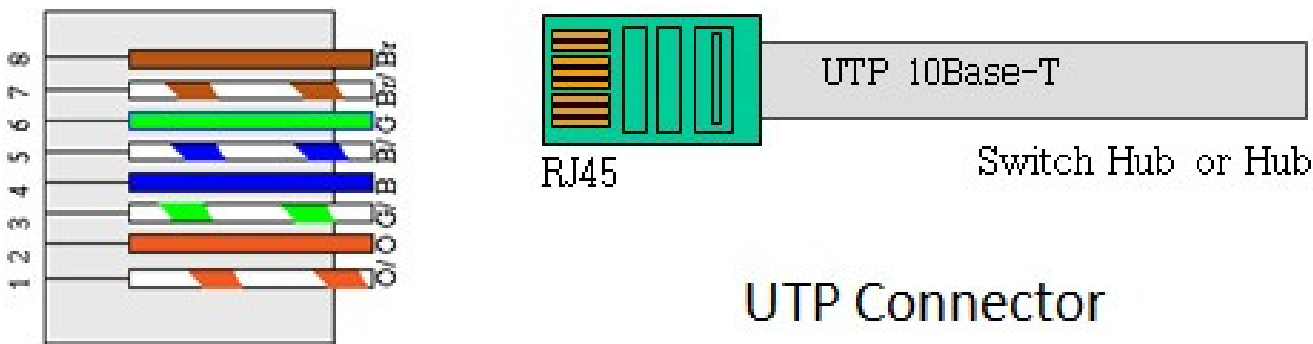
Connection Diagram

TW-IriGoPlus

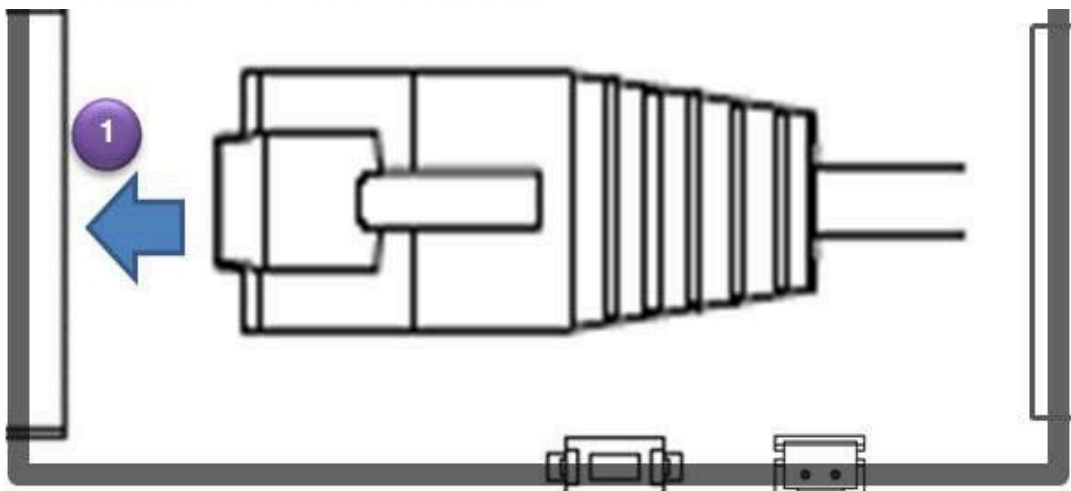
Connector Information

LAN Connector

RJ-45 connector for 10/100Base-T Ethernet communication, minimum CAT5 cable.



Hook is Underneath



RS-485 Termination Resistor Switch

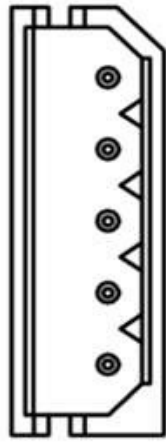
Switch for 100 Ohm termination resistor activation when EF-45 is connected to the end of RS-485 wire connection.

Default: Turned off

	Switch	Function	Etc.
 OFF (Default)	OFF	Disconnect RS-485 Termination Resistor	
 ON	ON	Connect RS-485 Termination Resistor	

RS-485 Connector

This is used for communication with Access Control Unit or remote PC based system or controller.

3	Pin Number	Pin Name	Etc.
	1	DATA -	
	2	DATA +	
	3	GROUND	
	4	SHIELD GROUND	
	5	SHIELD GROUND	

RS-232 Connector

This allows for external communications with serial device similar to Smart Card Reader or Pin-PAD.

4	Pin Number	Pin Name	Etc.
	1	TX	
	2	RX	
	3	GROUND	
	4	SHIELD GROUND	

GPI Connector

GPI input is used for sensing the Exit button or Door Open Sensor.

It is TTL level based circuit and is pulled-up by an internal resistor.

	Pin Number	Pin Name	Etc.
	1	GPI 1	
	2	GPI 2	
	3	GROUND	
	4	SHIELD GROUND	


Wiegand Input Connector

The Wiegand Input DATA0 and DATA1 are pulled-up by internal DC +5V supply.

	Pin Number	Pin Name	Etc.
	1	DATA 0	
	2	DATA 1	
	3	GROUND	
	4	SHIELD GROUND	

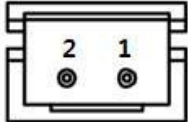
Wiegand Output Connector

To make Wiegand Out work properly, the DATA0 and DATA1 should be pulled up by 1K Ohm resistor unless the EF-45 is connected to external device with its own pull-up for Wiegand.

	Pin Number	Pin Name	Etc.
	1	DATA 0	
	2	DATA 1	
	3	GROUND	
	4	SHIELD GROUND	
	5	SHIELD GROUND	

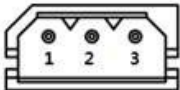
DC Power Input Connector

Clean and sustainable DC +12V / 3.2 A power is needed for reliable EF-45 operations.

	Pin Number	Pin Name	Etc.
	1	DC+12V INPUT	
	2	GROUND	

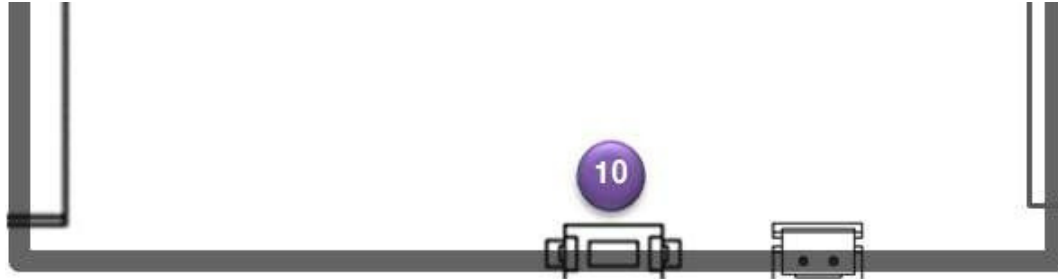
Relay Connector

Internal relay interface with nominal switching capacity of 1A 30VDC or 0.3A 124VAC, resistive load.

	Pin Number	Pin Name	Etc.
	1	Normal Close(NC)	
	2	COM	
	3	Normal Open(NO)	

Factory Reset Switch

If Factory Reset Switch is pushed for over 3 seconds, then system will re-initialize all the parameters to default and reboot the system.



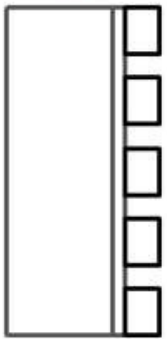
External Audio Output Connector

Connector for external audio output.

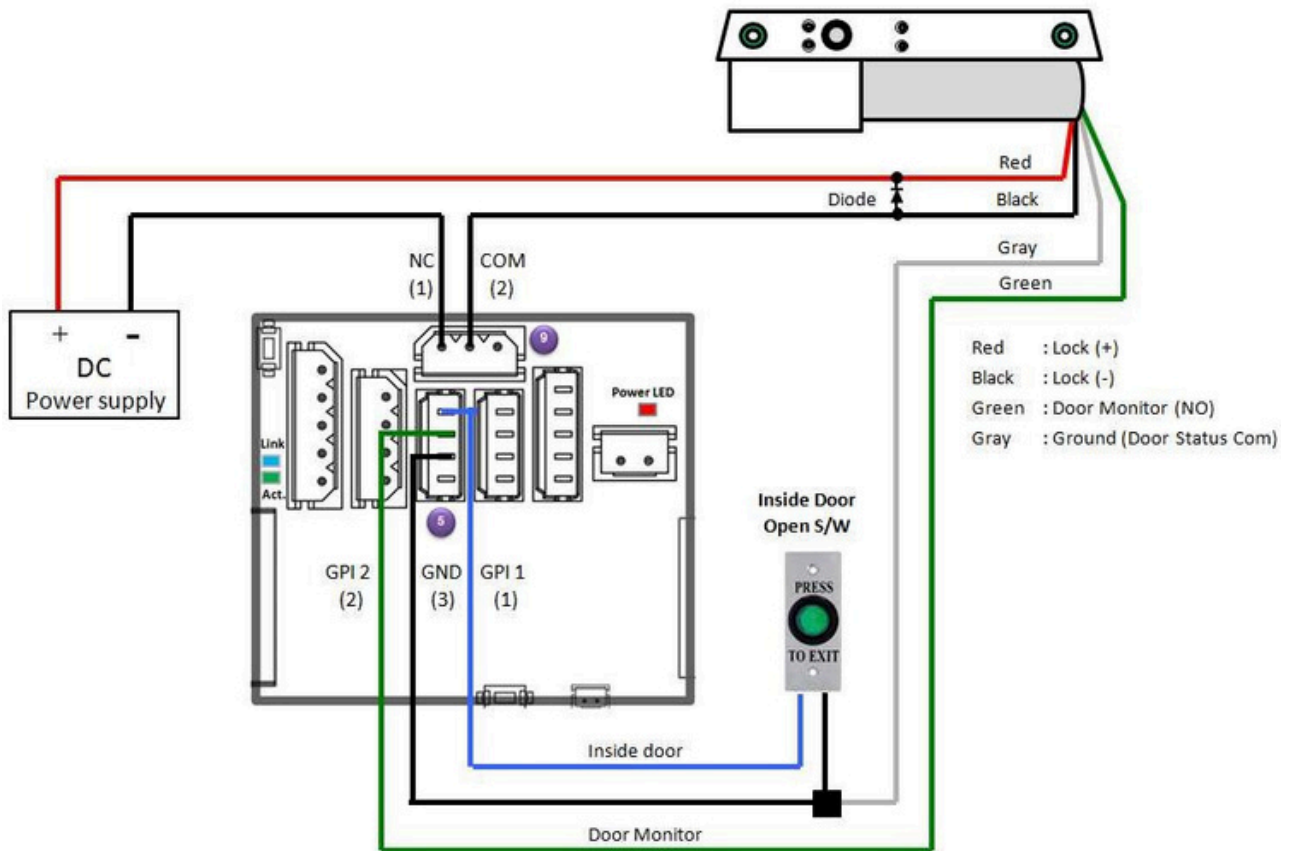
11	Pin Number	Pin Name	Etc.
	1	EXT. AUDIO OUT +	
	2	EXT. AUDIO OUT -	

Serial Debug Port

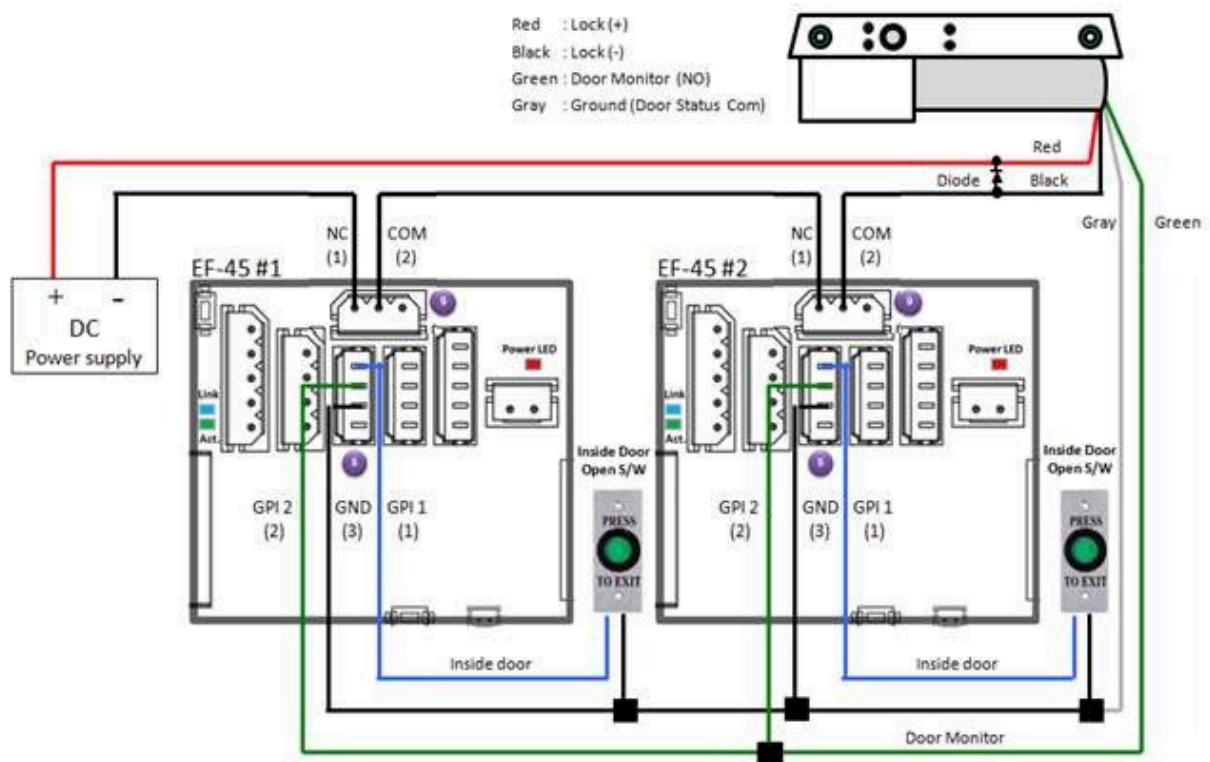
This serial debug port is used for debugging the system by CMITech Service or Engineering. It is not available to user.

12	Pin Number	Pin Name	Etc.
	1	GROUND	
	2	RX (TTL LEVEL)	
	3	TX (TTL LEVEL)	
	4	DC+3.3V OUTPUT	

Single EF-45 configuration

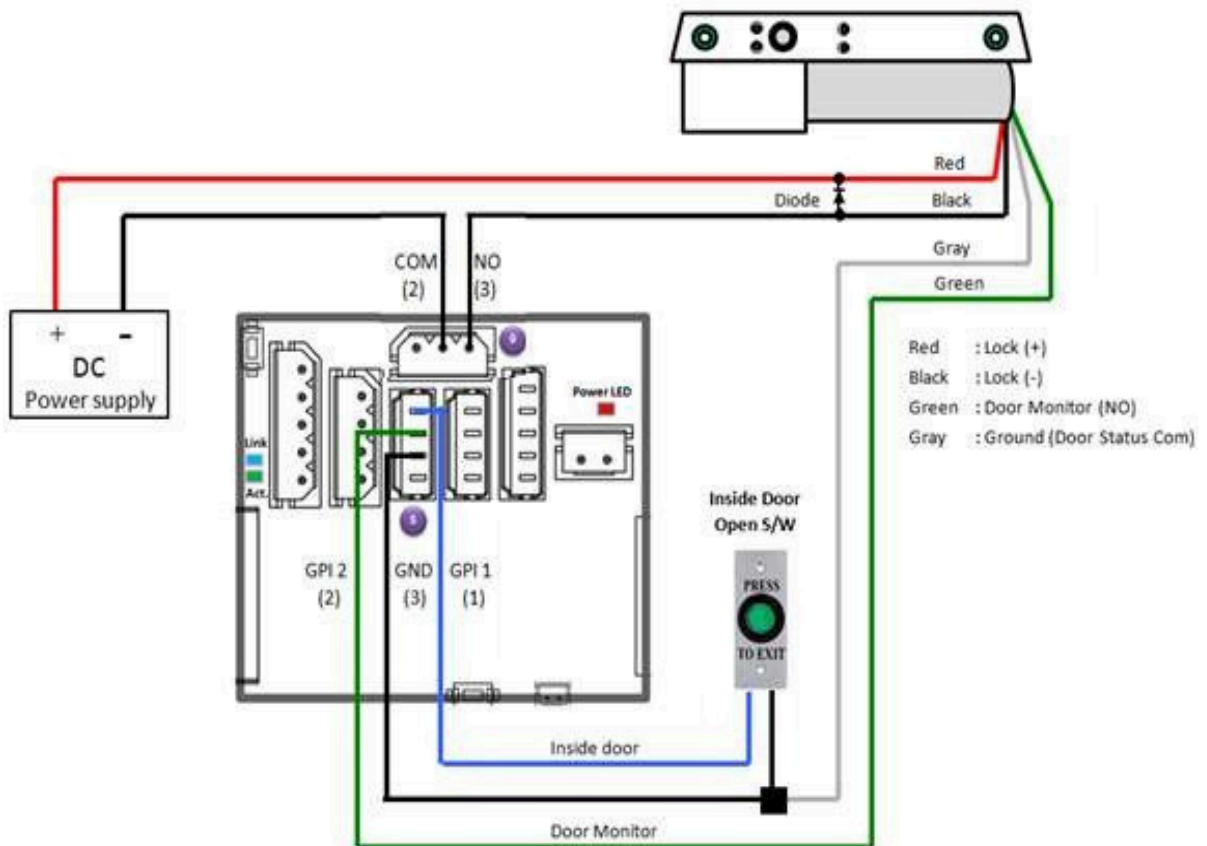


Dual EF-45 configuration

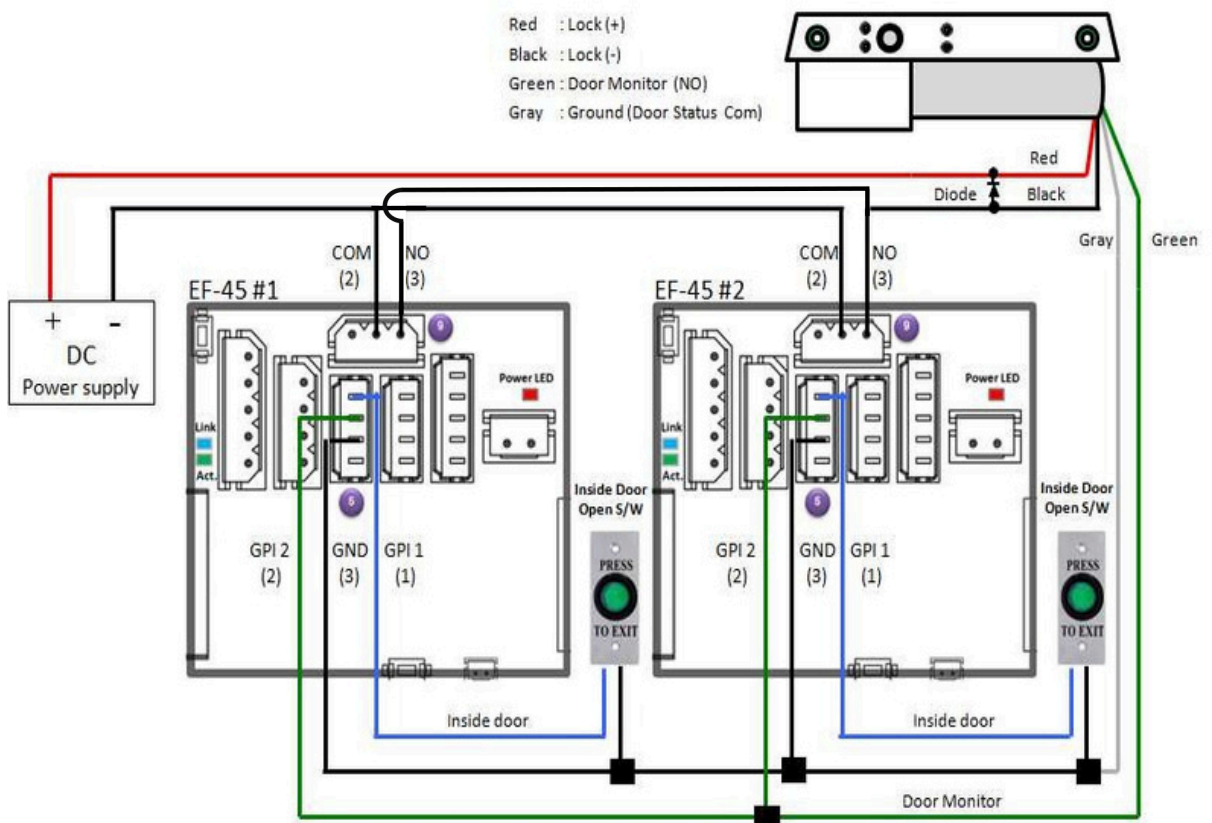


Relay Connection – Fail Secure Lock (Dead-Bolt Type Door Lock)

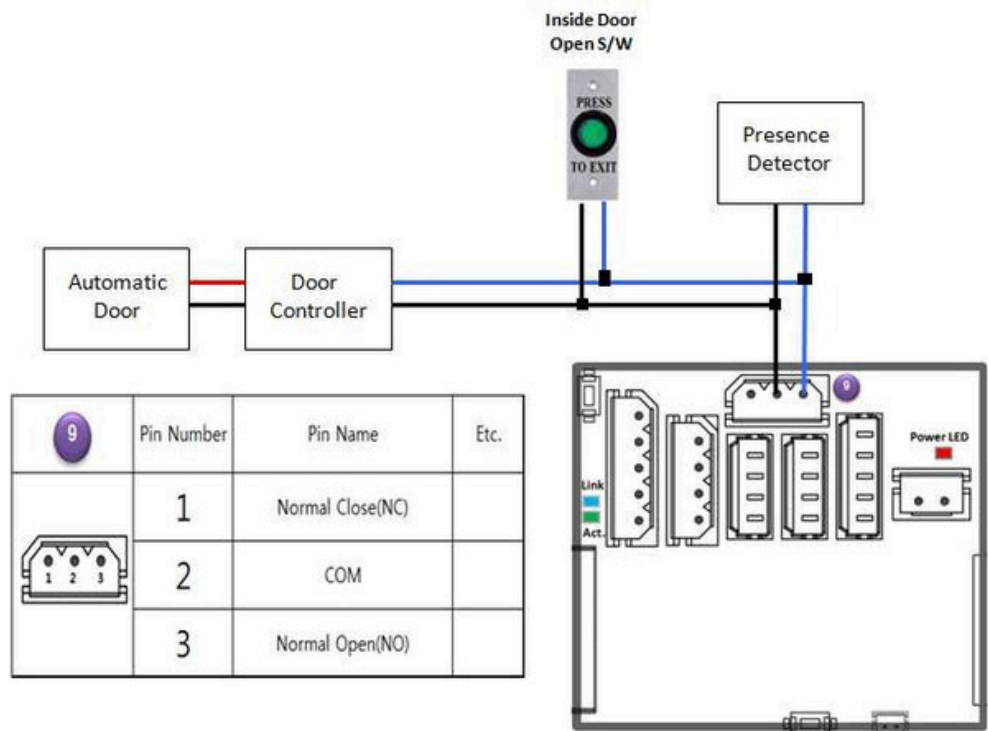
Single EF-45 configuration



Dual EF-45 configuration

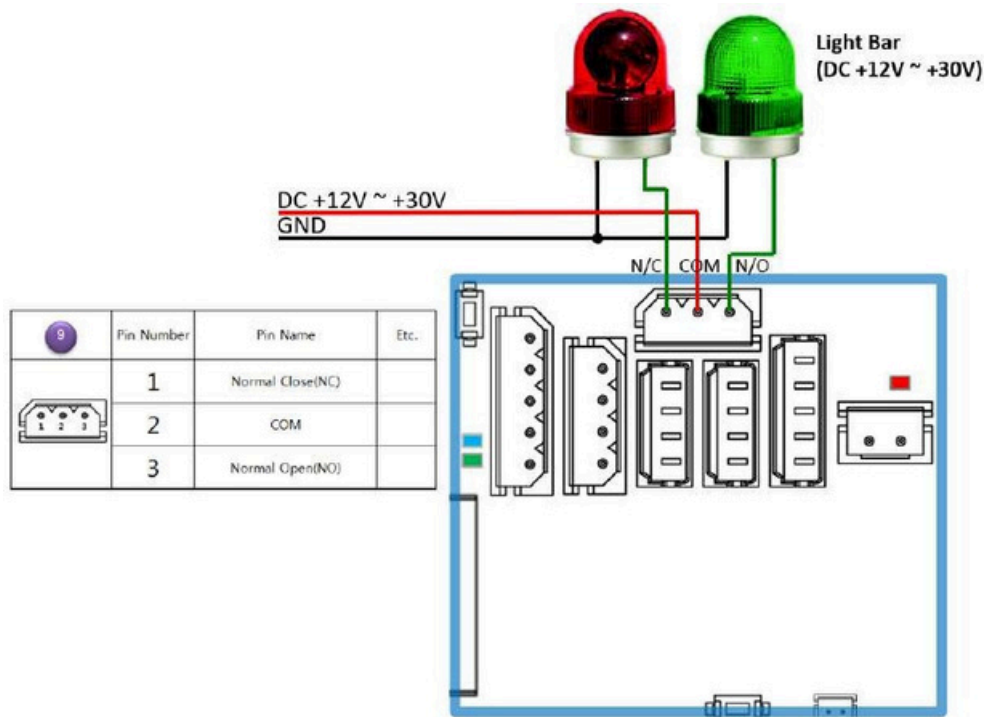


Relay Connection – Automatic Door

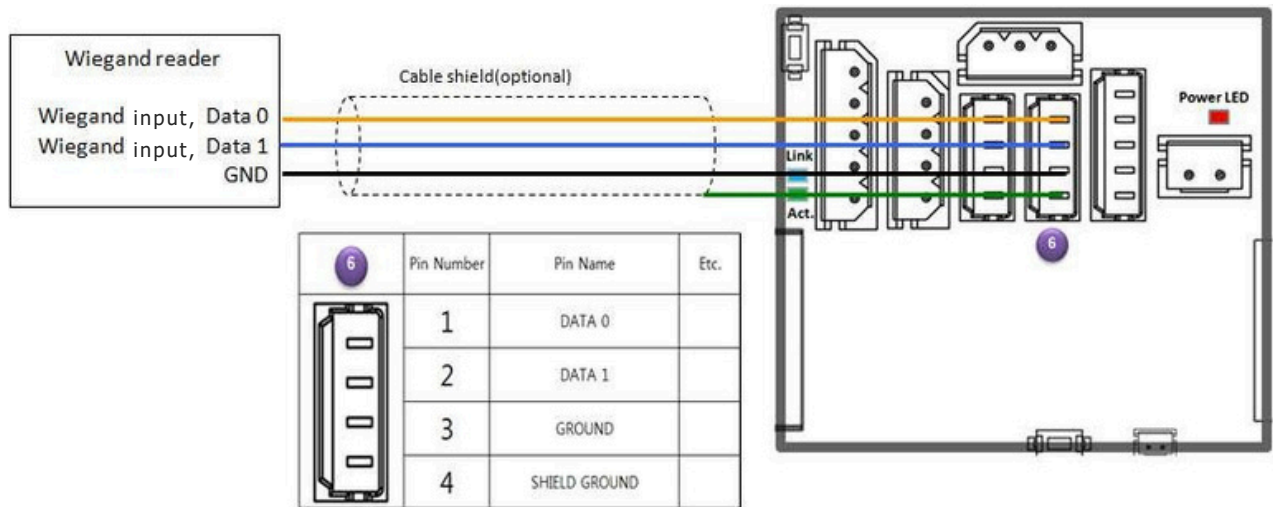


Relay Connection – Light Bar

Internal relay interface with nominal switching capacity of 1 A, 30 VDC or 0.3 A, 120 VAC, resistive load.



Wiegand Input Connection – External Reader



Wiegand Output Connection – External ACU / Controller

