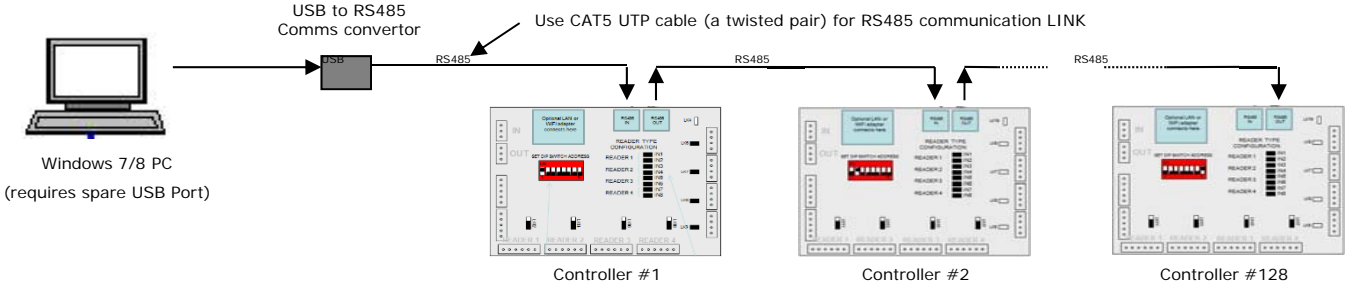
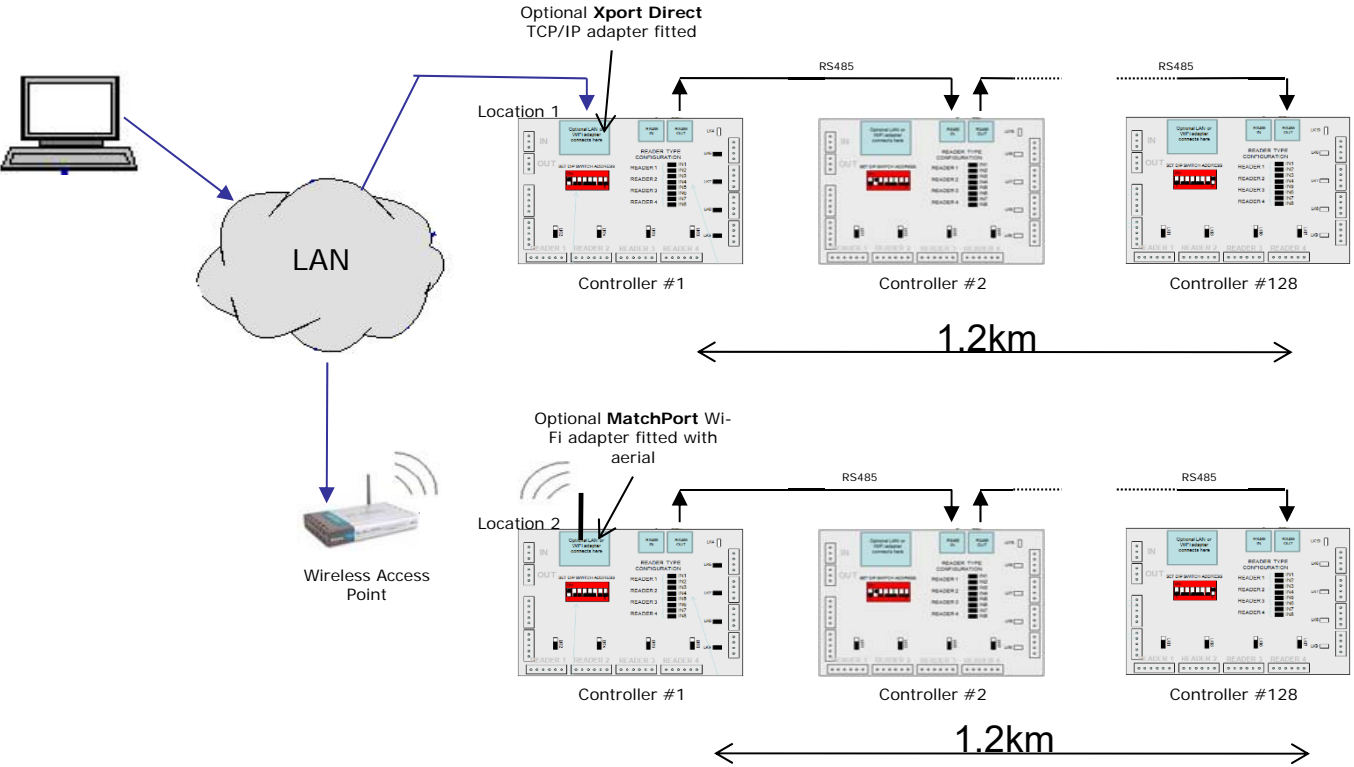


# How do I connect the controllers

## Direct Serial Communication

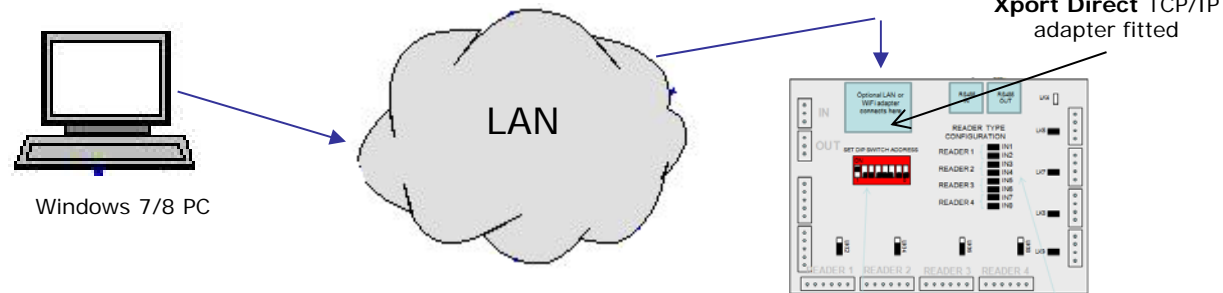


## TCP/IP Communication

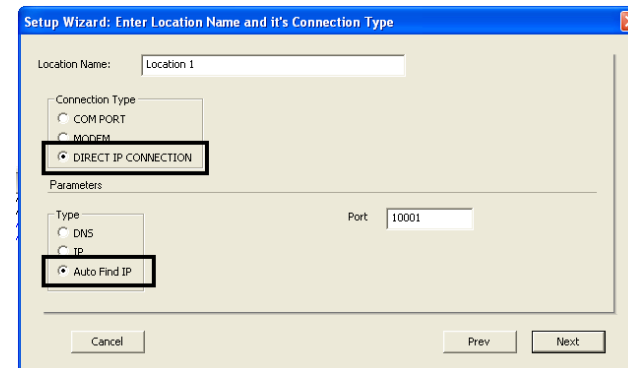


# Connecting using a LAN adapter

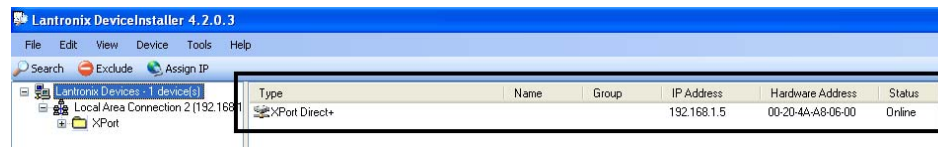
1. Insert the XportDirect TCP/IP adapter into the CS Controller. Connect the device to the LAN. Power on the controller.



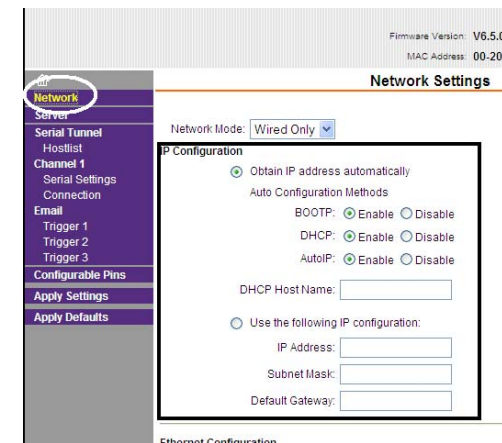
2. By default the XportDirect is set to auto DHCP. It will automatically connect to the network and be assigned a IP address by the network.
3. In the Evolution go to the Location (Hardware/Locations) and select **IP Connection** and select **Auto Find**. Evolution will now automatically connect to the device.  
That's it. Your done.



1. You can also manually set the IP address in the XportDirect to suit the network.
2. Install the included **Lantronix Device Installer** software on the configuration PC.  
<http://www.lantronix.com>
3. The Device Installer software will now automatically display the XportDirect.



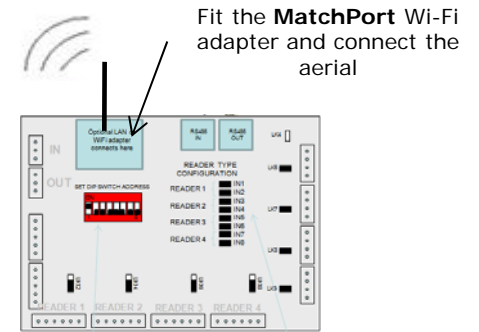
4. Double click on the device and use the 'Web Configuration' tool to configure the device. Configure the XportDirect as required.  
(Default username is 'Admin' with no password)  
Set the IP Address, Subnet Mask and Gateway as required.



# Configuring a MatchPort Wi-Fi adapter

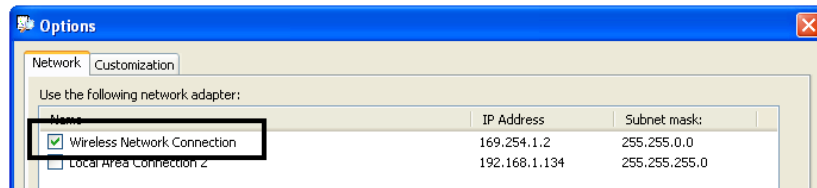
## Requirements:

- A PC/Laptop with a Wi-Fi adapter (Configuration PC).
- A Wireless Access Point (optional).

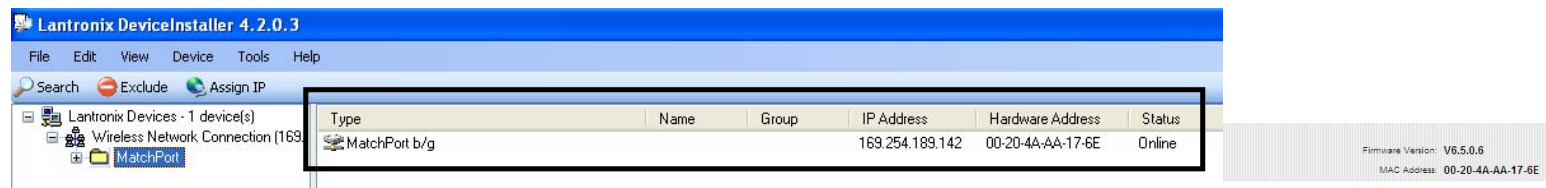


1. Insert the Wi-Fi adapter into the CS Controller. Attach the aerial and power on the controller.
2. Using the Windows Wireless Connection Program to connect the PC to the MatchPort.  
The MatchPort will appear by default as **LTRX\_IBSS**

1. Install the included **Lantonix Device Installer** software on the configuration PC.
2. In the Device Installer go to 'Tool/Options' and tick 'Wireless Network Connection'.



3. The Device Installer software will now display the MatchPort. If you are not going to use a Wireless Access Point add the shown IP address into Evolution.

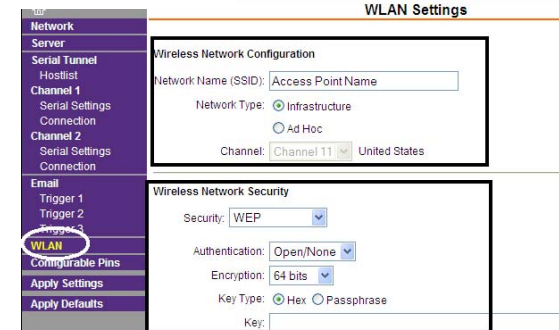


4. If using a WAP: Double click on the device and use the 'Web Configuration' tool to manually configure the device. (Default username is 'Admin' with no password)  
Configure the MatchPort as per you Wireless Access Point.

Click on WLAN. Set the Network name. Network type and security options to suit your WAP.



Wireless Access Point



**Power Notes:**

- Recommended cabling – Figure 8
- Do not use plug pack power supplies.
- Recommend 13.8 Volt 2A power supply with battery backup. (Can power several controllers)
- Check all devices current usage.

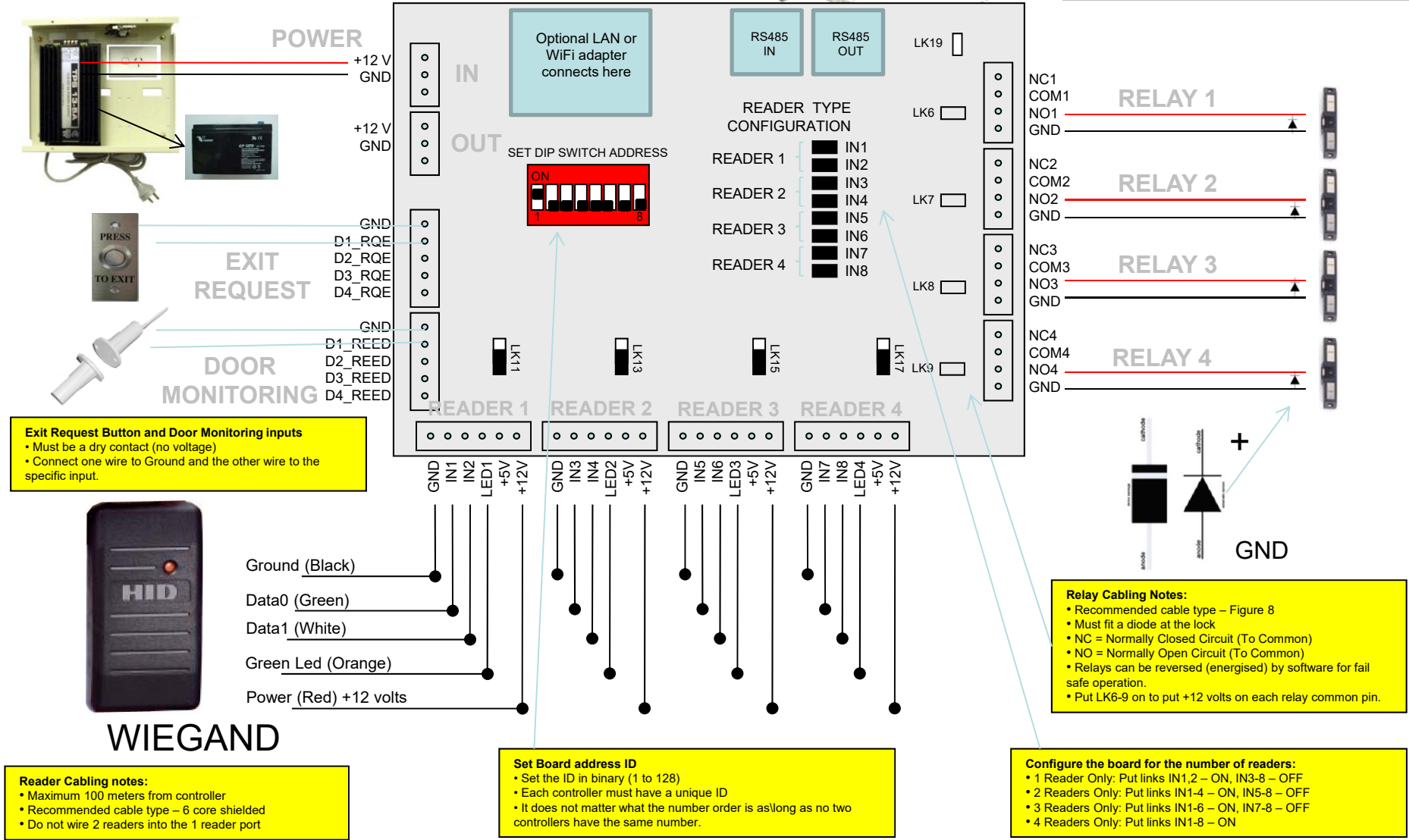
Typically: Board 400mA, Strike 200mA, Maglock 1000mA, Reader 20mA.

- There are two power terminals. Connect the power supply to the 'IN' terminal. The 'OUT' power terminal can be used as a power 'output'.



**Comms Cabling Notes:**

- Recommended cable type – CAT5
- Daisy Chain configuration
- Maximum distance is 1.2km from PC to last controller
- RJ45 connector. Use a 'straight through' network cable
- These connections are not for TCP/IP connection
- Pin 1 = A, Pin 2 = B, Pin 3+4 = GND
- If connecting to terminal connection – A connects to A, B connects to B and GND connects to GND on the next controller.
- LK19 is a termination link. It should be put on the last controller in the daisy chain.



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- Recommended cabling – Figure 8
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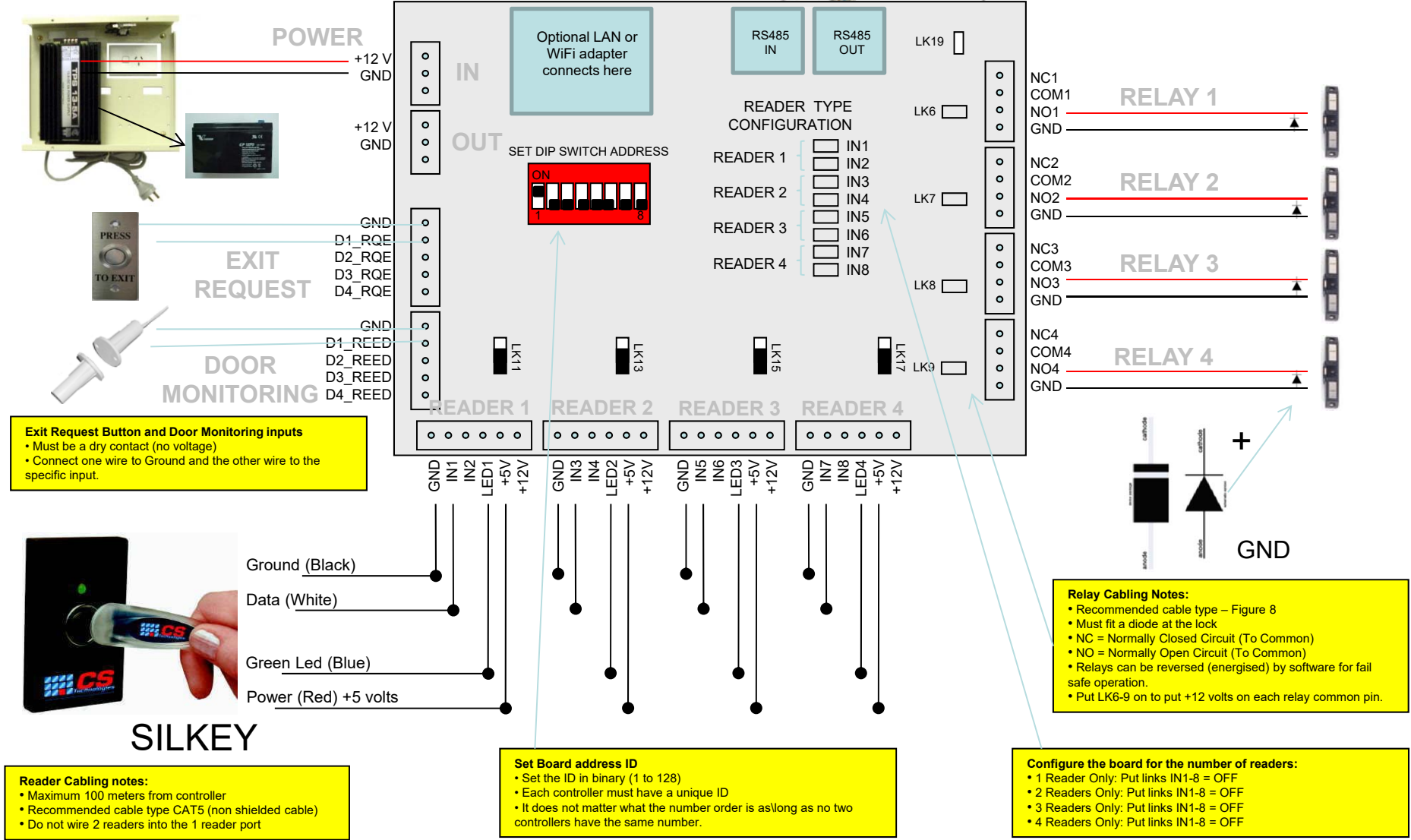
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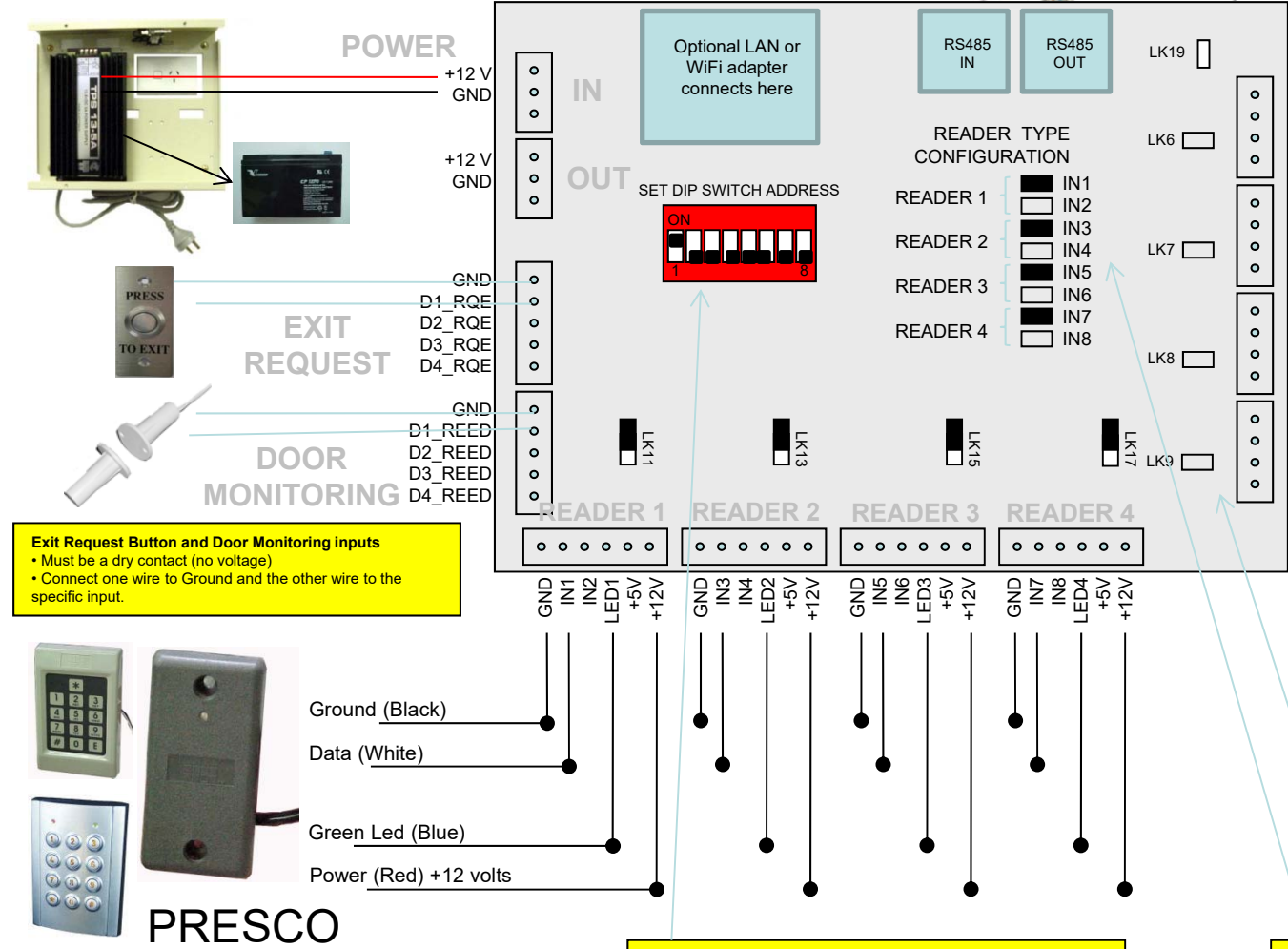
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**Exit Request Button and Door Monitoring inputs**

- Must be a dry contact (no voltage)
- Connect one wire to Ground and the other wire to the specific input.



Ground (Black)  
Data (White)  
Green Led (Blue)  
Power (Red) +12 volts

**Reader Cabling notes:**

- Maximum 500 meters from controller
- Recommended cable type – 4 core shielded or non shielded
- Do not wire 2 readers into the 1 reader port

**Set Board address ID**

- Set the ID in binary (1 to 128)
- Each controller must have a unique ID
- It does not matter what the number order is as long as no two controllers have the same number.

**Relay Cabling Notes:**

- Recommended cable type – Figure 8
- Must fit a diode at the lock
- NC = Normally Closed Circuit (To Common)
- NO = Normally Open Circuit (To Common)
- Relays can be reversed (energised) by software for fail safe operation.
- Put LK6-9 on to put +12 volts on each relay common pin.

**Configure the board for the number of readers:**

- 1 Reader Only: Put links IN1 – ON, IN2-8 – OFF
- 2 Readers Only: Put links IN1,3 – ON, IN2,4-8 – OFF
- 3 Readers Only: Put links IN1,3,5 – ON, IN2,4,6-8 – OFF
- 4 Readers Only: Put links IN1,3,5,7 – ON, IN2,4,6,8 - OFF



**Power Notes:**

- Recommended cabling – Figure 8
- Do not use plug pack power supplies.
- Recommend 13.8 Volt 2A power supply with battery backup. (Can power several controllers)
- Check all devices current usage.

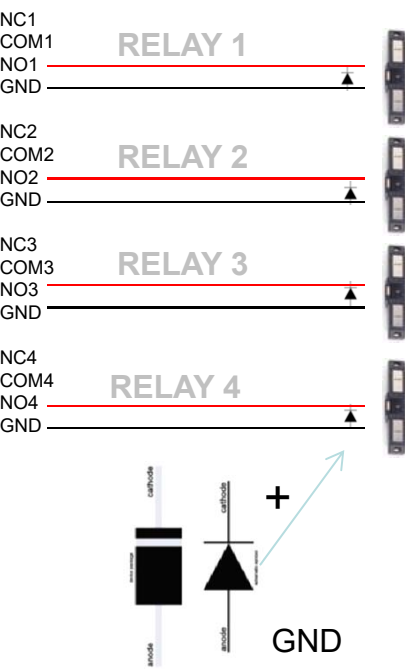
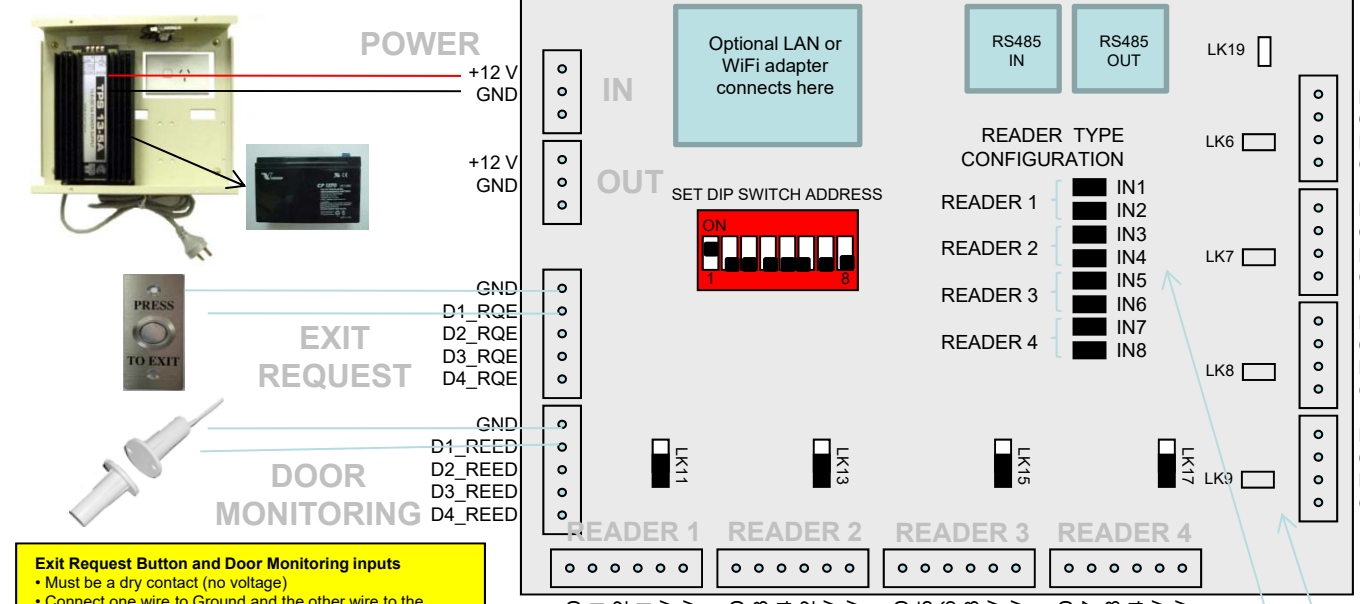
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Reader Type **Wiegand Card and Keypad Combo Reader**



Ground (Black)

Data0 (Green)

Data1 (White)

Green Led (Yellow)

Power (Red) +12 volts

**PRESCO PTKR**

**Reader Cabling notes:**

- Maximum 100 meters from controller
- Recommended cable type – 6 core shielded
- Do not wire 2 readers into the 1 reader port

**Reader Configuration – MUST Set PTKR for 4 bit Wiegand Burst mode (with \* and # keys enabled):-**

1. Remove power from the PTKR keypad.
2. Connect the Orange wire to 0V.
3. Reapply power.
4. Once the Presco logo LED starts to double flash green you are in program mode.
5. Press \* 032 101 #
6. Press \* 999 # to exit program mode.
7. Disconnect Orange wire.

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- 1 Reader Only: Put links IN1,2 – ON, IN3-8 – OFF
- 2 Readers Only: Put links IN1-4 – ON, IN5-8 – OFF
- 3 Readers Only: Put links IN1-6 – ON, IN7-8 – OFF
- 4 Readers Only: Put links IN1-8 – ON

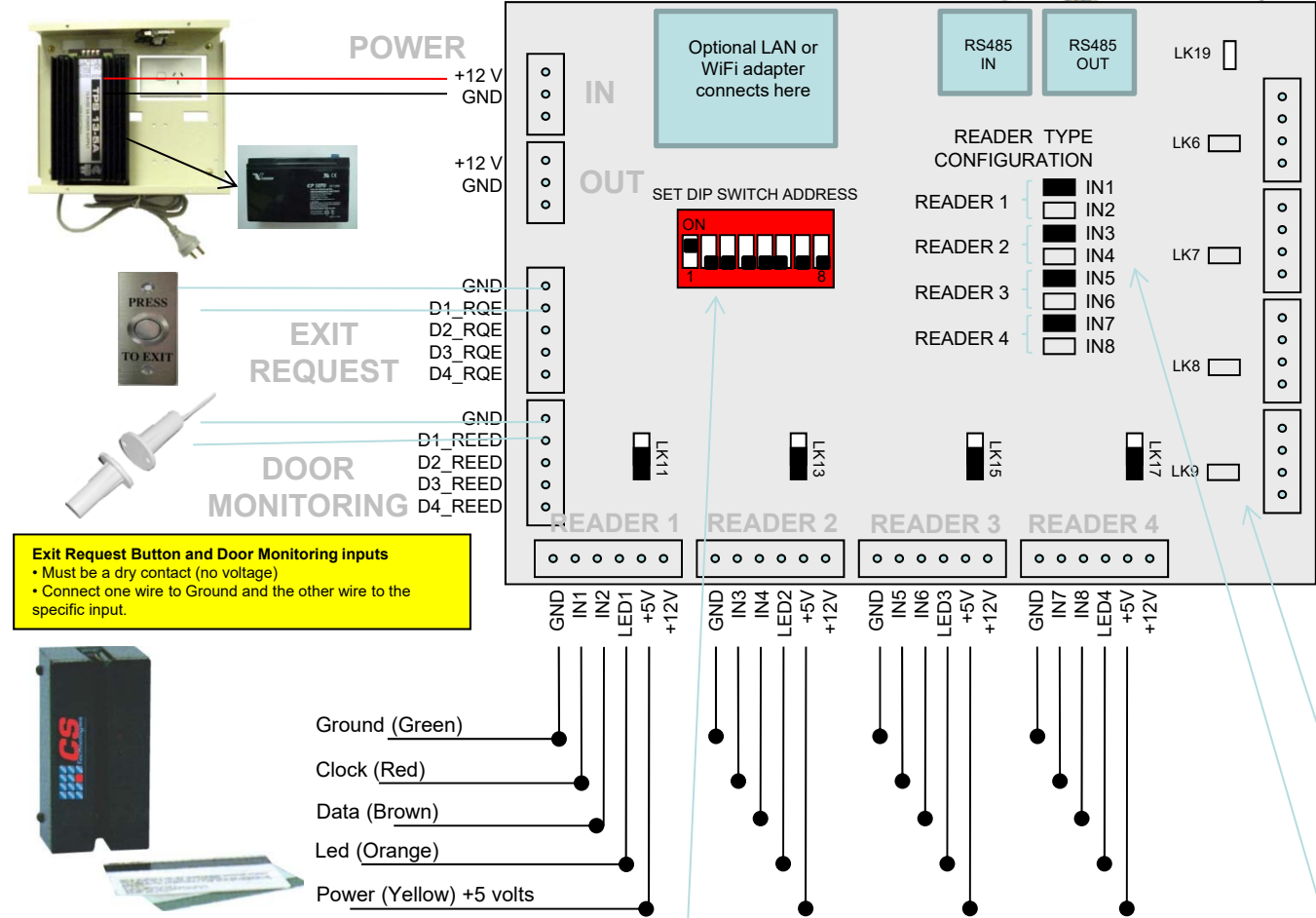
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