

Version 1.1

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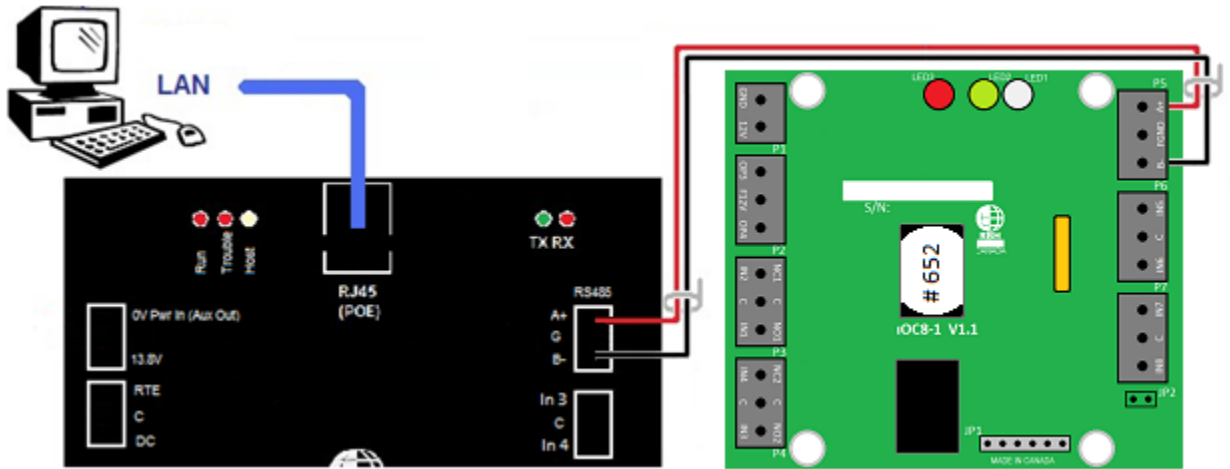
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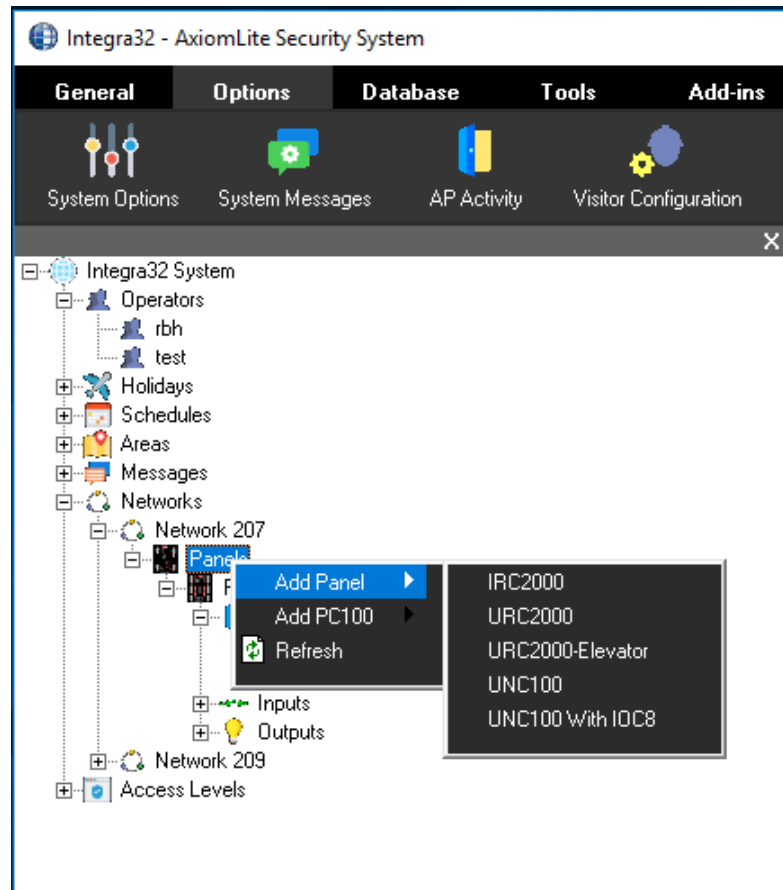
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Requirements:

To use the IOC8, please ensure that your software version is 4.1.8 R4.3 or higher. Also, the UNC100 firmware version must be 155 or higher.

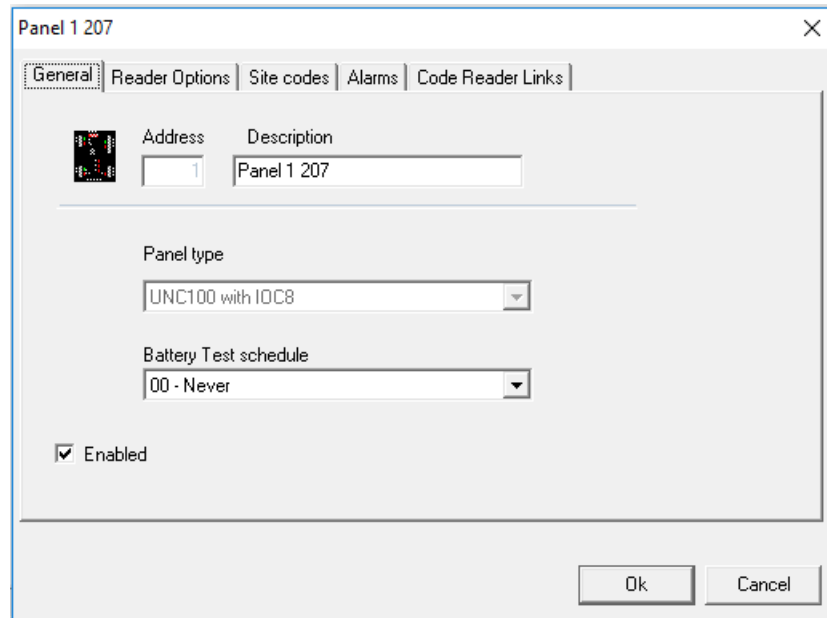


The IOC8 is wired into the UNC100's RS485 port with a two conductor shielded cable.

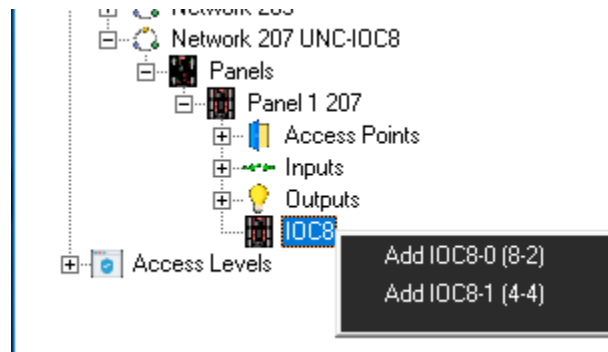


Panel must be added as *UNC100 with IOC8*.

Software 4.1.8 R4.3 or higher and firmware 155 or higher is required for IOC8 to work with UNC100.



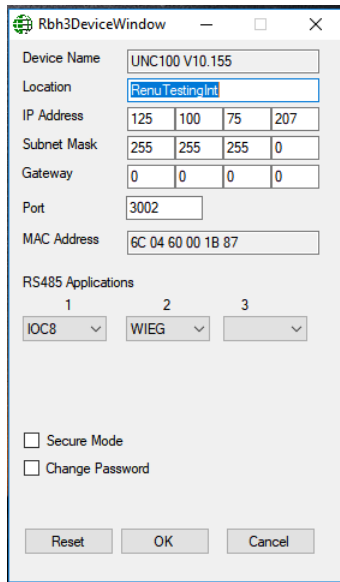
The option to add IOC8 is available only when the panel is configured as *UNC100 with IOC8* in software.



Only 1 panel per network can be added when using *UNC100 with IOC8*.

To add more panels of type *UNC100 with IOC8*, add them as other network(s).

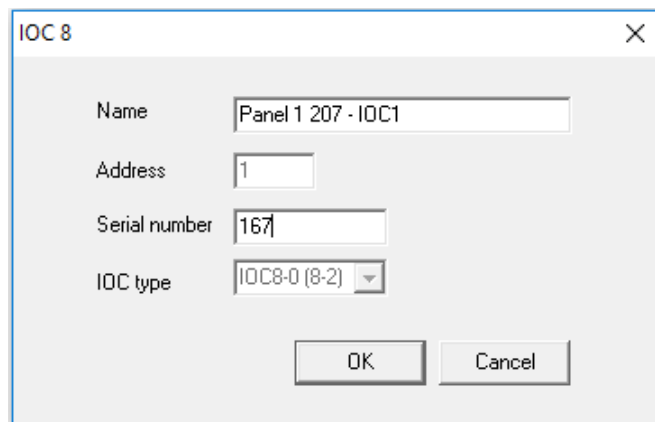
For a panel to work as *UNC100 with IOC8*, Channel 1 needs to be selected as IOC8 in Device Discovery Tool.



Note: *Devices Discovery Tool* can be found in the tools folder of the CD or in the tools menu of the software.

Maximum of 4 IOC8s can be added per *UNC100 with IOC8*

Give the IOC8 a name, and enter the serial number. This will be a small 3-5 digit number on the board.



Enter each device's individual serial number, as labelled on the board.

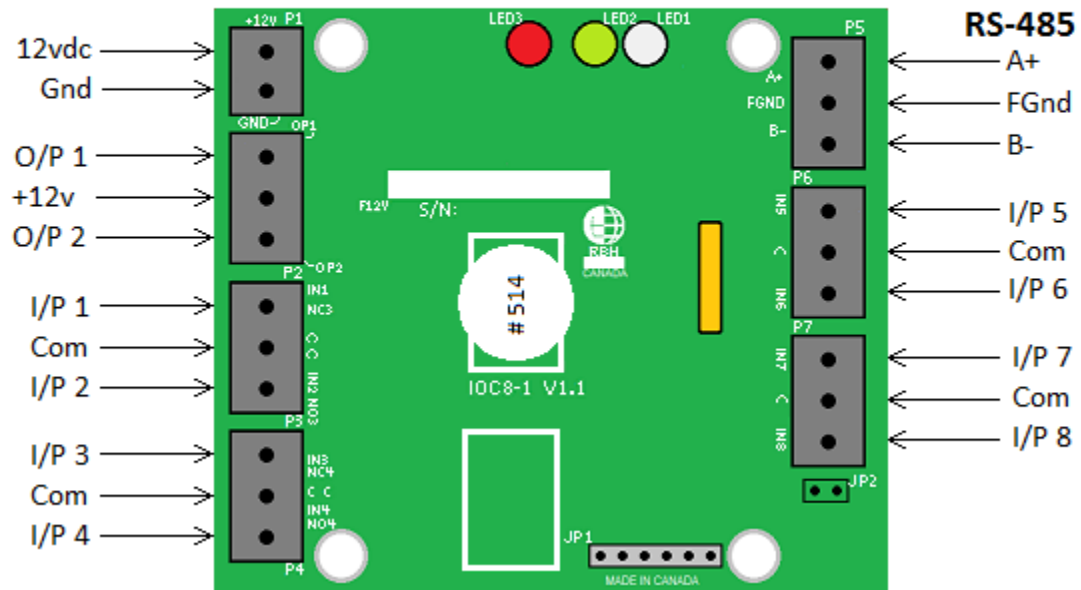
There are two types of IOC8's available; eight inputs, two outputs (8-2); and four inputs, four outputs (4-4).

The IOC8 board will have relays if it has four outputs.

IOC8 Inputs are defaulted to: General purpose, Normally Open No Resistor, No Abort Delay, No Schedule, Report Armed and Disarmed.

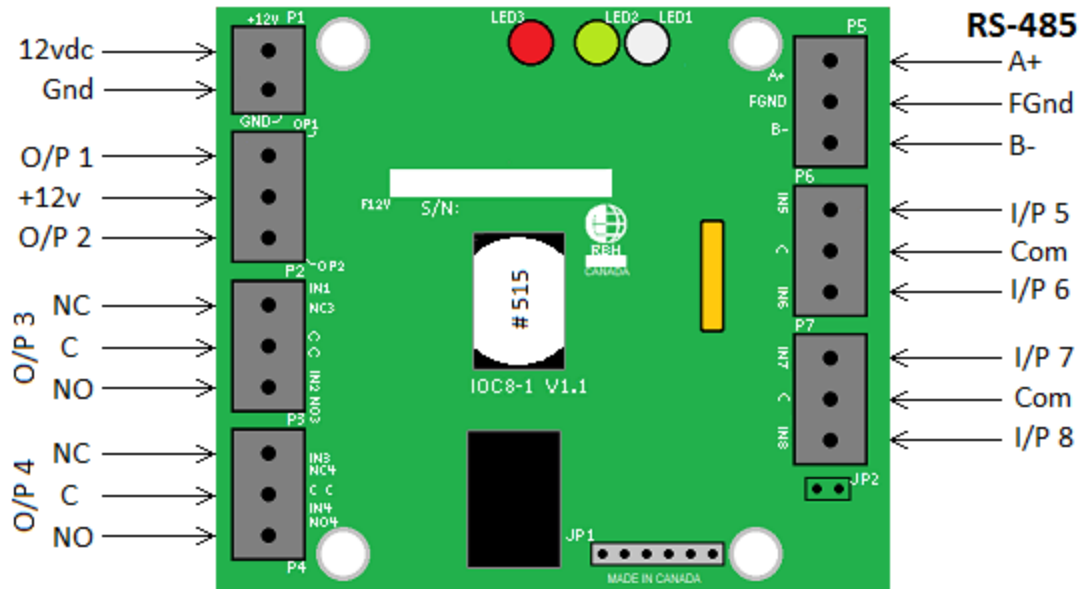
Wiring Diagrams for IOC8

IOC8 8x2 Wiring Diagram



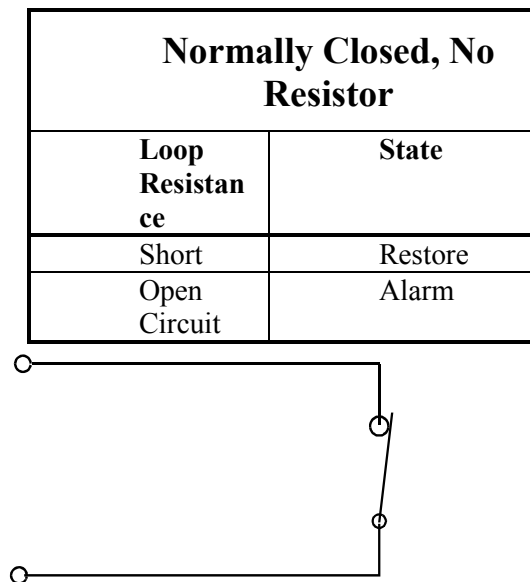
- Each pair of programmable inputs has its own common terminal.
- Outputs 1 & 2 are open collectors capable of sinking up to 100ma.
- Outputs 3 & 4 are dry contact form C relays.

IOC8 4x4 Wiring Diagram



Input Circuit Types

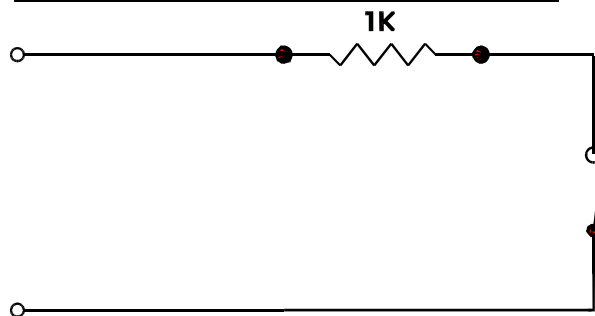
The IOC8 supports seven different input circuit types ranging from no resistor for low security applications to two resistor normally closed circuits where the highest security is required.



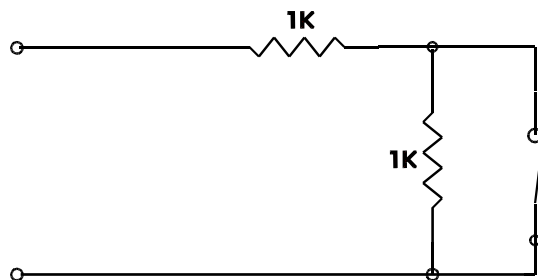
Normally Open, No Resistor	
Loop Resistance	State
Short	Alarm
Open Circuit	Restore



Normally Closed, One Resistor	
Loop Resistance	State
Short	Trouble
1k	Restore
Open Circuit	Alarm

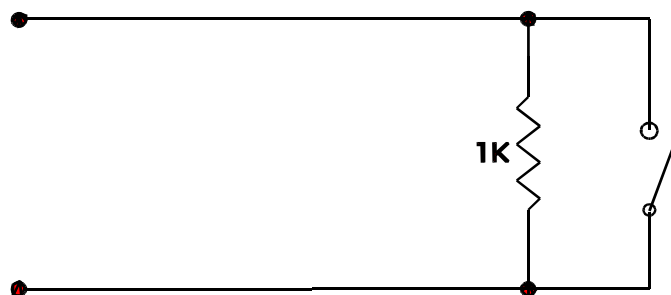


Normally Closed, Two Resistor	
Loop Resistance	State
Short	Trouble
1k	Restore
2k	Alarm
Open Circuit	Trouble

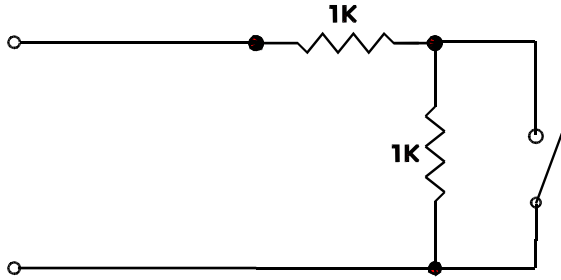


This circuit provides a high degree of supervision and detects both short and open circuit fault conditions. Use this circuit in high security applications.

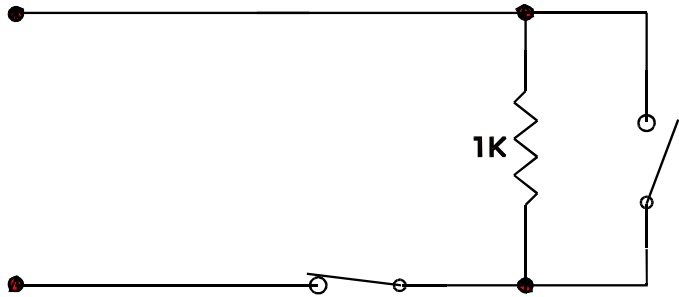
Normally Open, One Resistor	
Loop Resistance	State
Short	Alarm
1k	Restore
Open Circuit	Trouble



Normally Open, Two Resistor	
Loop Resistance	State
Short	Trouble
1k	Alarm
2k	Restore
Open Circuit	Trouble



Normally Open And Normally Closed, One Resistor	
Loop Resistance	State
Short	Alarm
1k	Restore
Open Circuit	Alarm

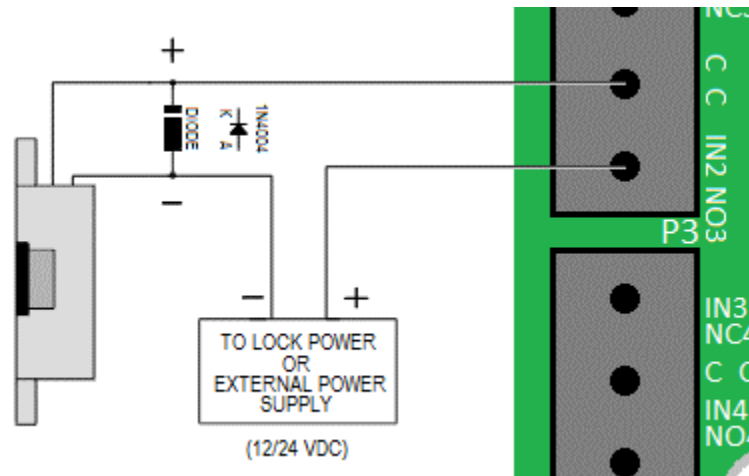


This circuit type is used where normally open and normally closed contacts are used in the same loop.

Outputs

The IOC8 has either two or four outputs. Outputs 3 and 4 use electronic drivers and can switch 100ma, while outputs 1 and 2 are dry contact relays capable of switching 5Amps@30vdc. All outputs are programmable from the PC as either normally energized or normally de-energized. Normally energized outputs are used for fail-safe operation where it is essential that the output return to a safe state when the system fails due to power loss, communications failure, or fire.

Electronic outputs are 'switched negative' which means that they switch the power negative to the terminal. When the output is off, the output terminal is electronically disconnected.



Switching Inductive Devices

Exercise caution when switching an inductive load. Inductive devices include external relay, solenoids, bells, and door locks. All of these devices generate extremely high voltage spikes (*several thousand volts*) when power is applied or removed and possible disruption of the operation could occur if this interference gets on to the electronic circuit board.

This interference can be suppressed by placing a diode (*1N4001 or similar*) across the lock or other inductive device being switched. Connect the diode cathode (*end with band*) to the positive terminal and the other end to the negative terminal. The diode must be placed at the device being switched and not at the controller.