



Installation Instructions

Version 1.0



Installation Instructions

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Installation Instructions

Introduction

Novation Wireless Security Systems, LLC (“Novation Wireless”) has revolutionized on-line electronic access control systems. The Novation Wireless **Security Center** software is easy to use, and the system hardware is simple to install reducing installation time and costs dramatically.

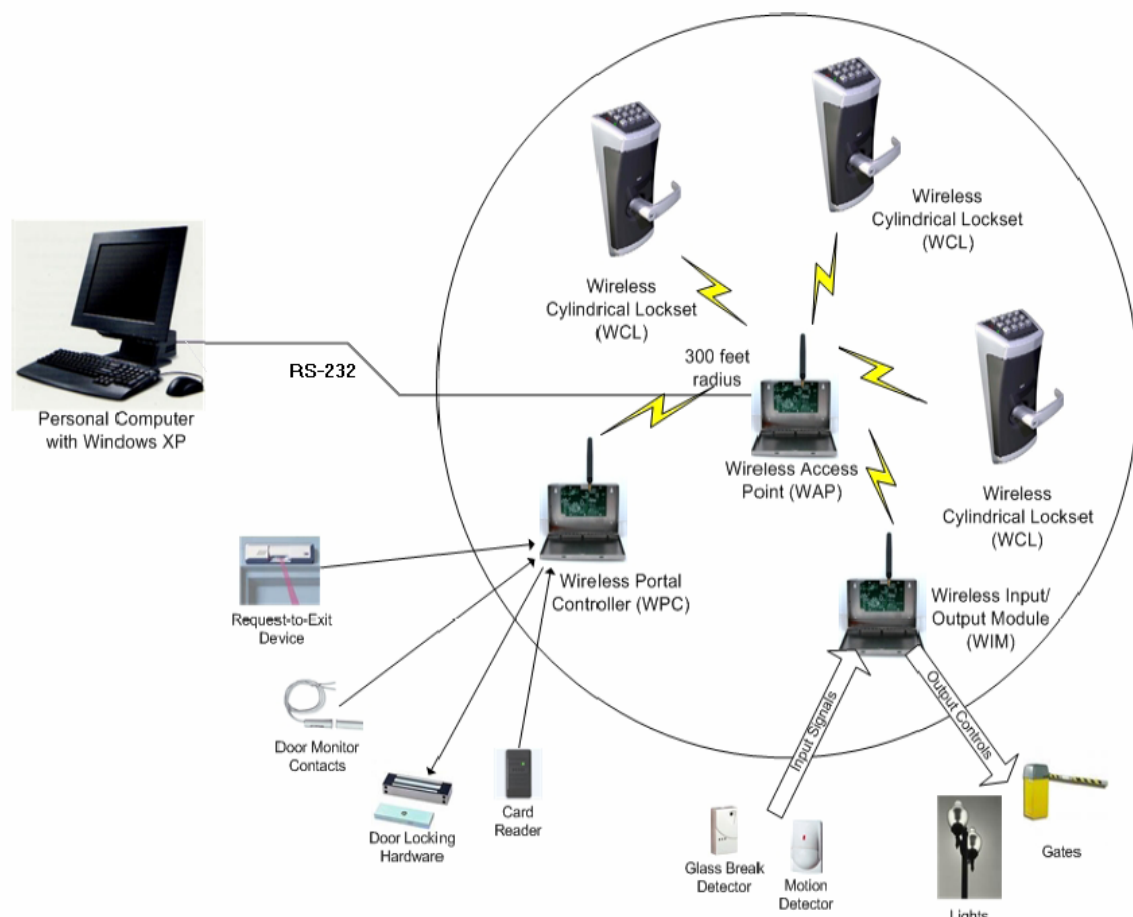
Novation Wireless Access Control Systems was created with the needs of business owners in mind. Novation Wireless Access Control Systems offers:

- ◆ **Simplicity** – existing staff can easily operate the security control system
- ◆ **Installation Ease** – (unlike traditional products) door installation requires:
 - No wiring
 - No AC power at entry points
 - No electric door strike
 - No drilling
 - No prolonged interruption of business at the installation site
- ◆ **Self-reliance** – reduces dependence on outside security staff
- ◆ **Flexibility** – allows seamless expansion, and integration with pre-existing wired systems

Novation Wireless Access Control System Components

The Novation Wireless Access Control System consists of 2-4 components depending on design:

- ◆ Wireless Access Point (WAP)
- ◆ Wireless Cylindrical Lockset (WCL)
- ◆ Wireless Portal Controller (WPC)
- ◆ Wireless Input/Output Module (WIM)



Wireless Access Point (WAP)

The Novation Wireless Access Point (WAP) is the “brains” of the system. The wireless access point uses an RS-232 serial port to communicate with the designated computer. The wireless access point also sends and receives data and commands it gets from the Security Center software to the wireless locksets. Some facilities, depending on size, may require more than one wireless access point.

A single WAP can:

- ◆ Communicate with up to 64 wireless locksets
- ◆ Communicate with locksets within a minimum radius of 150 feet, and a typical radius of 300 feet
- ◆ Store a maximum of 10,000 cardholder records which are distributed to the designated locksets
- ◆ Store the last 20,000 transactions received from a lockset (the oldest transactions are overwritten when storage is full)



Wireless Cylindrical Lockset (WCL)

A Novation Wireless Cylindrical Lockset unlocks and locks each door. The WCL is self-contained and battery operated (i.e., standard alkaline AA batteries). The WCL is extremely easy to install.



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The WCL is mounted to the door using the existing lock cutout for a standard cylindrical lock shown below.



The installation does not require any drilling or modifications to the existing door, and no wiring is needed.

Each WCL contains a:

- ◆ **Lock release mechanism** – that locks the door on the unsecured side, and unlocks the door on the secure side.
- ◆ **Door monitor with unlock electronics** – that knows when the door is locked or unlocked and whether the door is open or closed.
- ◆ **Tamper switches** – one detects when the lockset is removed from the door, and the other detects when the battery compartment is opened.
- ◆ **Card reader** – that uses a magnetic strip or proximity reader to determine if the card holder has access to that particular door.

Wireless Portal Controller (WPC)

The Novation Wireless Portal Controller (WPC) is an optional component. In the following situations the Novation Wireless Lockset will not work, therefore the WPC is used for:

- ◆ Glass doors
- ◆ Turnstiles
- ◆ Pedestrian gates
- ◆ Vehicle gates
- ◆ Doors with existing card reader, and electric strike or electromagnetic lock

Wireless Input/Output Module (WIM)

The Novation Wireless Input/Output Module (WIM) is an optional component. Some doors are used for emergency entrance or exit only. In these situations the WIM is used to monitor and/or control access. The WIM monitors any device that provides a contact closure that reports a change of state (e.g., open/closed, on/off, in/out, etc.).

Installing the Novation Wireless Access Control System

The following describes how to install the Novation Wireless Access Control System.

1 Mount the Wireless Access Point (WAP).

Mount the Wireless Access Point (WAP) within 25 feet of the system computer. The WAP is connected to any RS-232 serial communications port on the back of the system computer. These ports are commonly defined as COM 1, COM 2, etc., and are 9-pin male receptacles.

To mount the WAP:

- A. Connect one end of an RS-232 cable to an unused COM port on the back of the system computer, and the other end to a similar female receptacle on the WAP.
- B. Plug the WAP's AC adapter into a 120 volt receptacle and the round power plug at the end of the AC adapter cable into the power receptacle on the WAP.



On the WAP circuit board, one POWER green LED and two red LEDs should be illuminated continuously. In addition, another green LED should flash ON and OFF every two seconds.

- C. If the antenna is not already attached, screw it into the receptacle at the top of the circuit board and close and lock the enclosure door.

The WAP is now ready to receive data from the computer and communicate with any Novation wireless device within its range. No radio adjustments are available or required.

② Install the Wireless Cylindrical Lockset (WCL).

The Wireless Cylindrical Lockset (WCL) is battery powered.

To install the WCL:



- A. Unscrew the captive security screw on the removable access panel at the bottom of the WCL.
- B. Remove the panel to expose the battery compartment.
- C. Pull out the compartment from the inside of the lockset housing.
A wire cable restricts the travel of the compartment so that the thin power wires cannot be pulled off of the compartment.
- D. Carefully insert four AA size alkaline batteries in the compartment. Adjacent batteries alternate in polarity.
- E. Reinsert the battery compartment into the lockset housing.
- F. Replace the removable access panel and tighten the screw.

The WCL is now ready to communicate (both transmit and receive data) with any WAP within its range. No radio adjustments are available or required.

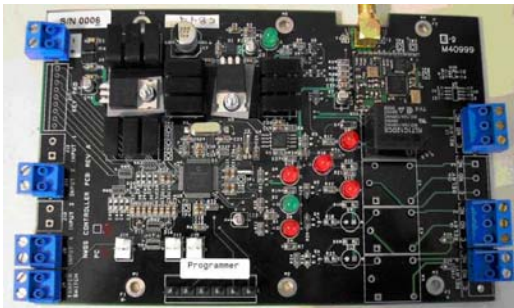
NOTE: Located on the back of the WCL is a label with a 12 character device serial number. This number is unique to this device and is used to identify this device to the WAP, and for the WAP to send information specific to this WCL only. Document this device serial number and the location of this door. This information must be entered in the Security Center software.

3 Install the Wireless Portal Controller (WPC) and/or the Wireless Input/Output Module (WIM).

The Wireless Portal Controller (WPC) and Wireless Input/Output Module (WIM) are 12 volt DC powered and have the same housing enclosure as the Wireless Access Point (WAP).

To connect and mount the WPC or WIM:

- A. Mount the WPC or the WIM close to the external devices to which they are to control.
- B. Connect the 12 volt DC power to the two screw terminals labeled ‘+’ and ‘-’ in the upper left of the circuit board of the WPC or WIM.



WPC



WIM

On the WPC or WIM circuit board, one POWER green LED and two red LEDs should be illuminated continuously. In addition, another green LED should flash ON and OFF every two seconds.

- C. If the antenna is not already attached, screw it into the receptacle at the top of the circuit board and close and lock the enclosure door.

NOTE: Located on the back of the WPC or WIM is a label with a 12 character device serial number. This number is unique to this device and is used to identify this device to the WAP, and for the WAP to send information specific to this device only. Document this device serial number and the location of this door. This information must be entered in the Security Center software.

The WPC or WIM is now ready to communicate (both transmit and receive data) with any WAP within its range. No radio adjustments are available or required.



Installation Instructions

Contacting Technical Support

For questions regarding Novation Wireless Access Control System installation:

www.novwireless.com
main: 805-494-3070
technical support: 805-494-3049
fax: 805-494-3170

FCC/UL Compliance & Warnings

FCC Compliance

- ◆ This device has been authorized by the FCC Rules and Industry Canada.
- ◆ This device complies with the limits for a Class B digital device and a Class B intentional radiator, pursuant to Part 15 of the FCC Rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions:
 - (1) This device may not cause harmful interference.
 - (2) This device must accept any interference received, including interference that may cause undesired operation.
- ◆ The Novation Wireless Access Control System Components must be installed by qualified professionals or contractors in accordance with FCC part 15.203, Antenna Requirements.
- ◆ Do not use any antenna other than the one provided with the unit.



Installation Instructions

Warnings

- ◆ RF Exposure - To comply with FCC RF exposure requirements for mobile transmitting devices this transmitter should only be used or installed at locations where there is normally at least a 20 cm separation between the antenna and all persons.
- ◆ Do not co-locate and operate in conjunction with any other antenna or transmitter.
- ◆ Use only with the batteries specified in these Installation Instructions.
- ◆ Follow local regulations for alkaline battery disposal.
- ◆ Immediately remove the batteries and discontinue use if:
 - the product is impacted after which the interior is exposed
 - the product emits a strange smell, heat, or smoke
- ◆ Changes or modifications not expressly approved by Novation Wireless could void the user's warranty and authority to operate the equipment.