



User Manual

Rev 2.0

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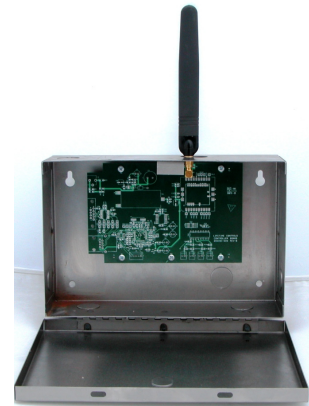
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Wireless Access Hub (nHub)

The nHub is the “brains” of the system. It communicates to a PC via RS-232 or Ethernet and sends and receives data and commands it gets from the software to the wireless devices.

A single nHub:

- ◆ Communicates with up to 64 Novation wireless devices (nPort-R, nPort-I/O, nLock)
- ◆ Communicates within a typical radius of 300 feet (depends on building architecture)
- ◆ Stores a maximum of 10,000 cardholder records
- ◆ Stores the last 20,000 transactions received (the oldest transactions are overwritten when storage is full)



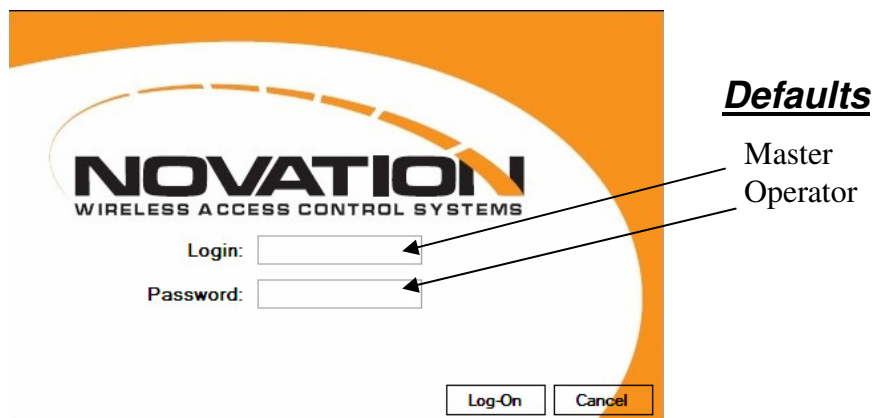
The nSecure software is comprised of two separate applications.

- ◆ The Hub Inspector application is used to manually control system hardware and to monitor the real-time status of events.
- ◆ The Security Center is used for hardware configuration and initial personnel enrollment. Information about configuring the system is defined in the Administration Manual.

Signing On

If you checked “add shortcut to the desktop” during the installation process, you can now double-click the Hub Inspector to launch the Monitoring program. The Log-On splash screen prompts for User Name and Password.

The default User Name of “**Master**” and Password of “**Operator**” will enable you to log on. This gives you access to all screens. **The password changes are made in the Security Center Application.**



Monitoring Activity via Inspector

The **Inspector Application** allows you to view alarms, system events, door messages and cardholder history in real time. This allows you to see where a person has been at a particular date and time, and who has entered a particular door. You can also view control and administrative operator actions.

Depending on the installation of the software, the installing dealer may or may not have installed this on your computer.

Double-Click the Inspector icon to launch the application, or go Start, Programs, NSS, Inspector and Log-on. There are five types of events you can view the status of:

1. Alarms and Alerts
2. Access Events
3. Door Status
4. Input Point Status
5. Output Point Status



Click on "Status", then the button of the type(s) of events to monitor. From this screen you can further add criteria to setup the categories of how you want to log the data. To change the priority of reporting on the screen, click on the top column. You can also drag a column to the position you desire.

Doors Status:

Drag a column header here to group by that column

Door Location	Lock	State	Lock Override	Reader Mode	DateTime
▶	Locked	Closed	Enabled	Card Only	6/5/2008 11:03 PM
Top Wall 1-H	Locked	Closed	Enabled	Card Only	6/9/2008 12:46 AM
Top Wall 2-G	Locked	Closed	Enabled	Card Only	6/9/2008 12:46 AM
Top Wall 2-H	Locked	Closed	Enabled	Card Only	6/9/2008 12:47 AM
Top Wall 1-G	Locked	Closed	Enabled	Card Only	6/9/2008 12:46 AM

Outputs Status:

Drag a column header here to group by that column

Location	Output Name	Enabled	Status	DateTime
▶ Laundry Room	1	Enabled	On	6/9/2008 12:50 AM
Laundry Room	2	Disabled	Off	6/9/2008 12:50 AM
Laundry Room	3	Enabled	Off	6/9/2008 12:50 AM
Laundry Room	4	Enabled	Off	6/9/2008 12:50 AM

Inputs Status:

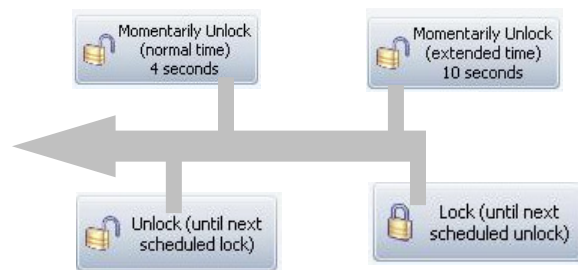
Drag a column header here to group by that column

Location	Input Name	Enabled	Status	DateTime
▶ Laundry Room	1	Enabled	Normal	6/9/2008 12:50 AM
Laundry Room	2	Disabled	Normal	6/9/2008 12:50 AM
Laundry Room	3	Enabled	Normal	6/9/2008 12:50 AM
Laundry Room	4	Enabled	Normal	6/9/2008 12:50 AM

Controlling Devices via Inspector

The **Control Doors** button is used for the following:

- ◆ Unlock Door Momentarily for Normal Unlock time
- ◆ Unlock Door Momentarily for Extended Unlock time
- ◆ Unlock Door until next system command is received to change the door condition
- ◆ Lock Door



NOTE: If using the nLock door device, the Unlock Door Command is not instantaneous. The unlock action will be based on the next time the nLock contacts the Hub for information, which could be anytime between seconds to a maximum of four minutes. This is because the nLock is battery operated and contacts the nHub every four minutes.

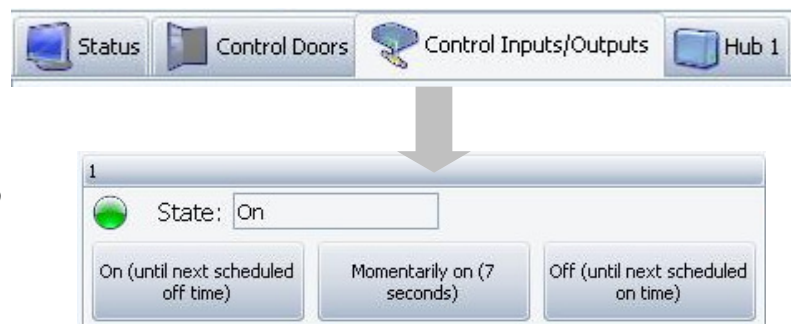
The command to the nPortal is instantaneous as it is a non-battery operated controller.



bt = battery okay
lk = lock status (from software commands)
st = door status (if using a contact to monitor door position)

The **Control Outputs** button is used for the following:

- ◆ Turn On Output Device until next system command is received to change the output condition
- ◆ Turn On Output Device for a specific period of time (as pre-programmed in the Pulse Time)
- ◆ Turn Off Output Device

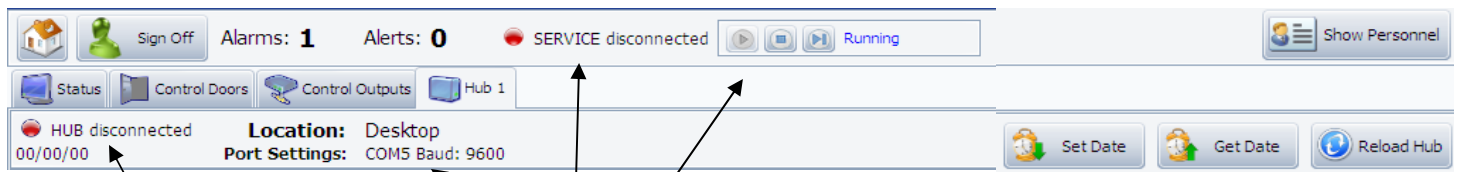


The command to the nPortal-I/O Controller is instantaneous as it is a non-battery operated controller.

Analyzing Hub Communications

The hub tab has several functions.

- A) Identifies detailed communications information. Specifically, what the communication port is, whether or not the Hub is communicating and online, and if the Service is running.
- B) Allows the system configuration to be re-downloaded to all panels. This ensures all the data is at the appropriate panels. Typically, the installing dealer will perform this task during initial setup, or if a new door is added after the initial system has been operating for an extended period of time.
- C) Setting the devices date and time. Each time the Hub Inspector is loaded the date and time are sent from the computer automatically.
- D) Troubleshooting system responses using the scrolling message strings.



Communications Status

The hub comes online when the PC communications port is active and the Service is started. The service is started on boot-up of the computer. It can manually be restarted if necessary.

Appendix A: Network Communications Protocol

This appendix outlines the network messages for the access control system (hereinafter “system”) interactions including:

- PC software to Hub
- Hub to nPort or nLock

Message Type Identifier

The message type identifier is a three-digit decimal number representing the type of message.

MESSAGES FROM THE PC TO THE HUB

- 002 Set Hub Configuration
- 003 Set nPort & nLock Configuration
- 004 Set I/O Controller Configuration
- 006 Set Card & PIN Configuration
- 008 Set an Individual Cardholder Record
Note: Once the number of individual card records added or updated has reached 100, the software will delete all card records (message 029) and then load all card records in ascending order.
- 009 ScheduleCount
- 010 Set The Time Schedules – One for each schedule
- 011 Set Holidays - Type1
- 012 Set Holidays –Type 2
- 015 Set Security Groups
- 023 Delete a Reader Configuration
- 028 Delete a Cardholder Record
- 029 DeleteAllCardRecords
- 038 Start Loading A Group of Cardholders
Note: Sent before sending a complete card list, sorted in card number order, one record at a time using 008 CardListData.
- 039 End Loading a Group of Cardholders
- 100 Set DateTime
- 101 Unlock a Door
- 102 Lock a Door
- 103 Unlock a Door by Access Time
- 104 Unlock a Door by Extended Unlock Time
- 105 Turn a Relay On
- 106 Turn a Relay Off
- 107 Turn a Relay On Momentary
- 110 Send the Date and Time (OR GET REQUEST OF DATE?TIME)
- 115 Get the Status of the Input / Output Controller

MESSAGES FROM HUB TO PC

- 120 DateTimeData
- 124 Controller Device Status
- 125 Controller Input / Output Status
- 202 Cardholder Granted Access
- 203 Cardholder Denied Access
- 205 Door Forced Open
- 206 Door Held OpenToo Long
- 207 Door Closed
- 208 Door Lockdown Override Enabled
- 209 Door Lockdown Override Disabled
- 210 Door Locked By Timeschedule
- 211 Door Unlocked By Timeschedule
- 212 Door Locked Manually by Operator Until next scheduled unlock
- 213 Door Unlocked Manually by Operator Until next scheduled lock
- 214 Door Unlocked For UnlockTime Manually by Operator
- 215 Door Unlocked For Extended UnlockTime Manually by Operator
- 216 Sensor Input Transitioned To Open
NOTE: Open means that the contacts for the sensor are an open circuit and have not been closed by the connected sensor device.
- 217 Sensor Input Transitioned To Closed
NOTE: Closed means that the contacts for the sensor are a closed circuit and have been closed by the connected sensor device.
- 218 Relay Turned On By Timeschedule
- 219 Relay Turned Off By Timeschedule
- 220 Relay Turned On Manually by Operator Until next scheduled off
- 221 Relay Turned Off Manually by Operator Until next scheduled on
- 222 Relay Turned On Manually by Operator Momentarily For Unlock Time
- 223 Device Tamper Switch Alarm
- 224 Device Tamper Switch Normal
- 230 Battery Door Open
- 231 Battery Door Closed
- 232 Hub Tamper Switch Alarm
- 233 Hub Tamper Switch Normal
- 238 Hub is Requesting Full Card Data Load
- 240 Door Disabled By Timeschedule
- 241 Door Enabled By Timeschedule
- 600 Device Update Success
NOTE: This message indicates that a command from the hub was received and performed by the nPort or nLock.
- 601 Device Update Failure
- 900 Hub Acknowledgement of a Command (Ack)
- 901 Hub did not Acknowledge (Nak) a Command, or Data did not exist in Hub
- 945 PC has lost communications with the Hub