Watchport™

USB Environmental Monitoring Appliances

Installation Guide

Digi®

Inside Out
NETWORKS™
A Digi International® Company

www.ionetworks.com

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Introduction

The Watchport™ Series is the first line of plug-and-play USB devices for 24/7 environmental monitoring. Asset monitoring is key in reducing total cost of ownership by pre-empting system failures, extending the life of equipment, and reducing downtime in mission-critical applications like branch server room management and equipment room monitoring. Camera components for surveillance may be paired with sensors for proximity, water, temperature, and humidity to create a made-to-order monitoring system. Watchport Manager sends phone, email, or beeper alerts and enables easy device integration without additional software development.

Watchport products consist of the following parts:

- The sensing device
- A USB interface (as a separate base unit or as part of the device itself)
- Watchport Manager Software

The Watchport products are divided into two categories:

Camera

301-9010-01 Watchport/V2 USB Camera

Camera Accessories

301-9012-01	Watchport/V2 Bulk 20
301-9014-01	Watchport/V2 Close-Up Lens
301-9015-01	Watchport/V2 Lens Package Green: 3 mm Wide Angle, Red: 8 mm Close-Up, Blue: 12 mm Telephoto
301-9018-01	Watchport/V2 Wall Mount
301-9019-01	Watchport/V2 Clamp Mount

Sensor

301-1141-01	Watchport/H Humidity & Temperature Sensor
301-1143-01	Watchport/P Proximity Sensor
301-1144-01	Watchport/T Temperature Sensor
301-1145-01	Watchport/W Water Detector
301-1146-01	Watchport/D Proximity & Distance Sensor
301-1147-01	Watchport/A Acceleration & Tilt Sensor

Installing Watchport/V2 Camera Drivers

NOTE: If any Watchport camera drivers are already installed on your system, you MUST uninstall them before continuing with these installation instructions. Also, the two sets of drivers (one for DirectShow and one for TWAIN and AVI) are mutually exclusive; you may install one OR the other, but not both.

If you are using DirectShow (DirectX), follow the instructions below. If you are using TWAIN or AVI, go to "TWAIN and AVI Drivers" on page 3.

DirectShow (DirectX) Drivers

You may want to check that you have the most recent version of DirectX before continuing with these installation instructions.

For Windows XP, 2000, and 2003 Server Users

Drivers for DirectShow (DirectX) are on the "Watchport/V2 Driver" CD. Note: You must be logged into an account with administrator privileges.

1) Plug in the Watchport/V2. (For more information go to "Cabling Watchport" on page 6).
2) Insert the "Watchport/V2 Driver" CD version 2.03 or above into your CD-ROM drive.
3) When the Found New Hardware screen for the Watchport/V2 USB Loader software appears, choose to specify the location of the drivers and click **Next**.
4) The next screen allows you to search removable media, type the location path, or browse to locate the drivers on your CD-ROM drive. Use one of these methods to locate your CD-ROM drive and click **Next**.
5) Windows may warn that the software "has not passed Windows Logo testing." Click **Continue Anyway** to continue with driver installation.
6) When the Found New Hardware Wizard finishes installing the Watchport/V2 USB Loader software, click **Finish**.
7) When the Found New Hardware screen for the Watchport/V2 Camera software appears, choose to have the drivers installed automatically and click **Next**.
8) Windows may warn that the software "has not passed Windows Logo testing." Click **Continue Anyway** to continue with driver installation.
9) When the Found New Hardware Wizard finishes installing the Watchport/V2 USB Camera software, click **Finish**.

Your Watchport/V2 is now ready. To verify installation you may use the Watchport V2 Viewer (found in **Start/Programs/Watchport V2/Watchport V2 Viewer**).

The Watchport V2 Viewer defaults to activating the camera (in **Options/Preview**). You can open a Properties screen through **Options/Video Capture Filter** and adjust brightness, sharpness, contrast, color, compression, etc.

TWAIN and AVI Drivers

For Windows XP, 2000, and 2003 Server Users

Drivers for TWAIN and AVI must first be downloaded from Inside Out Networks' web site.

1) Go to www.ionetworks.com. Click on **Support** and select **Drivers**.
2) Scroll down to **Watchport/V2 USB Camera** and select the download link for "Windows 2000, XP & 2003 Server (TWAIN and AVI drivers)."
3) In the next screen, select your specific operating system.
4) When asked, save the download to your hard drive (**c:\WatchportV2**).
5) When the download is complete, double click on **iw2tan5xxx.exe** (where **xxx** is the version number) to extract the files into your WatchportV2 folder.

   You are now ready to install the Watchport/V2 drivers for TWAIN or AVI. Note: You must be logged into an account with administrator privileges.
6) Plug in the Watchport/V2. (For more information see "Cabling Watchport" on page 6).
7) When the Found New Hardware screen for the Watchport/V2 USB Loader software appears, choose to specify the location of the drivers and click **Next**.
8) The next screen allows you to search removable media, type the location path, or browse to locate the drivers in your temp folder. Either type the location path or browse to find your WatchportV2 folder and click **Next**.
9) Windows may warn that the software "has not passed Windows Logo testing." Click **Continue Anyway** to continue with driver installation.
10) When the Found New Hardware Wizard finishes installing the Watchport/V2 USB Loader software, click **Finish**.
11) When the Found New Hardware screen for the Watchport/V2 Camera software appears, choose to have the drivers installed automatically and click **Next**.
12) Windows may warn that the software "has not passed Windows Logo testing." Click **Continue Anyway** to continue with driver installation.
13) When the Found New Hardware Wizard finishes installing the Watchport/V2 USB Camera software, click **Finish**.

Your Watchport/V2 is now ready. To verify installation you may use the VC3Viewer (found in **Start/Programs/Watchport V2/VC3Viewer**). The camera is automatically activated. In the **Controls** menu you can select **Camera Control Panel** to adjust image size, color format, brightness, sharpness, quality, etc.

Installing Watchport Sensor Drivers

For Windows XP and 2003 Server Users

Note: If your computer is connected to the internet, the latest Microsoft certified drivers will be automatically downloaded from the Microsoft driver update server. Also, you must be logged into an account with administrator privileges.

1) Plug in the Base Unit. (For more information see “Cabling Watchport” on page 6.)
2) Insert the “Edgeport Driver” CD version 2.80 or above into your CD-ROM drive.
3) When the Found New Hardware Wizard appears click **Next**, and the drivers will be automatically installed from the CD. Installation is complete when no more dialogs appear.

For Windows 2000 Users

You must be logged into an account with administrator privileges.

1) Plug in the Base Unit. (For more information see “Cabling Watchport” on page 6.)
2) Insert the “Edgeport Driver” CD version 2.80 or above into your CD-ROM drive.
3) When the Found New Hardware Wizard appears, select **Install from a list or specific location (Advanced)** and click **Next**.
4) Select Search for a suitable driver for my device and click Next.
5) Select Specify a location and click Next.
6) Type in <CD drive letter>:\Win2k and click OK.
7) Confirm that Windows is pointing to **<CD drive letter>:\Win2k**. Then click **Next**.
8) Note: Drivers installed from the CD have received “Designed for Windows 2000” certification. Drivers downloaded from our web site may be pending certification. If so, Windows 2000 will display a warning: Digital Signature Not Found. Click **Yes** to continue with driver installation. If you click **No** you will need to contact Inside Out Networks Technical Support (512-306-0600) before installing your USB Plus Series product.
9) Click **Finish** to complete the driver installation.

For Windows 98, and Me Users

1) Insert the “Edgeport Driver” CD version 2.80 or above into your CD-ROM drive.
2) Plug in the Base Unit. (For more information see “Cabling Watchport” on page 6.)
3) After connecting the USB cable, the Add New Hardware Wizard appears. Click **Next**.
4) Select Search for the best driver for your device and click Next.
5) Select Specify a location and type in <CD drive letter>:\Win98. Then click Next.
6) Confirm that Windows is pointing to **<CD drive letter>:\Win98**. Click **Next**. Windows will then copy over the driver files.
7) Click **Finish** to complete the driver installation.

For Windows NT 4.0 Users

Because Microsoft does not support USB in NT4.0, Inside Out Networks supplies a set of USB drivers that will be installed along with the necessary Edgeport drivers. NOTE: You must install the drivers using an account that has administrative privileges.

To install the USB stack and Edgeport drivers:

1) Insert the “Edgeport Driver” CD version 2.80 or above into your CD-ROM drive.
2) When the welcome dialog appears, click the **Install Driver** button.

Once the driver installation program has begun, follow the on screen instructions.

3a) *If you are installing drivers for the first time*: An Information dialog informs you that the installation was successful. After clicking **OK**, the installation is complete.

3b) *If you are replacing existing Edgeport drivers:* Follow the on-screen instructions. Note that, before beginning the installation of the drivers, all applications with open ports must be closed and all USB devices unplugged. If you close all the applications and unplug all the USB devices, then you will not need to reboot for the new drivers to take effect immediately. If any applications are left open or USB devices plugged in, you may choose to abort the installation or to continue and be required to reboot before the upgrade can take effect.

Note that because Windows NT 4.0 is *not* Plug-and-Play, you will *not* see a pop-up dialog box indicating that new hardware has been found. You may verify correct installation with the Edgeport Utility (see page 16) or the USB Status Utility (as described below).

The USB Status Utility (Viewer) can be accessed by clicking the USB icon in your system tray or by clicking on **Start/Programs/Inside Out Networks Utilities/USB Status Utility**. This utility lists all the USB devices installed on your PC and provides other relevant information for each device. You may also use this utility to create a log file.

For Windows 95 Users

1) Insert the “Edgeport Driver” CD version 2.80 or above into your CD-ROM drive.
2) Plug in the Base Unit. (For more information see “Cabling Watchport” on page 6.)
3) After connecting the USB cable, the Update Device Driver Wizard dialog appears. Click **Next** to continue.
4) After Windows fails to locate the drivers on your floppy disk drive, click **Other Locations...**.
5) When the Select Other Location dialog appears, type **<CD drive letter>:\Win95** and click **OK**.
6) Confirm that Windows has found the correct driver location and click **Finish**.
7) When Windows prompts you for the driver disk, click **OK**.
8) At the next Windows prompt, type **<CD drive letter>:\Win95** and click **OK**. Installation is complete when no more dialogs appear.

Cabling Watchport

USB Type A Connector

USB Type B Connector

Watchport Camera Products

To connect your Watchport/V2, plug the Type A (flat) end of the USB cable into the USB port located in the back of your PC or into an available USB port on a standard hub or into an Inside Out Networks Hubport. Plug the Type B (rounded) end of the USB cable into the Watchport/V2.

Watchport Sensor Products

The sensing device of the Watchport Sensor Products comes with an RJ45 terminated cable. Plug the RJ45 connector into the corresponding jack on the Watchport base unit.

Plug the Type A (flat) end of the USB cable into the USB port located in the back of your PC or into an available USB port on a standard hub or into an Inside Out Networks Hubport™. Plug the Type B (rounded) end of the USB cable into the Watchport base unit.

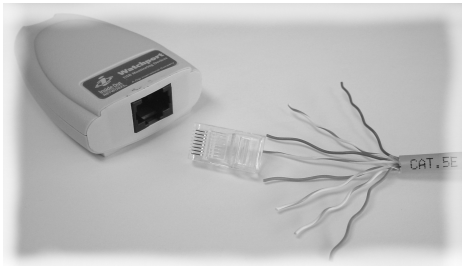
Extending the Cable

Watchport Sensor products, which are shipped with a 6 foot cable, can be extended using a CAT-5 twisted pair cable up to 500 feet for the Watchport/A, Watchport/H, Watchport/P and Watchport/T and 1000 feet for the Watchport/W. Contact Inside Out Networks if you need to extend it beyond these limits.

To extend your cable, we recommend that you use CAT-5 twisted pair cable and follow the wiring in Table 1 above. Your color assignment may vary and you will need to adjust the tables accordingly. Connect only the actively used signals indicated in the wiring diagram below.

Proximity Sensor		All Other Sensors	
RJ45	Wire Color	RJ45	Wire Color
3	Black	3	Yellow
6	Blue	4	Green
7	Red	5	Black
		8	Grey

Wiring Table 1: Extending the Cable



Base unit, RJ45 connector, CAT-5 twisted pair cable

Shortening the Cable

If you need to shorten the cable, cut off the RJ45 connector and crimp a new connector at the end following the wiring in Table 2 (for all sensors).

RJ45	Wire Color	RJ45	Wire Color
1	White	5	Black
2	Brown	6	Blue
3	Yellow	7	Red
4	Green	8	Grey

Wiring Table 2: Shortening the Cable

Installing Watchport Manager

The Watchport Manager allows you to monitor your Watchport Camera and Sensor readings. To install the Watchport Manager:

1) Use the browser to locate the Watchport Manager folder located on the Edgeport CD and then double-click on **setup.exe**.
2) Click **OK**.
3) Click on the large button to install Watchport Manager to the specified directory.
4) Click **Continue** to add items to the Watchport Manager program group.
5) Wait while files are copied and the system is updated. If prompted to keep newer existing files while installing, click **Yes**.
6) Click **OK** to complete installation.

You can open the Watchport Manager from the **Start/Programs** menu.

Updating Base Unit Firmware

This section applies to Watchport Sensor base units only (not Watchport Camera products).

1) Connect the Watchport base unit to your PC. Refer to “Cabling Watchport” on page 6 for information on connecting your Watchport base unit.
2) Open the Edgeport configuration utility program, found in the **Start/Programs** menu.
3) In the General tab, click on **Update**.
4) The **Open** button allows you to browse for the Watchport firmware (*.rom). The Edgeport Utility program can detect if the firmware is the same version, an older version, or for a different sensor.
5) After clicking **Update**, you will always be asked to confirm that you want to update your firmware. NOTE: Do NOT disconnect your Watchport until the update is complete!
6) After clicking **OK**, the update is complete.

See “The Edgeport Utility Program” on page 16 for more information about using this feature.

Using the Watchport Sensor Interface

The Watchport line of USB attached sensor products present themselves to a user application by way of a virtual serial port. This serial port is named as all standard serial ports in the form of COMx where x is a number between 1 and 255. The number assignment can be configured using the Edgeport configuration utility. (Refer to “The Edgeport Utility Program” on page 16.)

There are two basic types of sensing devices: the first type uses an ASCII command interface and the second type uses an RS-232 modem signal interface. The serial port can be opened with any serial parameters.

The first type of sensing devices uses ASCII commands. All ASCII commands sent to the sensing device must be terminated with a carriage return character `<CR>`. Multiple commands may be grouped together. For example, `TCTF<CR>` would cause Celsius temperature followed by Fahrenheit temperature to be returned in the response.

The format of the response sent from the Watchport sensor to the application is an ASCII printable character string terminated by a `<CR>`. For example, sending the command `TF<CR>` generates a single response string such as `+72.0000F<CR>` and sending a grouped command such as `TCTF<CR>` generates two responses such `as +22.2200C<CR>` followed by `+72.0000F<CR>`.

Other response strings generated by the Watchport sensor include `Invalid Command<CR>` or `Sensor Error<CR>`.

The second type of sensing device uses the modem signals: DSR (Data Set Ready), DCD (Data Carrier Detect), or CTS (Clear To Send) to inform the application of the status of the sensor.

The following section describes each sensor and its command or signal interface.

Additional information is available at www.ionetworks.com and Inside Out Networks’ technical support at 512-306-0600.

Watchport/A (Acceleration & Tilt Sensor)

The Watchport/A can be programmed to use either an RS-232 modem signal interface or an ASCII command interface. In its ASCII command mode, the sensor reports the current X-axis and Y-axis acceleration vectors relative to its 'neutral' position. In its modem signal mode, the sensor acts as a 'tilt' detector; that is, if the sensor is bumped from its 'neutral' position, it will raise (and then lower) its DSR signal.

Watchport/A Commands

Command	Description	Return Value
?<CR>	Tells about the command set available for this Watchport.	as described in this section
I<CR>	Tells what kind of Watchport is connected.	Watchport/A<CR>
C<CR>	Calibrates the sensor.	OK<CR>
A<CR>	Reflects the current acceleration.	+/-n.nngX +/-m.mmgY<cr>
U<CR>	Reads the raw axis values. These are the values that would be read if the C command were never executed.	+/-n.nngX +/-m.mmgY<cr>
E<CR>	Switches to modem signal mode. Until any other keystroke, the sensor uses DSR to signal 'tilt.'	OK<CR>
Mn<CR>	Adjusts sensitivity. M is followed by a single digit: 1 (most sensitive) through 9 (least sensitive).	OK<CR>

For starting in either mode:

Step 1: Mount the sensor at its 'neutral' position.

Step 2: Calibrate sensor to establish its 'neutral' position.

C<CR>	Calibrates the sensor.	OK<CR>

Step 3: Verify correct calibration.

A<CR>	Use to verify calibration. The response should be very close to 0 for both axes.	+0.00gX +0.00gY<cr>

Now the sensor can either be left in ASCII mode or the E<CR> command can be sent to switch it to modem signal mode.

Watchport/H (Humidity & Temperature Sensor)

The Watchport/H uses an ASCII command interface. Its operating range is -40C to +85C. For best results, avoid exposure to bright light.

Watchport/H Commands

Command	Description	Return Value
?<CR>	Tells about the command set available for this Watchport.	as described in this section
I<CR>	Tells what kind of Watchport is connected.	Watchport/H<CR>
H<CR>	Gives the percentage relative humidity.	38%<CR>
T<CR>	Gives temperature in Celsius.	+22.2500C<CR>
TC<CR>	Also gives temperature in Celsius.	+22.2500C<CR>
TF<CR>	Gives temperature in Fahrenheit.	+72.0000F<CR>
TF+<CR>	Repeats the TF command every 3-4 seconds until the next keystroke. Appending + also works with the TC and H commands	+72.0000F<CR>
L4<CR>	Adjusts the slew rate of the data line. When "L" is followed by a numeric value, 1 through 8, Watchport responds with OK. Other values return Invalid Command. The default setting is 4. Adjust the parameter until the data transmission becomes error-free. The setting remains in effect until the Watchport is power-cycled.	OK

Watchport/P (Proximity Sensor)

The Watchport/P uses an RS-232 modem signal interface. The sensor acts as a 'proximity' detector; that is, if an object comes within range, the sensor will raise (and then lower) its DSR signal. The Watchport/P detects the presence of objects within a user-selectable range of 0.5 to 1.5 meters (1.64 to 4.9 feet) of the device and can give a reading as frequently as 100 times per second. However, since such frequent readings can slow processor speed, the default is set to 1 read per 3 seconds.

To access the panel, pull tab out and lift up cover. Push firmly to close.

Watchport/P Panel Description

Red LED	This light indicates that the sensor is receiving some reflection of its signal but not enough to trigger the amber light. A persistent red light may mean that the sensor needs service. DSR is unaffected.
Amber LED	This light triggers the sensor. DSR goes high, so a message is sent.
PNP switch	This is the default setting. Watchport/P functions only with PNP selected.
NPN switch	This setting is not used.
L. ON switch	This is the default setting. DSR goes high when something comes within proximity of the sensor.
D. ON switch	This setting changes the sensor so that DSR goes high when something is NOT within proximity of the sensor.
SENS. knob	Adjust potentiometer with a small screwdriver. Adjusting higher (H) will increase sensitivity, lower (L) will lower sensitivity.

Watchport/P Commands

Command	Description	Return Value
`?<CR>`	Tells about the command set available for this Watchport.	as described in this section
`I<CR>`	Tells what kind of Watchport is connected.	`Watchport/P<CR>`

Watchport/D (Proximity & Distance Sensor)

The Watchport/D can be programmed to use either an RS-232 modem signal interface or an ASCII command interface. In its ASCII command mode, the sensor reports the distance to the object (if any). In its modem signal mode, the sensor acts as a 'proximity' detector; that is, if an object comes within range, the sensor will raise (and then lower) its DSR signal. The default mode is Proximity.

Watchport/D Commands

Command	Description	Return Value
?<CR>	Tells about the command set available for this Watchport.	as described in this section
I<CR>	Tells what kind of Watchport is connected.	Watchport/D<CR>

For the ASCII command mode:

D<CR>	Reflects the current distance. The valid range is from 20 cm to 150 cm. Otherwise, the sensor indicates no object.	nnncm<cr> No Object<cr>

For the modem signal mode:

E<CR>	Enables monitor function. Until any other keystroke, the sensor uses DSR to signal 'proximity.'	OK<CR>
Mn<CR>	Adjusts sensitivity M is followed by a single digit: 1 (most sensitive) through 9 (least sensitive).	OK<CR>

Watchport/T (Temperature Sensor)

The Watchport/T uses an ASCII command interface. Its operating range is -55C to +125C.

Watchport/T Commands

Command	Description	Return Value
?<CR>	Tells about the command set available for this Watchport.	as described in this section
I<CR>	Tells what kind of Watchport is connected.	Watchport/T<CR>
T<CR>	Gives temperature in Celsius.	+22.2500C<CR>
TC<CR>	Also gives temperature in Celsius.	+22.2500C<CR>
TF<CR>	Gives temperature in Fahrenheit.	+72.0000F<CR>
TF+<CR>	Repeats the TF commend every 3-4 seconds until the next keystroke. Appending + also works with the TC and T commands.	+72.0000F<CR>
L4<CR>	Adjusts the slew rate of the data line. When L is followed by a numeric value, 1 through 8, Watchport responds with OK. Other values return Invalid Command. The default setting is 4. Adjust the parameter until the data transmission becomes error-free. The setting remains in effect until the Watchport is power-cycled.	OK Invalid Command

Watchport/W (Water Detector)

The Watchport/W uses an RS-232 modem signal interface and gives a binary output as frequently as 100 times per second. However, since such frequent readings can slow processor speed, the default is set to 1 read per 3 seconds.

DCD high means wet and DCD low means not wet.

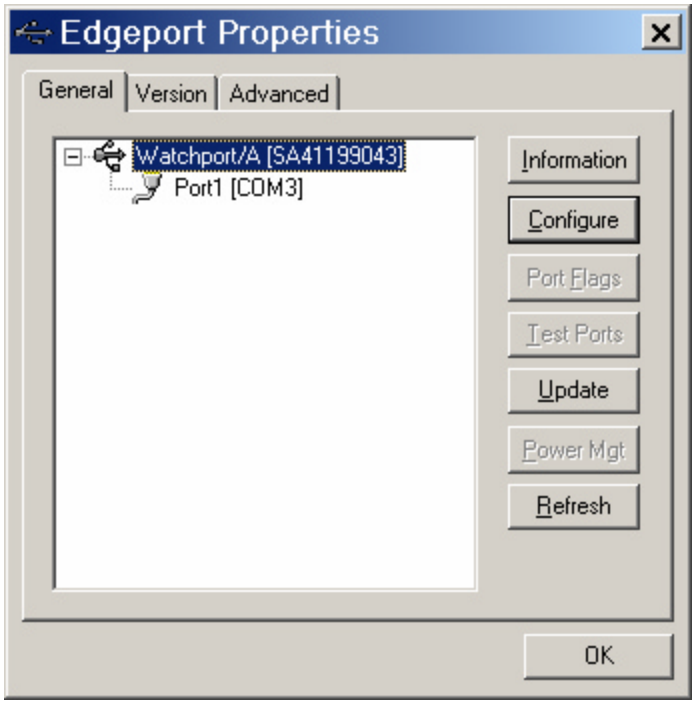
The two prongs projecting from the bottom are for securing the detector to a soft surface such as pinewood or wallboard. The surface should not be conductive when it is dry, so it cannot be a metallic or other conductive material.

Using the Edgeport Utility Program

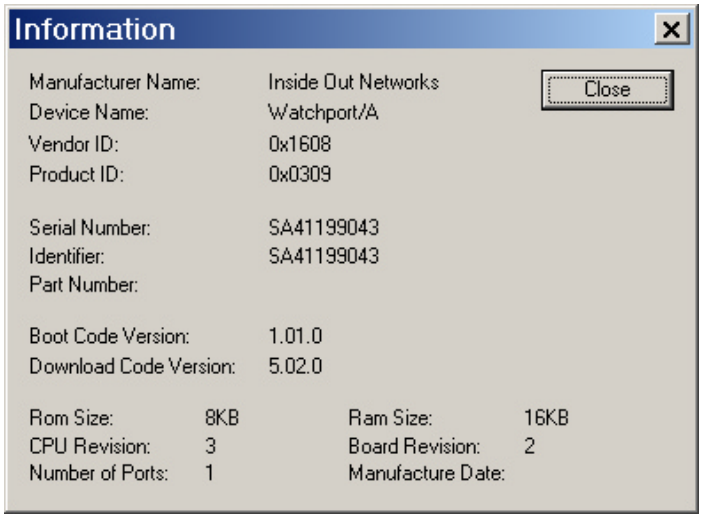
For all Windows Operating Systems

The Edgeport configuration utility program (**edgeport.exe**) allows you to manage the serial ports of your Edgeport product. Note that with Windows NT you must have administrative privileges in order to change the COM port settings. For more information, see the Support section at www.ionetworks.com.

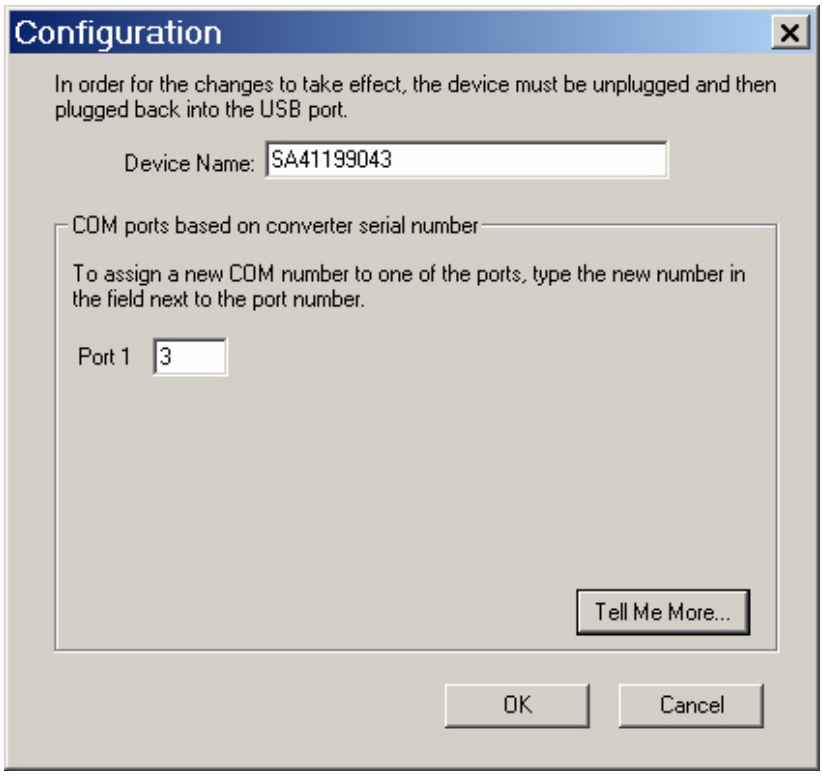
The **General** tab in this utility allows you to do the following:



- **Information** - Check the manufacturing information pertaining to your device.



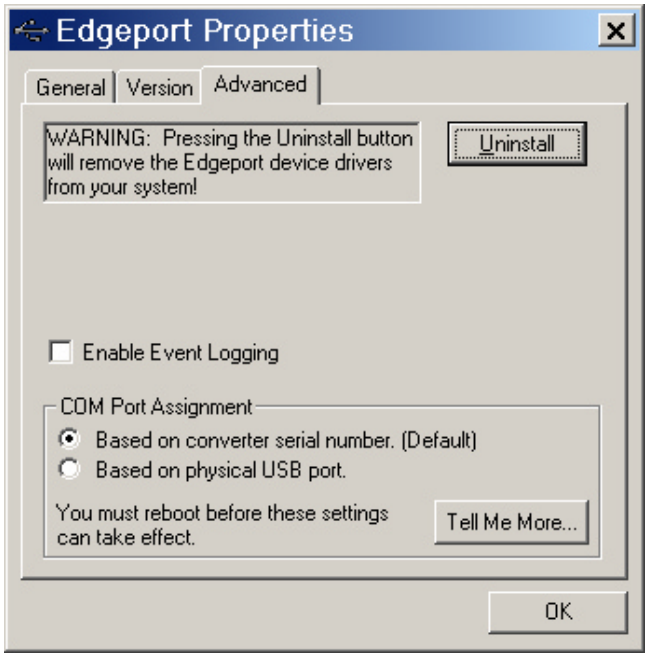
- **Configure** - Reassign the physical port on your device to any available Windows COM port number from 1 to 255 and give your device a user friendly Device Name. This capability is particularly helpful if you have more than one device.



- **Update Firmware** - Install new software upgrade to the Watchport controller.

- The **Version** tab allows you to check the file information pertaining to the software.

The **Advanced** tab allows you to do the following:



- Uninstall the drivers.
- Enable Event Logging – Place event messages in system event log.
- Configure how COM ports will be assigned.

The driver supports COM port number assignment in two ways:

1. Assign COM ports based on converter serial number.

This is the default setting. In this mode, the driver uses the serial number of each converter to uniquely identify it, and the COM port assignments for a given converter are based on its serial number. No matter which physical USB port a converter is plugged into, it will maintain its assigned COM port numbers.

2. Assign COM ports based on physical USB port.

In this mode, the driver identifies a converter based on the physical USB port it is plugged into. This effectively assigns COM port numbers to physical USB ports. No matter which converter is plugged into a given USB port, it will use the COM port numbers assigned to that USB port. This permits a converter to be to be replaced with a new unit, and, although the new unit has a different serial number, it will receive the same COM port assignments as the old unit because they were both plugged into the same USB port.

When using this mode, converters are identified not by their serial number, but by a 2-7 digit number that identifies which USB port it is plugged into.

After changing this setting, you will need to reboot before the change takes effect.

Regulatory and Other Information

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Federal Communications Commission (FCC) Regulatory Information (USA only)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet that is on a circuit different from the receiver.
- Consult the dealer or an experienced radio/TV technician for help.

Warning: The connection of a non-shielded interface cable to this equipment will invalidate the FCC Certification for this device.

FCC Regulation - Part 15

Declaration of Conformity (DoC)

This device complies with the requirements of the Code of Federal Regulations listed below:

FCC Title 47 CFR, Part 15 Class B for a digital device.

Operation is subject to the following two conditions:

This device may not cause harmful interference, and

This device must accept any interference received, including interference that may cause undesired operation.

Department of Communication (DOC) Notice (Canada only)

This Class B digital apparatus meets the requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la Classe B respecte toutes les exigences du Règlement sur le matériel brouiller du Canada.

European Community - CE Mark

Declaration of Conformity (DOC)

According to ISO/IEC Guide 22 and EN 45014

Manufacturer's Name:

Inside Out Networks

Manufacturer's Addr.:

7004 Bee Caves Rd., Bldg. 3
Ste. 200, Austin
TX 78746 USA

declares that the product

Product Name: Watchport/H
Model Number(s): 301-1141-01

Product Name: Watchport/P
Model Number(s): 301-1143-01

Product Name: Watchport/T
Model Number(s): 301-1144-01

Product Name: Watchport/W
Model Number(s): 301-1145-01

Product Name: Watchport/D
Model Number(s): 301-1146-01

Product Name: Watchport/A
Model Number(s): 301-1147-01

Product Name: Watchport/V2
Model Number(s): 301-9010-01

Product Name: Watchport/V2 Bulk 20
Model Number(s): 301-9012-01

Product Name: Watchport/V2 Close-Up Lens
Model Number(s): 301-9014-01

Product Name: Watchport/V2 Lens Pkg
Model Number(s): 301-9015-01

Product Name: Watchport/V2 Wall Mount
Model Number(s): 301-9018-01

Product Name: Watchport/V2 Clamp Mount
Model Number(s): 301-9019-01

Product Options: All

conforms to the relevant EU Directives listed here:

EMC Directive 89/336/EEC |
Low Voltage Directive 73/23/EEC
Amending Directive 93/68 EEC

using the relevant section of the following EU standards and other normative documents:

Safety:

IEC 950:1991 +A1, A2, A3, A4
EN 60950:1992 + A1, A2, A3, A4
EMC

The following summarizes the specifications and requirements for EN55024, EN55022 Class B & CISPR 22 Class B emission and immunity tests. If the actual test levels are higher or different than required, these levels are listed in the appropriate tables.

EN 55022 Class B (1994 w/A1 1995)

Test	Specification EN55024	Requirement
Electrostatic Discharge	EN61000-4-2	+4 kV contact +8kV air
Radiated Immunity	EN61000-4-3	3 V/m
Electrical Fast Transient Burst	EN61000-4-4	1kV (A/C), .5kV (I/O)
Surge	EN61000-4-5	2kV common mode 1kV differential mode
Conducted Immunity	EN61000-4-6	3V rms
Magnetic Immunity	EN61000-4-8	1 A/m Not Applicable
Voltage Dips & Interrupts	EN61000-4-11	>95%, 30% & >95%

EN55024 (1998)

Test	Specification EN55022	Requirement
Radiated Emissions	—	Class B
Conducted Emissions	CISPR 22	Class B

European Contact

Digi International
Joseph-von-Fraunhofer Str. 23
44227 Dortmund, GERMANY
49-231-9747-0

UL/CSA Safety Information

This device complies with the requirements of following safety standards below:

UL 1950, 3rd edition
CSA No. 950

Quality Manager
Austin, Texas
December 2005

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