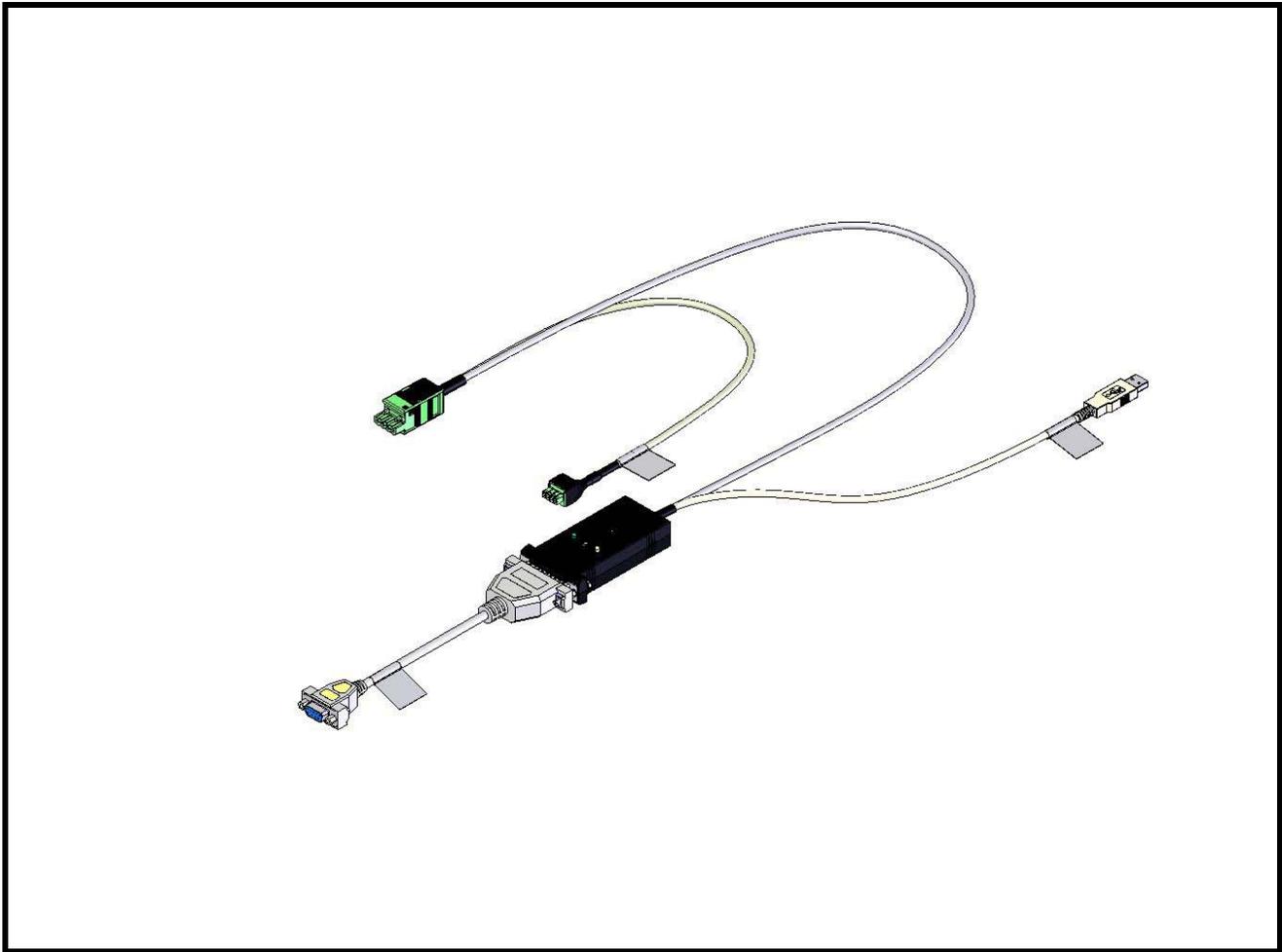




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# WI-SmartCable User Guide

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WI-SmartCable *User Guide v1.0*



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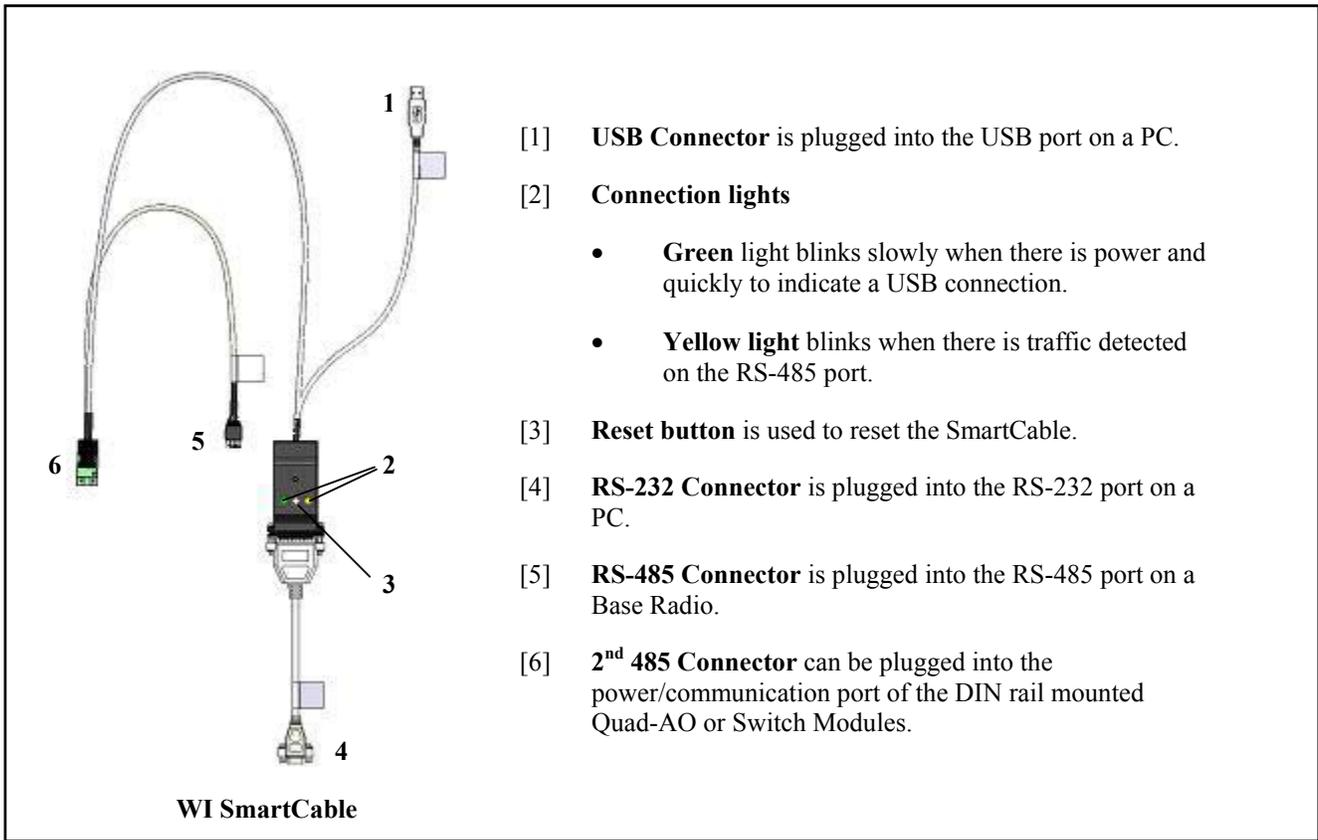
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# 1. About the SmartCable

The Accutech SmartCable is used to connect a Base Radio to a PC (personal computer) running Accutech WIM (Wireless Instrumentation Manager). The SmartCable can be attached to either a USB port or a RS-232 port on the PC. In addition, it can be plugged into the power/communication port of the Accutech DIN rail mounted Quad Analog Output Module WI-4AO, Switch Module WI-8SW or Analog Switch Output Module WI-4AO-8SW.



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## 2. Setting up a RS-232 Port

This section will show you how to attach the SmartCable to a RS-232 port and how to configure the port settings on your PC. For additional information about the Base Radio see the Base Radio User Manual. For information about WIM, see the WIM User Manual.

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### 2.1. Attaching the SmartCable

- [1] Turn on the computer.
- [2] Turn on the Base Radio.
- [3] Insert the RS-485 plug into the 485 slot (the left slot) on the Base Radio.
- [4] Insert the RS-232 plug into the RS-232 port on the PC.

*Note: Do NOT use both the USB and RS-232 plugs at the same time.*

If this is the first time that you attach the SmartCable, the following window will appear. Click **Next** to allow it to install the software automatically. When it has completed installing the software, click **Finish** to continue.



- [5] Start WIM from the PC. If WIM is already running, you do not have to restart it.

WIM opens with the Connection view showing.

- [6] Type your User name and Password and click **Connect**.

The server should be automatically started. Also the RF icon, a blue square with a red 'RF', appears in the system tray (in the lower right corner of the screen next to the clock). If data from the Base Radio appears in the window, setup is complete. If no data appears, then continue to the next section to check the port settings.

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## 2. Setting up a RS-232 Port (continued)

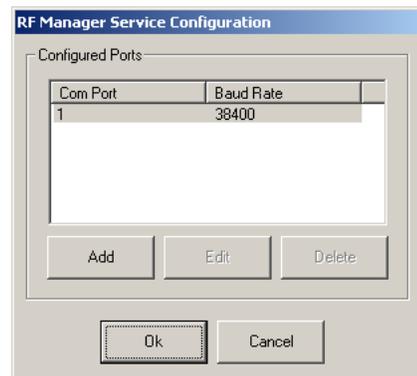
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### 2.2. Configuring Port Settings

Com port 1 is the default port. If you are using Com port 1, you probably do not need to reconfigure the ports.

- [1] Make sure that the RF Server running. If the RF icon is in the system tray, the server is running.
- [2] With the right mouse button click the RF icon in the system tray. Click **Options** from the Right Mouse Button menu.

The RF Manager Service Configuration box opens.

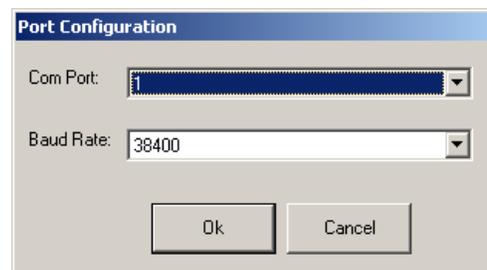


#### RF Manager Service Configuration box

- [3] Check the Configured Ports list. This most likely shows Com Port 1. If you are using a different port that does not appear in the list, either edit the existing port or add a new port.
- [4] To edit an existing port, select the port from the Configured Port list and click **Edit**.

*Note: You can also add additional ports. To add a port, click **Add**.*

The Port Configuration box opens.



#### Port Configuration box

- [5] Select your desired port from the Com Port list.  
*Note: The Baud Rate will NOT be changed.*
- [6] Click **Ok** on the Port Configuration box.

---

## 2. Setting up a RS-232 Port (continued)

- [7] Click **Ok** on the RF Manager Service Configuration box. The following message appears:



- [8] Click **Ok** to acknowledge that ‘Changes will not take effect until the server is restarted.’
- [9] To restart the server, right-click the RF icon in the system tray and click **Restart Server**.
- [10] Disconnect and reconnect WIM. To disconnect WIM, go to the WIM **File** menu and click **Disconnect**.

WIM should be showing the Connection view with the word ‘Disconnected’ in the upper right corner.

*Note: WIM may also be disconnected by pressing Disconnect on the Connection page in WIM.*

- [11] To connect WIM, press Connect on the Connection screen in WIM.

*Note: Going to the WIM File menu and clicking Connect will also connect WIM.*

WIM should be connected and data from the Base Radio should appear. If not, check the *Trouble Shooting* section.

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## 3. Setting up a USB Port

This section will show you how to attach the SmartCable to a USB port on your PC and how to configure the port settings on your PC. For additional information about the Base Radio see the Base Radio User Manual. For information about WIM, see the WIM User Manual.

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### 3.1. Attaching the SmartCable

- [1] Turn on the computer.
- [2] Turn on the Base Radio.
- [3] Insert the RS-485 plug into the 485 slot (the left slot) on the Base Radio.
- [4] Insert the USB plug into the USB port on the PC.

*Note: Do NOT use both the USB and RS-232 plugs at the same time.*

If this is the first time that you attach the SmartCable, the following window will appear. Click **Next** to allow it to install the software automatically. When it has completed installing the software, click **Finish** to continue.



- [5] Start WIM from the PC. If WIM is already running, you do not have to restart it.

WIM opens with the Connection view showing.

- [6] Type your User name and Password and click **Connect**.

The server should be automatically started. Also the RF icon, a blue square with a red 'RF', appears in the system tray (in the lower right corner of the screen next to the clock). If data from the Base Radio appears in the window, setup is complete. If no data appears, then continue to the next section to check the port settings.

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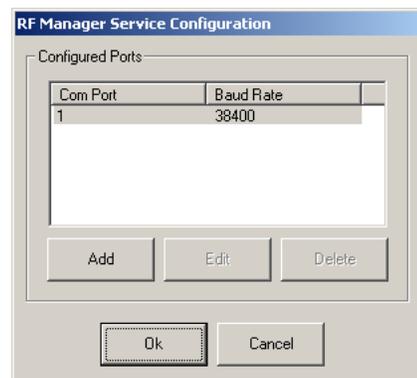
## 3. Setting up a USB Port (continued)

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### 3.2. Configuring Port Settings

- [1] Make sure that the RF Server is running. If the RF icon is in the system tray, the server is running.
- [2] With the right mouse button click the RF icon in the system tray. Click **Options** from the Right Mouse Button menu.

The RF Manager Service Configuration box opens.

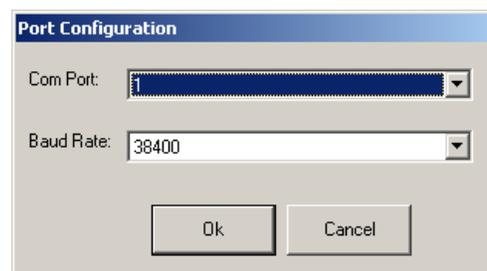


#### RF Manager Service Configuration box

- [3] Check the Configured Ports list. This most likely shows Com Port 1. You can either edit the existing port or add a new port.
- [4] To edit an existing port, select the port from the Configured Port list and click **Edit**.

*Note: You can also add additional ports. To add a port, click Add.*

The Port Configuration box opens.



#### Port Configuration box

- [5] Select USB from the Com Port list. USB is at the bottom of the list.  
*Note: The Baud Rate will NOT be changed.*
- [6] Click **Ok** on the Port Configuration box.

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## 3. Setting up a USB Port (continued)

- [7] Click **Ok** on the RF Manager Service Configuration box. The following message appears:



- [8] Click **Ok** to acknowledge that 'Changes will not take effect until the server is restarted.'
- [9] To restart the server, right-click the RF icon in the system tray and click **Restart Server**.
- [10] Disconnect and reconnect WIM. To disconnect WIM, go to the WIM **File** menu and click **Disconnect**.

WIM should be showing the Connection page with the word 'Disconnected' in the upper right corner.

*Note: WIM may also be disconnected by pressing Disconnect on the Connection page in WIM.*

- [11] To connect WIM, press Connect on the Connection screen in WIM.

*Note: Going to the WIM File menu and clicking Connect will also connect WIM.*

WIM should be connected and data from the Base Radio should appear. If not, check the *Trouble Shooting* section.

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## 4. Troubleshooting

If the Base Radio is not communicating with the PC, check the following:

- [1] Check the cables. Make sure that all of the connectors are firmly pressed in.
- [2] Is the Base Radio plugged in and turned on? Does it have a reading on an LCD?
- [3] Check the lights on the SmartCable. The green light blinks slowly when there is power and quickly to indicate a USB connection. The yellow light blinks when there is traffic detected on the RS-485 port.
- [4] Is the correct port configured? See the 'Configuring Port Settings' section to check this.
- [5] Is WIM version 1.58 or higher? To check the WIM version number, go to the WIM **Help** menu and click **About** to check the version number.
- [6] On some computers it may take time for the WIM program to find the Base Radios, particularly through the USB port. If you get a "No Base Radios found" message or you do not see the WI Output Modules right away, wait about 30 seconds and the WIM should find the base radios.
- [7] Use Discover Devices in WIM for it to find everything, especially if any changes have been made. Go to the WIM **File** menu and click **Discover Devices**.
- [8] Reboot the SmartCable for it to find everything, particularly if you are changing from the SmartCable RS-232 output to the SmartCable USB output. You can reboot the SmartCable by pressing the white Reset Button on the cable body or by unplugging it from the Base Radio or WI Output module.

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## 5. Technical Specifications

<b>Software</b>	
Operating System	Windows 2000, XP
USB Interface	USB1.1 and USB2.0
WIM version	1.58 or higher
<b>Electrical</b>	
Power Requirements	24 Volts DC, Powered from Base Radio or Din Rail Output Module
Supply Current	20mA
Isolation	
<b>Environmental</b>	
Operating Temperature	0°C to 50°C (32°F to 122°F)
Storage Temperature	-20°C to 50°C (-4°F to 122°F)
Storage Humidity	0% to 90% Relative Humidity
<b>Physical Dimension</b>	
Enclosure	2.1 x 4.1 x 1 in (53.3 x 104.1 x 25.4 mm)
USB Cable	12" cable with a USB type A connector
RS232	12" cable with a DB9 Female connector
RS484	3" with Phoenix 1754481 and 1939934

## **A B O U T U S**

Accutech is the sales division of Adaptive Instruments Corp., a leading edge, technology-driven developer, manufacturer and supplier of embedded microprocessor-based electronics. Based in Hudson, Massachusetts, Accutech is the most successful leading independent producer of wireless instrumentation on the market today.

Accutech customers include large national companies in the oil and gas, chemicals, pharmaceutical, food and beverage, primary materials processing, and energy industries. In addition to the wireless product line, Accutech also offers a traditional wired line of temperature, pressure and differential pressure instrumentation.

In the process control field, where quality is taken for granted and new technology is announced daily, we have deliberately concentrated our efforts on the development of instrumentation that makes business sense. The result is a product range that is rugged, secure, and reliable and works in even the most hazardous environments. We give companies the tools to reduce costs, save time, enhance safety, improve environmental performance and cut waste.

The next industrial revolution is right now. Let Accutech show you how to realize gains in operating efficiency.

**Visit us at: [www.accutechinstruments.com](http://www.accutechinstruments.com)**

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