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# FBT-6

Fieldbus Monitor

User Manual



## Table of Contents

I. Table of Contents	3
II. Introduction	5
III. Certifications	6
IV. FBT-6 Assistant Software Installation Instructions	7
Before Starting	7
FBT-6 Assistant Installation	8
Windows 7 Driver Installation	14
Windows Vista Driver Installation	15
Windows XP Driver Installation	17
Windows 2000 Driver Installation	21
Uninstalling the FBT-6 Assistant	25
V. Operation	26
Segment Check Mode	29
Manual Mode Functions	31
1. Voltage	31
2. Peak Noise	32
3. Average Noise	34
4. Shield Short	36
5. Retransmit	37
6. Add-Drop	38
7. Device	39
8. Low	41
9. Device Count	42
10. Save Report	43
USB Port and Associated Features	45
1. Connecting the Monitor to the PC USB Port and Starting the FBT-6 Assistant	46
2. Transfer Reports function	47
3. Erase Reports function	51
4. Set Report Names function	52
5. Set Alert Limits function	54
6. Update Firmware function	56
Using the Clip-on Probe Cable	59
Operation in Special Cases	60
VII. Accessories	63
VIII. Specifications	64
IX. Service	65
X. Warranty	66
XI. EMC Summary Information	67
XII. Revision History	69

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Relcom, Inc.  
2221 Yew St.  
Forest Grove, OR 97116  
USA

Tel: (503) 357-5607  
Fax: (503) 357-0491  
www.relcominc.com

## Introduction

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### II. Introduction

The FBT-6 Fieldbus Monitor is a Foundation Fieldbus physical segment and signal testing tool. It allows both engineering and service technicians to determine the health of fieldbus segments. The Monitor supports segment troubleshooting without interfering with segment operation.

This manual was current at the time of printing. Go to [www.relcominc.com](http://www.relcominc.com) for an electronic copy of the latest version of this manual. Further information on fieldbus is available in the Fieldbus Wiring Guide, also available on the website.

### Summary of Features

The Monitor includes the following features:

- Tests the segment automatically and gives a OK/BAD indication without operator intervention.
- Measures segment DC voltage.
- Detects short circuits between the segment cable's wires and shield.
- Indicates number of detected retransmissions to devices.
- Measures noise in three bands: Below, at and above fieldbus frequencies.
- Shows when a device is added to or dropped from the segment.
- Supports the transfer of data collected to a PC via a USB port.
- Supports firmware updates via a USB port.
- Displays the number of devices on the segment.
- Indicates the address of the device with the lowest detected signal level.
- Displays device addresses (in decimal and hexadecimal) and signal level.
- Creates printable reports indicating segment condition.
- Usable in hazardous areas.

## Certifications

### III. Certifications

#### CE

The Monitor meets the European Union requirements for electromagnetic radiation by complying with the EMC Directive 89/336/EEC.

#### FCC

The Monitor is a Class A digital device and complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### Hazardous Area/Location Approvals

FM US and Canada:

Class I Division 2 Groups A, B, C, and D T4

Class I Zone 2 Group II C T4

Class I Division 1 Groups A, B, C, and D T4

Class I Zone 0 and 1 EX/AEx ia IIC T4

ATEX Ex ia IIC T4

ATEX Ex nL IIC T4

ATEX Ex ic IIC T4

## FBT-6 Assistant Software Installation Instructions

### IV. FBT-6 Assistant Software Installation Instructions

#### Before Starting

FBT-6 Assistant software included with the Monitor supports the USB features of the Monitor.

The FBT-6 Assistant software is on the **FBT-6 Software and Documents** CD included with the Monitor shipment. The **FBT-6 User Manual** is also included on the CD and will be installed along with the FBT-6 Assistant software.

You must be logged in as an administrator to install the software and driver. **Install the FBT-6 Assistant Software before attaching the Monitor to the computer.** The FBT-6 Assistant application should be installed first, followed by the USB driver. See the appropriate page below for driver installation instructions.

Operating System	Page for driver installation instructions
Windows 7 (32- and 64-bit)	14
Windows Vista (64-bit)	14
Windows Vista (32-bit)	15
Windows XP	17
Windows 2000	21

## FBT-6 Assistant Software Installation Instructions

### FBT-6 Assistant Installation

The Monitor should not be attached yet. Close all Windows programs. You must be logged in as an administrator to install the software and driver.

Insert the **FBT-6 Software and Documents** CD and the setup program will run automatically. If it does not run automatically, run the setup.exe file on the CD.

You may see a screen similar to the one shown below:

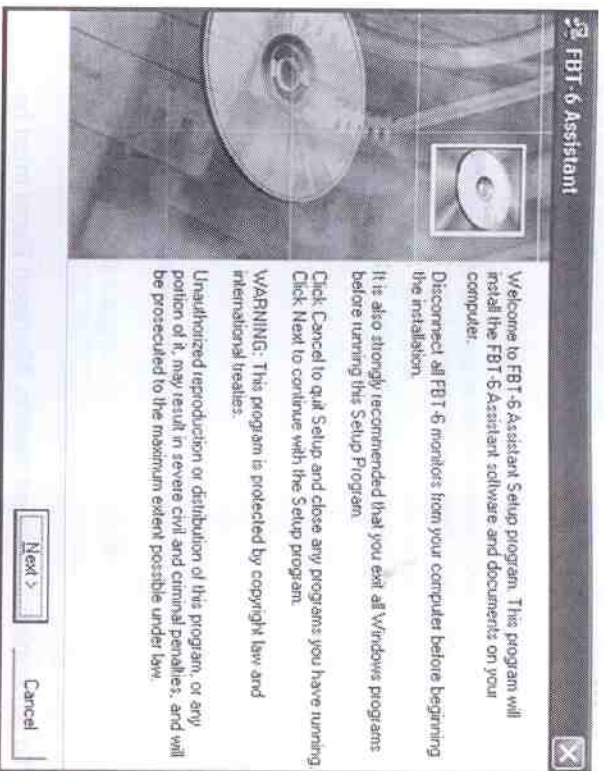


If you do see this screen, click **Run setup.exe**.

You may also see a screen asking if you want to allow the FBT-6 Assistant software to make changes to the computer. Click Yes/Run/Continue as appropriate if you see this screen.

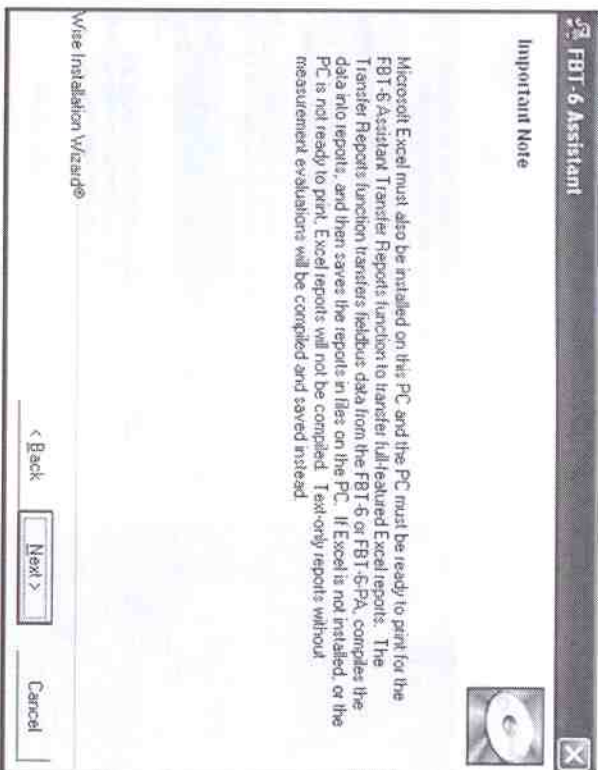
## FBT-6 Assistant Software Installation Instructions

The following screen will be displayed:



Press the **Next** button to continue.

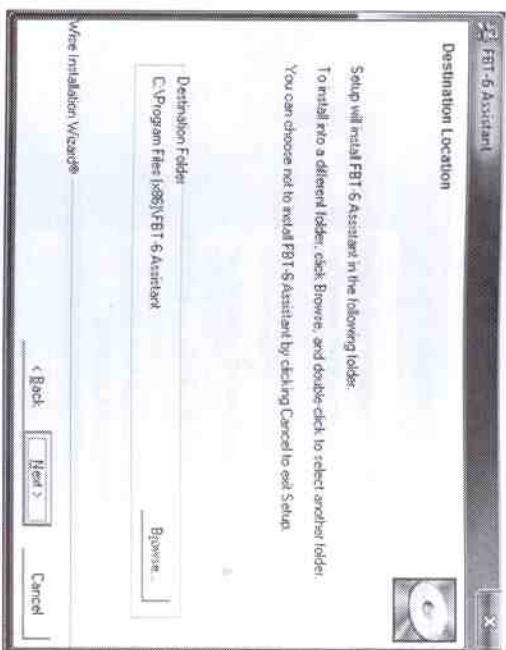
## FBI-6 Assistant Software Installation Instructions



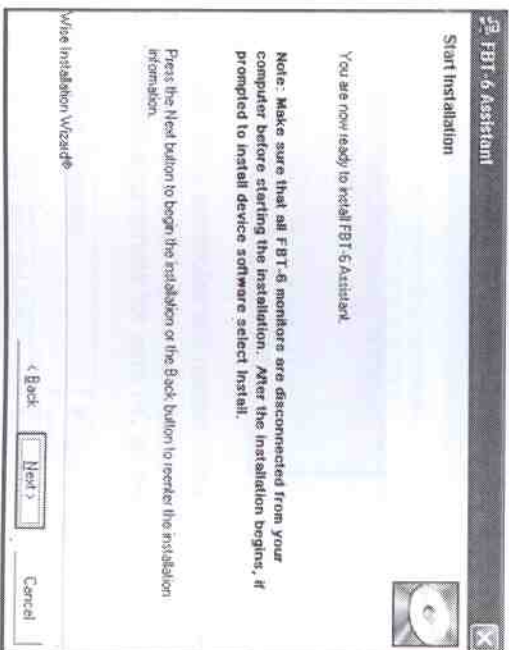
To generate full-featured reports, Microsoft Excel must be installed on the PC and the PC must be ready to print. If not, text reports will be generated instead.

Press the **Next** button to continue.

## FBI-6 Assistant Software Installation Instructions



Choose an installation location or use the default location displayed and press the **Next** button to continue.



Press the **Next** button to continue.

## FBT-6 Assistant Software Installation Instructions

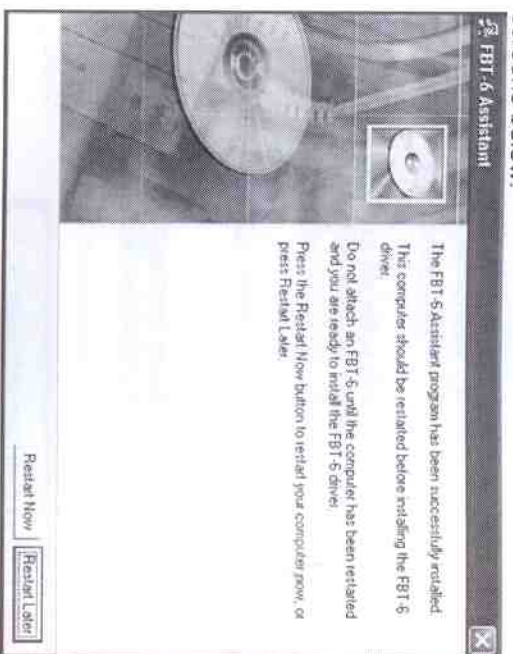
You may see the following screen:



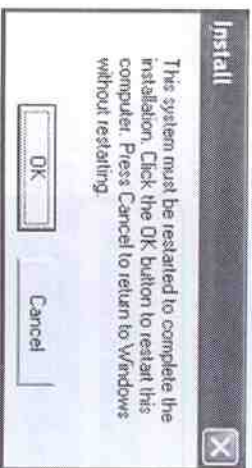
Click **Install**.

## FBT-6 Assistant Software Installation Instructions

Your computer may need to be restarted. If so, you will see the screens below.



Click **Restart Now**.



Click **OK**. Your computer will restart. The FBT-6 Assistant application is now installed. Turn to the driver installation instructions appropriate for your PC as listed below:

Operating System	Page for driver installation instructions
Windows 7 (32- and 64-bit)	14
Windows Vista (64-bit)	14
Windows Vista (32-bit)	15
Windows XP	17
Windows 2000	21

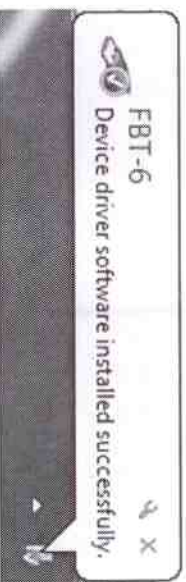
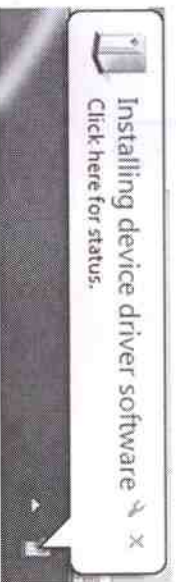
## FBT-6 Assistant Software Installation Instructions

### Windows 7 (32- and 64-bit) and 64-bit Vista Driver Installation

After installing the FBT-6 Assistant application, the USB driver needs to be installed. Attach the Monitor to a USB port on the PC with the provided cable.

**Note: Connect the Monitor directly to a USB port on the PC. The Monitor does not work with all USB hubs and laptop docking stations.**

The "Installing device driver software" text bubble appears followed by the "FBT-6 Device driver software installed successfully" text bubble.



The driver installation is now complete and the FBT-6 Assistant program is ready for use.

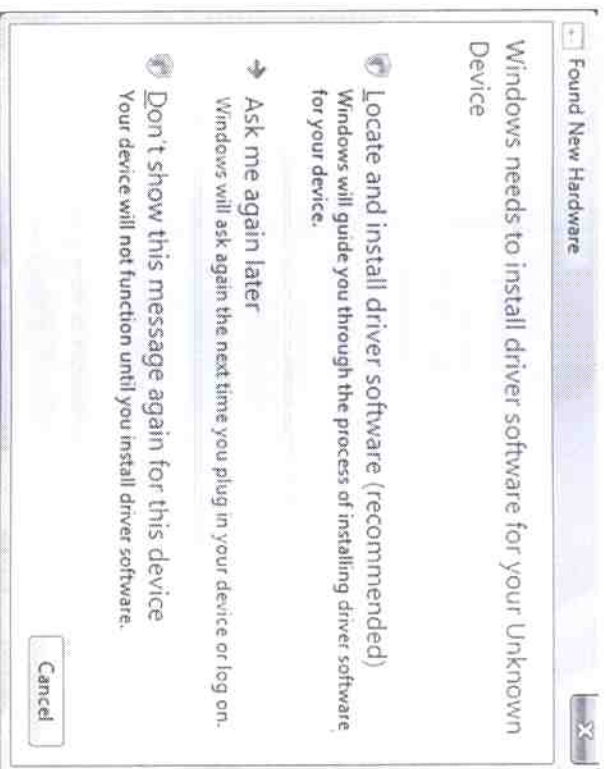
## FBT-6 Assistant Software Installation Instructions

### Windows Vista 32-bit Driver Installation

After installing the FBT-6 Assistant application, the USB driver needs to be installed. Attach the Monitor to a USB port on the PC with the provided cable.

**Note: Connect the Monitor directly to a USB port on the PC. The Monitor does not work with all USB hubs and laptop docking stations.**

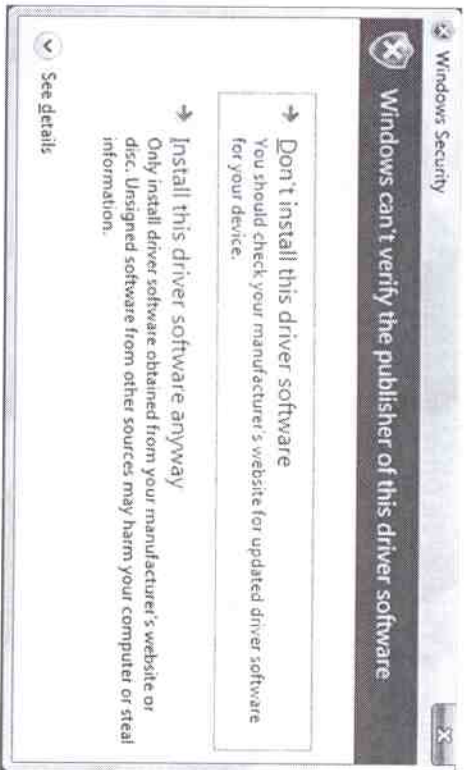
The Found New Hardware window appears:



Select **Locate and install driver software (recommended)**.



## FBT-6 Assistant Software Installation Instructions



Click **Install this driver software anyway**.



This text bubble shows that the driver successfully installed.

The Windows Vista driver installation is now complete and the FBT-6 Assistant program is ready for use.

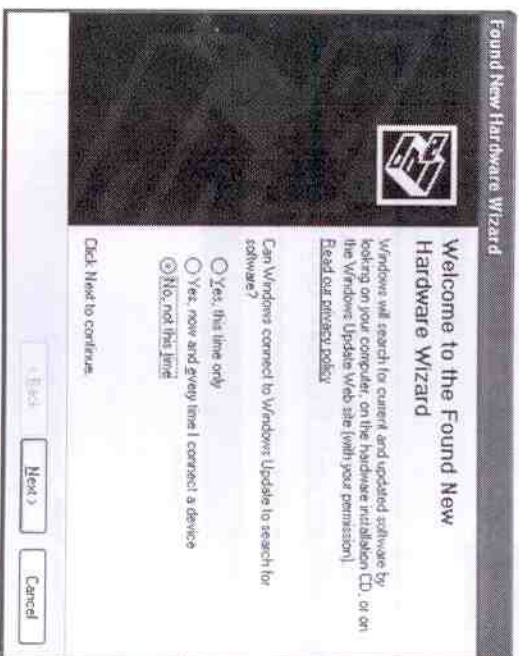
## FBT-6 Assistant Software Installation Instructions

### Windows XP Driver Installation

After installing the FBT-6 Assistant application, the USB driver needs to be installed. Attach the Monitor to a USB port on the PC with the provided cable.

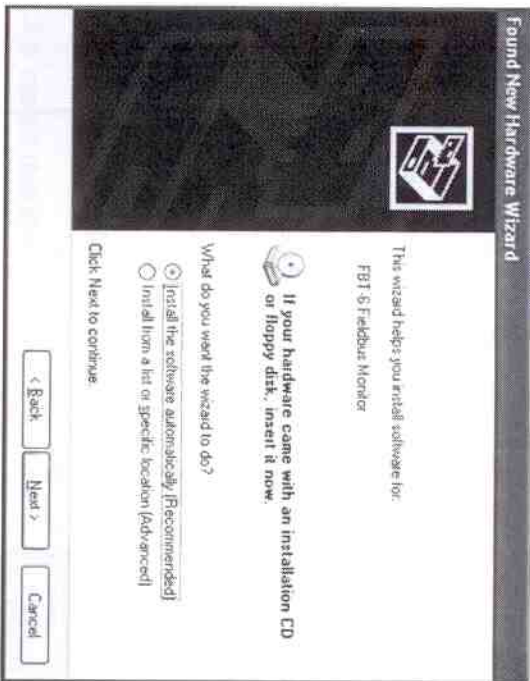
**Note: Connect the Monitor directly to a USB port on the PC. The Monitor does not work with all USB hubs and laptop docking stations.**

The Found New Hardware Wizard window appears:



Select **No**, not this time and press the **Next** button to continue.

## FBT-6 Assistant Software Installation Instructions

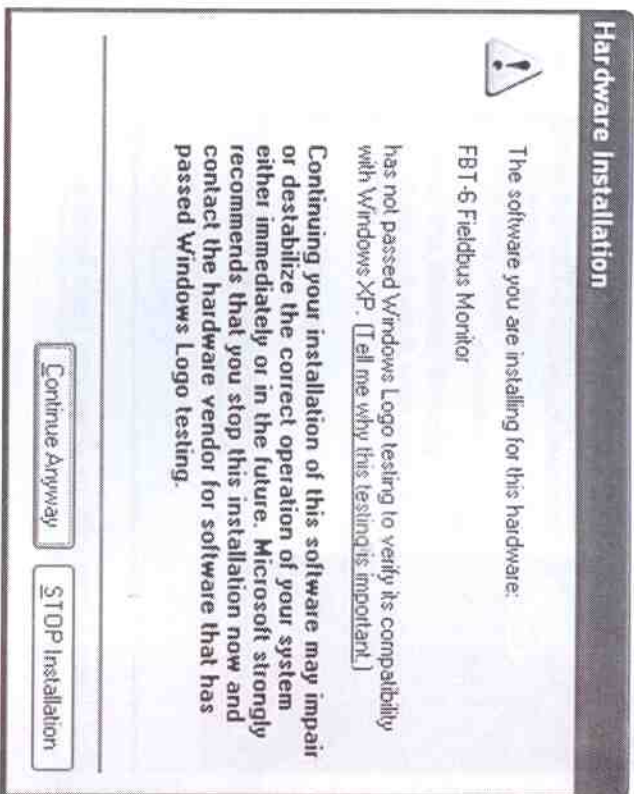


Select the first option, **Install the software automatically (Recommended)**, and press the **Next** button to continue.



The computer searches for the driver.

## FBT-6 Assistant Software Installation Instructions



Press **Continue Anyway**.

