

USB-Link™ Installation and Setup Manual



USB-Link™

IDSC Holdings LLC retains all ownership rights to the USB-Link and its documentation. The USB-Link source code is a confidential trade secret of IDSC Holdings LLC. You may not decipher or decompile USB-Link software, develop source code for the USB-Link, or knowingly allow others to do so. The USB-Link and its documentation may not be sublicensed or transferred without the prior written consent of IDSC Holdings LLC.

This manual, as well as the software it describes, is furnished under license and may only be used or copied in accordance with the terms of such license. The content of this manual is furnished for informational use only, is subject to change without notice, and should not be construed as a commitment by IDSC Holdings LLC. IDSC Holdings LLC assumes no responsibility or liability for any errors or inaccuracies that may appear in this book.

Except as permitted by such license, no part of this publication may be reproduced, or transmitted, in any form or by any means, electronic, mechanical, or otherwise, without the prior written permission of IDSC Holdings LLC.

NEXIQ Technologies is a trademark of IDSC Holdings LLC.

©2007 IDSC Holdings LLC. All rights reserved. All other marks are trademarks or registered trademarks of the respective holders. Pictures for illustration purposes only. Specifications are subject to change without notice.

www.nexiq.com

The device 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. This device contains FCC-ID-POOWML-C30XX.



Approved in accordance to R&TTE directive transmitter module marked by “CE product label”, manufactured by MITSUMI Incorporated to OEM product.

Part No.1400-358 Revised 09/11/2007

Safety Information

For your safety, read this manual thoroughly before operating your **USB-Link™** unit.

Your **USB-Link™** unit is intended for use by properly trained, skilled professional heavy-duty technicians. The safety messages presented below and throughout this user's manual are reminders to the operator to exercise extreme care when using this test instrument.

There are many variations in procedures, techniques, tools, and parts for servicing vehicles, as well as in the skill of the individual doing the work. Because of the vast number of test applications and variations in the products that can be tested with this instrument, we cannot possibly anticipate or provide advice or safety messages to cover every situation. It is the heavy-duty technician's responsibility to be knowledgeable of the system being tested. It is essential to use proper service methods and test procedures and to perform tests in an appropriate and acceptable manner that does not endanger your safety, the safety of others in the work area, or vehicle or equipment being tested.

It is assumed the operator has a thorough understanding of vehicle systems before using the **USB-Link™** unit. Understanding of these system principles and operating theories is necessary for competent, safe and accurate use of this instrument.

Before using the **USB-Link™** unit, always refer to and follow safety messages and applicable test procedures provided by the manufacturer of the vehicle or equipment being tested. Use equipment only as described in this manual.

Read, understand and follow all safety messages and instructions in this manual and on the test equipment. Safety messages in this section of the manual contain a signal word with a three-part message and an icon. The signal word indicates the level of the hazard in a situation.

Safety Message Conventions

Safety messages are provided to help prevent personal injury and equipment damage. All safety messages are introduced by a signal word indicating the hazard level.



Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury to the operator or to bystanders.



Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury to the operator or to bystanders.



Indicates a potentially hazardous situation which, if not avoided, may result in moderate or minor injury to the operator or to bystanders.



Indicates a situation which, if not avoided, may result in damage to the test equipment or vehicle.

Safety messages contain three different type styles.

- Normal type states the hazard.
- **Bold** type states how to avoid the hazard.
- *Italic* type states the possible consequences of not avoiding the hazard.

An icon, when present, gives a graphical description of the potential hazard.

Example:



Risk of unexpected vehicle movement.

- **Block drive wheels before performing a test with engine running.**
A moving vehicle can cause injury.

Important Safety Instructions



Risk of entanglement.

- **Do not allow cables to hang in such a way that they may become entangled with operator or driving controls.**

Cable entanglement can cause interference with driving and can cause injury.



Risk of electric shock.

- **Do not exceed voltage limits between inputs as indicated on the rating label.**
- **Use extreme caution when working with circuits that have greater than 60 volts DC or 25 volts AC.**



Risk of explosion.

- **Do not use this system in environments where explosive vapor may collect, such as in below-ground pits, confined areas, or areas that are less than 18 inches above the floor.**

Explosion can cause injury.



Risk of poisoning.

- **Use this equipment in locations with mechanical ventilation providing at least four air changes per hour. Engine exhaust contains odorless lethal gas.**
- **Route exhaust outside while testing with engine running.**

Poisoning can result in death or serious injury.



Risk of accident.

- **Two people should be in the vehicle when driving on road, one to drive and the other to attend to the equipment.**

Accidents can occur when attention is not solely given to driving.



Risk of unexpected vehicle movement.

- **Block drive wheels before performing a test with engine running.**
- **Unless instructed otherwise, set parking brake and put gear selector in neutral or park.**
- **If vehicle has an automatic parking brake release, disconnect release mechanism for testing and reconnect when finished.**
- **Do not leave a running engine unattended.**

A moving vehicle can cause injury.

Save These Instructions

Table of Contents

Safety Information	iii
Safety Message Conventions	iv
Important Safety Instructions	iv
 Chapter 1:	
Introducing the USB-Link™	1
Product Specifications	2
System Requirements	3
USB-Link™ Components	4
Communication Options: Wireless or Wired?	5
Wireless Connection	6
Wired Connection	7
 Chapter 2:	
Installation and Bluetooth Configuration	9
Installation Process Flowchart	10
Outline of Installation Process	11
Step 1: Install the USB-Link™ Drivers and Utilities	12
Instructions for Windows® 2000 and XP Users	12
Instructions for Vista® Users	22

Table of Contents

Step 2: Choose Your Connection	33
Step 3: Install the Bluetooth Adapter	35
Step 4: Install the Bluetooth Drivers	36
Additional Steps for Windows XP SP-2	44
Configure the Bluetooth Environment	52

Chapter 3:

Preparing to Use the USB-Link™	55
Step 5: Connect the USB-Link™ to a Vehicle	56
Wireless Connection	57
Wired Connection Using a USB Cable	58
Step 6: Use the Bluetooth Connection Utility	60
Step 7: Test the Connection to the Vehicle	65
Step 8: Setting Up Diagnostic PC Applications	68
Allison DOC™ for Fleets (1000/2000)	68
Allison DOC™ for Fleets (3000/4000)	68
Bendix ABS Diagnostics	69
Caterpillar Electronic Technician	69
Cummins Insite	70
Detroit Diesel Diagnostic Link	71
Eaton Service Ranger	71
International INTUNE	72
International Master Diagnostics (3BX, DLC, DLC II)	72
Meritor WABCO ABS	72

Table of Contents

Chapter 4:	
USB-Link™ Troubleshooting Information	73
LED Issues	74
Configuration Issues	75
Wireless Communication Issues	76
Appendix A:	
Warranty and Service	77
Exclusive Warranty	78
Exclusive Remedy	79
Return Materials Authorization (RMA)	80
Return of Goods Policy	82
Return Goods Authorization (RGA) Procedure	83

Table of Contents

Chapter 1

Introducing the USB-Link™



- ▼ *Product Specifications, page 2*
- ▼ *System Requirements, page 3*
- ▼ *USB-Link™ Components, page 4*
- ▼ *Communication Options: Wireless or Wired?, page 5*

The USB-Link™ is a hardware device that enables service bay personal computers (PCs) to retrieve vehicle information using either Bluetooth® wireless technology or a more traditional cable connection. Once configured, the USB-Link™ interfaces with your PC, enabling you to use specific PC applications to perform vehicle diagnostics.

This chapter introduces the USB-Link™ and provides details regarding the communication modes available to you to interface with your PC.

Product Specifications

The USB-Link™ is configured with the following specifications:

Feature	Data
Physical Dimensions	5.86" x 3.02" x 1.78" (149 mm x 77 mm x 45 mm)
Weight	4.6 oz. (0.13 kg)
Power Requirements	10 - 32 VDC @ 350 mA maximum
Operating Temperature	0 to +70 °C
Vehicle Protocols Supported	<ul style="list-style-type: none"> • J1708/J1587 • J1939 • CAN (125K, 250K, or 500K) (Dual CAN supported) • J2284 CAN (125K, 250K, or 500K) • ALDL Pass-through • ALDL 8192 • ALDL 9600 • OBDII • ISO 9141 • ISO 14230 (KWP2000) • J1850 (PWM, VPM, or Allison) • J1708 • IESCAN (required for Allison)
USB Communication	USB Device, version 1.1
Wireless Communication	<i>Bluetooth</i> Class 1 adapter (up to 100 m range)
Wired Communication	USB cable 15 ft. (5 m) maximum
PC Driver	TMC RP1210A compliant
Vehicle Connector	DB15F
USB Connector	Type B jack

System Requirements

Be aware of the following system requirements:

Component	Requirement
IBM PC-compatible computer	<ul style="list-style-type: none">• 1GHz processor or more• RAM: 256MB or more (512MB recommended)• USB port, version 1.1 or higher
Operating system	Windows 2000, XP (Service Pack 1 or 2), Vista®
<i>Bluetooth</i> adapter	<ul style="list-style-type: none">• <i>Bluetooth</i> serial port capability• Must support WIDCOMM® drivers, 1.4x and higher <p>The USB-Link™ has been qualified with the following Class 1 adapters:</p> <ul style="list-style-type: none">- Linksys USBBT100 (preferred)- Belkin F8T001

USB-Link™ Components

The following illustration details each of the USB-Link™ components:

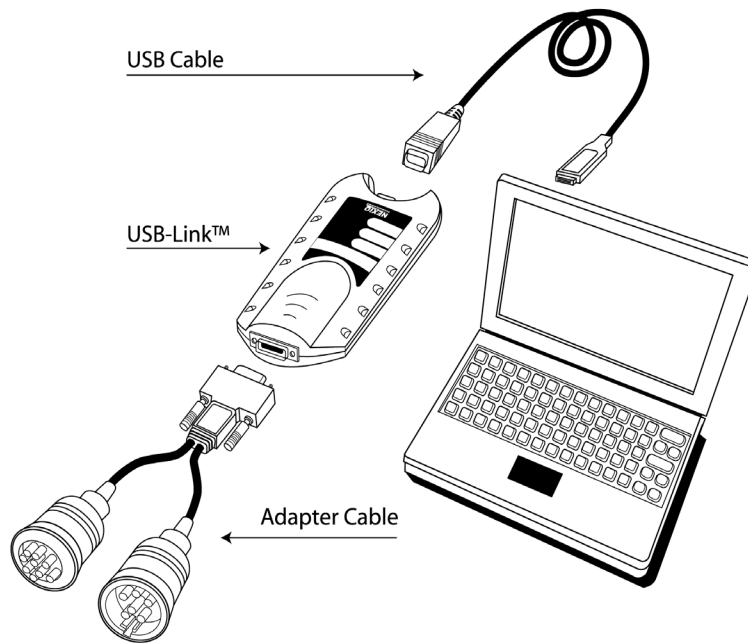


Figure 1.1 USB-Link™ Components

Communication Options: Wireless or Wired?

Prior to using the USB-Link™, you need to decide how you want the unit to communicate with your PC. There are two options:

- Wireless connection to the PC using *Bluetooth*
A wireless connection provides the advantage of untethered communication.

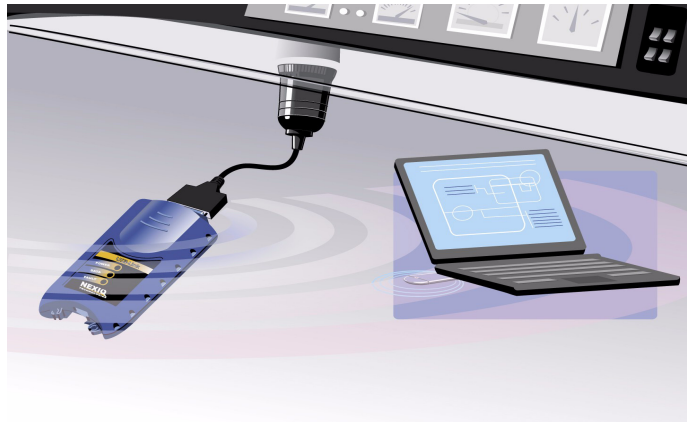


Figure 1.2 *Wireless Connection*

- Wired connection to the PC using a USB cable
A wired connection provides the advantage of faster data throughput.

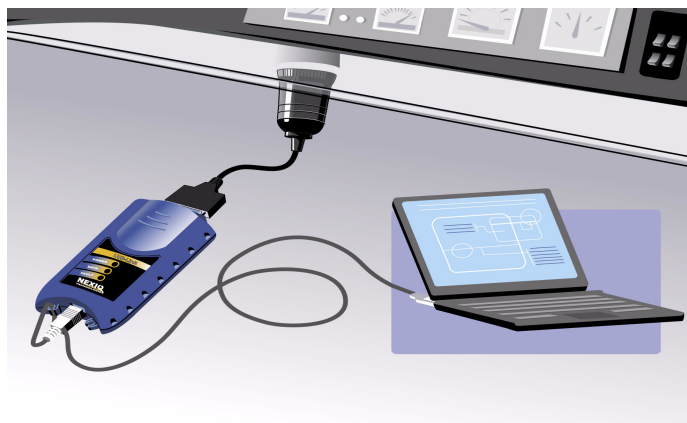


Figure 1.3 *Wired Connection*

Wireless Connection

Wireless connectivity provides untethered operation, and that's a bonus in a busy service bay. USB-Link™ uses *Bluetooth* to provide this wireless communication between the USB-Link™ and your PC.

NOTE:



The USB-Link™ *does not* support Integrated *Bluetooth*. If your PC has Integrated Bluetooth, your system has *Bluetooth* drivers installed and a built-in *Bluetooth* transceiver. You must *uninstall* Integrated Bluetooth and its *Bluetooth* drivers prior to proceeding with the USB-Link™ installation process.

If your PC *does not* have Integrated Bluetooth, then you are clear to proceed with the USB-Link™ installation process as documented in this manual:

- Install *Bluetooth* drivers
- Install an external *Bluetooth* transceiver (i.e., an adapter)
- Configure a basic *Bluetooth* environment
 - For detailed information on installing *Bluetooth* drivers and configuring a basic *Bluetooth* environment, refer to *Chapter 2: Installation and Bluetooth Configuration*, later in this manual.
- Run the NEXIQ *Bluetooth* Connection Utility
 - For information on running the NEXIQ *Bluetooth* Connection Utility, refer to *Chapter 3: Preparing to Use the USB-Link™*, later in this manual.
 - USB-Link™ is intended for diagnostic use, for example, retrieving trouble codes. By nature, *Bluetooth* has limited bandwidth and latency when compared to wired solutions. This may result in dropped messages in situations requiring high bandwidth.

Wired Connection

Using a USB connection to the PC is *highly recommended* when diagnosing heavily-loaded CAN/J1939 buses. By nature, *Bluetooth* has less bandwidth than USB, which can result in dropped messages in situations requiring high bandwidth. ECU reprogramming typically requires both high throughput and critical timing, and should *always* use a USB-to-PC wired connection.

Wired communication between the USB-Link™ and your PC requires a USB cable.



Figure 1.4 15 ft. USB Cable included with your USB-Link™

Chapter 2

Installation and Bluetooth Configuration



- ▼ *Step 1: Install the USB-Link™ Drivers and Utilities, page 12*
 - ▼ *Instructions for Windows® 2000 and XP Users, page 12*
 - ▼ *Instructions for Vista® Users, page 22*
- ▼ *Step 2: Choose Your Connection, page 33*
- ▼ *Step 3: Install the Bluetooth Adapter, page 35*
- ▼ *Step 4: Install the Bluetooth Drivers, page 36*
- ▼ *Additional Steps for Windows XP SP-2, page 44*
- ▼ *Configure the Bluetooth Environment, page 52*

This chapter provides instructions for installing NEXIQ drivers and utilities, installing the required *Bluetooth*® drivers, installing a *Bluetooth* adapter, and configuring a basic *Bluetooth* environment. It also provides special instructions for Vista® users.

Installation Process Flowchart

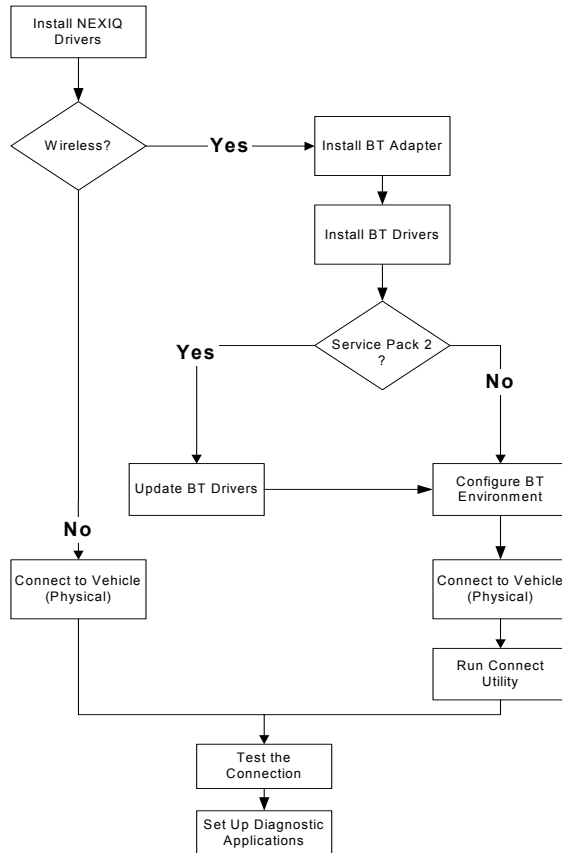



Figure 2.1 Process Flowchart

Outline of Installation Process

- Step 1:** Install the NEXIQ USB-Link™ drivers and utilities.
- Step 2:** Choose your connection (wired or wireless).
If you chose a wired connection, move on to complete steps 5, 7, and 8 only.
- Step 3:** If you chose a wireless connection, install the *Bluetooth* adapter (e.g., the Linksys dongle).
- Step 4:** Install the drivers for the *Bluetooth* adapter you are using.
Only if you are installing an adapter other than the Linksys:
- If you are running Windows XP Service Pack 2, update the *Bluetooth* drivers you installed in Step 4. If, however, you are *not* running Windows XP SP-2, skip this procedure and move on to the next bullet.
 - Use the *Bluetooth* Configuration Wizard to configure a basic *Bluetooth* environment.
- Step 5:** Connect the USB-Link™ to the vehicle.
- Step 6:** Use the NEXIQ *Bluetooth* Connection Utility to select a USB-Link™ and test the signal strength.
- Step 7:** Use the NEXIQ Device Tester to test the connection between the USB-Link™ and the vehicle.
- Step 8:** Set up diagnostic PC applications that apply to your local environment for use with the USB-Link™.


Step 1: Install the USB-Link™ Drivers and Utilities


Instructions for Windows® 2000 and XP Users

 If you are running Vista®, please refer to the special instructions for Vista users on page 22 of this manual.

Prior to using the USB-Link™ it is necessary to install the required NEXIQ device drivers and utilities on your PC or laptop. These device drivers are compatible with Microsoft® Windows® 2000 and XP.

IMPORTANT:

 Remember, if you are running Windows XP on your PC, you *must* have Administrator security rights *and* be logged in as “Admin” to successfully complete the installation process outlined in this manual.

 If you have questions about using this product, contact NEXIQ Technical Support at **(800) 639-6774**, or send us an e-mail at **support@nexiq.com**.

To install the device drivers and utilities:

- 1 Close all programs and insert the NEXIQ *USB-Link Drivers* CD into your PC's CD-ROM drive.

The installation begins by displaying the **Welcome!** screen.

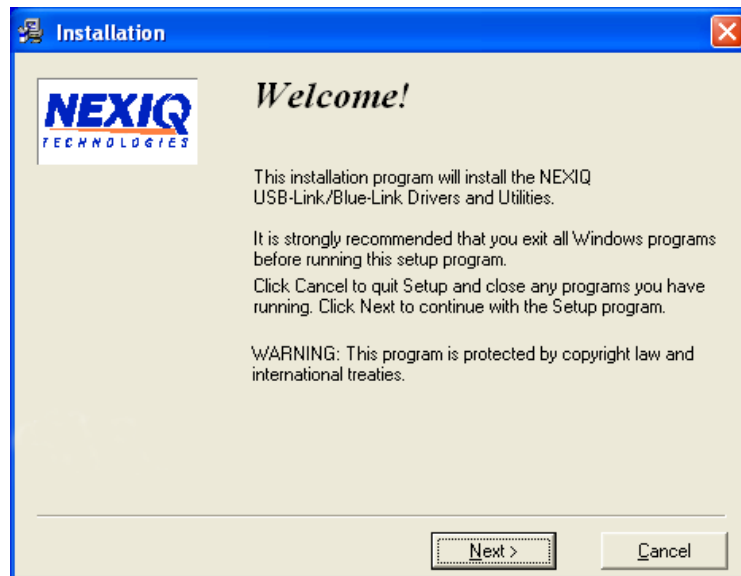


Figure 2.2 *Installation Welcome! Screen*

- If the program does not automatically start, access your CD-ROM drive through **My Computer** and double-click the **SETUP.EXE** file.
- 2** Read the information displayed on the **Welcome!** screen, and click **Next**.

The **Copyright Notice** screen is displayed.

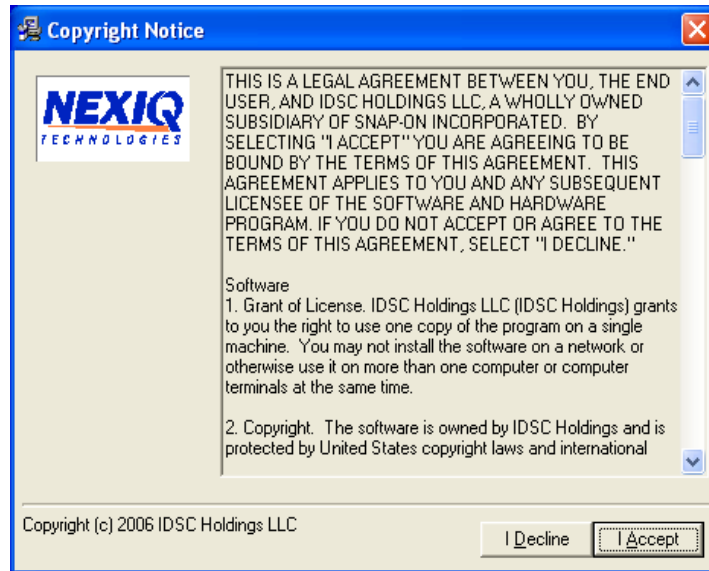


Figure 2.3 Copyright Notice Screen

- 3 Read all the information on this screen, then click **I Accept**.

NOTE:



If you do not agree to the terms, click **I Decline**. A message is displayed prompting you to confirm exiting the installation. Click **EXIT SETUP**.

The **Backup Replaced Files?** screen is displayed.

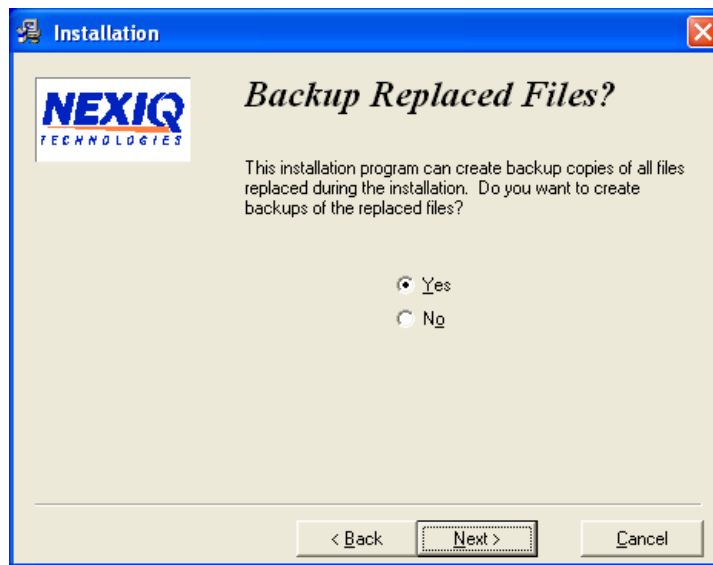


Figure 2.4 Backup Replaced Files? Screen

- 4** Do one of the following:
 - Click **Yes** if you wish to back up copies of files replaced during the installation (recommended).
 - Click **No** if you do not wish to back up files.
- 5** Click **Next** to continue.

If you chose to back up replaced files, the installation program requests a location to store the files.

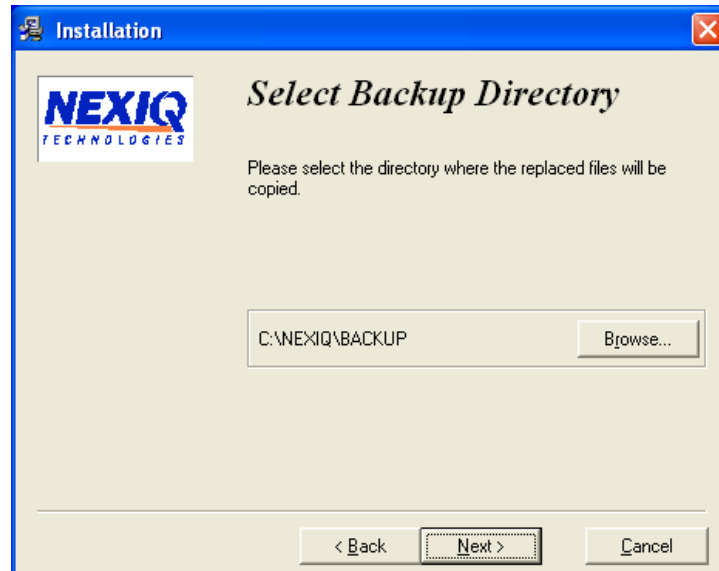


Figure 2.5 Select Backup Directory Screen

6 Do one of the following:

- To accept the default directory, click **Next** and proceed to Step 7 (recommended).
- To select a different directory, click **Browse...**

At the bottom of the screen, select the desired drive letter from the drop-down list. Double-click each directory to add to the path. Click **OK** to proceed.

The program returns to the **Select Backup Directory** screen. Confirm the destination, then click **Next**.

The **Select Components** screen is displayed.

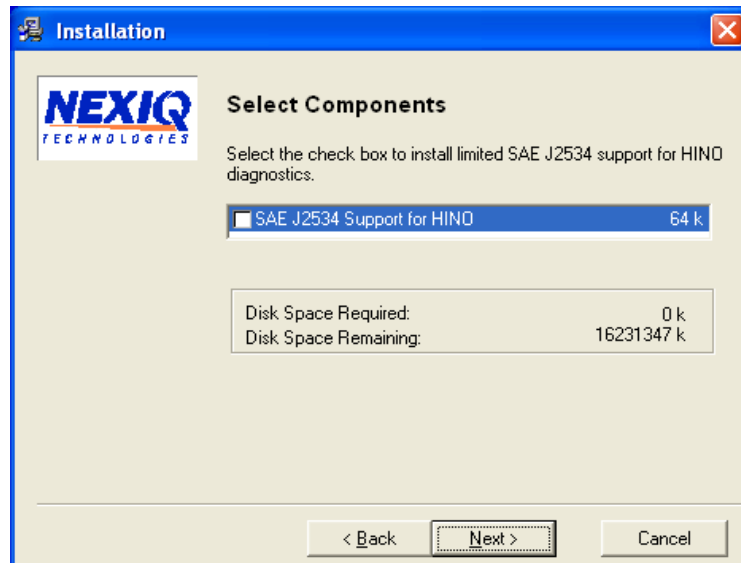


Figure 2.6 Select Components screen

- 7** Check the check box to install J2534 support for **HINO Diagnostic eXplorer**.
- 8** Click **Next** to continue.

- 9 Wait for the **Ready to Install!** screen to appear.

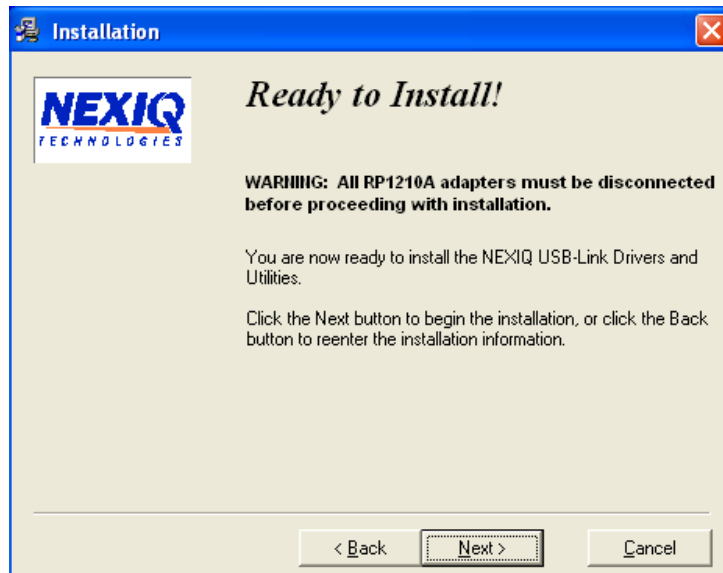


Figure 2.7 Ready to Install! Screen

NOTE:



Be sure to disconnect all RP1210A adapters currently connected to the PC before proceeding with the installation.

- 10 Do *one* of the following:

- Click **Next** to proceed with the installation.
- Click **Back** to step backward through previous screens.
- Click **Cancel** to stop the installation.

A dialog box displaying a status bar is displayed indicating percentage complete.

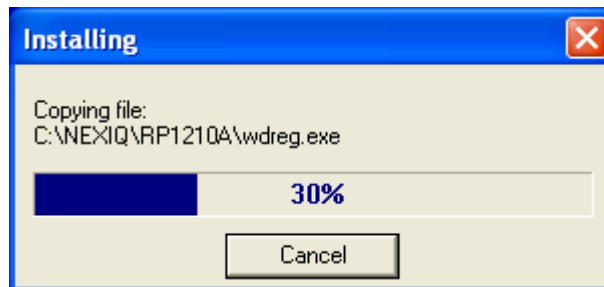


Figure 2.8 Status Bar

If Microsoft® .NET Framework is *not* found on your PC, the following dialog box is displayed.



Figure 2.9 .NET Framework Dialog Box

- 11** Click **OK**, and follow the prompts to install the .NET software.

Once the .NET installation is complete, the following message is displayed:

Installation of Microsoft .NET Framework 1.1 is complete.

- 12** Click **OK** to continue.

The following dialog is displayed:

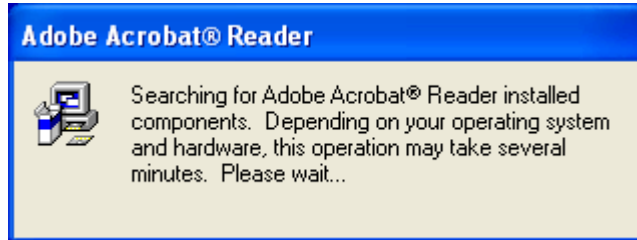


Figure 2.10 Acrobat Reader Search Dialog

If the version of the Adobe Acrobat® Reader installed on your PC is up-to-date, a dialog is displayed informing you of this fact. Click **OK**, and move on to Step 14 (pg. 21).

NOTE:



The Adobe Acrobat® Reader is required to view this *Installation Manual* electronically as a portable document format (PDF) file.

If, however, your PC requires installation of the Adobe Acrobat® Reader, the

following screen is displayed.

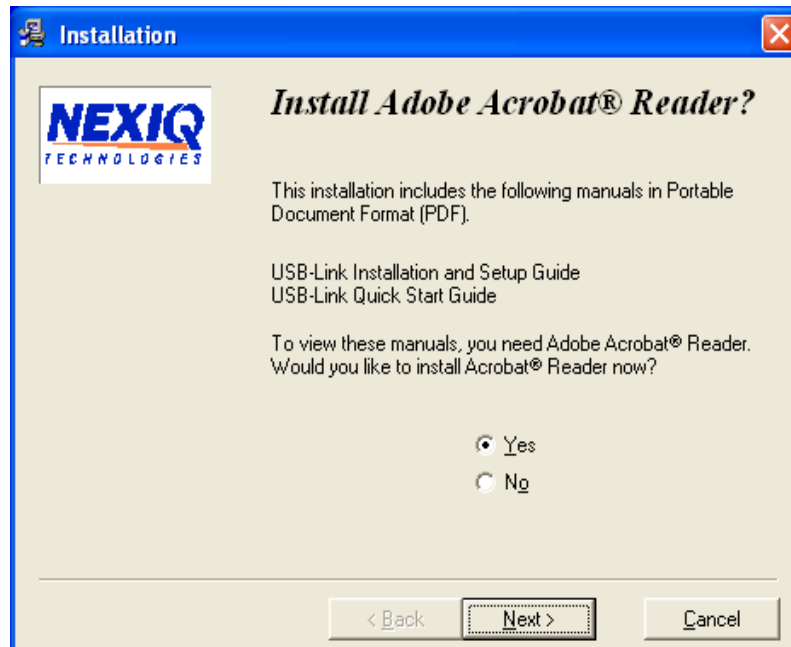


Figure 2.11 Acrobat Reader Installation Screen

- 13** Click **Next** to accept the default (Yes), and follow the prompts.
- 14** Wait for the **Installation Completed!** screen to appear, then click **Finish**.

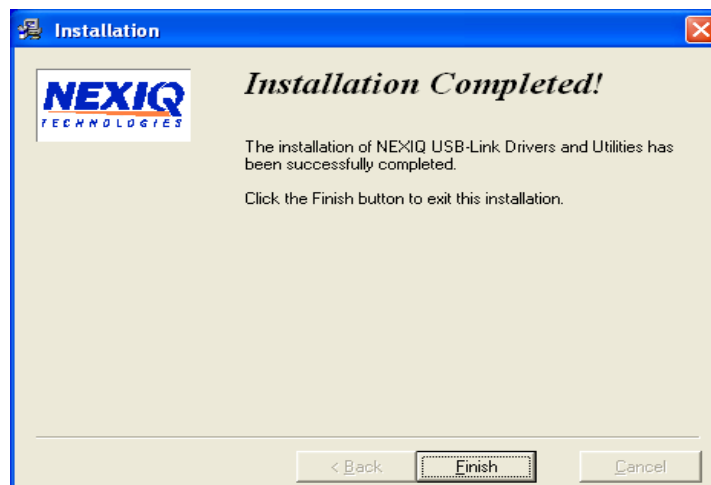


Figure 2.12 Installation Completed! Screen

A message appears prompting you to restart the PC.

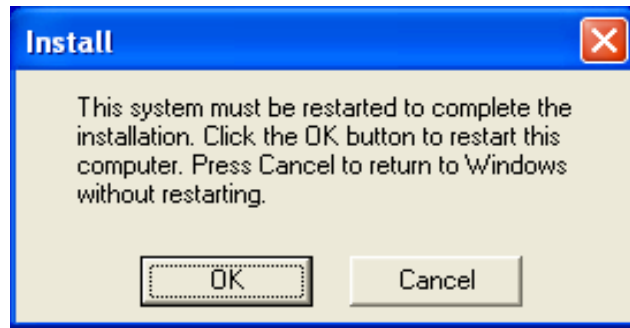


Figure 2.13 Restart Prompt

15 Click **OK** to restart the PC.

16 Once the PC restarts, remove the installation CD from the CD-ROM drive.

Move on to “Step 2: Choose Your Connection,” later in this chapter.

Instructions for Vista® Users

Prior to using the USB-Link™ it is necessary to install the required NEXIQ device drivers and utilities on your PC or laptop. These device drivers are compatible with Microsoft® Windows® 2000, XP, and Vista®.

IMPORTANT:



You *must* have Administrator security rights *and* be logged in as “Admin” to successfully complete the installation process outlined in this manual.

NOTE:



If you have questions about using this product, contact NEXIQ Technical Support at (800) 639-6774, or send us an e-mail at support@nexiq.com.

To install the device drivers and utilities:

- 1 Close all programs and insert the NEXIQ *USB-Link Drivers* CD into your laptop's CD-ROM drive.

The AutoPlay window opens.

- 2 Click **Install or run program** (i.e., “Run setup.exe Published by IDSC Holdings LLC”).
- 3 Click **Continue**.

The installation begins by displaying the **Welcome!** screen.

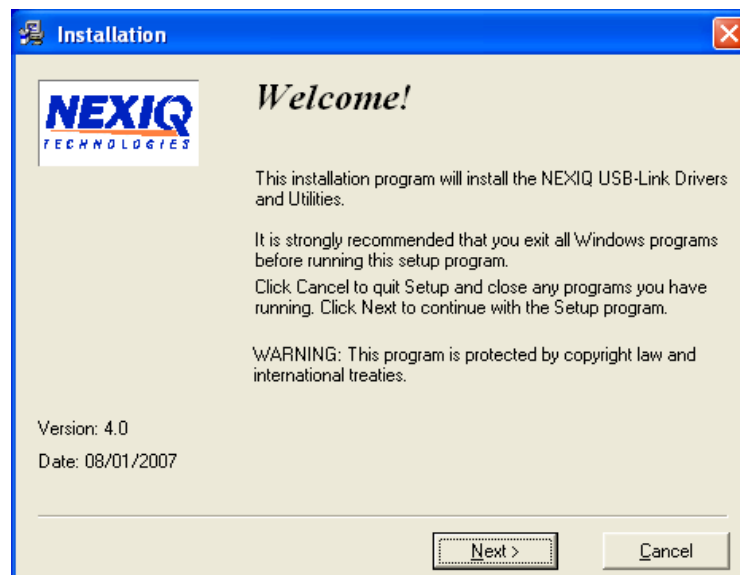


Figure 2.14 *Installation Welcome! Screen*

—If the program does not automatically start, access your CD-ROM drive through **Start** ► **Computer** and double-click the **SETUP.EXE** file.

- 4 Read the information displayed on the **Welcome!** screen, and click **Next**.

The **Copyright Notice** screen is displayed.

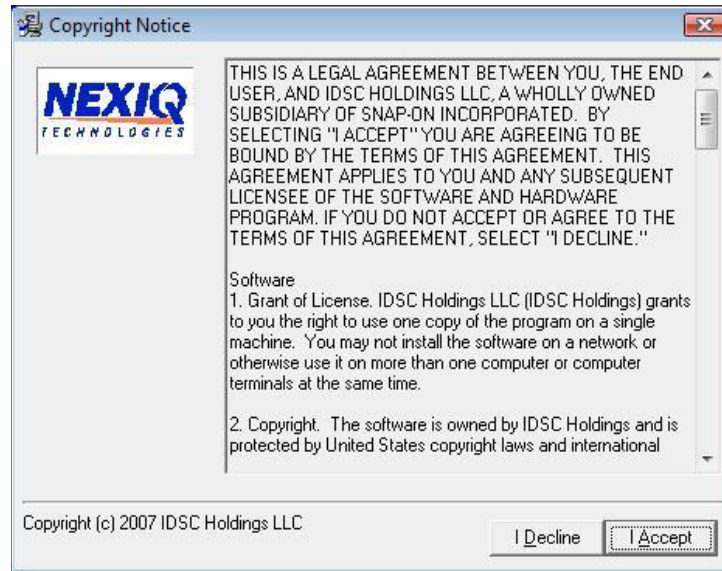


Figure 2.15 Copyright Notice Screen

- 5 Read all the information on this screen, then click **I Accept**.

NOTE:



If you do not agree to the terms, click **I Decline**. A message is displayed prompting you to confirm exiting the installation. Click **EXIT SETUP**.

The **Backup Replaced Files?** screen is displayed.

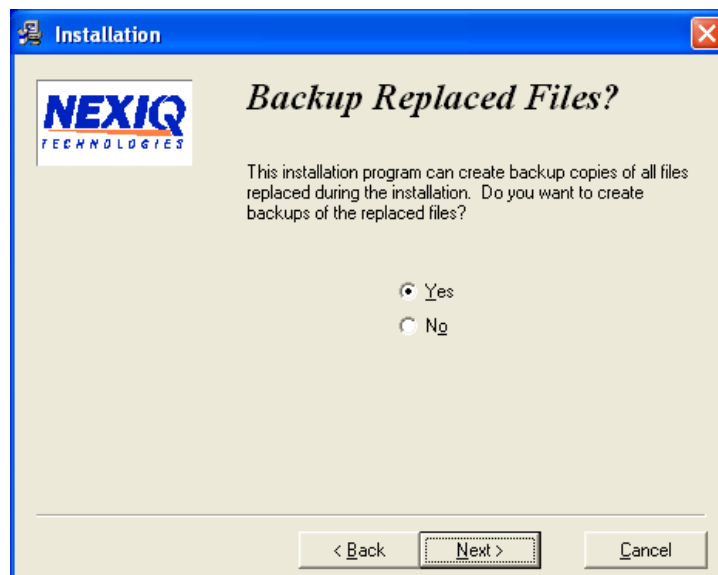


Figure 2.16 Backup Replaced Files? Screen

- 6** Do one of the following:
 - Click **Yes** if you wish to back up copies of files replaced during the installation (recommended).
 - Click **No** if you do not wish to back up files.
- 7** Click **Next** to continue.

If you chose to back up replaced files, the installation program requests a location to store the files.

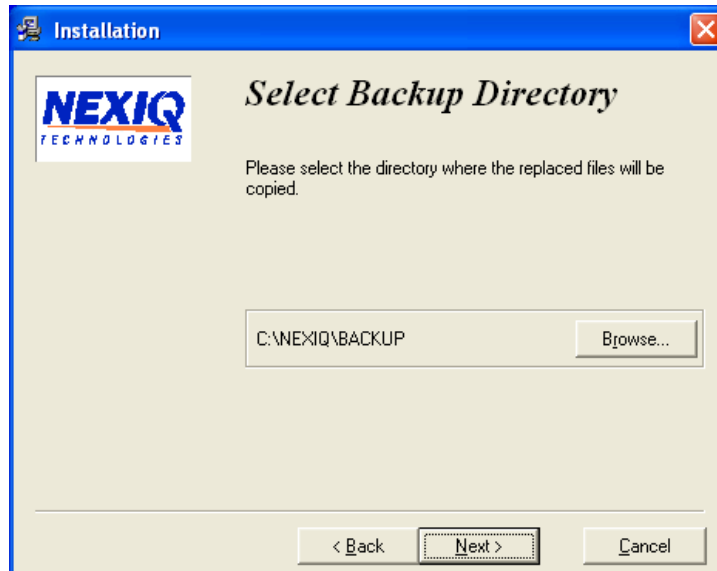


Figure 2.17 Select Backup Directory

8 Do one of the following:

- To accept the default directory, click **Next** and proceed to Step 9 (recommended).
- To select a different directory, click **Browse...**

At the bottom of the screen, select the desired drive letter from the drop-down list. Double-click each directory to add to the path. Click **OK** to proceed.

The program returns to the **Select Backup Directory** screen. Confirm the destination, then click **Next**.

The **Select Components** screen is displayed.

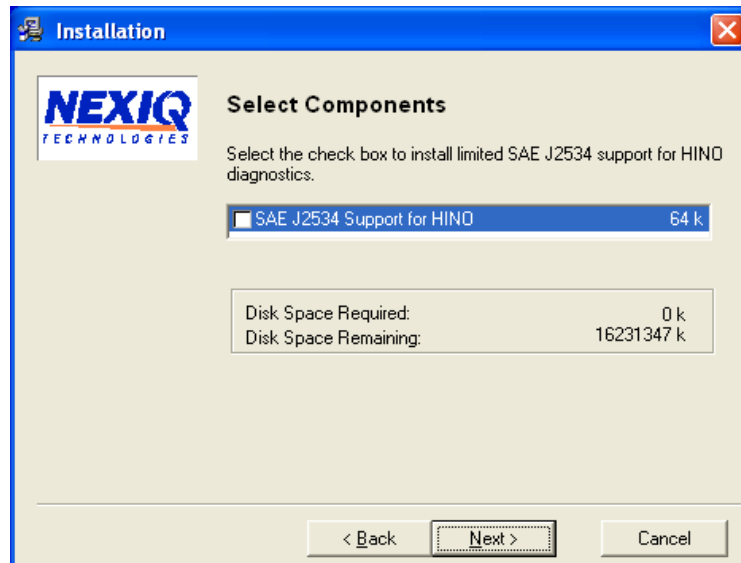


Figure 2.18 Select Components screen

- 9 Check the check box to install J2534 support for **HINO Diagnostic eXplorer**.
- 10 Click **Next** to continue.

- 11 Wait for the **Ready to Install!** screen to appear.

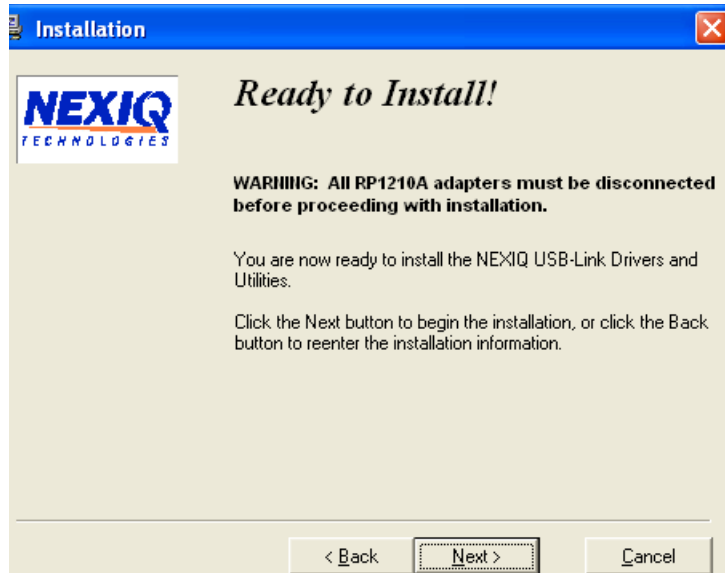


Figure 2.19 Ready to Install! Screen

NOTE:



Be sure to disconnect all RP1210A adapters currently connected to the PC before proceeding with the installation.

- 12 Do *one* of the following:

- Click **Next** to proceed with the installation.
- Click **Back** to step backward through previous screens.
- Click **Cancel** to stop the installation.

A Windows Security warning is displayed.



Figure 2.20 Windows Security Warning

- 13** Click on the check box labeled **Always trust software from “Jungo LTD”**.
- 14** Click **Install**.

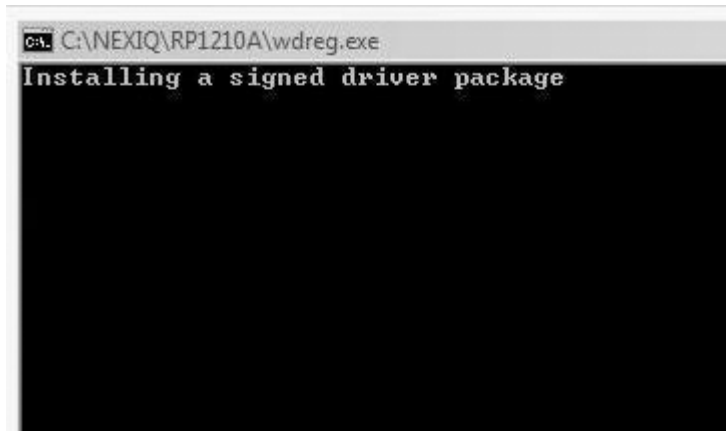


Figure 2.21 Installation Window

- 15** Wait while the driver package is installed. This could take a few seconds.

Windows Security displays the following window:



Figure 2.22 *Windows Security Warning*

- 16** Click **Install this driver software anyway**.
- 17** Wait while the drivers are installed.

The following dialog is displayed:

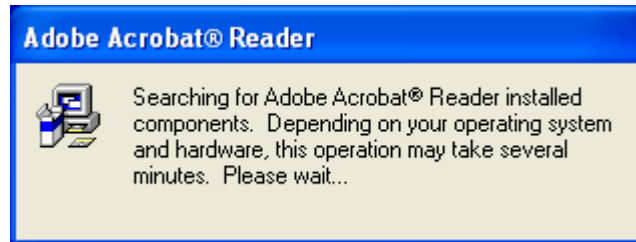


Figure 2.23 Acrobat Reader Search Dialog

If your PC requires installation of the Adobe Acrobat® Reader, the following screen is displayed.

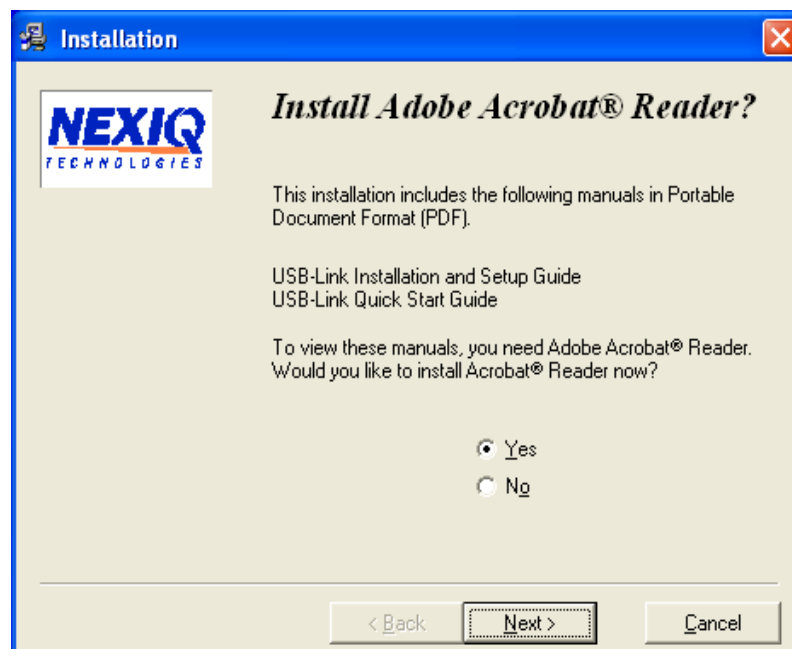


Figure 2.24 Acrobat Reader Installation Screen

18 Click **Next** to accept the default (Yes), and follow the prompts.

The Adobe Reader - Setup window is displayed.

19 Click **Next**, and follow the Adobe Wizard prompts.

- 20 When the Adobe installation is complete, click **Finish** to exit the Wizard and continue with the remainder of the installation process.
- 21 When the **Installation Completed!** screen appears, click **Finish**.

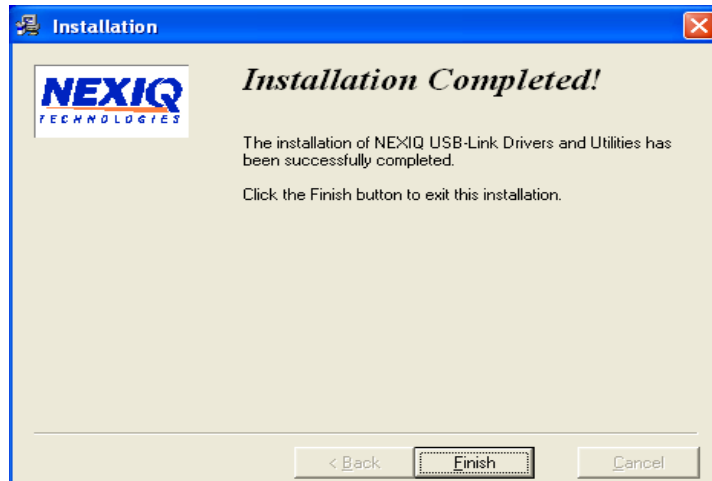


Figure 2.25 Installation Completed! Screen

A message appears prompting you to restart the PC.

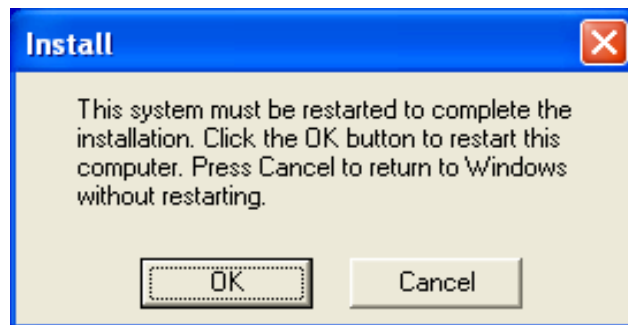


Figure 2.26 Restart Prompt

- 22 Click **OK** to restart the PC.
- 23 Once the PC restarts, remove the installation CD from the CD-ROM or DVD-ROM drive.

Move on to “Choose Your Connection,” next in this manual.

Step 2: Choose Your Connection

You have two options for connecting the USB-Link™ to a PC or laptop computer. Choose **one** of the following options. Both have advantages.

- Wired connection using a 15 ft. USB cable

The advantage of a wired connection is faster throughput (e.g., you want to use the USB-Link™ for ECU reprogramming).

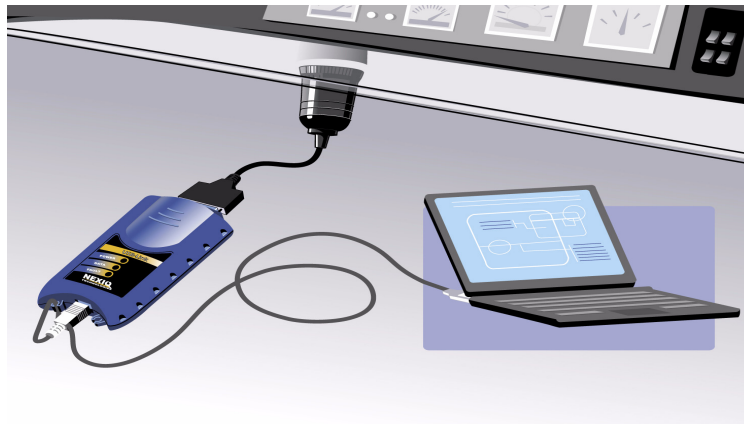


Figure 2.27 Wired Connection Using USB Cable

If you are connecting the USB-Link™ by means of a USB cable, you *do not need to read the rest of this chapter*. Instead, move on to “Connect the USB-Link™ to a Vehicle” in Chapter 3 of this manual.

If, however, you want the flexibility of *both wired and wireless* connectivity, it is recommended that you install the *Bluetooth* drivers *now* rather than later. In this case, continue reading the remainder of this topic.

- Wireless connection using *Bluetooth*

The advantage of a wireless connection is, of course, untethered operation.

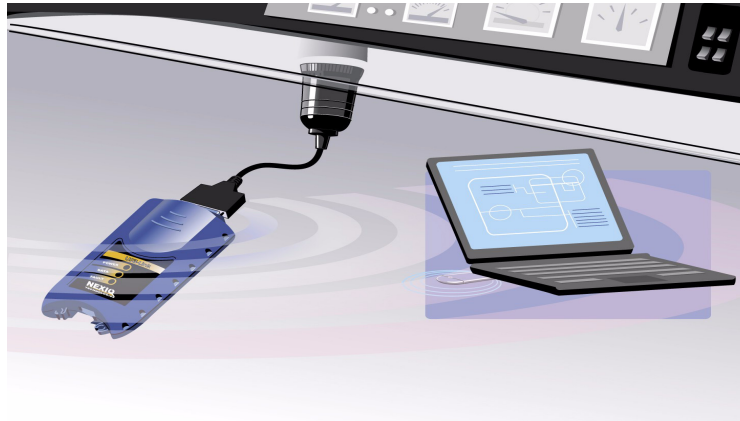


Figure 2.28 *Wireless Connection Using Bluetooth®*

For a wireless connection using *Bluetooth*, you must:

- Plug in the *Bluetooth* adapter (i.e., the dongle)
- Insert the USB *Bluetooth* Adapter CD into your PC's CD-ROM drive
- Install the necessary *Bluetooth* drivers.

Move on to “Install the Bluetooth Adapter” next in this manual.

Step 3: Install the Bluetooth Adapter

The USB-Link™ has been qualified with the following Class 1 (100 m range) *Bluetooth* USB Adapters. Class 1 adapters are recommended because of their greater operating range.

- Linksys USBBT100, version 2 (preferred)
- Belkin F8T001

The following step-by-step instructions (based on the Linksys USBBT100) are **generic** and apply for any of the *Bluetooth* adapters with which the USB-Link™ has been qualified. Also, keep in mind that the installation process for Windows XP may look slightly different than the process for Windows 2000 or Vista.

For more specific instructions, please refer to the documentation supplied by the manufacturer of the package you are installing.

IMPORTANT:



Prior to inserting the Linksys CD into your PC's CD-ROM drive, *you must first* plug in the Linksys *Bluetooth* USB Adapter (i.e., the dongle).

To plug in the Linksys *Bluetooth* USB Adapter:

- 1** Choose an available USB port on the back of your PC.
- 2** Plug in the 10 ft. USB extension cable that came with the USB-Link™.
- 3** Plug the Linksys *Bluetooth* USB Adapter into the female end of the extension cable.

The following message is displayed: **“Found new hardware...”**

Step 4: Install the Bluetooth Drivers

To install the *Bluetooth* drivers:


- 1 Insert the Linksys CD into your PC's CD-ROM drive.

The Linksys **Welcome** screen is displayed.



Figure 2.29 Linksys Bluetooth USB Adapter Welcome screen

IMPORTANT:

 Ignore the instruction on the screen, “To function properly...”

- 2 Click the **Install** button to install the Linksys USB *Bluetooth* software.

The **Welcome to the InstallShield Wizard** screen is displayed.

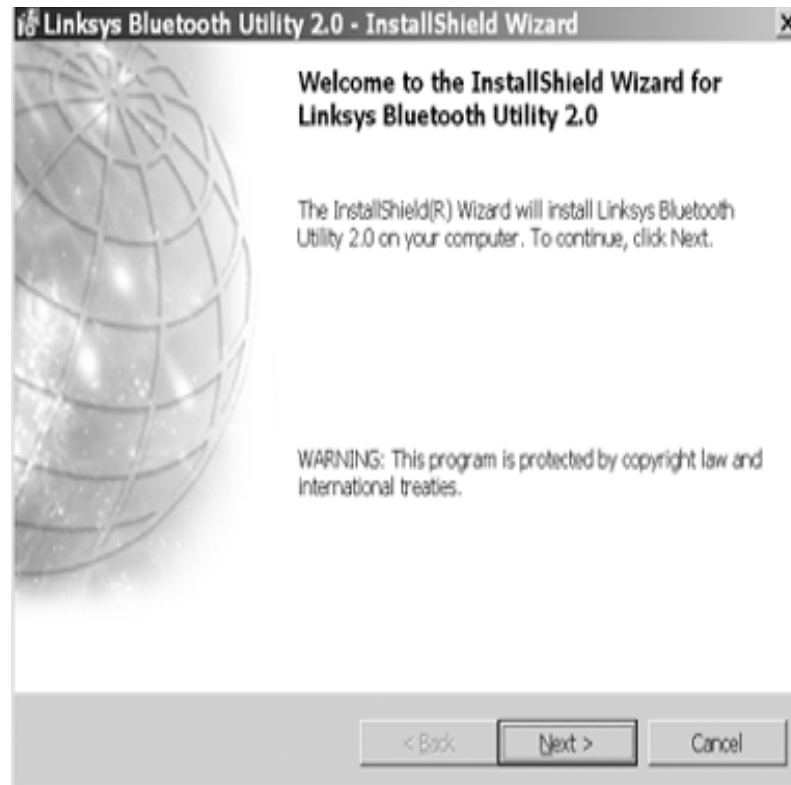


Figure 2.30 *InstallShield Wizard Welcome screen*

- 3 Click **Next**, and follow the on-screen prompts.
The **License Agreement** screen is displayed.

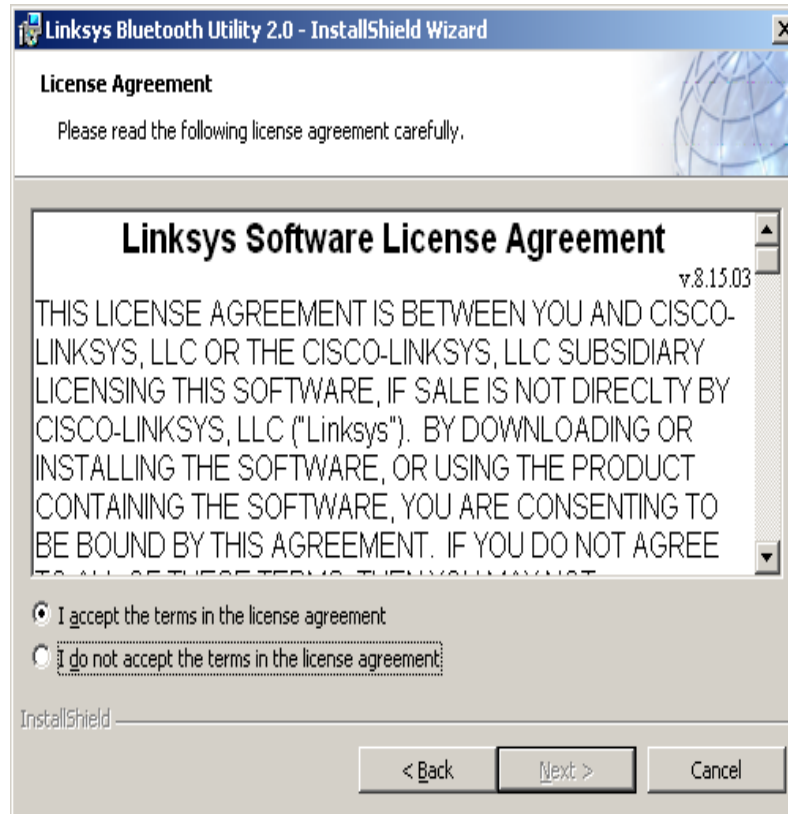


Figure 2.31 License Agreement screen

- 4 Click the **I accept the terms in the license agreement** button.
- 5 Click **Next** to continue.

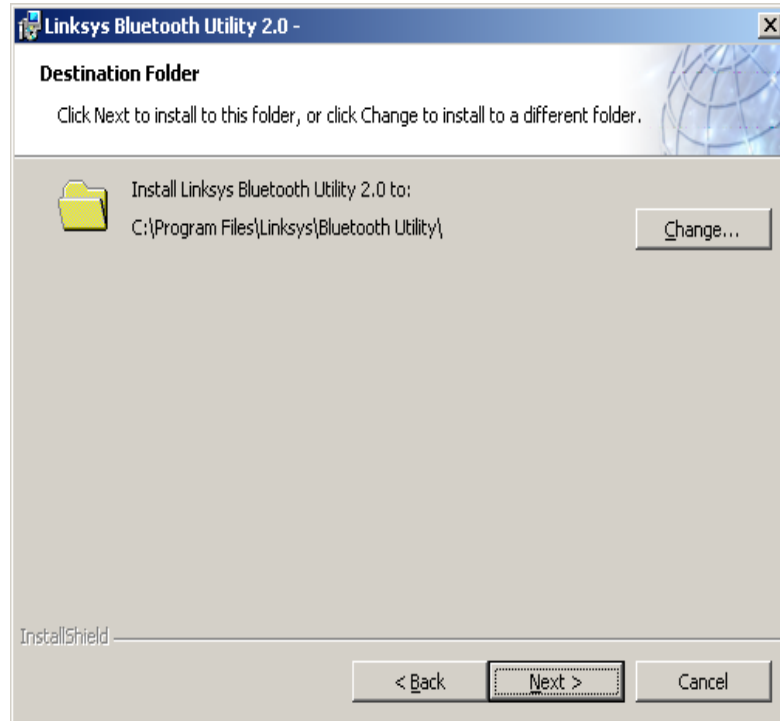


Figure 2.32 *Destination Folder screen*

- 6 Click **Next** to install the folder.

The **Ready to Install the Program** screen is displayed.

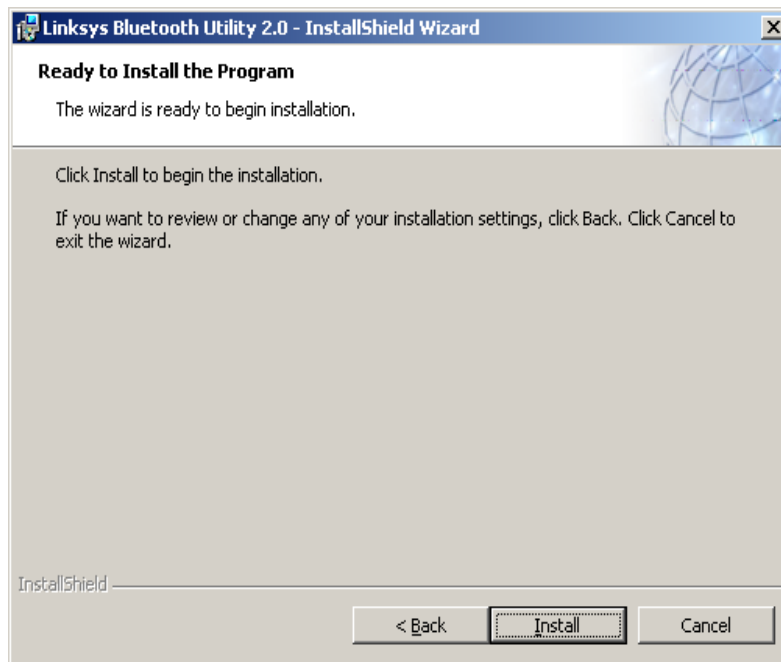


Figure 2.33 Ready to Install the Program screen

- 7** Click **Install** to begin the installation.
- 8** Wait while the InstallShield Wizard installs the Linksys *Bluetooth* software.

A status bar provides an indication of how close the wizard is to completing the installation. The process may take several minutes.

The **Driver Signature Notice** is displayed.

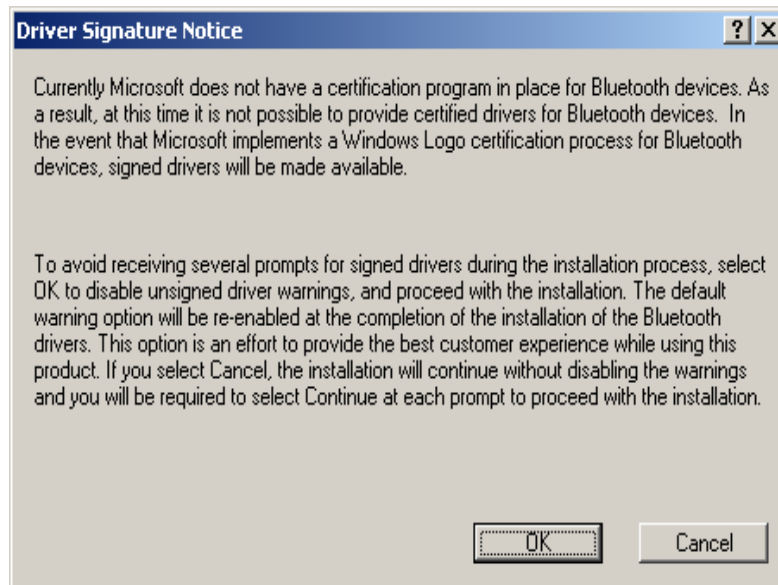


Figure 2.34 *Driver Signature Notice screen*

- 9 Click **OK** to avoid display of multiple prompts for signed drivers during the remainder of the installation.

The **Please wait while the wizard installs the software...** screen is displayed.

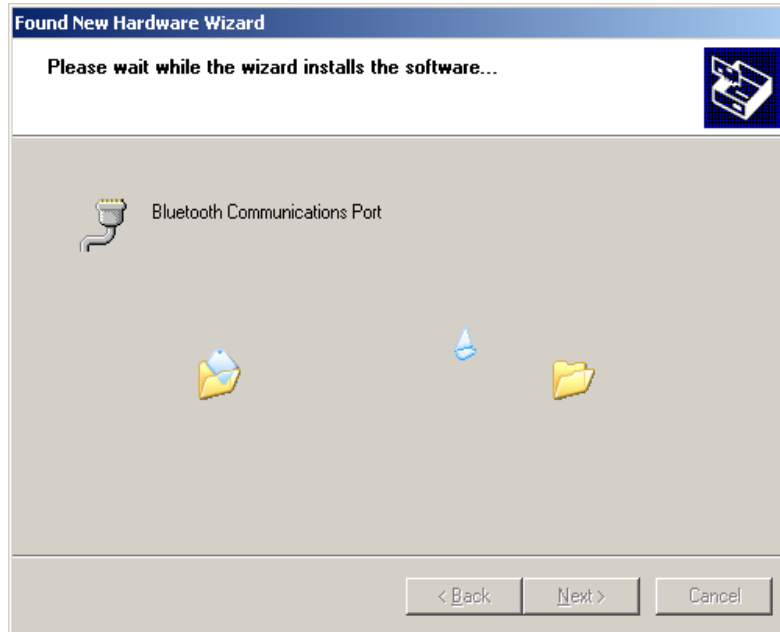


Figure 2.35 Please wait while the wizard installs the software screen

The **InstallShield Wizard Completed** screen is displayed.

- 10 Click **Finish** to exit the wizard.

The Linksys *Bluetooth* USB Adapter Welcome screen is displayed (Fig. 2.15).

- 11 Click the **Exit** button, and remove the CD from the CD-ROM drive.
- 12 Restart your system so that the changes you made can take effect.

IMPORTANT:



If you are installing the Linksys adapter and have followed the previous instruction directing you to plug in the adapter *prior* to installing the *Bluetooth* drivers (see “Step 3: Install the Bluetooth Adapter”), you *do not* need to perform the last two procedures in this chapter. Move on to “Step 5: Connect the USB-Link™ to a Vehicle” in Chapter 3.

However, if you are installing another adapter (e.g., the Belkin adapter) or you failed to install the adapter as instructed (*pg. 35*), then you may need to proceed with these instructions depending on which version of Windows you are running (see instructions following).

If you are running Windows 2000 or XP Service Pack 1 on your PC, skip the next topic and move on to “Configure the Bluetooth Environment” later in this manual (*pg. 52*).

If, however, you are running Windows XP Service Pack 2, continue on to “Additional Steps for Windows XP SP-2” next in this manual.

NOTE:



To determine your PC’s operating system (and whether you are running SP-1 or SP-2), right-click **My Computer** (found on the Windows desktop). Select **Properties** ► **General** tab.

Most users (i.e., those installing the Linksys adapter), move on to Step 5 in Chapter 3. This includes users running the Vista operating system.

Additional Steps for Windows XP SP-2

If you are running Windows XP Service Pack 2 on your PC, you will need to perform the following procedure to update the *Bluetooth* drivers you installed earlier in this chapter. One indication that this is necessary is the appearance of two *Bluetooth* icons in the Windows taskbar:

- One smaller, white icon (the Microsoft *Bluetooth* Enumerator icon)
- One slightly larger, red icon (the *Bluetooth* Adapter icon)

The Windows taskbar prior to performing this procedure:



Figure 2.36 Windows Taskbar with Both Microsoft and WIDCOMM Icons

Upon completion of this procedure, the Microsoft *Bluetooth* Enumerator icon will be removed from the taskbar, and the larger *Bluetooth* Adapter icon will have changed from red to white (see Figure 2.44).

To update the *Bluetooth* drivers:

- 1 From the Windows desktop, right-click **My Computer** and select **Properties**
▶ **Hardware** ▶ **Device Manager**.

The **Device Manager** screen is displayed.

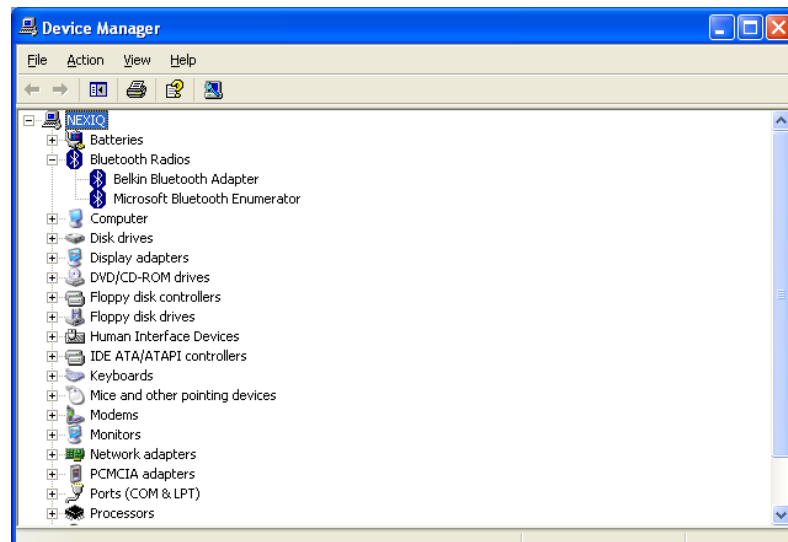


Figure 2.37 Device Manager Screen

- 2 Click on the plus (+) sign to expand the **Bluetooth Radios** folder.

Typically, you will see two items in the folder, one for the *Bluetooth* Adapter you installed earlier in this guide and one for Microsoft *Bluetooth* Enumerator (see Figure 2.37, above).

- 3 Right-click the **Belkin Bluetooth Adapter** item. Do *not* click on the Microsoft *Bluetooth* Enumerator.

The following menu is displayed.

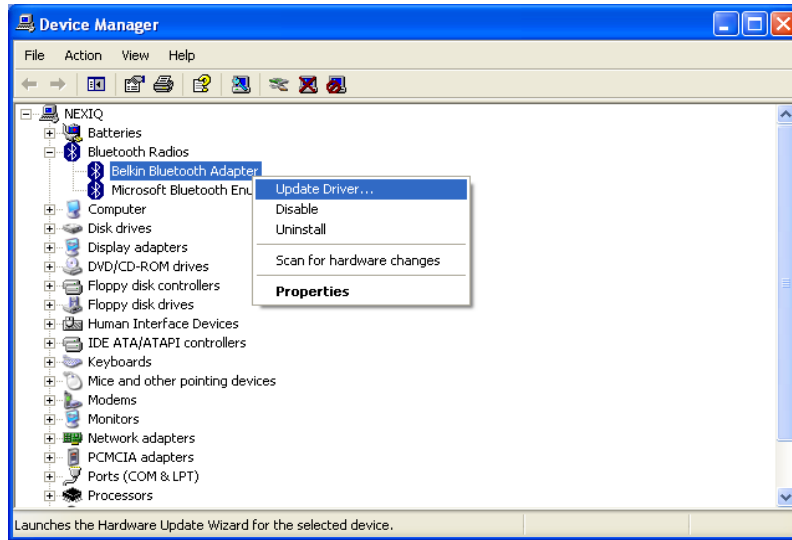


Figure 2.38 Bluetooth Adapter Menu

- 4 Choose **Update Driver...** from the menu.

The **Hardware Update Wizard** welcome screen (Figure 2.39) *may or may not* appear at this time. If it does, select **No, not at this time** (to indicate that you do not wish to run the Wizard), and click **Next** to continue.



Figure 2.39 *The Hardware Update Wizard May or May Not Appear.*

If the above screen does not appear, move on to step 5, next in this procedure (see Figure 2.40).

The **Hardware Update Wizard** is displayed.

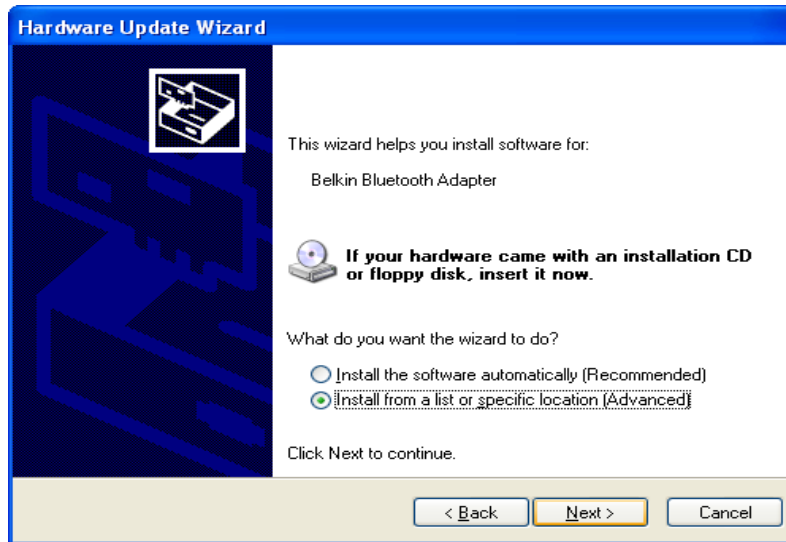


Figure 2.40 *Hardware Update Wizard*

- 5 Ignore the on-screen prompt “If your hardware came with an installation CD...,” and select **Install from a list or specific location (Advanced)**.
- 6 Click **Next**.

The **Please choose your search and installation options** screen is displayed.

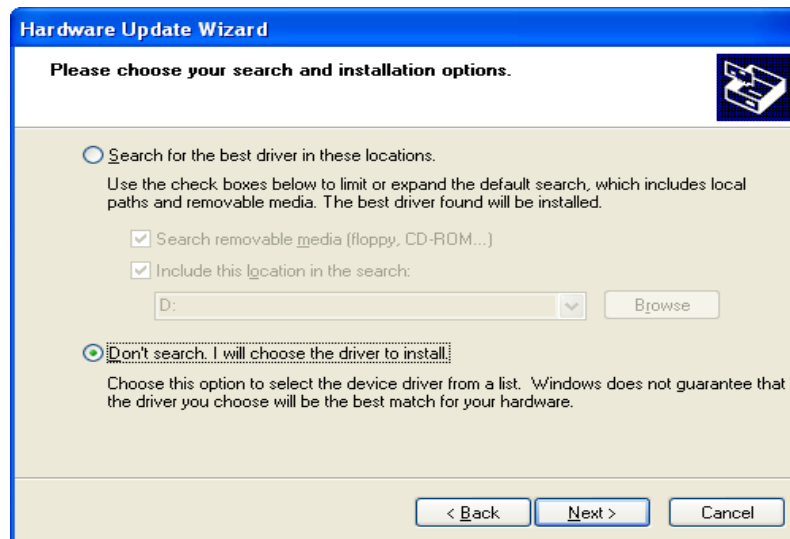


Figure 2.41 Choose Your Search and Installation Options.

- 7** Select (☉) **Don't search. I will choose the driver to install.**
- 8** Click **Next**.

The **Select the device driver...** screen is displayed.

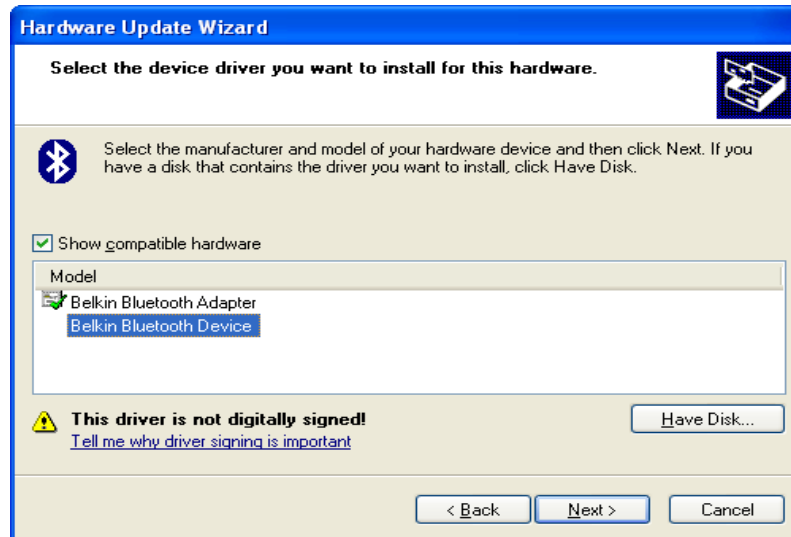


Figure 2.42 Select the Device Driver



Typically, you will see two choices in the **Model** area of the screen. If the driver is *digitally signed*, an icon appears next to the selection.

- 9 Since you already installed the required *Bluetooth* drivers back in Chapter 2 of this manual, *do not* click the **Have Disk** button.
- 10 From the **Model** area of the screen, select the device driver that *is not* digitally signed (i.e., the device driver without the icon next to it).
- 11 Click **Next**.

The updated Device Manager screen is displayed. Note that the Microsoft *Bluetooth Enumerator* *no longer* appears in the **Bluetooth Devices** folder (compare Figure 2.43 with Figure 2.37).

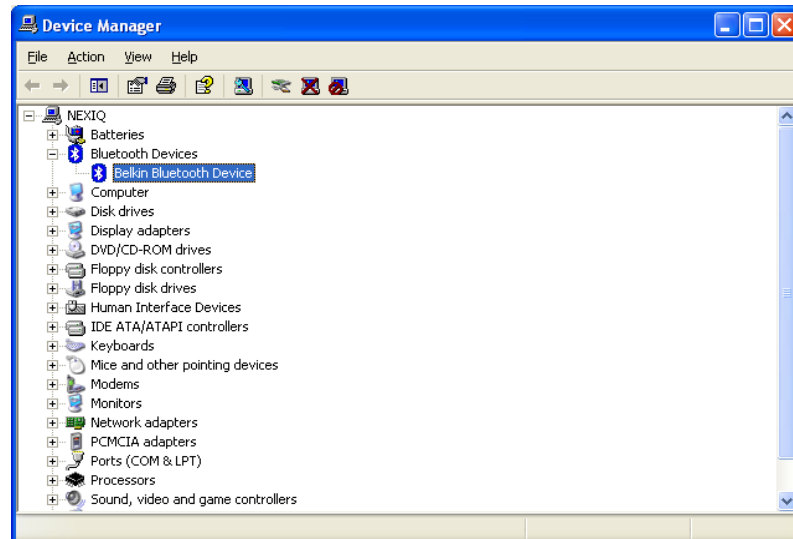


Figure 2.43 Updated Device Manager Screen

In addition, the Windows taskbar has been updated. Note that the Microsoft *Bluetooth Enumerator* icon no longer appears (compare Figure 2.44 with Figure 2.36).

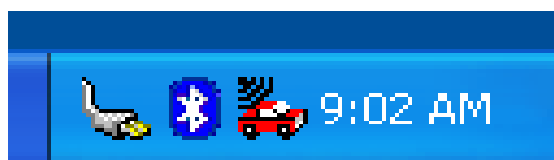


Figure 2.44 Updated Windows Taskbar

Move on to “Configure the Bluetooth Environment,” next in this manual.

Configure the Bluetooth Environment

IMPORTANT:



You do not need to perform this procedure if you are installing the Linksys adapter.

Once you have successfully installed the *Bluetooth Adapter*, the **Initial Bluetooth Configuration Wizard** is displayed

NOTE:



If the Configuration Wizard does not start up, double-click the **My Bluetooth Places** shortcut on the Windows desktop.



Figure 2.45 Initial Bluetooth Configuration Wizard

To configure a basic *Bluetooth* environment:

- 1 Click **Next**.

Follow the prompts through the configuration process. During the process the following screen is displayed:

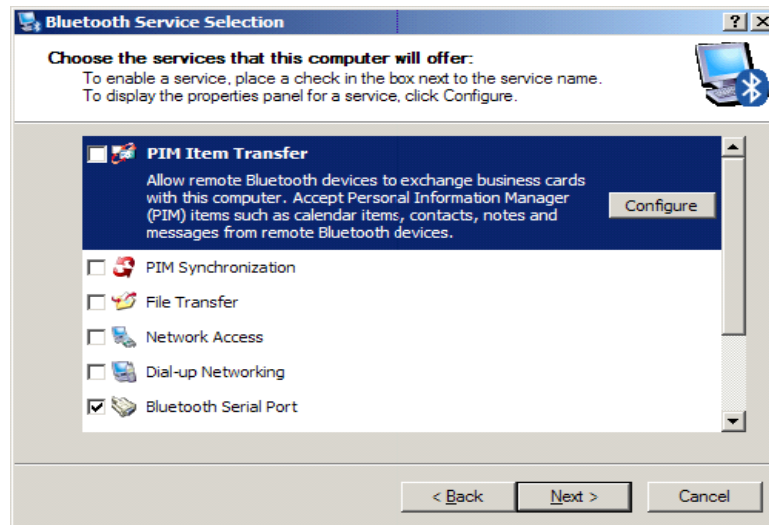


Figure 2.46 Bluetooth Service Selection

- 2 Clear all of the check boxes except the **Bluetooth Serial Port** check box.

NOTE:



You need to use the scroll bar on the right side of the screen to view all of the check boxes.

- 3 Click **Next**.

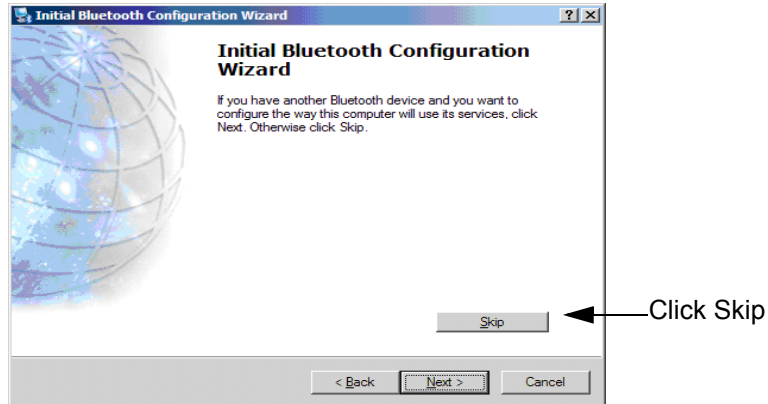


Figure 2.47 Skip to Continue Without Configuring Another Device

4 Click **Skip**.

The Initial *Bluetooth* Configuration Wizard Congratulations screen is displayed.

5 Click **Finish**, and move on to *Chapter 3, Preparing to Use the USB-Link™*, next in this manual.

Chapter 3

Preparing to Use the USB-Link™



- ▼ *Step 5: Connect the USB-Link™ to a Vehicle, page 56*
- ▼ *Step 6: Use the Bluetooth Connection Utility, page 60*
- ▼ *Step 7: Test the Connection to the Vehicle, page 65*
- ▼ *Step 8: Setting Up Diagnostic PC Applications, page 68*

This chapter provides instructions for connecting the USB-Link™ to a vehicle, using the *Bluetooth Connection Utility*, and testing the connection. It also includes instructions on setting up the diagnostic personal computer (PC) applications supported by the USB-Link™.

Step 5: Connect the USB-Link™ to a Vehicle

The USB-Link™ interfaces with the vehicle by means of any one of the following connectors:

- 6-pin Deutsch
- 9-pin Deutsch
- 9-pin Deutsch - 1 meter
- 6- and 9-pin Deutsch Y
- 16-pin J1962 for OBD II
- 16-pin J1962 for Heavy Duty

NOTE:

i For additional information on choosing the right connector for your situation, refer to *Adapter Guide for the USB-Link™* (NEXIQ Part No. 1400-357).

The following illustration shows how the USB-Link™ connects with the vehicle:

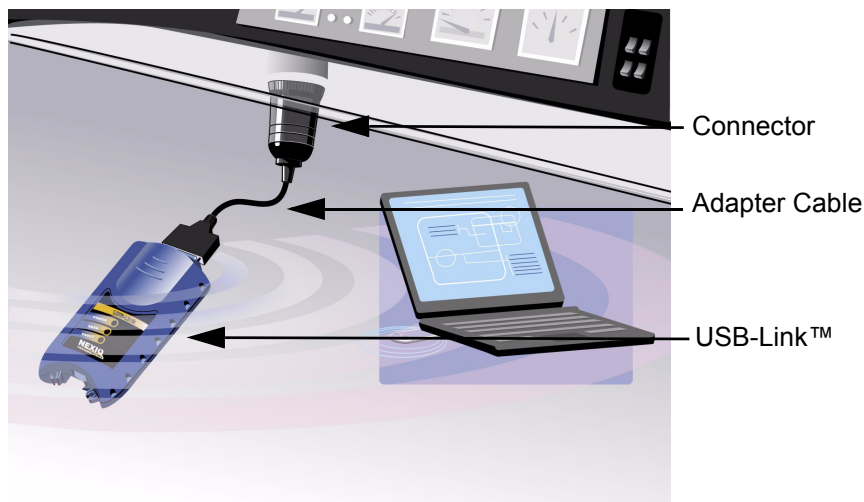


Figure 3.1 *USB-Link™-to-Vehicle Connection*

NOTE:

i A wired connection between the PC and the USB-Link™ is also possible by means of a USB cable (not pictured). Refer to Figure 3.2 for an example of a wired connection.

Wireless Connection

To connect the USB-Link™ to the vehicle:

- 1 Connect the DB15 male end of the appropriate adapter cable to the USB-Link™ (see Figure 3.1).
- 2 Attach the other end of the adapter cable (i.e., the Deutsch connector end) to the vehicle's diagnostic connector.

NOTE:



The vehicle's diagnostic connector is typically located under the dashboard on the driver's side, or beside the driver's seat. It can also be located in the engine compartment, near the electronic control unit (ECU).

At this point, the **Power** (green) LED on the USB-Link™ should be illuminated (on).

—If the **Power** LED is not illuminated, turn the vehicle's key to the ON position, leaving the engine off.

When using a *Bluetooth* wireless connection, you will hear an alert signal when a PC running an RP1210A compliant application connects and disconnects from the USB-Link™.

In addition, when the USB-Link™ is out of range (more than 100 ft.) of the PC while the application is running, the device will beep and the fault LED will flash until the USB-Link™ is back in range. Plugging the USB cable into the USB-Link™ will silence the out-of-range beep and turn off the flashing fault LED.

Wired Connection Using a USB Cable

To connect the USB-Link™ to a desktop or notebook computer by means of a USB cable:

- 1 Connect the USB cable to the USB port of the PC or laptop.

- 2 Connect the other end of the cable to the port on the device as shown in the following illustration:

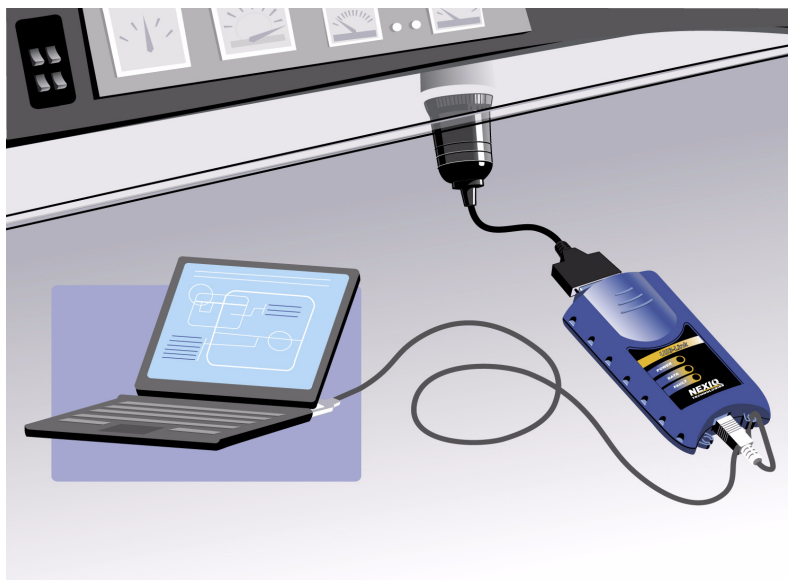


Figure 3.2 Connecting to a Notebook Computer Using a USB Cable

- 3 Connect the DB15 male end of the appropriate adapter cable to the USB-Link™.
- 4 Attach the other end of the adapter cable (i.e., the Deutsch connector end) to the vehicle's diagnostic connector.

NOTE:



The vehicle's diagnostic connector is typically located under the dashboard on the driver's side, or beside the driver's seat. It can also be located in the engine compartment, near the electronic control unit (ECU).

Step 6: Use the Bluetooth Connection Utility

You use the **Bluetooth Connection Utility** to do the following:

- Select an adapter
- Open a serial connection to the adapter
- Test that the adapter is online and ready to respond
- Test the signal strength
(only with Widcomm® *Bluetooth* PC driver 1.4x and higher)
- Determine that the signal strength falls within the level specified
(only with Widcomm® *Bluetooth* PC driver 1.4x and higher)

To start the utility, use the **Bluetooth Connection Utility** icon, which is located on the Windows taskbar.



Figure 3.3 *Bluetooth Connection Utility Icon*

To use the Connection Utility:

- 1 From the taskbar on the Windows desktop, right-click the **Bluetooth Connection Utility** icon.

The *Bluetooth* Connection Utility menu appears.

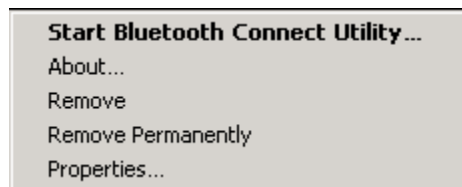


Figure 3.4 *Bluetooth Connection Utility Menu*

- 2 Click **Start Bluetooth Connect Utility...**

The **Bluetooth Connect Utility - Select a Bluetooth Adapter** window is displayed.

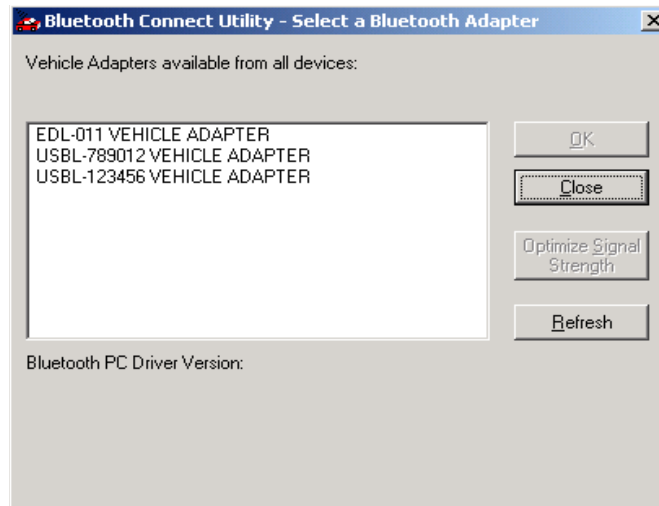


Figure 3.5 *Select a Bluetooth Adapter*

—A list of vehicle adapters on the network is displayed in the data window.

- 3** From the **Vehicle Adapters available from all devices:** list, select the vehicle adapter to which you want to connect.

The following screen is displayed.

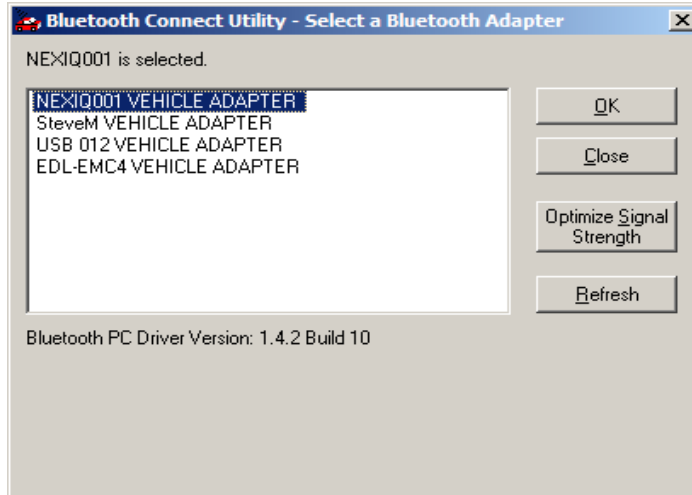


Figure 3.6 Adapter Selection

- 4 Click **OK** to confirm the selection.

The utility performs the steps to ensure that the *Bluetooth* adapter is ready for communication with the USB-Link™.

The utility also opens a serial connection to the device and tests to make certain that the device is online and ready to respond.

Finally, the utility tests the Returned Signal Strength Indicator (RSSI) and determines if the signal strength falls within the level specified by the user (*Bluetooth* PC driver 1.4x and higher only).

The results of these tests are displayed in the lower right corner of the screen (e.g., ADAPTER SELECTION PASSED).

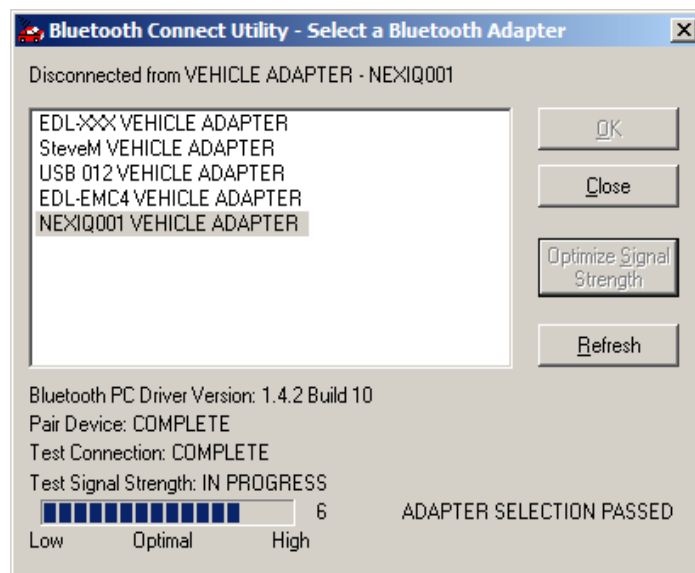


Figure 3.7 Adapter Confirmation

At this point, you have several options.

- If you want to select a different vehicle adapter (i.e., USB-Link™) from among those displayed, select the adapter from the list, and click **OK**.
- If you want to search for a different adapter not included in the display (e.g., you just connected another USB-Link™ to a vehicle), click **Refresh** and make your selection from the newly displayed list.
- If the **Test Signal Strength:** status bar (located in the lower left corner) indicates that the signal is low, you can move the USB-Link™ closer to the PC/laptop and click **Optimize Signal Strength**.

The utility “pairs” with the device, tests the connection, and attempts to test

If-second intervals until you click on the **Stop Signal Adjustment** button.

NOTE:



The **Optimize Signal Strength** button is only available with Widcomm® Bluetooth PC Driver version 1.4x and higher.

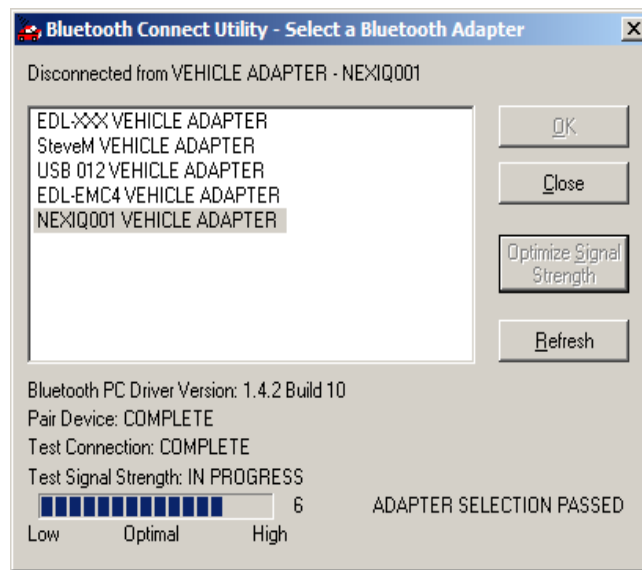


Figure 3.8 Optimize Signal Strength

Once the test is complete, the results of the operation are displayed in the lower right corner of the screen.

- 5 Click **Close** to quit the *Bluetooth* Connection Utility.

Move on to “Test the Connection to the Vehicle,” next in this manual.

Step 7: Test the Connection to the Vehicle

You use the **Device Tester** to test the connection between the USB-Link™ and the vehicle. At startup, the Device Tester checks for any NEXIQ drivers installed on the PC.

Access the Device Tester from the Windows taskbar.

To test the connection between the USB-Link™ and the vehicle:

- 1 Click **Start** and then select **Programs ▶ NEXIQ NX RP1210A Devices ▶ Device Tester**.

The application is started and the **Device Tester** screen is displayed.

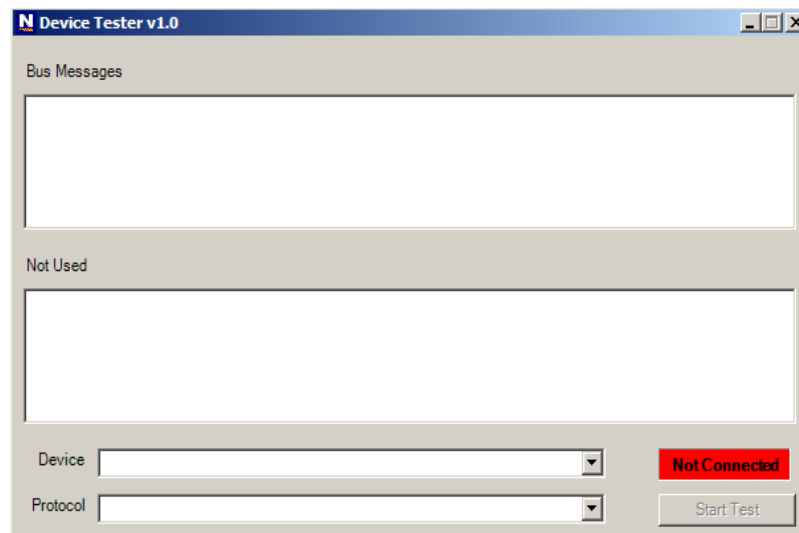


Figure 3.9 Device Tester Screen, Showing a Status of Not Connected

- 2 Use the button in the **Device** box to select the appropriate device (for example, USB Link J1708).
—The **Device** box lists all the devices supported by the NEXIQ drivers installed on the PC.
- 3 Use the button in the **Protocol** box to select the appropriate protocol (e.g., J1708, J1939, or CAN).
—The **Protocol** box lists only the protocols supported by the device selected in the **Device** box.
- 4 Press the **Start Test** button.

The **Device Tester** screen is refreshed, and data received from the vehicle bus is displayed in the **Bus Messages** window.

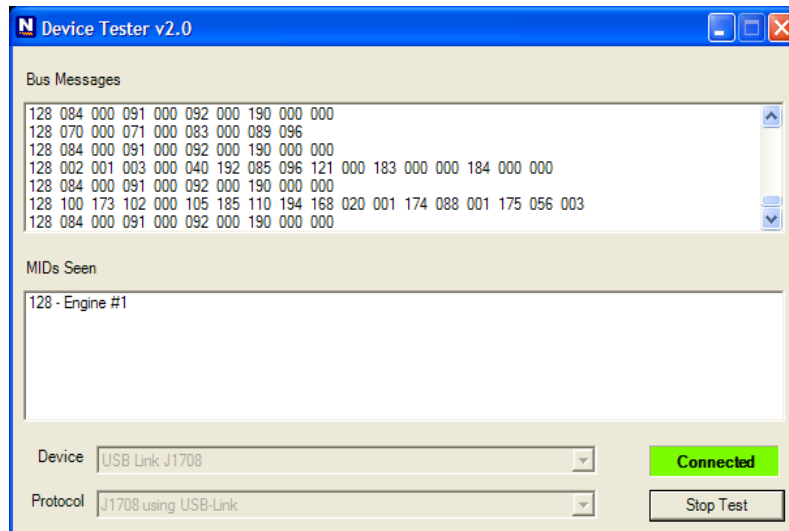


Figure 3.10 Device Tester Screen, Showing a Status of Connected

NOTE:



The window in the lower portion of the screen displays a list of all systems seen on the bus. It is used for J1708 and J1939 only. For all other protocols this window will be unavailable (i.e., NOT USED). For J1708, the window title reads **MIDs Seen**. For J1939, the window title reads **Source Addresses Seen**.

If the Connection Indicator button is red (i.e., **Not Connected**), do *one* of the following:

—For wireless connection using *Bluetooth* technology:

- In the **Device** list, make sure that the heading is **BT USB-Link** (Protocol desired).
- Check to ensure that the connections between the USB-Link™ and the vehicle are secure (i.e., the Diagnostic Connector).
- Check to make certain that the Power LED on the USB-Link™ is illuminated.
- Check to make sure you are “paired” with devices.

—For wired connection using a USB cable:

- In the **Device** list, make sure that the heading is USB-Link (Protocol desired).
- Check to ensure that the connections between the USB-Link™ and PC are secure (i.e., the USB cable).
- Check the connections between the USB-Link™ and the vehicle (i.e., the Diagnostic Connector).
- Check to make certain that the Power LED on the USB-Link™ is illuminated.

NOTE:



For additional information, refer to “Connect the USB-Link™ to a Vehicle”.

- 5 Click **Stop Test** to end the test, or select another device to test.

Step 8: Setting Up Diagnostic PC Applications

The diagnostic applications supported by the USB-Link™ use varying methods of vehicle communication device selection. This section provides instructions for configuring some of the PC diagnostic applications currently available for use with the NEXIQ USB-Link™.

NOTE:



The instructions provided here are based on the application settings at the time this guide was developed.

NOTE:



If you need assistance setting up these diagnostic PC applications, contact **NEXIQ Technical Support at 1-800-639-6774**, or visit us online at <http://www.nexiq.com/support>.

Allison DOC™ for Fleets (1000/2000)

- 1 From the PC's desktop, click **Start** then select **Programs ▶ Allison Transmission ▶ Allison DOC 1K2K Lite**.

The **Allison Transmission** screen appears.

- 2 Click **Connect to Vehicle**.

The **Transmission Connect/Disconnect** screen appears.

- 3 Click on the radio button (☉) next to the **Transmission Type** field, then select the desired transmission type.

- 4 Click on the ▾ next to the **Vendor** field, then select **NXULNK32**.

- 5 Click on the ▾ next to the **Protocol** field, then select **J1939**.

- 6 Click on the ▾ next to the **Device** field, then select **USB-Link J1939** if connection is wired; select **BT USB-Link J1939** if the connection is wireless.

- 7 Click **Connect**.

Allison DOC™ for Fleets (3000/4000)

- 1 From the desktop, click **Start** then select **Programs ▶ Allison Transmission ▶ Allison World Transmission Lite**.

The **Allison Transmission** screen appears.

- 2 Click **Connect to Vehicle**.

The **Transmission Connect/Disconnect** screen appears.

- 3 Click on the radio button (☉) next to the **Transmission Type** field, then select **WTEC Series**.
- 4 Click on the ▼ next to the **Vendor** field, then select **NXULNK32**.
- 5 Click on the ▼ next to the **Protocol** field, then select **J1708**.
- 6 Click on the ▼ next to the **Device** field, then select **USB-Link J1708** if the connection is wired; select **BT USB-Link J1708** if the connection is wireless.
- 7 Click **Connect**.

Bendix ABS Diagnostics

NOTE:



Complete the steps in the following procedure *before* attempting to run this application.

- 1 From the PC's desktop, click **Start** then select **Programs ▶ ACOM Diagnostics NAD**.

The **Diagnostic Interface Selection** screen appears.

- 2 Under **Available hardware interfaces**: use the drop-down list box to select one of the following:
 - Select **RP1210A device using J1708 line: BTUSBLINK (BT USB-Link J1708)** for wireless connection.
 - Select **RP1210A device using J1708 line: USBLINK (USB-Link J1708) for wired operation**.
- 3 Click **OK**.

Caterpillar Electronic Technician

- 1 From the PC's desktop, click **Start** then select **Programs ▶ Caterpillar ET ▶ Electronic Technician**.
- 2 Click on **Utilities ▶ Preferences** on the screen's menu bar.

The **Preferences** screen appears.

- 3 Click on the arrow of the **Communication Interface Device** drop-down list then select **RP1210 Compliant Device**.
- 4 From the pull down menu, click on the **Advanced** button.
 - Select **BT USB-Link J1708 (237) - NEXIQ (NNT, Inc.)** for wireless connection.
 - Select **USB-Link J1708 (137) - NEXIQ (NNT, Inc.)** for wired connection.
- 5 Click **OK**.
- 6 Click **OK**.

NOTE:



Prior to connecting for the first time, use the **NEXIQ Device Tester** (refer to page 65 in this manual) to test the connection to the vehicle for this device.

Cummins Insite

NOTE:



Complete the steps in the following procedure *before* attempting to run this application.

- 1 From the PC's desktop, click **Start** then select **Programs ▶ Intellect ▶ Cummins INSITE**.

The application screen appears.
- 2 Click on **File ▶ Connections ▶ Add New Connection**.

The Connection Wizard screen appears.
- 3 Click **Next**.

The screen prompts you to select a connection type.
- 4 Click on the radio button (☉) for **RP1210A**.

The screen prompts you to select an RP1210A adapter type.
- 5 Select **USB-Link**, for the protocol that you wish to use (i.e., J1708 or J1939).

6 Click **Next**. The screen displays with the “Connection Name.”

—If you want to change the name in the **Connection Name** box, type in the desired name.

7 Click **Next**.

The screen prompts you to indicate whether you want to make this connection active or set up another connection.

8 Click on the first check box () (labeled “*To make this connection active...*”).

9 Click **Finish**.

Detroit Diesel Diagnostic Link

NOTE:



Complete the steps in the following procedure *before* attempting to run this application.

1 From the PC’s desktop, click **Start** then select **Programs ▶ Detroit Diesel ▶ Options**.

2 Click **Next>**.

3 Select the **Local Communication Interface** by clicking on the arrow of the drop-down list and pointing to the appropriate protocol (i.e., USB-Link J1708 or BT USB-Link J1708).

4 Click **Next>**.

5 Click **Finish**.

Eaton Service Ranger

1 From the PC’s desktop, click **Start** then select **Programs ▶ Service Ranger ▶ Service Ranger**.

The application screen appears.

2 On the **Service Ranger** main menu, click on the **Utilities** menu, then select **View/Change Communications Settings**.

The **Communications Hardware** screen appears.

3 Click on **USB-Link J1708**, then click **OK**.

International INTUNE

- 1 From the PC's desktop, click **Start** then select **Programs ▶ Vehicle Diagnostics ▶ INTUNE**.

The **INTUNE** application screen appears.

- 2 Click on the **F**ile menu, then select **S**ettings ▶ **C**om Device... .

The screen prompts you to enter a communication DLL.

- 3 Click on **NEXIQ (NNT, Inc.) USB-Link**, then click **OK**.

The screen prompts you to select a communication device.

- 4 Click on **USB-Link J1939**, then click **OK**.

International Master Diagnostics (3BX, DLC, DLC II)

- 1 From the PC's desktop, click **Start** then select **Programs ▶ Vehicle Diagnostics ▶ MD32 3BX (or DLC, or DLC II)**.

The application screen appears.

- 2 Click on **F**ile, then choose **M**D Settings ▶ **C**om Device... .

A new screen appears, prompting you to select a communications device.

- 3 Click on **NEXIQ (NNT, Inc.) USB-Link**, then click **OK**.

The screen displays a new list of options.

- 4 Click on **USB-Link J1708**, then click **OK**.

Meritor WABCO ABS

- 1 From the PC's desktop, click **Start** then select **Programs ▶ Meritor WABCO ▶ Meritor WABCO PC Diagnostics**.

The application screen appears.

- 2 Click on the **S**ystem Setup menu item, then select **C**OM Port.

The **Device Settings** screen appears.

- 3 Under **V**endor, click on the drop-down list box, then select **NEXIQ (NNT, Inc.) USB-Link**.

- 4 Under **D**evice, click on the drop-down list box, then select **USB-Link J1708**.

- 5 Click **OK**.

Chapter 4

USB-Link™ Troubleshooting Information



- ▼ *LED Issues, page 74*
- ▼ *Configuration Issues, page 75*
- ▼ *Wireless Communication Issues, page 76*

This chapter provides troubleshooting information to assist you in resolving issues that may arise when setting up and using the USB-Link™.

NOTE:



If you have questions about using this product, contact NEXIQ Technical Support at **(800) 639-6774**, or send us an e-mail at **support@nexiq.com**.

LED Issues

The following table provides some possible causes and solutions to issues related to the USB-Link's light-emitting diodes (LEDs).

Problem	Possible Cause	Solution
Power LED on the USB-Link™ does not come on if USB cable is hooked up.	Loose or faulty cable or adapter.	Check to make certain that the USB cable is plugged into the PC.
No power on the USB-Link™ when the vehicle adapter is plugged into the device.	Bad connection. Vehicle power off.	Make sure that the connector on the vehicle has power on the proper terminals.
Power LED does not light, the USB cable is connected, and the vehicle cable is disconnected.	On occasion, Windows power management removes power from the USB bus.	<ul style="list-style-type: none"> From the Control Panel on the PC, select System <ul style="list-style-type: none"> ▶ Hardware ▶ Device Manager ▶ Universal Serial Bus Controllers <ul style="list-style-type: none"> ▶ USB Root Hub <ul style="list-style-type: none"> ▶ Properties ▶ Power Management. <p>Make certain that the "Allow the computer to turn off this device to save power" check box is clear (<input type="checkbox"/>)</p>
Power LED does not light, the USB cable is connected, and the vehicle cable is disconnected.	For laptops using a docking station, you may be encountering a bug in Windows.	<ul style="list-style-type: none"> To attempt correction: Place the laptop in Stand by mode, then press the Power button to restore to Operating mode. USB power should be restored.

Configuration Issues

The following table provides some possible causes and solutions to issues that may be experienced when configuring the USB-Link™ and/or PC for wireless communication.

Problem	Possible Cause	Solution
PC applications produce communication errors when trying to connect to the USB-Link™.	Not set up for USB-Link™.	Under the application that is in use, check user options to verify that the USB-Link™ has been selected.
Unable to find the USB-Link™ in the application menu.	USB-Link™ drivers not installed or supported.	Reinstall device drivers, restart the PC, and check again for the device.
The PC does not recognize the USB-Link™ after restarting the PC.		Unplug the USB-Link™ and restart the PC. Plug the USB cable back into the PC.
Power LED flashes	USB-Link™ is only powered up by USB cable.	Check vehicle power to make sure that there is power on the connector and power is on.

Wireless Communication Issues

The following table lists some possible causes and solutions to issues that may be experienced when attempting to set up the USB-Link™ to use wireless communication.

Problem	Possible Cause	Solution
Unable to find <i>Blue-tooth</i> Network		Make certain that the dongle is plugged into the machine and that the device drivers are loaded.

Appendix A

Warranty and Service



- ▼ *Exclusive Warranty, page 78*
- ▼ *Exclusive Remedy, page 79*
- ▼ *Return Materials Authorization (RMA), page 80*
- ▼ *Return of Goods Policy, page 82*
- ▼ *Return Goods Authorization (RGA) Procedure, page 83*

This appendix provides warranty and service information.

Exclusive Warranty

The USB-Link™ adapter is warranted for a period of one (1) year from the date of purchase to be free of defects in materials and workmanship and to be merchantable and fit for its intended purpose.

All cables, adapters, and connectors are warranted for a 90-day period.

All warranties are null and void if, after shipment, the product is altered or modified for any reason by anyone other than NEXIQ Technologies, or is misused or abused. No warranty, express or implied, lasts beyond one (1) year from the date of purchase. There are no oral warranties of any kind.

Exclusive Remedy

The sole remedy for breach of warranty or any other obligation (including and arising out of statute or regulation, strict liability, negligence or the law of torts) is repair or replacement of defective parts by NEXIQ Technologies or, at the option of NEXIQ Technologies, refund of the purchase price. This is the exclusive remedy. ALL LIABILITY OF NEXIQ Technologies FOR CONSEQUENTIAL OR OTHER DAMAGES IS EXCLUDED AND DISCLAIMED. In no event shall the Buyer be entitled to damages for lost profits, down time, attorney fees, or business, economic, or commercial loss or damage of any kind. Action on any claim must be commenced within one (1) year after the cause of action has accrued.

Return Materials Authorization (RMA)

Warranty service is obtained by returning the product (shipping charges prepaid), along with proof of price and date of purchase to the following address:

NEXIQ Technologies
2329 East Walton Blvd.
Auburn Hills, MI 48326
Attention: Product Service/Repair Department

During the warranty period, NEXIQ Technologies will, at its option, repair or replace the product which proves to be defective or refund the purchase price.

Customers MUST obtain an RMA number before repair items are sent in for service. This is for warranty and non-warranty repairs as well as rework services.

To obtain an RMA number, please call **(800) 639-6774** and then enter **option 3**. This option transfers your call to the Product Service department where either the Production Associate or a Technician will troubleshoot the issues the customer is experiencing. If there is an issue that cannot be handled during the phone conversation, the customer will be given an RMA number to return the unit. You will be asked by the NEXIQ associate for your company name, address, phone number, and main contact source. Your issue will be documented under the RMA number given and linked to your company's information.

NOTE:



For Michigan and international support, call **1-248-232-6610, option 3**.

NOTE:



It is required that the RMA number be written on the outside of the box in large, bold print.

Return the unit(s) to the NEXIQ Location at:

NEXIQ Technologies
2329 East Walton Blvd.
Auburn Hills, MI 48326
Attention: Product Service/Repair Department



Local: **1-248-232-6610**



Toll Free: **1-800-639-6774**

In addition, we request that you include a business card or your name and phone number **INSIDE** the box so we can contact you if there are any repair costs. Any package sent in for the Product Service department that does not have an RMA number on the outside of the box **WILL BE REFUSED** and returned to the sender, unopened.

If necessary, payment information will be obtained for NEXIQ to cover the cost of services while on the phone and a copy should be returned with the items coming in for repair/rework. Payment needs to include shipping and handling charges. (This is for non-warranty and rework charges.)

The customer is responsible for shipping and handling charges on non-warranty repairs and non-warranty rework. With all warranty repairs, NEXIQ is responsible for the shipping costs of the return to customer.

Return of Goods Policy

Thank you for your NEXIQ purchase. Please inspect your order for accuracy and for damage during the shipping process. If you did not receive your entire order or your order has not arrived in excellent condition, please contact the Customer Service Department at **(800) 639-6774, option 1** within 30 working days of receipt.

If NEXIQ receives the request for return AFTER 30 DAYS, a 15 percent restocking fee will be issued. Upon inspection and approval of the returned products, credit will be issued. Any damaged or missing parts will be deducted from the final credit total. NO RETURNS ARE ACCEPTED WITHOUT AN RGA (RETURN GOODS AUTHORIZATION) NUMBER. Customers are responsible for return shipping charges.

Return Goods Authorization (RGA) Procedure

RGA numbers are issued for any item that needs to be returned due to an incorrect shipment or credit adjustment. Customers **MUST** obtain an RGA number **BEFORE** returned items can be returned to NEXIQ. Any package sent to NEXIQ that does not have an RGA number on the outside of the box **WILL** be refused and returned to the sender, unopened.

To obtain an RGA number, please call **(800) 639-6774** and then enter **option 1**. This option transfers your call to the Customer Service department. Please be prepared to provide the following information:

- Company Name and Contact Name
- Company Address
- Phone Number
- Where the unit was originally purchased
- Purchase order number
- Packing Slip Number

NOTE:




NEXIQ will accept the return of any product, **HOWEVER**, if the unit is damaged or items are missing, deductions will be made to the final credit amount. **ANY ITEM THAT IS OBSOLETE OR DETERMINED TO HAVE NO VALUE WILL NOT RECEIVE CREDIT.**

Once authorization for the return is given, it is required to have the RGA number put on the outside of the box in big, bold letters and numbers.

Return the unit(s) to NEXIQ Location at:

NEXIQ Technologies
2329 East Walton
Auburn Hills, MI 48326
Attention: Returns/Quality Control Department

Local: **1-248-232-6610**

 Toll Free: **1-800-639-6774**

NOTE:



The customer is responsible for return shipping and handling to NEXIQ.
