

# NoiseTutor System Manual



# **Larson Davis**

## **NoiseTutor System Manual**

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## Record of Purchase Date and Serial Number

### Model 831 or

SoundTrack LxT: \_\_\_\_\_ Serial Number: \_\_\_\_\_

Preamplifier Model: \_\_\_\_\_ Serial Number: \_\_\_\_\_

Microphone Model: \_\_\_\_\_ Serial Number: \_\_\_\_\_

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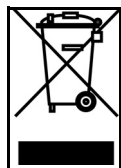
**PCB Piezotronics, Inc.**

**Attn: Recycling Coordinator**

**1681 West 820 North**

**Provo, Utah, USA 84601-1341**

where it will be accepted for disposal



## Product Warranty

Refer to our website, [www.larsondavis.com](http://www.larsondavis.com), for a copy of the product warranty.

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# Introduction

This manual describes how to set up and configure the Larson Davis NoiseTutor System. The NoiseTutor System is designed to interact with noise monitoring stations. It provides portable and remote observation of monitoring sites through a web interface.

Setting up the NoiseTutor System includes the following steps:

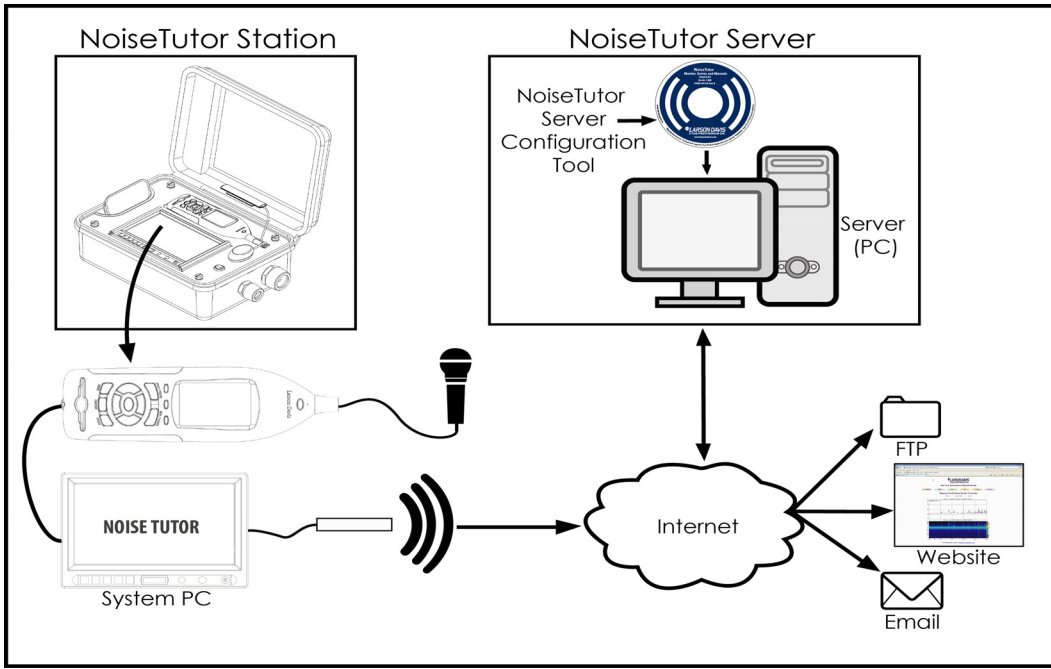
**Step 1** Setting up the NoiseTutor station

**Step 2** Configuring the NoiseTutor server

**Step 3** Installing the NoiseTutor System software, if not already pre-installed.

Figure 1-1 shows the components and architecture of the NoiseTutor System.

*The NoiseTutor System software comes pre-installed when NoiseTutor is purchased as a system.*



**FIGURE 1-1 Components and Architecture - NoiseTutor System**

## Setting up the NoiseTutor Station

***Start** by reading the *NoiseTutor Quick Start Guide*. It is a card located inside your station case that describes the steps for deploying your NoiseTutor station.*

*The *NoiseTutor Installation Reference* is located inside your NoiseTutor station case and describes the assembly and operation of your station.*

To set up your NoiseTutor station, refer to the NoiseTutor Quick Start Guide and the NoiseTutor Installation Reference.

The NoiseTutor station consists of the following:

- The NoiseTutor Quick Reference Guide
- The NoiseTutor Installation Reference
- Model 831 or SoundTrack LxT<sup>®</sup> sound level meter
- Preamplifier model PRM831, PRMLxT1, PRMLxT1L, PRMLxT2, or PRMLxT2L.
- Microphone model number 377B02 or 377B20
- Microphone cable connecting Model 831 to preamplifier/microphone

*Note: Larson Davis does not supply an active SIM card. You must obtain one separately.*

- Active SIM card

Refer to the NoiseTutor Installation Reference on the inside of the NoiseTutor case to install your system hardware.

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## Configuring the NoiseTutor Server

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Larson Davis provides server configuration aids with the NoiseTutor System to provide web access to sound level monitoring sites. This includes the NoiseTutor Server Configuration Tool that can be used with the instructions in this manual to set up a server on a Windows-based computer. The server consists of both a website--with a collection of pre-designed web pages--and an FTP site.

The pre-designed server web pages present information from each monitoring site in the following forms:

- Ten-minute report
- One-hour report
- One-day report
- One-week report
- One-month report

Although you can use any web site server that is capable of rendering HTML pages, along with Java Script, with the NoiseTutor System, the configuration aids in this manual describe the steps for using Internet Information Services (IIS) from Microsoft. This manual describes configuration with IIS because it is currently the most common web server for Windows and it is available at no cost.

*Although the NoiseTutor system provides server configuration aids, you are responsible for setting up the web server.*

By setting up an FTP site, you can collect noise monitoring data from Noise Tutor clients. This data can then be displayed in graphic reports for each monitoring site on a web site.

The process of installing and configuring the NoiseTutor Server involves complex and technical tasks, and generally requires the services of an IT professional. For your assistance, detailed instructions for installing and configuring the NoiseTutor Server on a Windows 7 platform are provided in this manual.

The NoiseTutor System also functions on Windows XP SP 3 and Windows Vista SP 1. However, the steps and options are

different than those represented in this manual. To install and configure the NoiseTutor System on these platforms, Larson Davis recommends that you consult with an IT professional. Detailed instructions for setting up a server on other platforms are not available from Larson Davis.

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## **System requirements for NoiseTutor Server Configuration**

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- Windows 7 SP 1, Server or Professional editions. Server edition is recommended.
- IIS 5.1 or higher
- One or more NoiseTutor Noise Monitoring Systems (NMS)
- One 831 analyzer serial number for each NMS

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## **Installing NoiseTutor System Software**

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The NoiseTutor System software comes pre-installed when ordering the NMS-021 (with Model 831 or SoundTrack LxT analyzers), and the EPS 041 (without Model 831 or SoundTrack LxT analyzers). For other configurations, the software must be installed on the PC that is connected to the sound level meter. The software interacts with noise monitoring stations by downloading measured data from the sound level meters at predefined intervals. It then sends data or graphical reports to specified recipients. If your system does not include pre-installed software, refer to the instructions in the chapter “Installation and Setup.”

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## **System Requirements for NoiseTutor System Software**

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- Larson Davis analyzers 824, 831 and SoundTrack LxT.
- All Windows operating system versions, starting from Windows 2000.

# Setting up the NoiseTutor Server

This chapter lists and describes the steps for setting up the NoiseTutor server on the Windows 7 operating system. To install the server, complete the following process:

*Although the NoiseTutor System provides server configuration aids, you are responsible for setting up the web server.*

1. Install IIS on Windows 7.
2. Configure the IIS web server.
3. Install the NoiseTutor Server Configuration Tool.
4. Run the NoiseTutor Server Configuration Tool.
5. Create an FTP user account.
6. Configure the Windows Firewall.

Each step is described in more detail in the following sections.

**Before You Begin:** *The process of installing and configuring the NoiseTutor Server involves complex and technical tasks, and generally requires the services of an IT professional. These detailed instructions are provided for the convenience of an IT professional working with your NoiseTutor System.*

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## Installing IIS on Windows 7

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The NoiseTutor System also functions on Windows XP SP 3 and Windows Vista SP 1. However, the steps and options are different than those represented in this manual. To install and configure the NoiseTutor System on these platforms, Larson Davis recommends that you consult with an IT professional. Detailed instructions for setting up a server on other platforms are not available from Larson Davis.

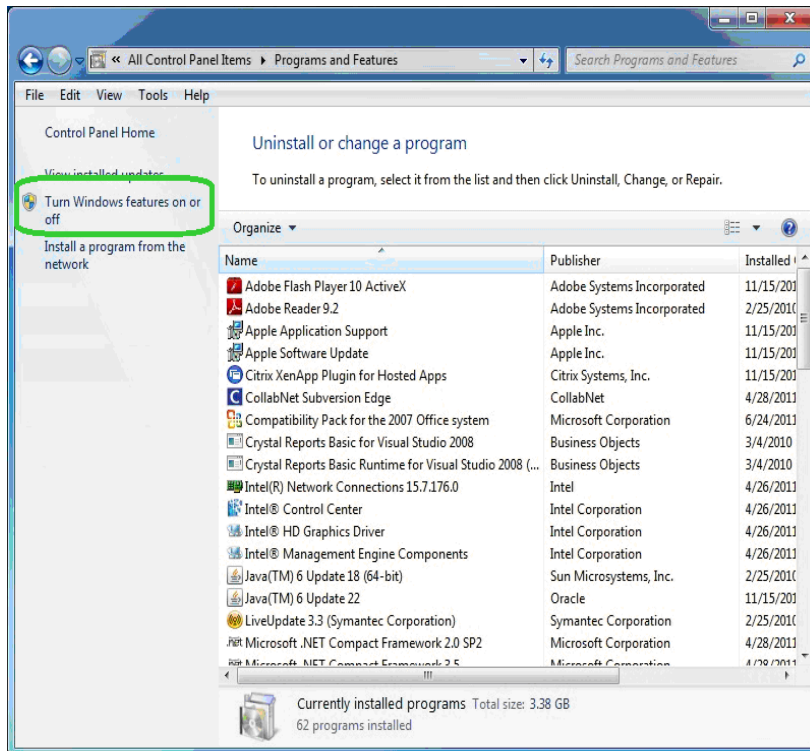
Installing the IIS addin provides your host PC with both web- and FTP-server functionality. If you do not want to use IIS, you will need to supply your own web server and FTP server. To install IIS, follow these steps:

**Step 1** On the Start menu, click **Control Panel**.

*If the **Programs and Features** icon is not displayed in your Control Panel, click the drop down arrow in the address bar following the words “Control Panel.” Click **All Control Panel Items**. The **Programs and Features** icon should then appear with other icons in your Control Panel.*

**Step 2** Click **Programs and Features**.

**Step 3** On the left window border, click **Turn Windows features on or off**, as shown in FIGURE 2-1.



**FIGURE 2-1 Turn Windows Features On or Off**

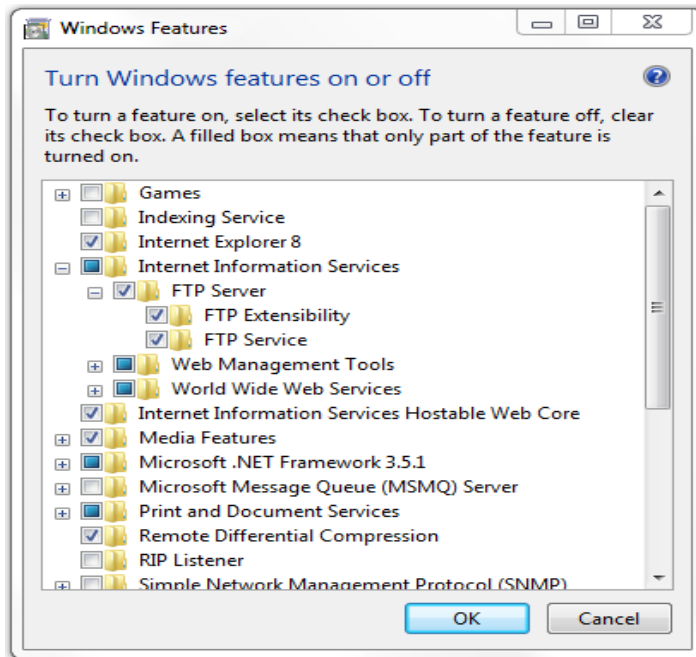
**Step 4** Select **Internet Information Services**.

**Step 5** Expand **Internet Information Services**.

**Step 6** Expand **FTP Server**. Select all items, as shown in FIGURE 2-2.

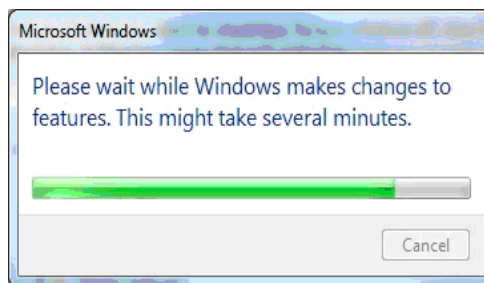
**Step 7** Select **Web Management Tools**, as shown in FIGURE 2-2. Accept all defaults.

**Step 8** Select **World Wide Web Services**, as shown in FIGURE 2-2. Accept all defaults.



**FIGURE 2-2 Windows Features - Internet Information Services**

**Step 9** Click **OK**. Wait for Windows to make changes, as shown in FIGURE 2-3.



**FIGURE 2-3 Microsoft Windows - Please Wait**

## **Step 10** Close Programs and Features.

## **Configuring the IIS Web Server**

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You can configure the IIS web server to set up your NoiseTutor web site. The following configuration places the web pages for your site in a virtual directory and sets the FTP server upload location as a subdirectory of that virtual directory. To set up your web site, follow these steps:

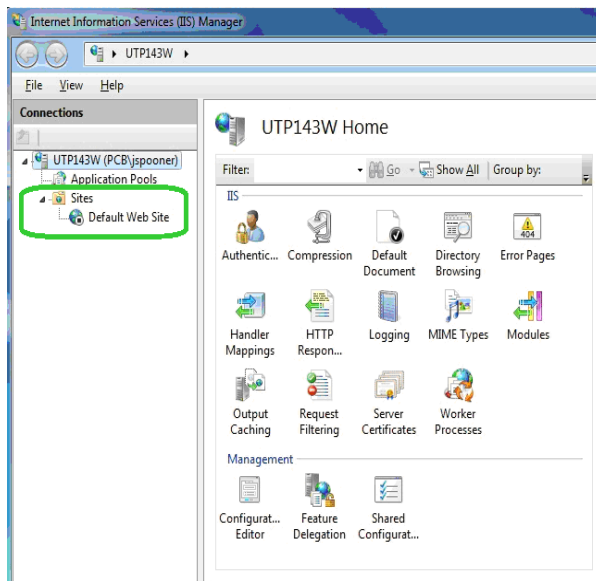
**Step 1** Browse to `c:\inetpub\wwwroot\`. Click the **New Folder** button and name it **LarsonDavis**.

**Step 2** Open **inetmgr** at the following location:  
`c:\windows\system32\inetsrv\inetmgr.exe`.

**Step 3** Expand the name of your computer.

**Step 4** Expand **Sites**.

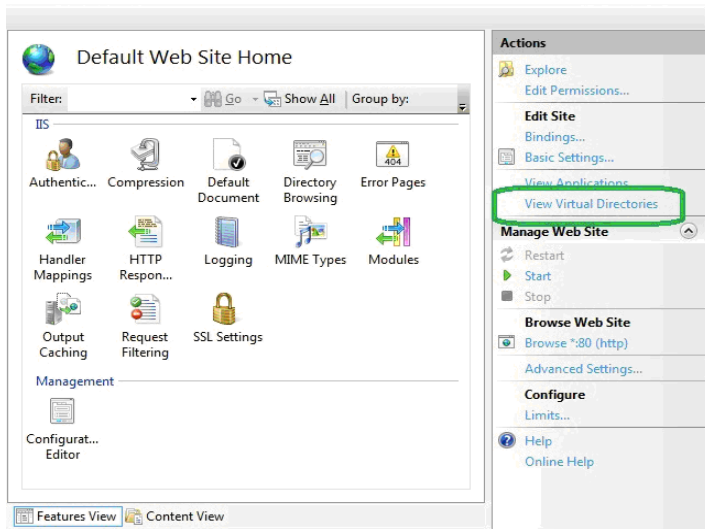
**Step 5** Depending on your operating system, you may have the option of creating a new web site. Otherwise, you may be provided only with the default web site option, as shown in FIGURE 2-4.



**FIGURE 2-4 IIS Manager - Expand Sites**

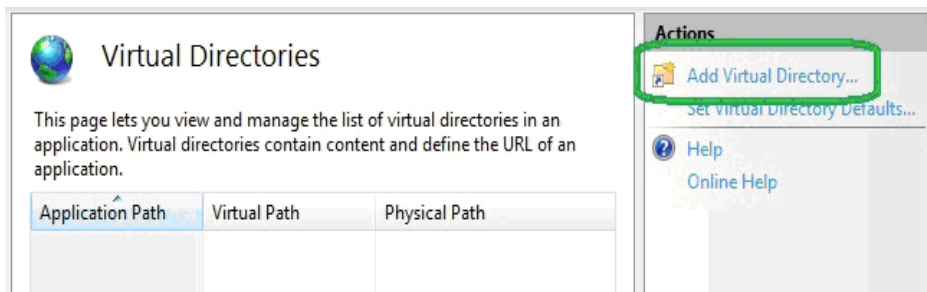
**Step 6** Select **Default Web Site**.

**Step 7** Select **View Virtual Directories**, as shown in **FIGURE 2-5**.



**FIGURE 2-5 IIS Manager - View Virtual Directories**

**Step 8** Click **Add Virtual Directory**, as shown in FIGURE 2-6.



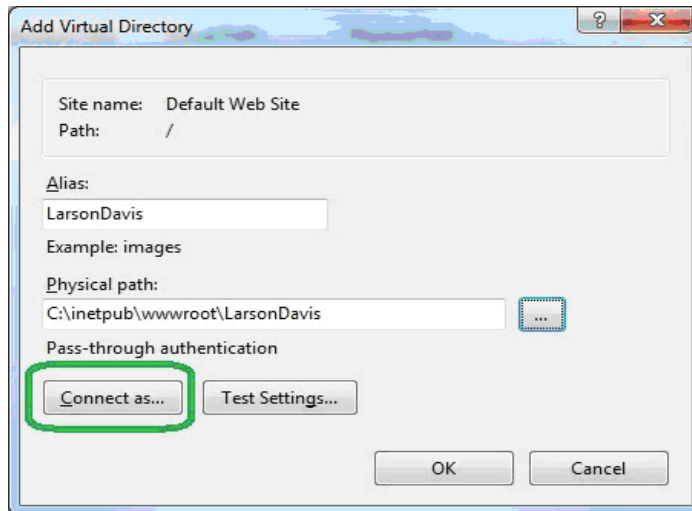
**FIGURE 2-6 IIS Services Manager - Add Virtual Directory**

**Step 9** In the **Add Virtual Directory** dialog box, **Alias**, type **LarsonDavis** in the Alias field, as shown in FIGURE 2-7.

*Larson Davis strongly recommends that you specify, select, or accept all defaults for your configuration, as demonstrated in this manual.*

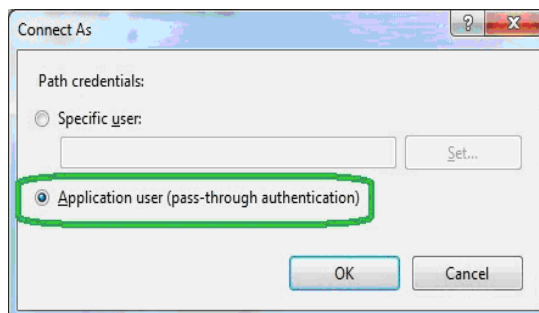
**Step 10** For Physical path, specify **LarsonDavis** as the default root directory by typing the path as shown in FIGURE 2-7.

**Step 11** Click **Connect as...**, as shown in FIGURE 2-7.



**FIGURE 2-7 Add Virtual Directory - Connect As**

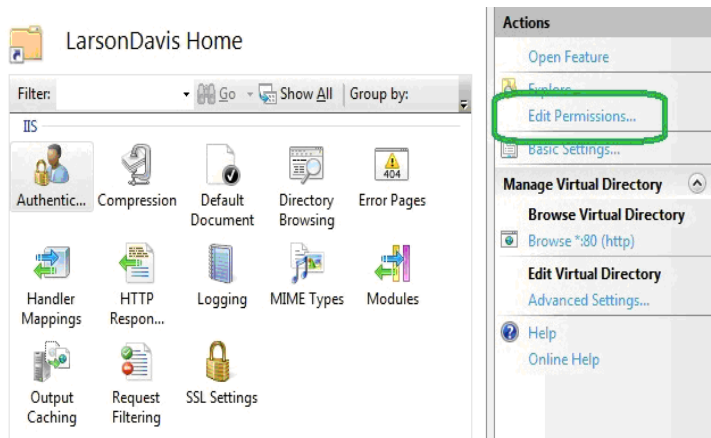
**Step 12** In the **Connect As** dialog box, select the **Application user (pass-through authentication)** option and click **OK**, as shown in FIGURE 2-8.



**FIGURE 2-8 Connect As - Application User (pass through authentication)**

*Application user settings should not include errors, but can include warnings about being unable to verify access to the virtual directory. Such warnings are permissible because the user names and passwords are not available until the user accesses the web site.*

**Step 13** Select the application path and click **Edit Permissions...**, as shown in FIGURE 2-9.



**FIGURE 2-9 IIS Manager - Edit Permissions**

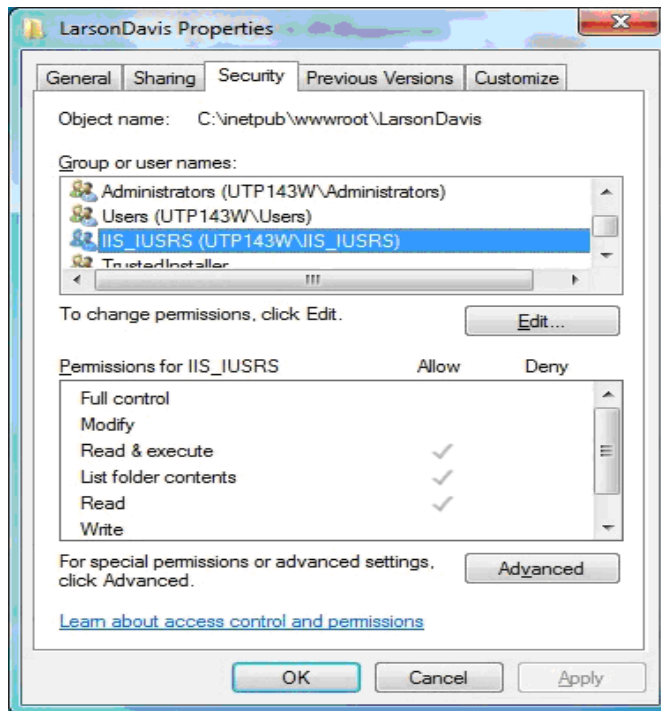
**Step 14** On the LarsonDavis Properties sheet, click the **Security** tab, as shown in FIGURE 2-10.

**Step 15** Select the user or group that will access the web site, as shown in FIGURE 2-10. Ensure the user or group has the following permissions:

- A. Read & execute**
- B. List folder contents**
- C. Read**

It is recommended that you not grant other permissions.

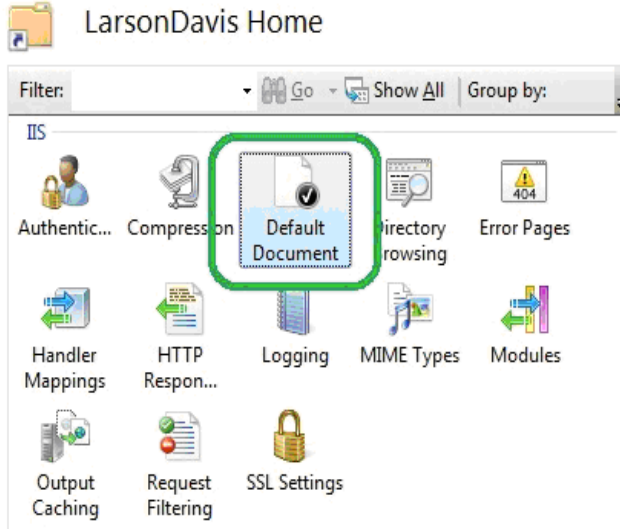
**Step 16** Click **Apply** if you have made changes. Otherwise, click **OK**.



**FIGURE 2-10 Larson Davis Properties - Security**

**Step 17** Expand **Default Web Site** and double-click **LarsonDavis**.

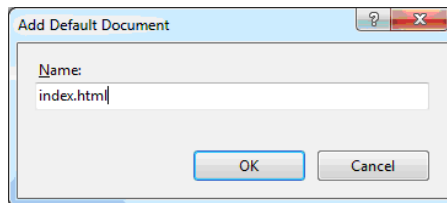
**Step 18** Double-click **Default Document**, as shown in FIGURE 2-11.



**FIGURE 2-11 IIS Manager - Default Document**

**Step 19** Remove all default documents except for **index.html**

**Step 20** If **index.html** is not present, click **Add** and in the **Add Default Document** dialog box, type **index.html** and then click **OK**, as shown in FIGURE 2-12.



**FIGURE 2-12 Add Default Document**

**Step 21** Close the IIS Manager.

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## Installing the NoiseTutor Server Configuration Tool

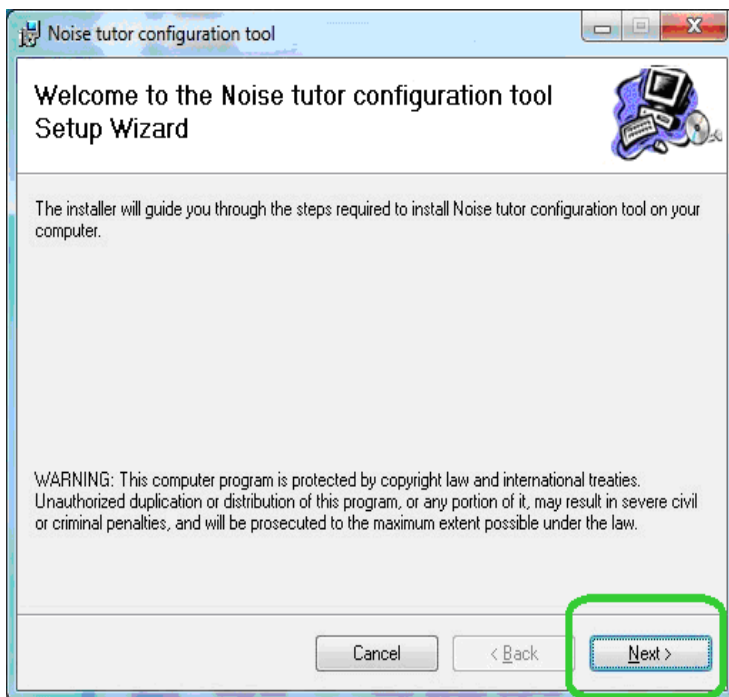
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To install the NoiseTutor Configuration Tool, follow these steps:

**Step 1** Insert NoiseTutor CD into your CD/DVD drive.

**Step 2** If auto start is not enabled, Click **[CD / DVD]\NoiseTutorConfigurationInstaller.exe**.

**Step 3** On the NoiseTutor Configuration Tool Setup Wizard, Click **Next**, as shown in FIGURE 2-13.

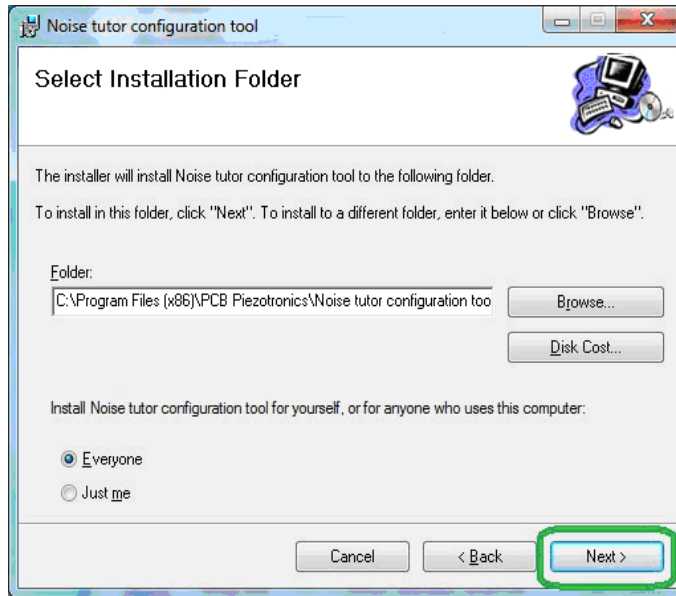


**FIGURE 2-13 Configuration Tool Installer - Welcome**

**Step 4** Select the folder where you want to install the NoiseTutor Configuration Tool, as shown in FIGURE 2-14.

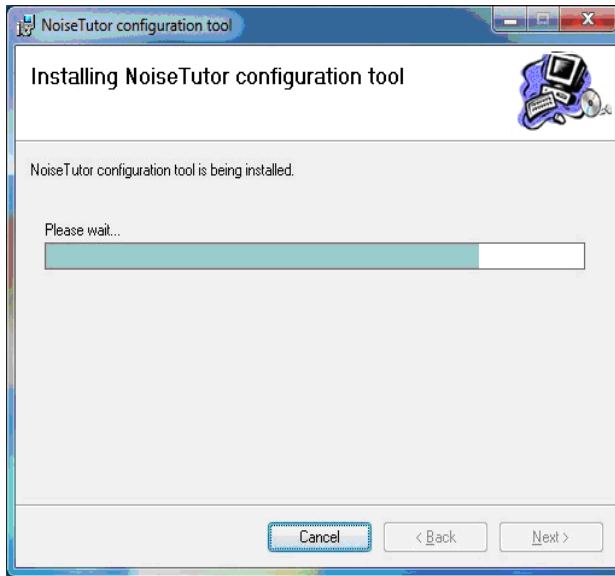
**Step 5** Select either **Everyone** or **Just me**.

**Step 6** Click **Next** to install the default installation folder.



**FIGURE 2-14 Configuration Tool Installer - Select Installation Folder**

**Step 7** To confirm the installation, click **Next** again. The wizard displays the installation progress as shown in FIGURE 2-15.



**FIGURE 2-15 Configuration Tool - Installing NoiseTutor Configuration Tool**

**Step 8** Click Close.

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## Running the NoiseTutor Configuration Tool

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The NoiseTutor Configuration Tool can be used to set up the following functionality on the server:

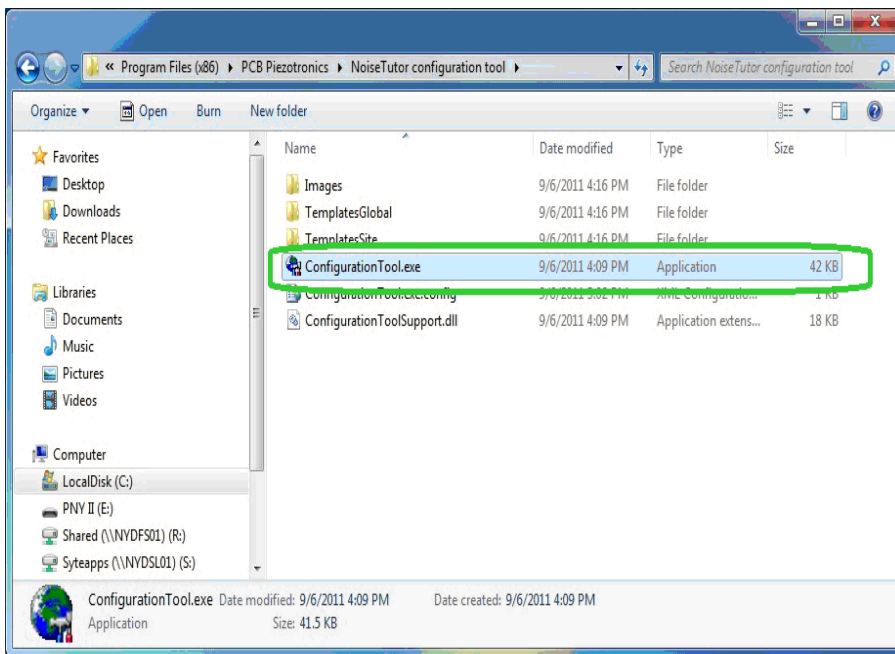
- Generate web pages.
- Request specific monitoring site information to populate web page templates.
- Generate and send graphical reports to a specified location.
- Create an FTP directory for uploading site information.

*You are responsible for assigning users and giving them the correct permissions to any FTP upload directories you create with the NoiseTutor Configuration Tool.*

To run the NoiseTutor Configuration Tool, follow these steps:

**Step 1** On the **Start** menu, click **Computer**. Browse to the **ConfigurationTool.exe** file, and double-click it, as shown in FIGURE 2-16.

- A.** For 64-bit Windows 7 operating systems, the file is located at **c:\program files (x86)\PCB Piezotronics\NoiseTutor configuration tool\ConfigurationTool.exe**.
- B.** For 32-bit Windows 7 operating systems, the file is located at **c:\program files\PCB Piezotronics\NoiseTutor configuration tool\ConfigurationTool.exe**.



**FIGURE 2-16 Configuration Tool - Launch**

**Step 2** If you are configuring a new site, click **New Configuration** on the **File** menu of the NoiseTutor Site Configuration Tool dialog box. Skip to step 6.




**Step 3** If you are modifying an existing configuration, click **Open Configuration** on the **File** menu.

**Step 4** From the Open box, browse to the location of your existing site configuration file (.csf) and double-click it.

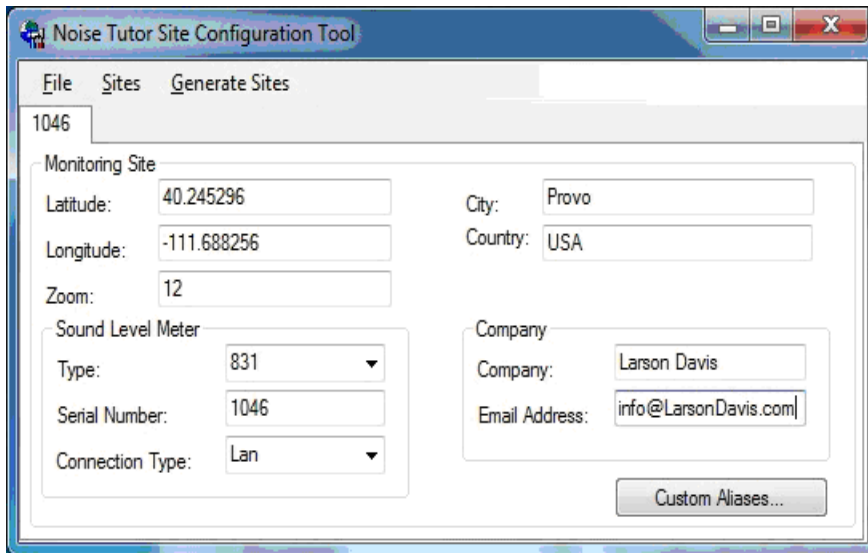
**Step 5** For Monitoring Site information, provide decimal values for the Latitude and Longitude coordinates of your site, as shown in FIGURE 2-17. Refer to Google Maps, for help in finding these values for your site.

**Step 6** For Zoom, type a numeric value for the zoom level of the Google map to display for your site. The number you specify corresponds to the Google Maps designation of zoom levels, where zero (0) displays a map of the world and 21 displays an individual building. Larson Davis provides a default value of 12.

**Step 7** For Sound Level Meter, specify the Type by selecting either **831** or **LxT**. The model type is shown on the front of your analyzer in the Larson Davis name.

**Step 8** For Serial Number, specify your analyzer serial number. You can find the serial number by turning on your analyzer with the  (ON/OFF) button, pushing the  (TOOLS) key, scrolling to the **About** folder, selecting the folder by pressing  (ENTER), and retrieving the number displayed in the Instrument Information section.

**Step 9** Provide the appropriate information for the remaining fields in this box.



**FIGURE 2-17 Configuration Tool - Information Launch3**

**Step 10** Repeat steps one through six for each site, as needed.

**Step 11** On the **File** menu, click **Save Configuration**.

**Step 12** Click **Generate Sites** to create the web files for the current configuration.

**Step 13** In the Browse for Folder box, click the folder location that you specified for your virtual directory.

**Step 14** In the Confirm Delete box, click **Yes** to delete current web files. All previous files in the virtual directory are deleted prior to regenerating the new files. Click **No** to leave all previous files during generation. Duplicate files are overwritten.

**Step 15** On the Successful Generation box, click **OK**.

**Step 16** To close NoiseTutor Site Configuration Tool, click **Exit** on the **File** menu.

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## Creating User Accounts for FTP Uploads

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You can create user accounts for your FTP client to authenticate itself with an FTP server. User accounts should have write access permissions to the FTP server **UploadImages** folder, and any sub-folders, but any additional rights are best left restricted. To create a user account, follow these steps:

**Step 1** On the Start menu, click **Control Panel**.

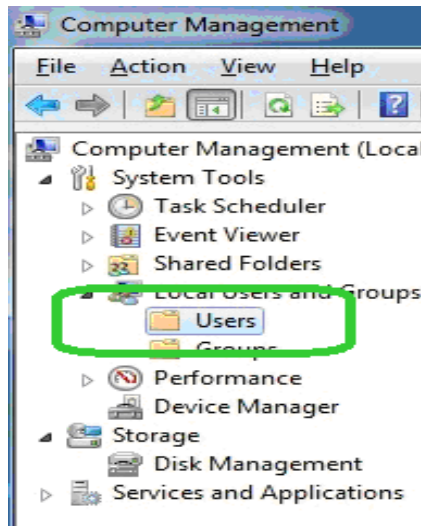
*If **Administrative Tools** is not displayed in your Control Panel, click the drop down arrow in the address bar following the words "Control Panel." Click **All Control Panel Items**. The **Administrative Tools** icon should appear with other icons in your Control Panel.*

**Step 2** Click **Administrative Tools**.

**Step 3** Double-click **Computer Management**.

**Step 4** Expand **Local Users and Groups**.

**Step 5** Click the **Users** folder, as shown in FIGURE 2-18.



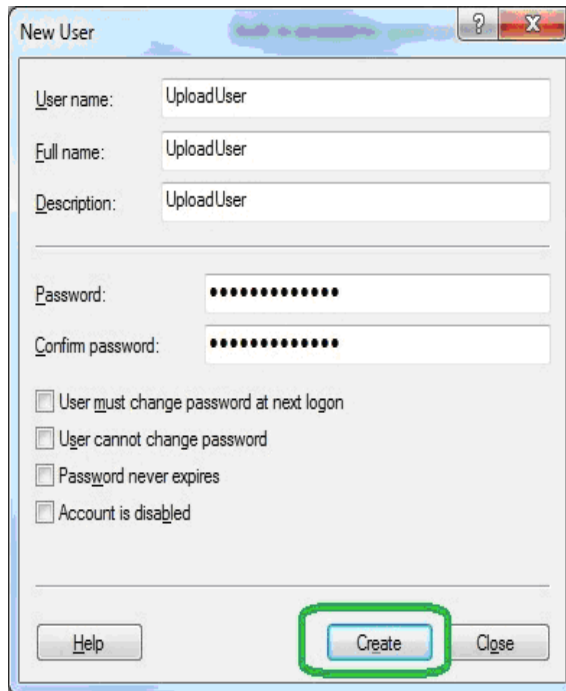
**FIGURE 2-18 Computer Management - Users**

**Step 6** On the **Action** menu, click **New User**.

*Larson Davis strongly recommends that you specify, select, or accept all defaults for your configuration, as demonstrated in this manual.*

**Step 7** In the New User box, provide the user name, full name, description; and create a password as shown in FIGURE 2-19. The default name for user accounts is **UploadUser**. Do not select any additional options on this box.

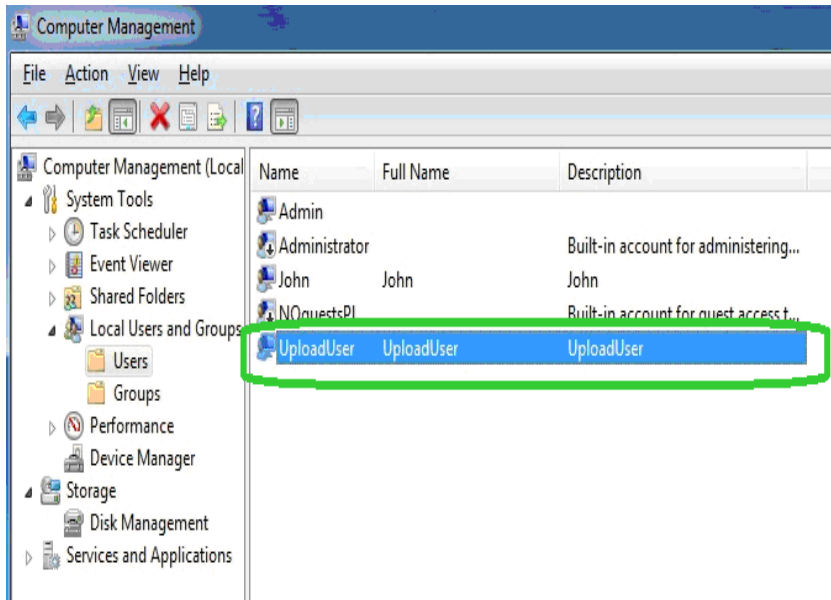
**Step 8** Click **Create**.



**FIGURE 2-19 New User - Create**

**Step 9** Click **Close**.

**Step 10** Click the name of the user account, or the default name **UploadUser**, if applicable, as shown in FIGURE 2-20.



**FIGURE 2-20 Computer Management - Upload User**

**Step 11** Provide the user account with the appropriate permissions to the FTP upload folder **UploadImages** and its sub-folders. This folder is a sub-folder in your NoiseTutor virtual directory. Permission options may vary but should include write access. It is best to restrict permissions to only the **UploadImages** folder and any sub-folders.

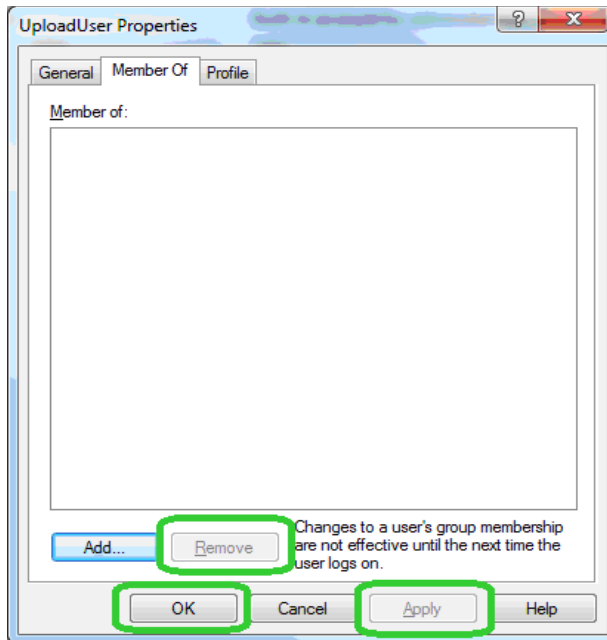
**Step 12** On the **Actions** menu, click **Properties**.

**Step 13** Click the **Member Of** tab.

**Step 14** On the Properties dialog box, select any entries listed under Member of: and click Remove, as shown in FIGURE 2-21.

**Step 15** Click **Apply**.

**Step 16** Click **OK**.



**FIGURE 2-21 UploadUser Properties - Member of**

**Step 17** To close the Computer Management screen click **Exit** on the **File** menu.

**Step 18** Close the Administrative Tools screen and the Control Panel.

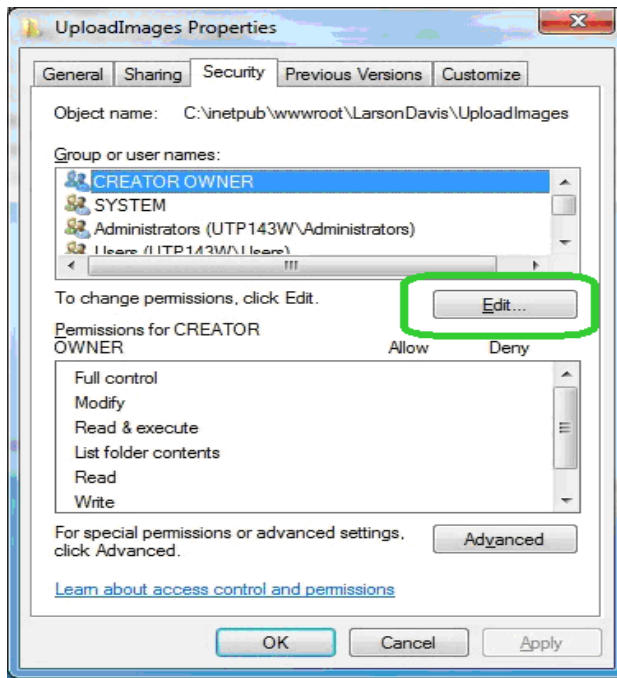
**Step 19** From the Start menu, click **Computer**.

**Step 20** Browse to the default virtual directory at **c:\inetpub\wwwroot\LarsonDavis\UploadImages**, as specified in step 7.

**Step 21** Right-click **UploadImages** and select **Properties**.

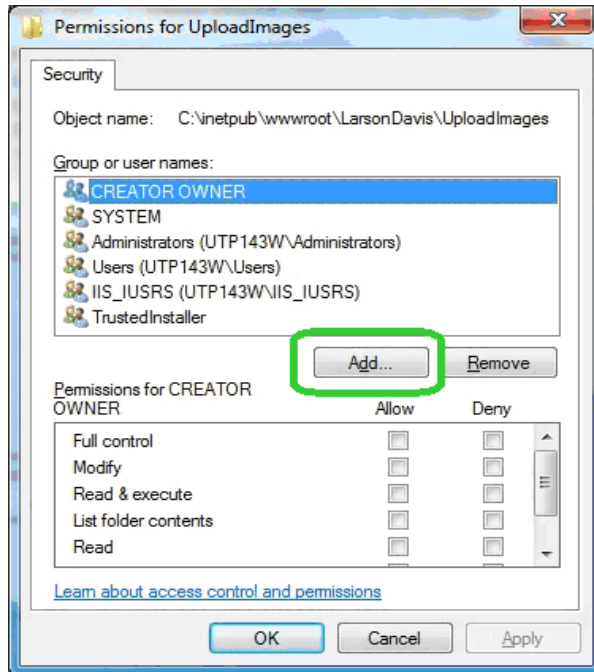
**Step 22** On the Properties dialog box, click **Security Tab**.

**Step 23** Click **Edit...**, as shown in FIGURE 2-22.



**FIGURE 2-22 UploadImages Properties - Security**

**Step 24** On the Permissions dialog box, click **Add...**, as shown in FIGURE 2-23.



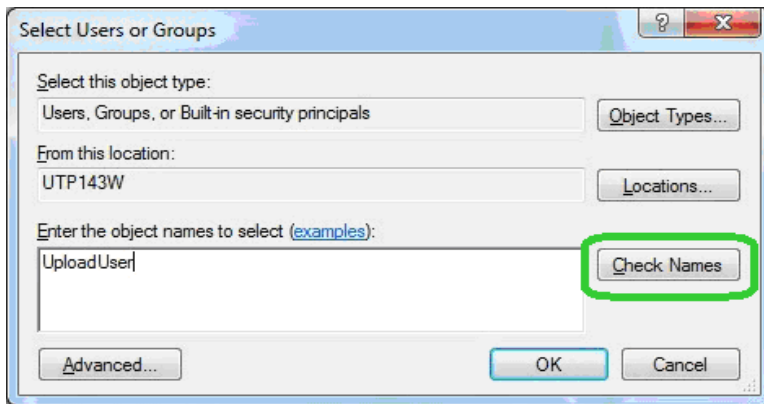
**FIGURE 2-23 Permissions for UploadImages - Add**

**Step 25** In the **Enter the object names to select**, type in the name of the user account, or the default name **UploadUser**, if applicable, as shown in FIGURE 2-24.

**Step 26** Make sure the **From this location** references your computer.

**Step 27** Click **Check Names**.

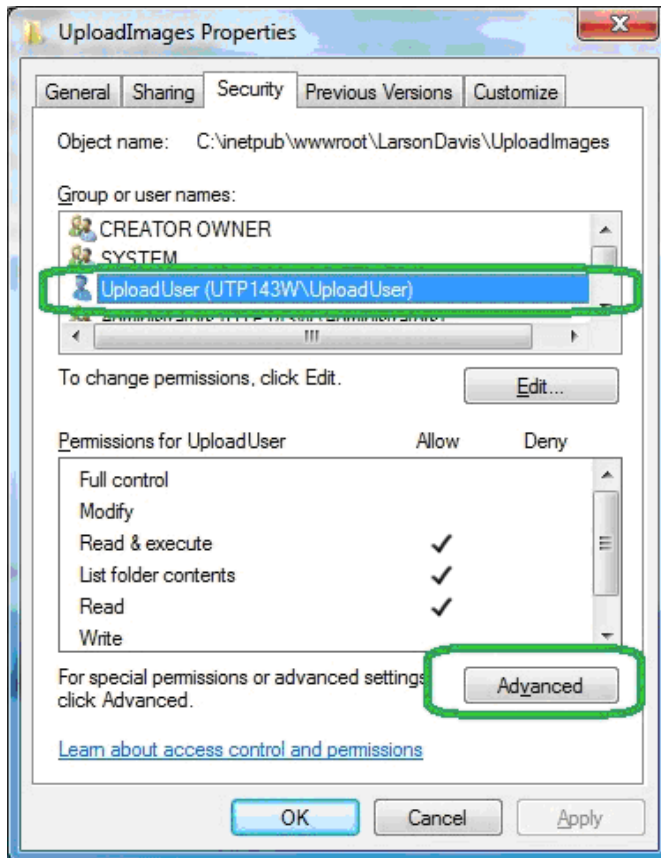
**Step 28** Click **OK** on both boxes.



**FIGURE 2-24 Select User or Groups - Upload User**

**Step 29** On the **Security** tab of the Properties box, click the user account name, or the default name **UploadUser**, if applicable, as shown in FIGURE 2-25.

**Step 30** Click **Advanced**.

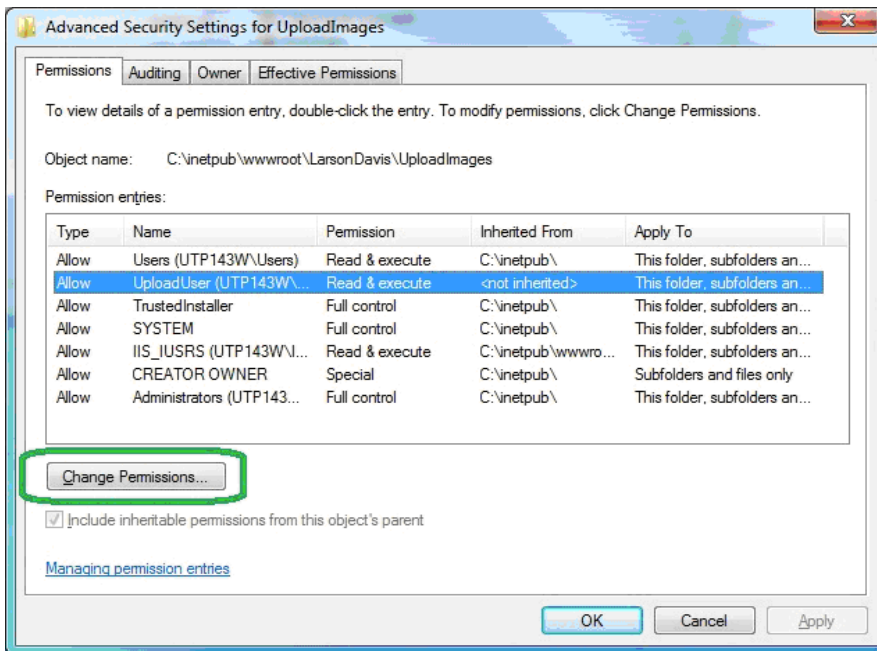


**FIGURE 2-25 UploadImages Properties - Advanced**

**Step 31** On the Advanced Security Settings box, click the **Permissions** tab.

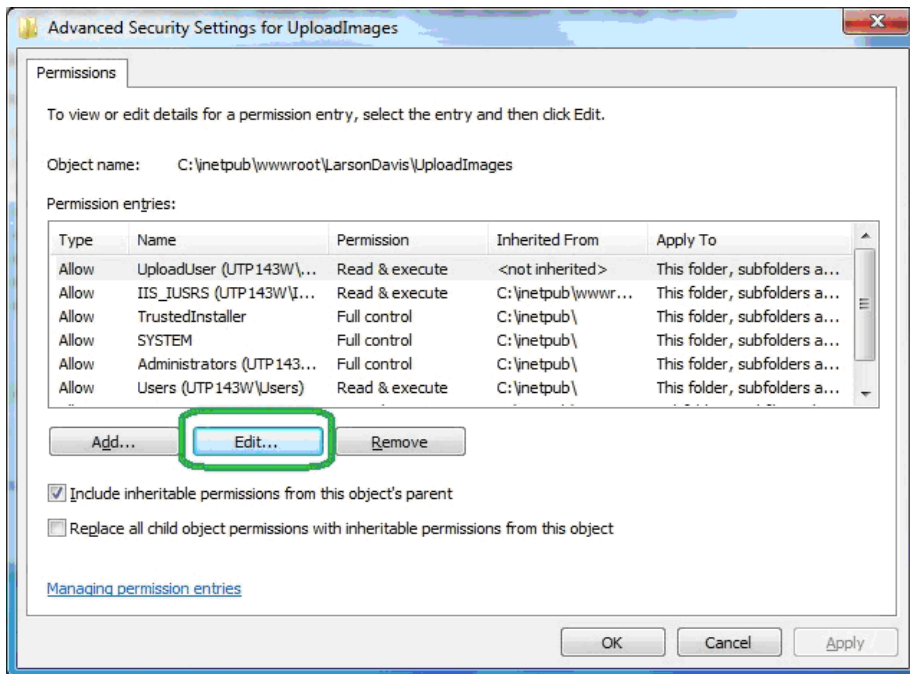
**Step 32** Click the user account name, or the default **UploadUser**, if applicable, as shown in FIGURE 2-26.

**Step 33** Click **Change Permissions....**



**FIGURE 2-26 Advanced Security Settings for UploadImages - Change Permissions**

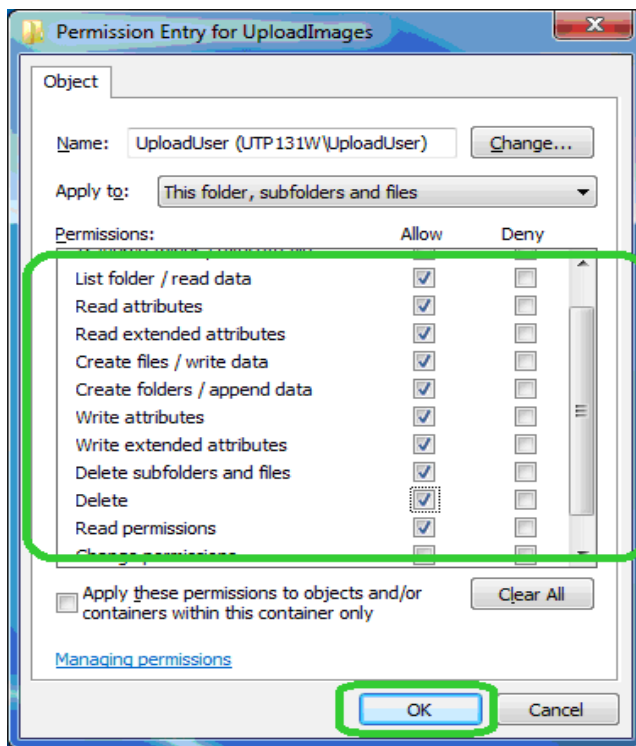
**Step 34** Click **Edit...**, as shown in FIGURE 2-27.



**FIGURE 2-27 Advanced Security Settings for UploadImages - Edit**

**Step 35** On the Permission Entry box, select the following **Allow** rights, as shown in FIGURE 2-28:

- **List folder/read data**
- **Read attributes**
- **Read extended attributes**
- **Create files/write data**
- **Create folders/append data**
- **Write attributes**
- **Write extended attributes**
- **Delete sub-folders and files**
- **Delete**
- **Read permissions**



**FIGURE 2-28 Permissions Entry for UploadImages - Upload User**

**Step 36** Click **OK** on all boxes.

## Setting up FTP Servers

Setting up an FTP server allows you to upload the NoiseTutor client reports. The FTP server root folder should be specified as the sub-folder “UploadImages” for the web server. To set up the FTP server, follow these steps:

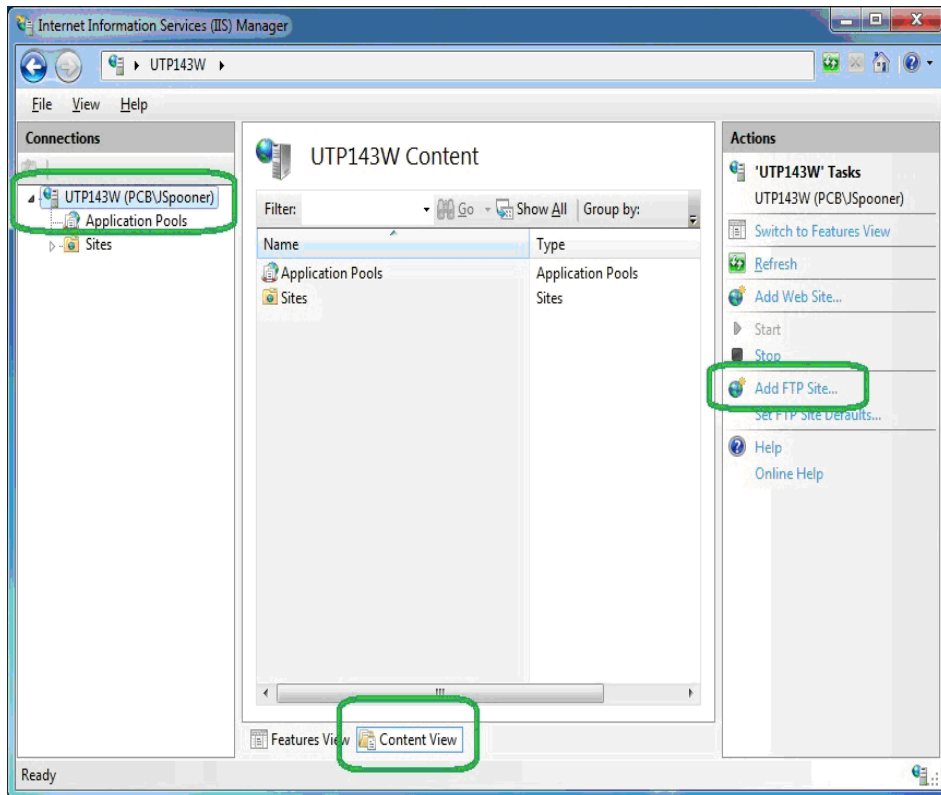
**Step 1** From the Start menu, click **Computer**. Browse to **c:\windows\system32\inetsrv\inetmgr.exe**.

**Step 2** Double-click **inetmgr**: ()

**Step 3** Under **Connections** on the Internet Information Services (IIS) Screen, click the local computer icon to expand it, as shown in FIGURE 2-29.

**Step 4** Click **Content View**, as shown in FIGURE 2-29.

**Step 5** Click **Add FTP Site...**, as shown in FIGURE 2-29.

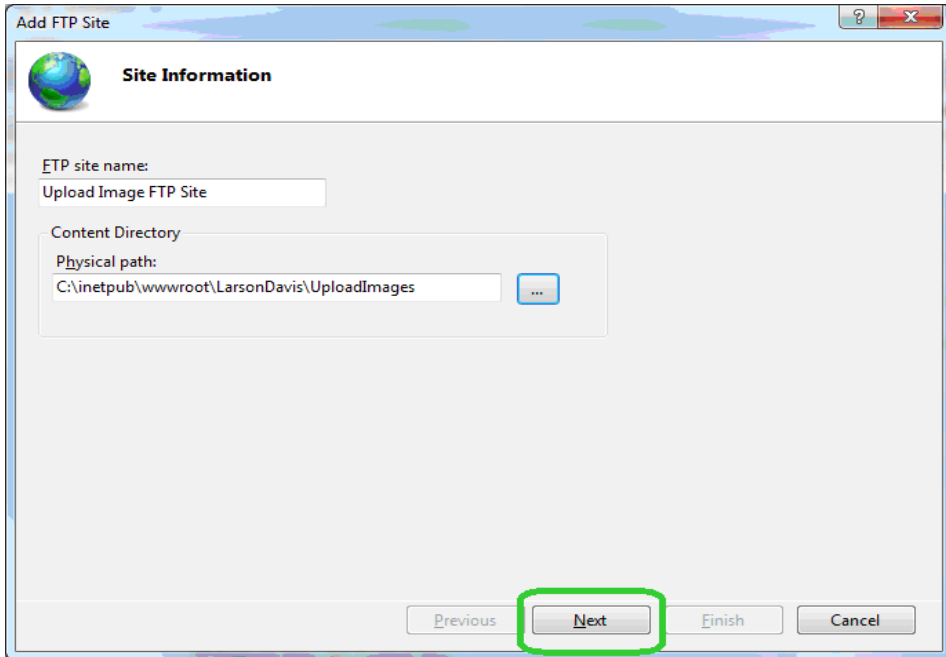


**FIGURE 2-29 IIS Service Manager - Add FTP Site**

**Step 6** On the Site Information page of the Add FTP Site wizard, type **Upload Images FTP Site** for the FTP site name, as shown in FIGURE 2-30.

**Step 7** Under Physical path: type **c:\inetpub\wwwroot\LarsonDavis\UploadImages**, as shown in FIGURE 2-30, or browse to the folder and select it.

**Step 8** Click **Next**.



**FIGURE 2-30 Add FTP Site - Site Information**

**Step 9** On the Binding and SSL Settings page, Select **All Unassigned** for IP Address, as shown in FIGURE 2-31.

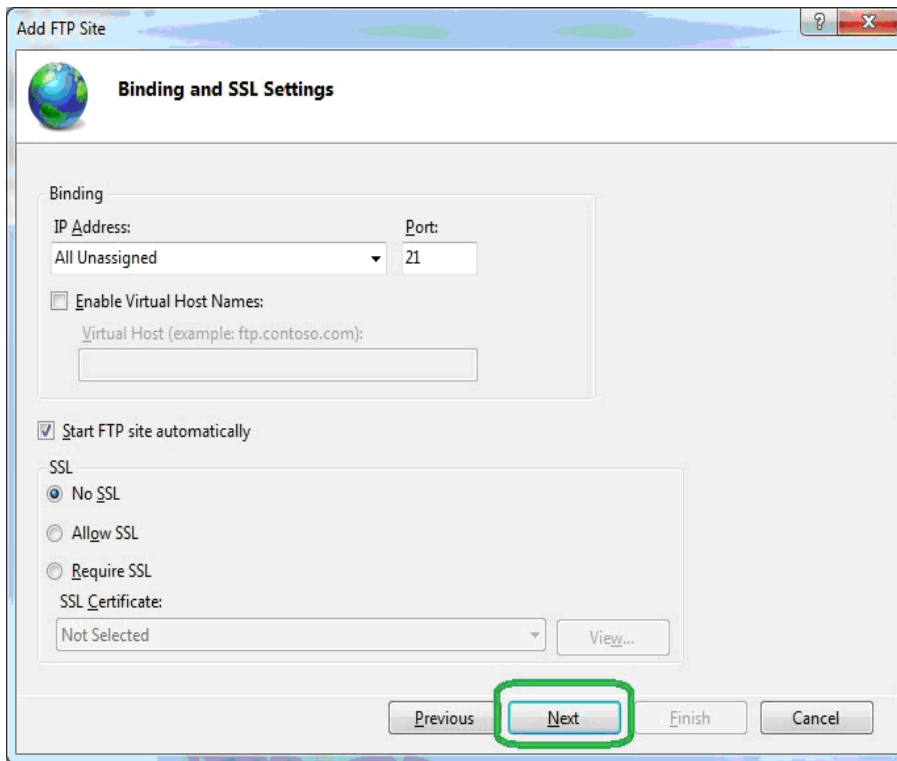
**Step 10** Specify the port for the FTP site, as shown in FIGURE 2-31. The default is 21.

**Step 11** Clear the **Enable Virtual Host Names:** option.

**Step 12** Select **Start FTP Site Automatically**.

**Step 13** Select **No SSL**.

**Step 14** Click **Next**.



**FIGURE 2-31 Add FTP Site - Binding and SSL Settings**

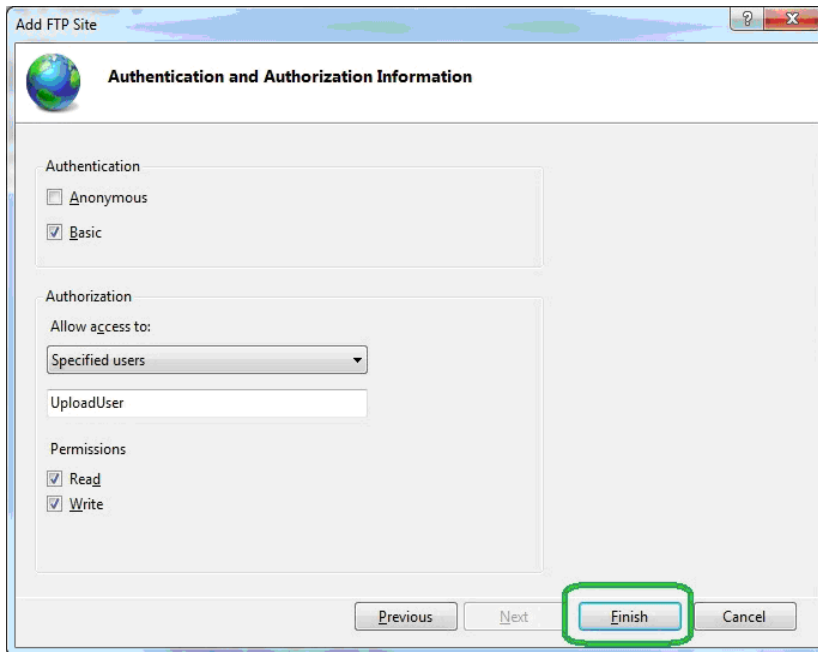
**Step 15** On the Authentication and Authorization Information page, select **Basic** for Authentication.

**Step 16** Select **Specified Users** for **Allow access to:**

**Step 17** Type in your user account name, or the default **UploadUser**, if applicable, as shown in FIGURE 2-32.

**Step 18** Select **Read** and **Write** under **Permissions**.

**Step 19** Click **Finish**.



**FIGURE 2-32 Add FTP Site - Authentication and Authorization Information**

**Step 20** Close IIS.

---

## Configuring Windows Firewalls

---

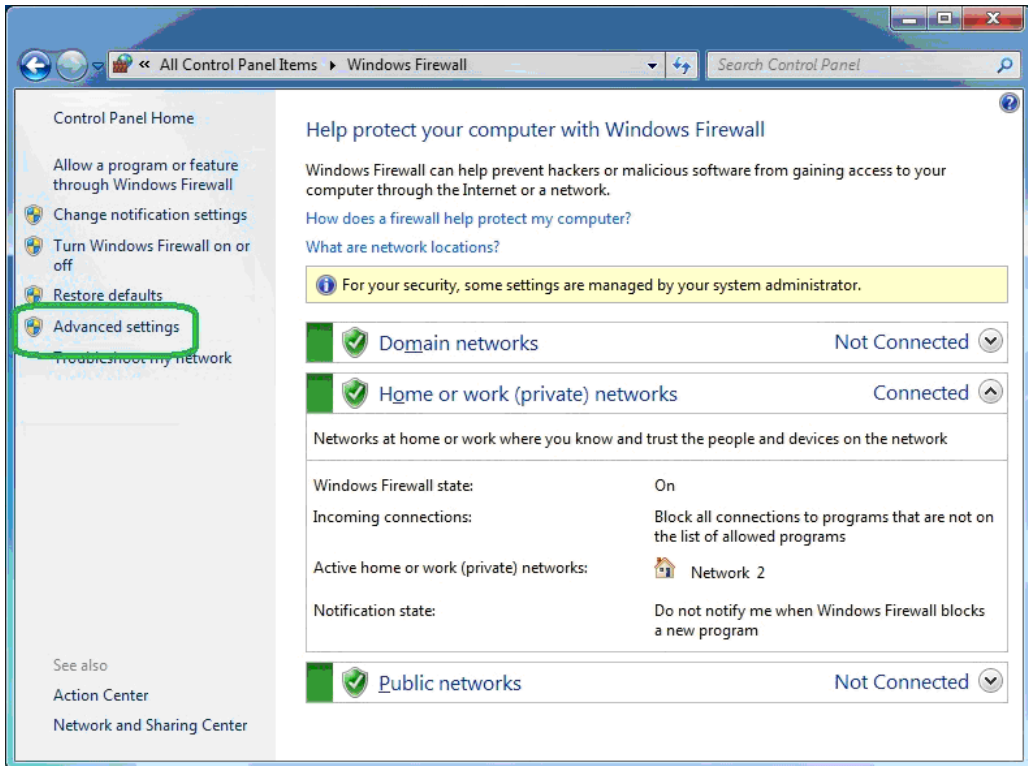
Firewalls are used to restrict remote access to your computer. If you have a firewall present, you will need to allow web and FTP access. Below is an example for configuring Windows Firewalls. For other firewalls, refer to the documentation from that provider.

**Step 1** From the **Start** menu, click **Control Panel**.

*If **Windows Firewall** is not displayed in your Control Panel, click the drop down arrow in the address bar following the words “Control Panel.” Click **All Control Panel Items**. The **Windows Firewall** icon should appear with other icons in your Control Panel.*

**Step 2** Click **Windows Firewall**.

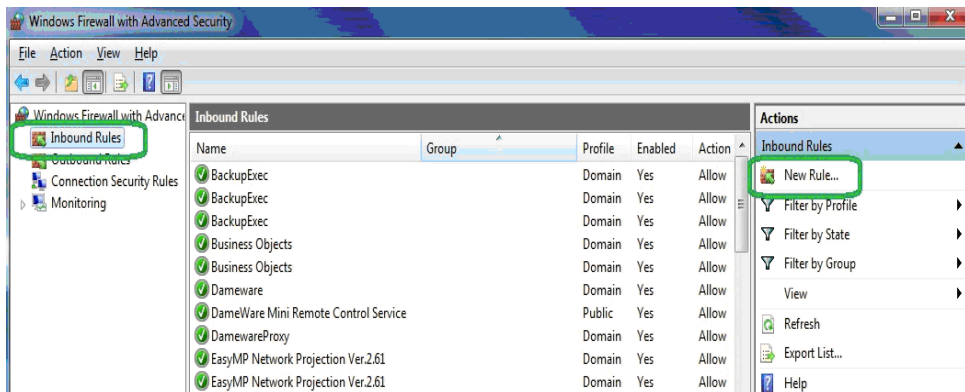
**Step 3** Click **Advanced Settings**, as shown in FIGURE 2-33.



**FIGURE 2-33 Windows Firewall - Advanced Settings**

**Step 4** On the Windows Firewall with Advanced Security screen, click **Inbound Rules**, as shown in FIGURE 2-34.

**Step 5** Click **New Rule...**, as shown in FIGURE 2-34.

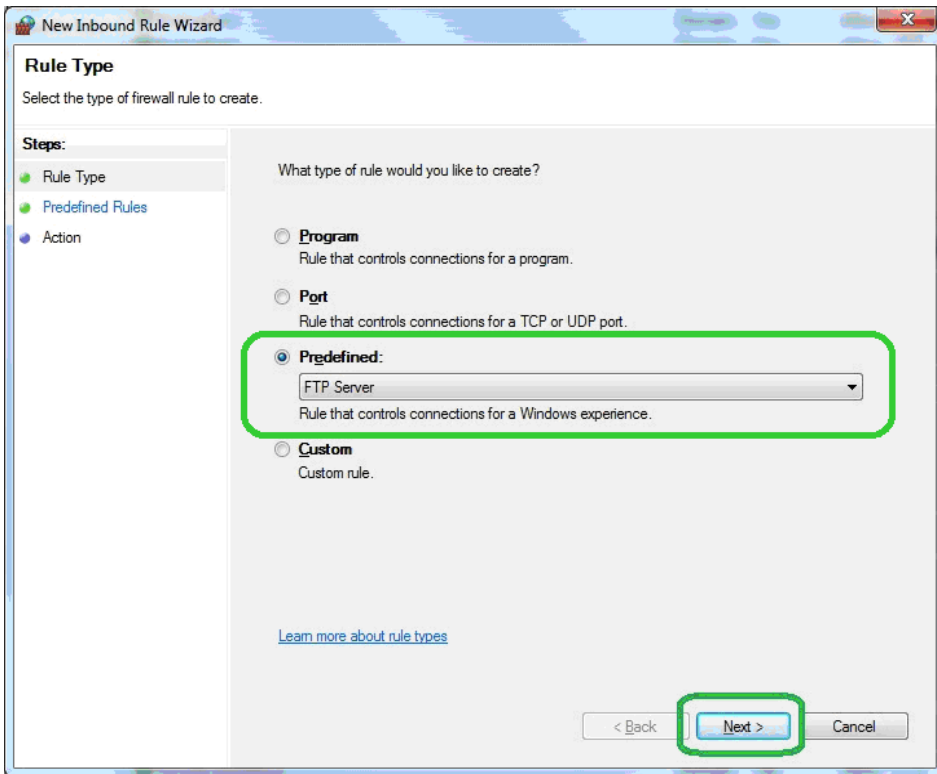


**FIGURE 2-34 Windows Firewall with Advanced Security - New Rule**

**Step 6** On the **Rule Type** page of the New Inbound Rule Wizard, select **Predefined:** as shown in FIGURE 2-35.

**Step 7** Select **FTP Server**, as shown in FIGURE 2-35.

**Step 8** Click **Next**.



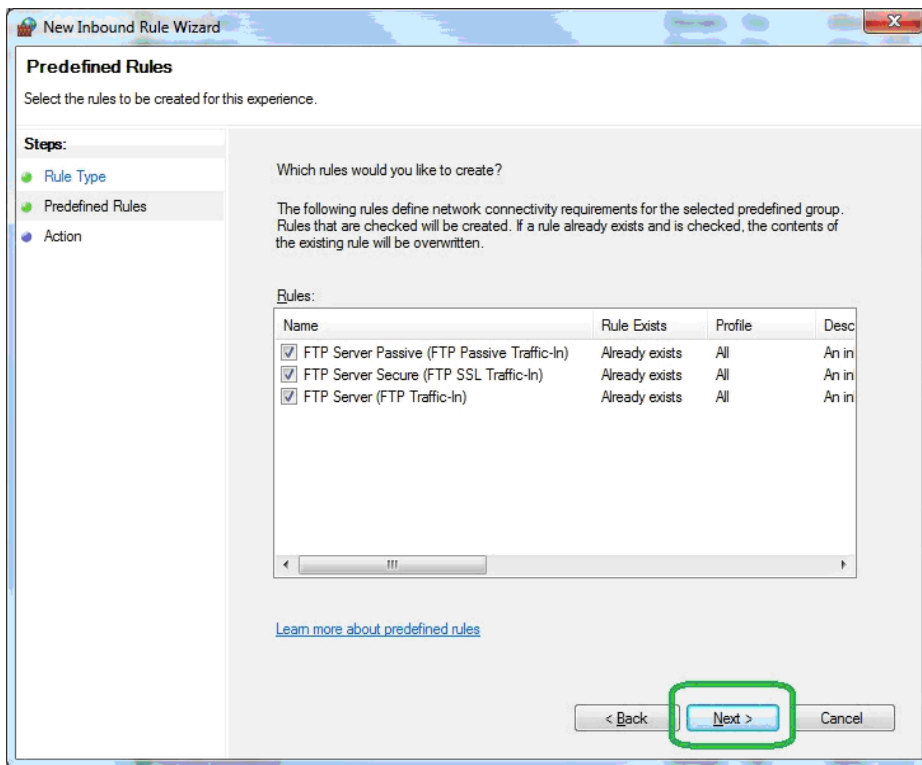
**FIGURE 2-35 Windows Firewall - New Inbound Rule Wizard - Predefined (FTP Server)**

**Step 9** On the **Predefined Rules** page, select **FTP Server Passive (FTP Passive Traffic-In)**, as shown in FIGURE 2-36.

**Step 10** Select **FTP Server Secure (FTP SSL Traffic-In)**, as shown in FIGURE 2-36.

**Step 11** Select **FTP Server (FTP Traffic-In)**, as shown in FIGURE 2-36.

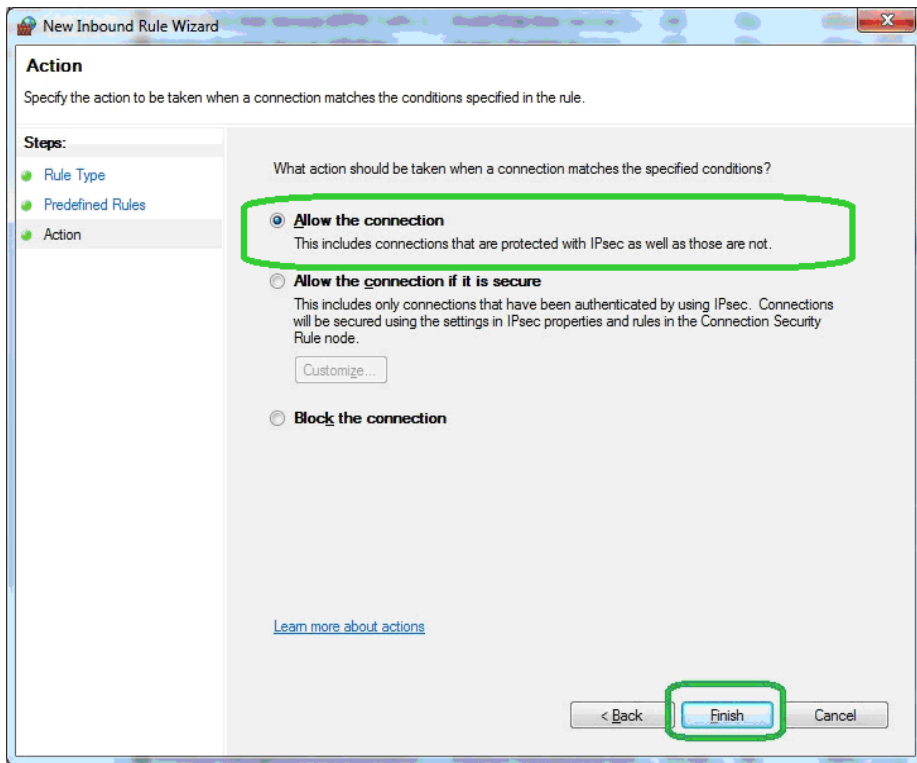
**Step 12** Click **Next**.



**FIGURE 2-36 Windows Firewall - New Inbound Rule Wizard - FTP Rules**

**Step 13** On the Action page, select **Allow the connection**, as shown in FIGURE 2-37.

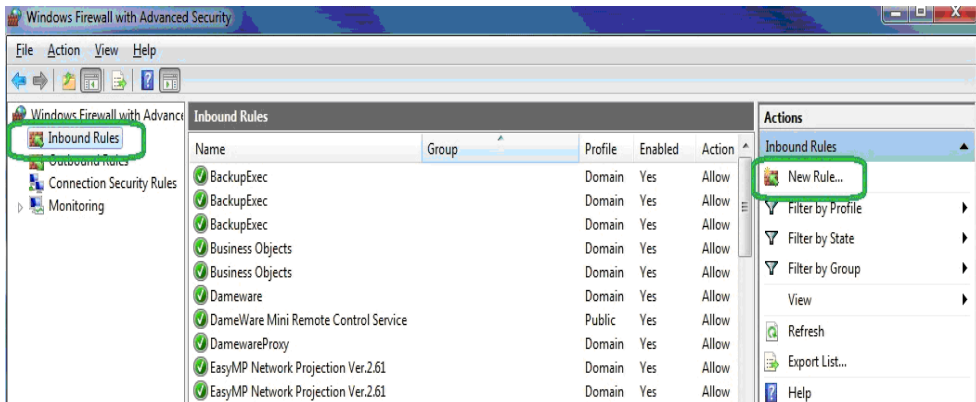
**Step 14** Click **Finish**.



**FIGURE 2-37 Windows Firewall - New Inbound Rule Wizard - FTP (Allow the connection)**

**Step 15** On the Windows Firewall with Advanced Security screen, click **Inbound Rules**, as shown in FIGURE 2-38.

**Step 16** Click **New Rule...**, as shown in FIGURE 2-38.

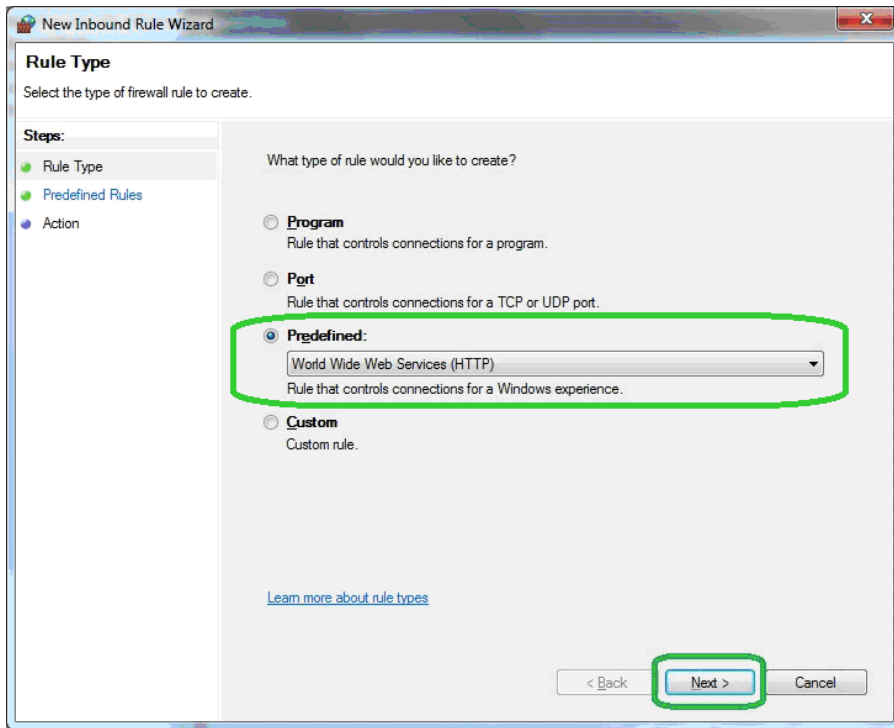


**FIGURE 2-38 Windows Firewall with Advanced Security - New Rule**

**Step 17** On the **Rule Type** page, select **Predefined**;, as shown in FIGURE 2-39.

**Step 18** Select **World Wide Web Services (HTTP)**, as shown in FIGURE 2-39.

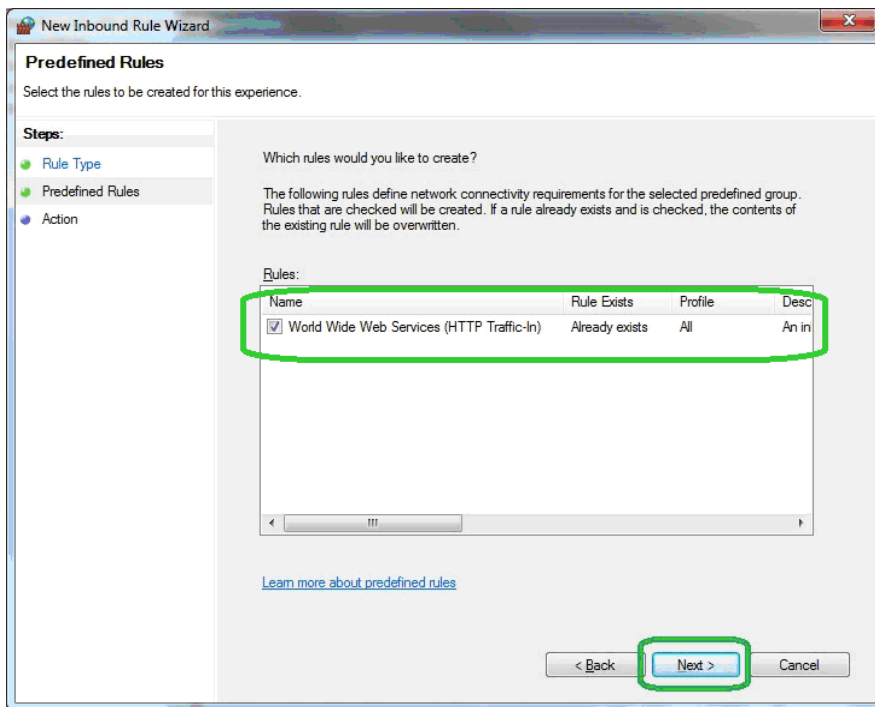
**Step 19** Click **Next**.



**FIGURE 2-39 Windows Firewall - New Inbound Rule Wizard - Predefined (World Wide Web)**

**Step 20** On the **Predefined Rules** page, select **World Wide Web Services (HTTP Traffic-In)**, as shown in FIGURE 2-40.

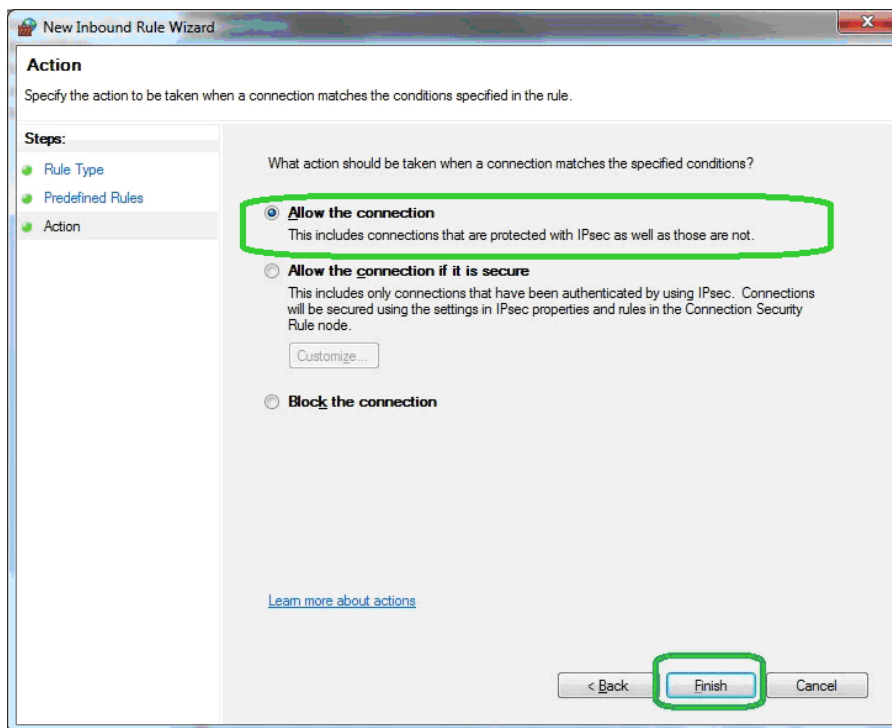
**Step 21** Click **Next**.



**FIGURE 2-40 Windows Firewall - New Inbound Rule Wizard - Rule (World Wide Web)**

**Step 22** On the **Action** page, select **Allow the connection**, as shown in FIGURE 2-41.

**Step 23** Click **Finish**.



**FIGURE 2-41 Windows Firewall - New Inbound Rule Wizard - Allow the Connection**

**Step 24** Close the Windows Firewall with Advanced Security screen.

**Step 25** Close the Windows Firewall.

---

## Verifying Access to FTP Servers

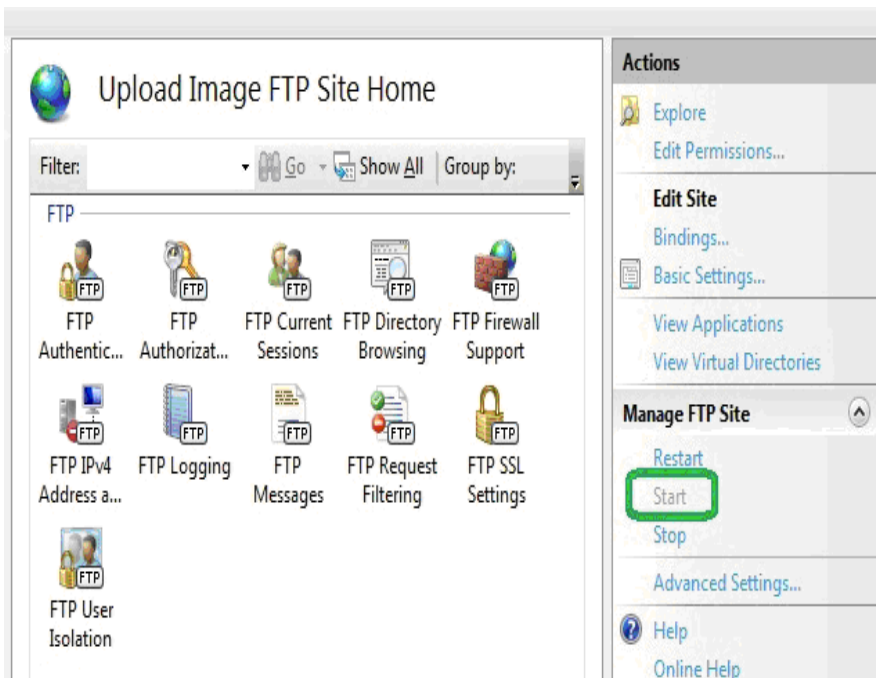
---

### Local Access

---

Verify your access to the FTP server from your server (local), by following these steps:

**Step 1** Make sure the FTP server is running. Click **Start** in IIS if it is not, as shown in FIGURE 2-42.



**FIGURE 2-42 IIS Manager - FTP Server Running**

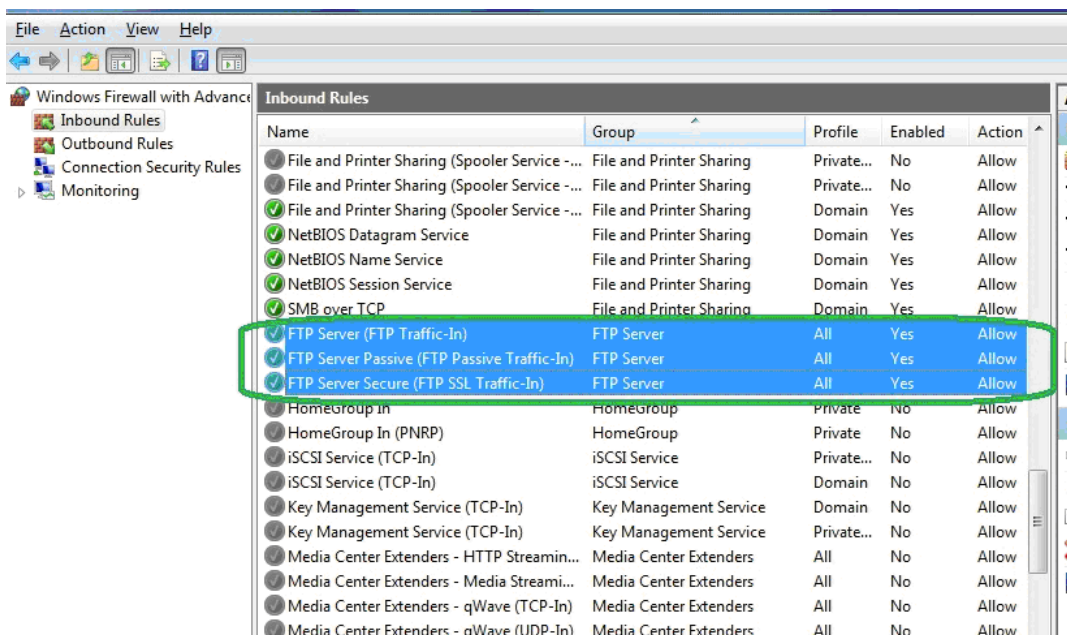
**Step 2** Verify that the user name and password are valid for the server. If not, use the user name and password supplied by the administrator, or add the user name and password to a user account for the server machine.

## Local Network Access

Verify your access to the FTP server from another machine on the same network, by following these steps:

**Step 1** Follow the steps for verifying that your server can access the FTP server.

**Step 2** Verify that the FTP server's firewall allows FTP traffic, as shown in FIGURE 2-43.



**FIGURE 2-43 Windows Firewall with Advanced Security - FTP Services Allowed**

**Step 3** Type your IP address into the address bar of your browser. Verify that the browser loads correctly, as described in the following section.

## Public Access

*If you have a public FTP firewall on your network, you will need help from your network administrator.*

*The FTP site address must be publicly accessible to receive data.*

Verify your access to the FTP server from another network (public), by following these steps:

**Step 1** Follow instructions in Accessing FTP server from another machine on the same network.

**Step 2** Verify that the router has port forwarding or port triggering rules for the FTP port, as shown in FIGURE 2-44.

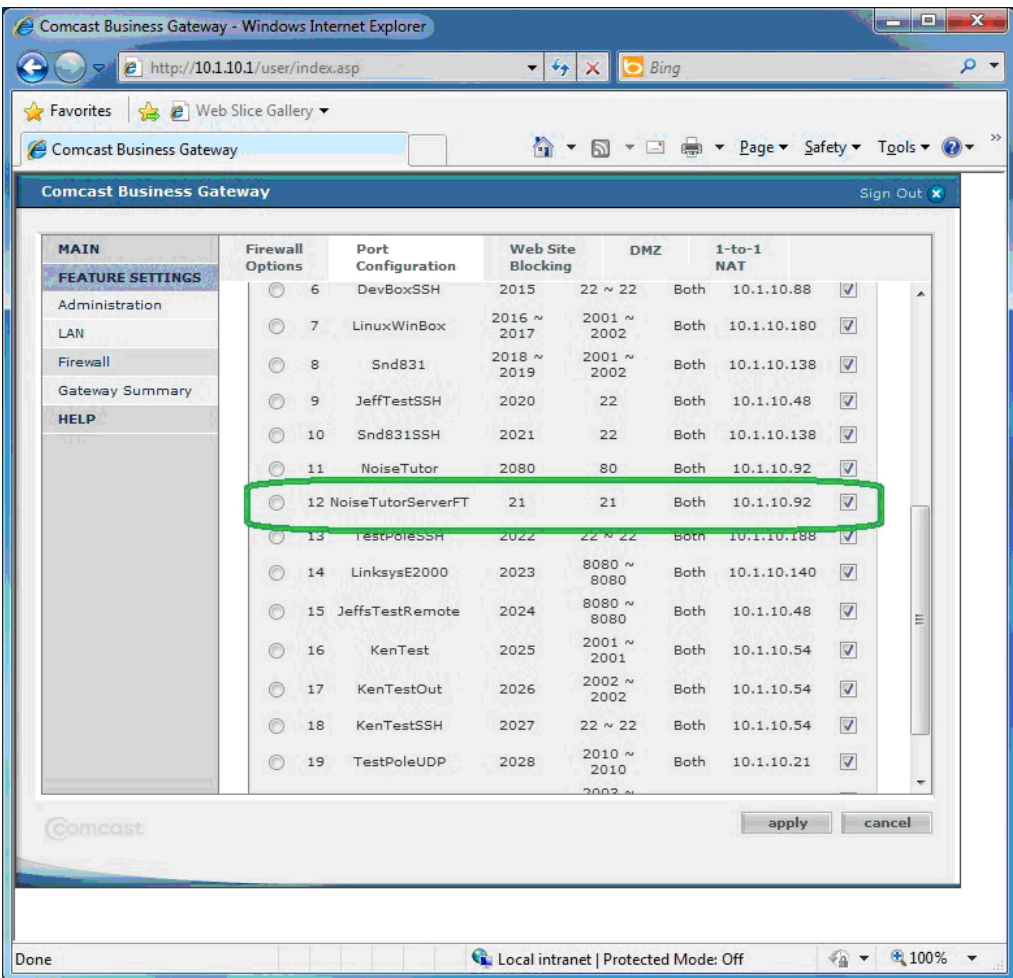


FIGURE 2-44 Router Port Forwarding - FTP Service

## Verifying Browser Connections

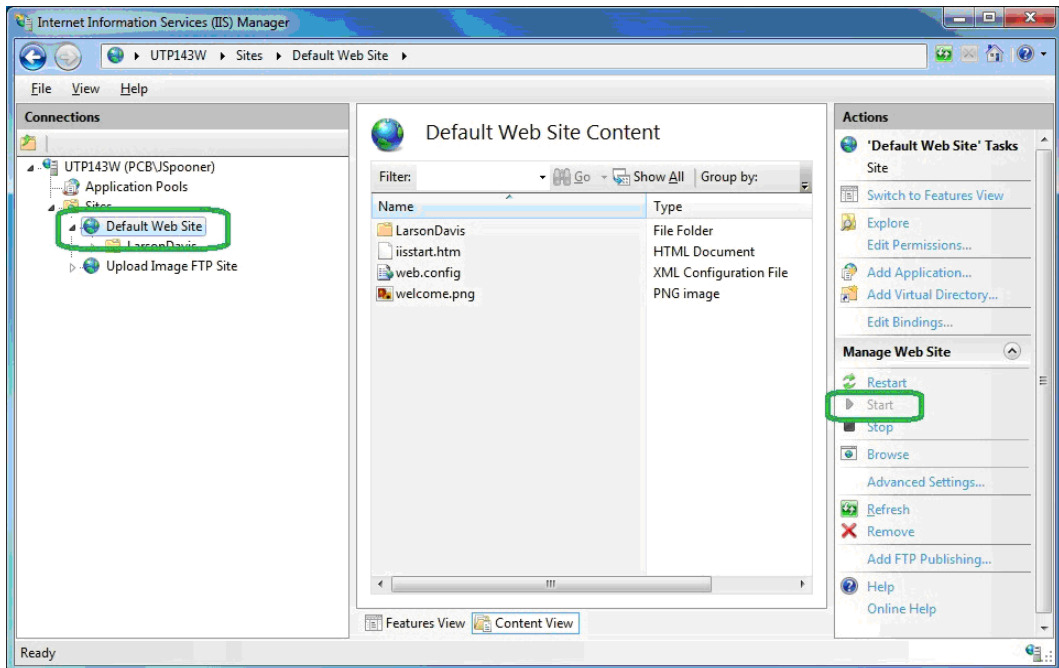
To verify your browser is connected and loads correctly, follow these steps.

**Step 1** Verify that the website is available on the web server.

**Step 2** Open Internet Explorer.

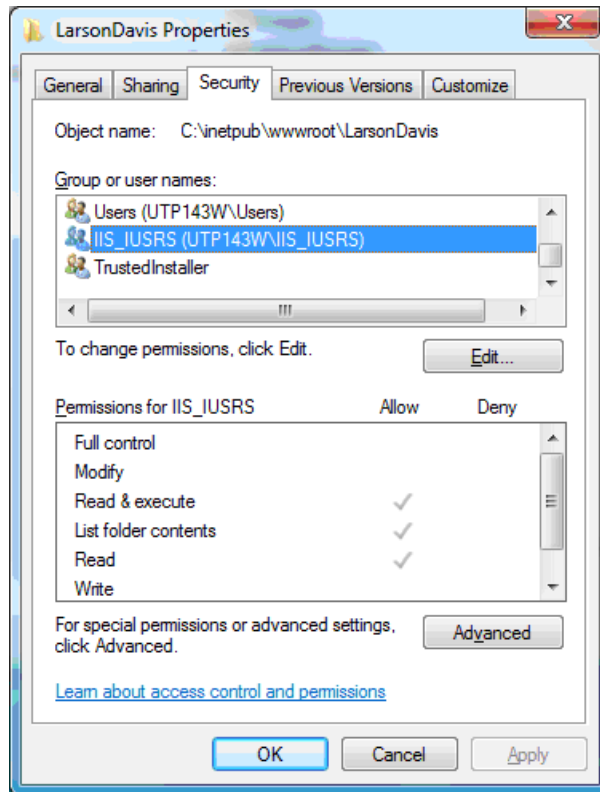
**Step 3** In the address bar, type **http://localhost/LarsonDavis/index.html**.

**Step 4** If the main web page does not appear, verify that the web service is running. Click Start in IIS if it is not, as shown in FIGURE 2-45.



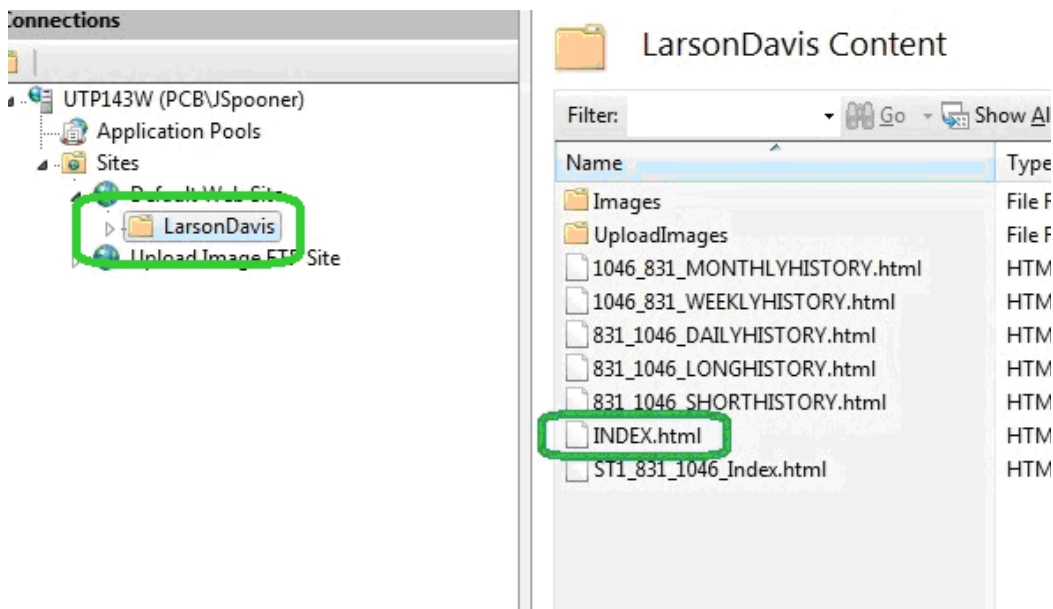
**FIGURE 2-45 IIS Manager - Website Running**

**Step 5** Verify that the proxy user or supplied user has read access permissions, as shown in FIGURE 2-46. If not, grant read access to the proxy user or supplied user.



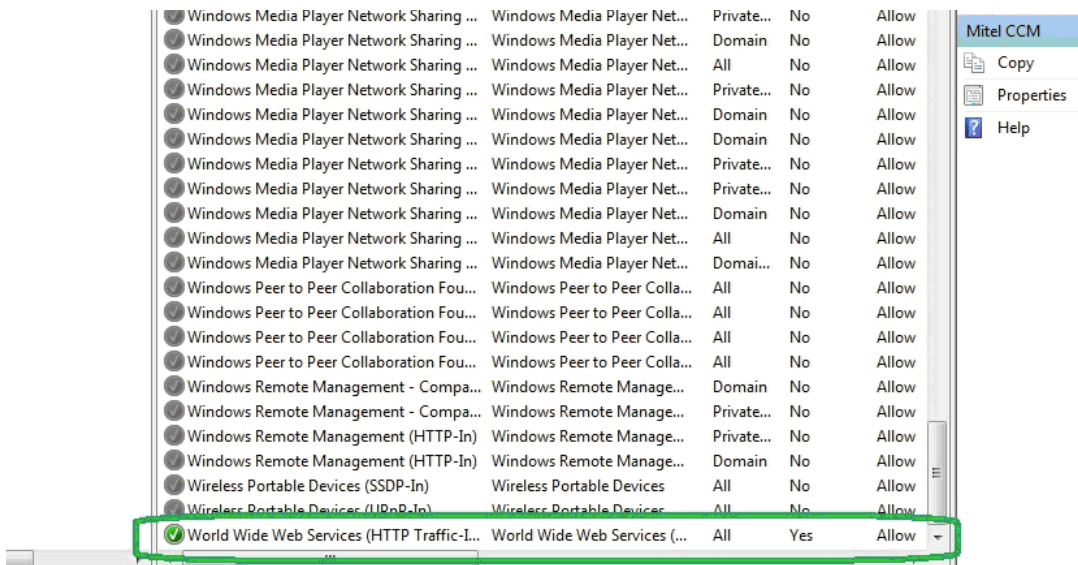
**FIGURE 2-46 Larson Davis Properties - Web User Access Rights**

**Step 6** Verify that the file **index.html** is located in the virtual directory, as shown in FIGURE 2-47. If not, run **ConfigurationTool.exe** again.



**FIGURE 2-47 IIS Manager - Index.html Present**

**Step 7** To ensure access to your web site from another computer, verify that the server's firewall allows traffic through the web site port (Default 80), as shown in FIGURE 2-48. Change the firewall if needed.



**FIGURE 2-48 Windows Firewall With Advanced Security - World Wide Web**

*If your web server does not have a public IP address, you will need to configure your routers for access. Consult with your organization's IT professional for help.*

**Step 8** To ensure access to your website from the Internet (and not just your local network), verify that the router has port forwarding or port triggering rules for your web site.



## Installation and Set-up

The Noise Tutor System reports and transmits sound level data directly to web-servers or e-mail inboxes. This provides increased accessibility and versatility to Larson Davis sound level meters. To set up the system, complete the following steps:

1. Install the NoiseTutor software.
2. Start the NoiseTutor System.
3. Install the NoiseTutor System license.
4. Set up data transmission.

The procedures for installation and set up are described in the following sections.

---

### Installing NoiseTutor Software

---

**Important:** *The NoiseTutor software comes pre-installed when NoiseTutor is purchased as a system. If you purchased a system, skip to the following section, “Starting the NoiseTutor System.”*

If your NoiseTutor station was not purchased as part of a system, or if for some other reason you need to install the NoiseTutor software, insert the CD into your station computer (not the server computer) and follow the instructions on the installation wizard.

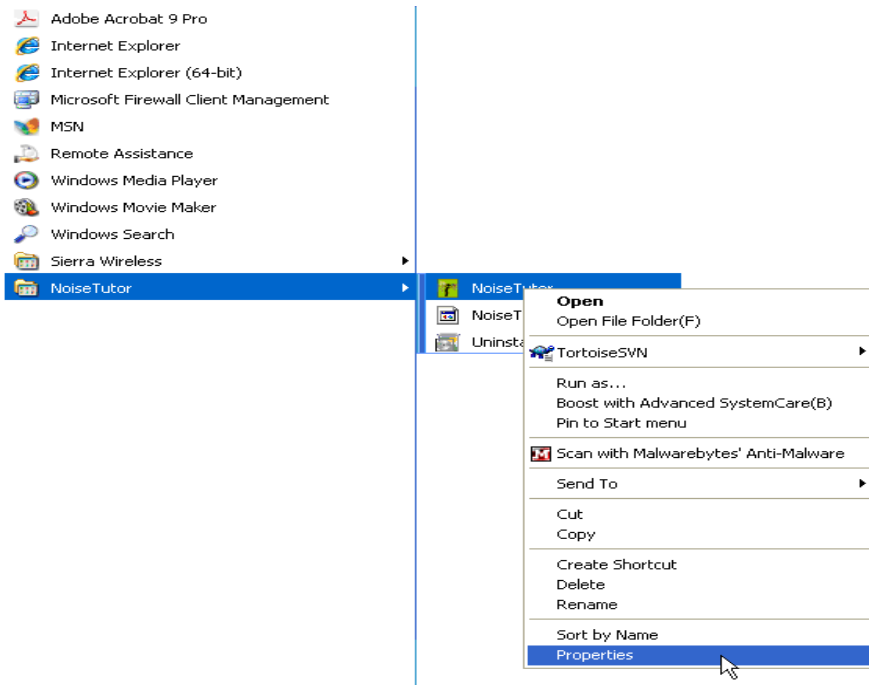
During the setup process, a link to the NoiseTutor System is created in the Startup folder of Windows. As a result, the NoiseTutor software runs every time Windows is started. It also enables the NoiseTutor System to automatically restart Windows without user intervention.

The link to the Windows Startup folder starts the NoiseTutor System as a program, but it does not automatically start monitoring operations. If Windows is restarted while the NoiseTutor System is opened and running (see Main Commands), the program stores the previous state, and upon restart it reactivates the monitoring operations.

If you want the monitoring operations to start automatically each time Windows starts up, follow these steps:

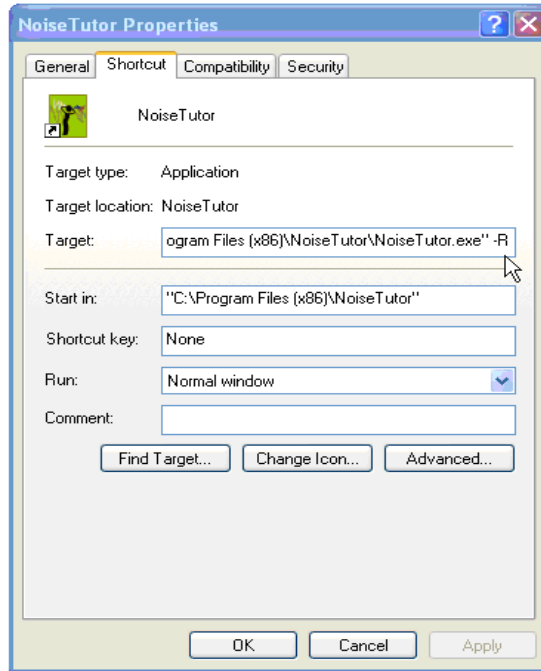
**Step 1** Browse to the NoiseTutor link in the Windows Startup folder.

**Step 2** Right-click the NoiseTutor icon and click Properties, as shown in FIGURE 3-1.



**FIGURE 3-1 NoiseTutor Application Properties Access**

**Step 3** In the **Target** field, replace **C:\Program Files\NoiseTutor\NoiseTutor.exe** with **C:\ProgramFiles\NoiseTuto\NoiseTutor.exe -R**, as shown in FIGURE 3-2.



**FIGURE 3-2 NoiseTutor Properties Window**

## Starting the NoiseTutor Station

*Refer to the NoiseTutor Quick Start Guide and the NoiseTutor Installation Reference on the inside of the NoiseTutor System case to set up your hardware.*

*Note: Slide the keyboard switch to **OFF** when not in use.*

With the necessary hardware installed, follow these steps to start the NoiseTutor System:

- Step 1** Press the black power switch to start the system.
- Step 2** Press the monitor power button to activate the display.
- Step 3** Remove the keyboard and slide the keyboard switch to **ON**.
- Step 4** When prompted, enter your specified password to access Windows, or enter the default password, **12345**, as the hint **1-5** suggests. The NoiseTutor application automatically starts along with the Sierra Wireless Watcher network connection utility.

**Step 5** Click **Connect** in the network utility to connect to a cell network.

**Step 6** When the Sierra Wireless utility has connected to the cell network, minimize the utility.

---

## Installing NoiseTutor System Licenses

---

*Your license may be pre-installed if you receive a new analyzer as part of your NoiseTutor station.*

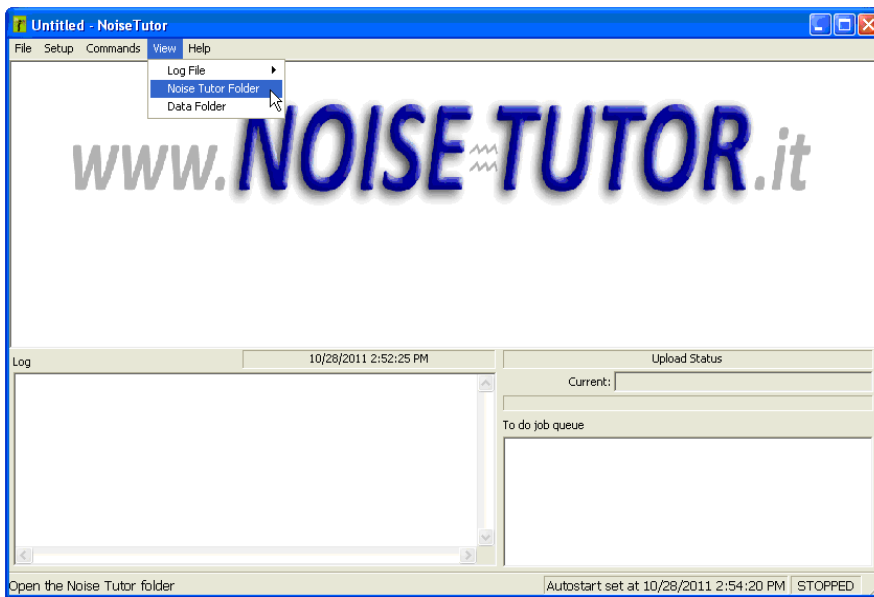
*If you received the license file as a zipped file, remember to unzip it first. Otherwise, NoiseTutor will not recognize it as a license file.*

The NoiseTutor station requires an activation license in order to be used. The license is based on the model and serial number of the analyzer. Please contact PCB Technical Support to obtain license files. To install the license file, copy the license file to the NoiseTutor folder. The location of the NoiseTutor folder depends on the version of Windows you are using. To install the license file, follow these steps:

**Step 1** Copy the license file you receive from PCB to your clipboard.

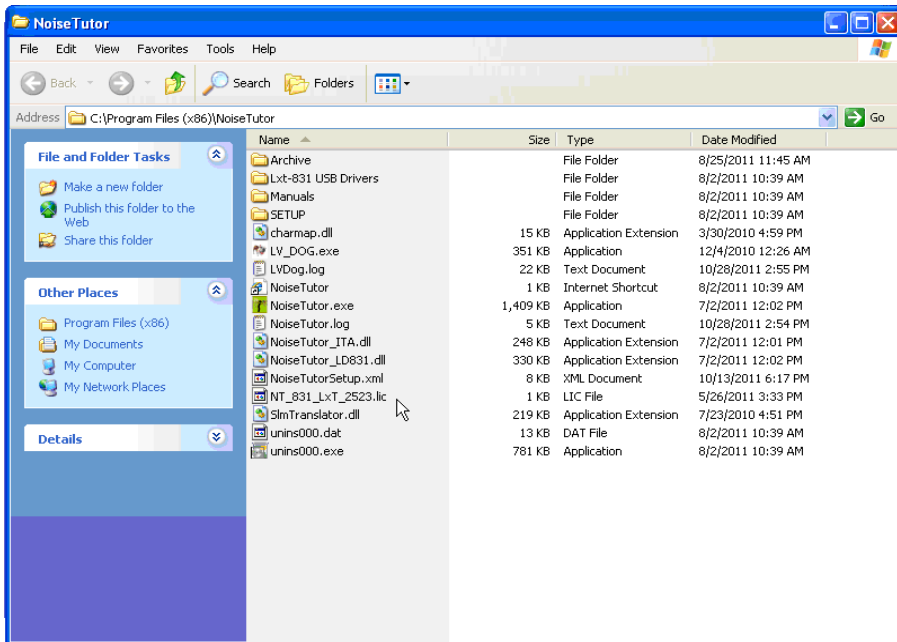
**Step 2** Launch the NoiseTutor Software.

**Step 3** From the **View** menu, click **NoiseTutor Folder**, as shown in FIGURE 3-3.



**FIGURE 3-3 NoiseTutor Folder Access**

**Step 4** Paste the license file into NoiseTutor folder, as shown in FIGURE 3-4.



**FIGURE 3-4 NoiseTutor Folder**

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## Setting up Data Transmission

---

You can set-up the remote delivery of collected sound level data via the following methods:

*All of these methods can be used simultaneously, if desired.*

- Deliver data files via e-mail.
- Deliver data files to an FTP site.
- Create and deliver graphical reports via e-mail.
- Create and publish graphical reports to a web site.

---

### Deliver Data Files via E-mail

---

To send sound level data to an e-mail address, follow these steps:

**Step 1** Specify the Working Mode. On the **Setup** menu, click **Working mode** and then click either **Data File** or **Data File + Realtime Reports**. The **Data File** option configures NoiseTutor to e-mail only data files; the **Data File + Realtime Reports** option configures NoiseTutor to deliver both data files and graphical reports via e-mail.

**Step 2** On the **Setup** menu, click **Main Setup**.

**Step 3** Select the **zip files before sending to mail or ftp** option to send compressed files. Zipping files is recommended.

**Step 4** In the **SMTP** section, enter the SMTP mail server address and the e-mail address to be used to send data files, as shown in FIGURE 3-5.

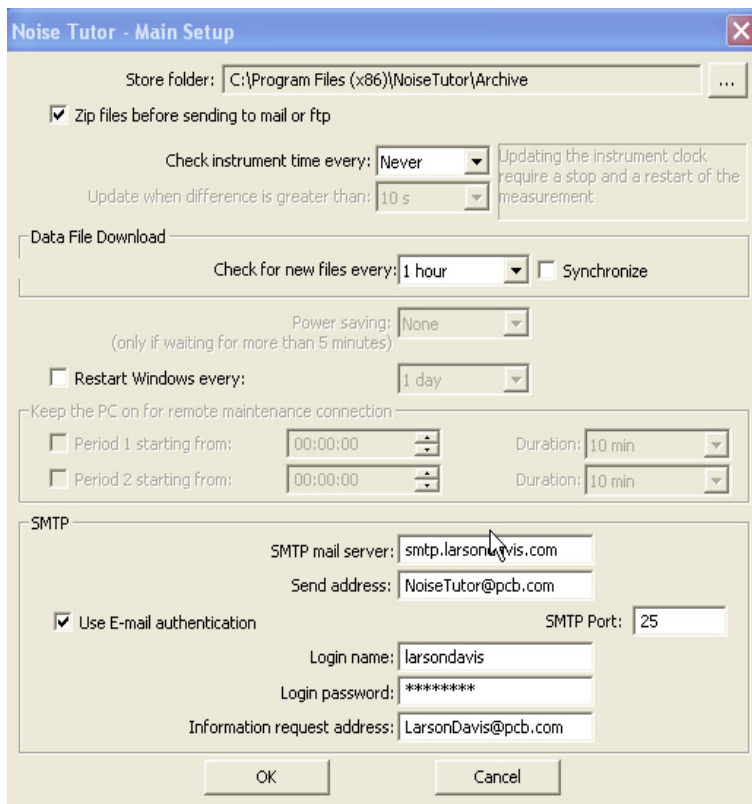
**Step 5** Specify the SMTP port for the SMTP mail server.

**Step 6** Select the Use e-mail authentication option, if appropriate.

**Step 7** Type your login name and password if server authentication is selected.

**Step 8** In the **Information request address** field, type the e-mail address of the designated personnel to handle data inquiries, as shown in FIGURE 3-5.

**Step 9** Click OK.



The image shows the 'Noise Tutor - Main Setup' dialog box. It has a title bar with a close button. The main area contains several sections: 'Store folder' with a text box showing 'C:\Program Files (x86)\NoiseTutor\Archive' and a browse button; a checked checkbox 'Zip files before sending to mail or ftp'; 'Check instrument time every' set to 'Never' and 'Update when difference is greater than' set to '10 s'; a 'Data File Download' section with 'Check for new files every' set to '1 hour' and an unchecked 'Synchronize' checkbox; 'Power saving' set to 'None' with a note '(only if waiting for more than 5 minutes)'; 'Restart Windows every' set to '1 day' with an unchecked checkbox; 'Keep the PC on for remote maintenance connection' with two periods, each starting at '00:00:00' and lasting '10 min'; and an 'SMTP' section with 'SMTP mail server' as 'smtp.larsondavis.com', 'Send address' as 'NoiseTutor@pcb.com', a checked 'Use E-mail authentication' checkbox, 'SMTP Port' as '25', 'Login name' as 'larsondavis', 'Login password' as '\*\*\*\*\*', and 'Information request address' as 'LarsonDavis@pcb.com'. At the bottom are 'OK' and 'Cancel' buttons.

**FIGURE 3-5 Main Setup**

## Add E-mail Recipient Lists

---

To add a recipient list, follow these steps:

**Step 1** On the **Setup** menu, click **Recipient Lists**.

**Step 2** In the **List name** field on the **Recipient Lists** box, type the name of the recipient list, as shown in FIGURE 3-6.

**Step 3** In the **Recipient list** field, type the e-mail addresses of the recipients for your list, as shown in FIGURE 3-6.

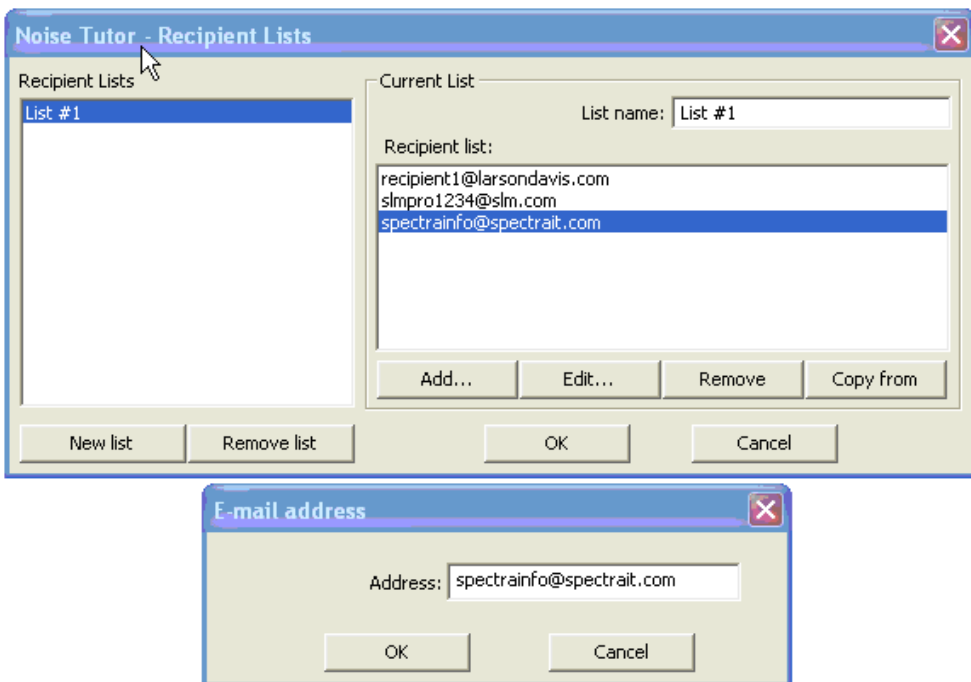
**Step 4** Click the **New List** button to create additional recipient lists, as shown in FIGURE 3-6.

**Step 5** In the **Recipient Lists** field, select the name of the list and click **Add...**

**Step 6** In the **Address** field of the **E-mail address** box, type the e-mail address of an e-mail data file recipient, as shown in FIGURE 3-6.

**Step 7** Click **OK** to add the recipient.

**Step 8** Repeat the previous steps for additional recipient e-mail addresses.



**FIGURE 3-6 Recipient List Set-up**

## Specifying E-mail Settings for Data Files

---

To specify e-mail settings for data files, follow these steps:

**Step 1** On the **Setup** menu, click **Data File**, and then click **E-mail 1...**, as shown in FIGURE 3-7.

**Step 2** Select **Enable E-mail data file ...**, as shown in FIGURE 3-7.

**Step 3** In the **Recipients list** box, select the recipient list to which the sound level data will be sent, as shown in FIGURE 3-7.

**Step 4** In the **Subject** box, type the subject.

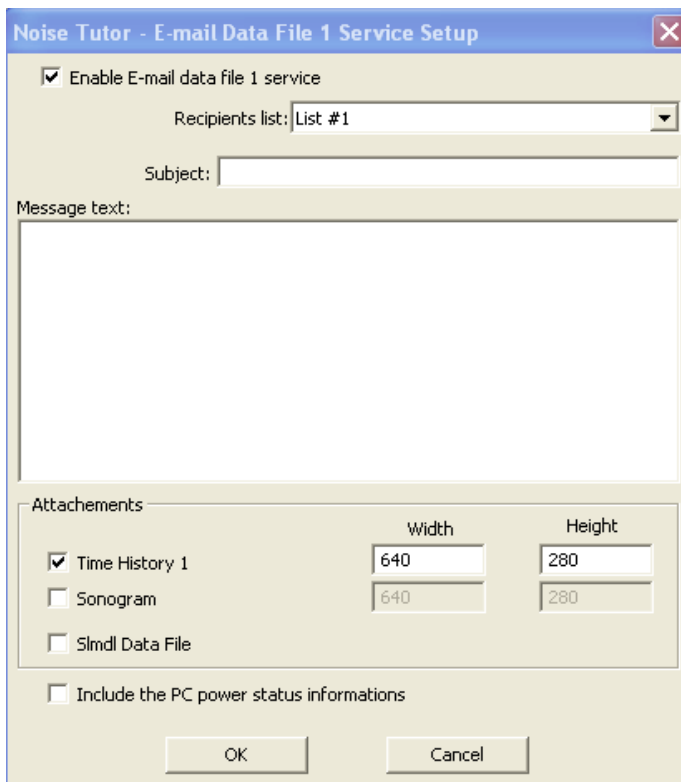
**Step 5** In the **Message text** box, type the e-mail message.

**Step 6** In the **Attachments** section, select the desired graphic report attachment options to include in the e-mail, as shown in FIGURE 3-7.

**Step 7** Specify the height and width dimensions for the graphs in the attachments, as shown in FIGURE 3-7.

**Step 8** Select the **Include the PC power status information** option, if desired.

**Step 9** Click **OK**.



**FIGURE 3-7 E-mail Settings for Data Files**

**Step 10** Verify that **Internet Upload** on the **Commands** menu is checked.

**Step 11** Configure other NoiseTutor data transmission options and begin taking sound level data by clicking **Start** on the **Commands** menu.

## **Deliver Data Files to an FTP Site**

---

To deliver sound level data to an FTP site, follow these steps.

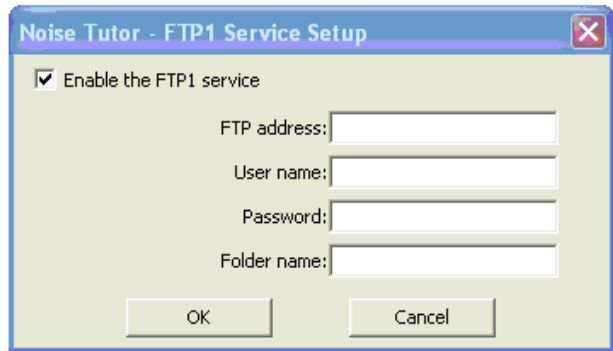
*If you have a public FTP firewall on your network, you will need help from your network administrator.*

**Step 1** Specify the Working mode. On the **Setup** menu, click **Working mode** and then click either **Data File** or **Data File + Realtime Reports**. The **Data File** option configures NoiseTutor to deliver only data files to FTP

sites; the **Data File + Realtime Reports** option allows both FTP data file delivery and real-time report e-mail and web publishing features.

**Step 2** On the **Setup** menu, click **Data File** and then click **FTP 1...**

**Step 3** On the **FTP1 Service Setup** box, select the **Enable the FTP1** service option, as shown in FIGURE 3-8.



**FIGURE 3-8 FTP Transfer Set-up**

*The FTP site address must be publicly accessible to receive data.*

*Larson Davis strongly recommends that you specify, select, or accept all defaults for your configuration, as demonstrated in this manual.*

**Step 4** Specify an FTP site address by typing your user IP address or the local host IP address.

**Step 5** Type the default FTP site User name **UploadUser**.

**Step 6** Type an FTP site password.

**Step 7** If you have specified the default values in configuring your server, as shown in this manual, type a forward slash (/) for Folder name. This specifies your virtual directory. Otherwise, type the path to the location you have specified in configuring your server.

**Step 8** Click **OK**.

**Step 9** Verify that **Internet Upload** on the **Commands** menu is checked.

**Step 10** Configure other NoiseTutor data transmission options and begin taking sound level data by clicking **Start** on the **Commands** menu.

## Create and Deliver Graphical Reports via E-mail

---

To deliver graphical reports of sound level data via e-mail, follow these steps:

**Step 1** On the **Setup** menu, click **Main Setup**. Select **Realtime Report** to deliver only graphical reports to a list of e-mail recipients. Select **Data File + Realtime Report** to deliver both data files and graphical reports.

**Step 2** Select the **zip files before sending to mail or ftp** option to send compressed files. Zipping files is recommended.

**Step 3** In the **SMTP** section, enter the SMTP mail server address and the e-mail address to be used to send data files, as shown in FIGURE 3-9.

**Step 4** Specify the SMTP port for the SMTP mail server.

**Step 5** Select the Use e-mail authentication option, if appropriate.

**Step 6** Type your login name and password if server authentication is selected, as shown in FIGURE 3-9.

**Step 7** In the **Information request address** field, type the e-mail address of the designated personnel to handle data inquiries, as shown in FIGURE 3-9.

**Step 8** Click **OK**.

**Noise Tutor - Main Setup**

Store folder: C:\Program Files (x86)\NoiseTutor\Archive ...

☒ Zip files before sending to mail or ftp

Check instrument time every: Never  
Update when difference is greater than: 10 s  
Updating the instrument clock require a stop and a restart of the measurement

**Data File Download**

Check for new files every: 1 hour ☐ Synchronize

Power saving: None  
(only if waiting for more than 5 minutes)

☐ Restart Windows every: 1 day

**Keep the PC on for remote maintenance connection**

☐ Period 1 starting from: 00:00:00 Duration: 10 min

☐ Period 2 starting from: 00:00:00 Duration: 10 min

**SMTP**

SMTP mail server: smtp.larsondavis.com

Send address: NoiseTutor@pcb.com

☒ Use E-mail authentication SMTP Port: 25

Login name: larsondavis

Login password: \*\*\*\*\*

Information request address: LarsonDavis@pcb.com

OK Cancel

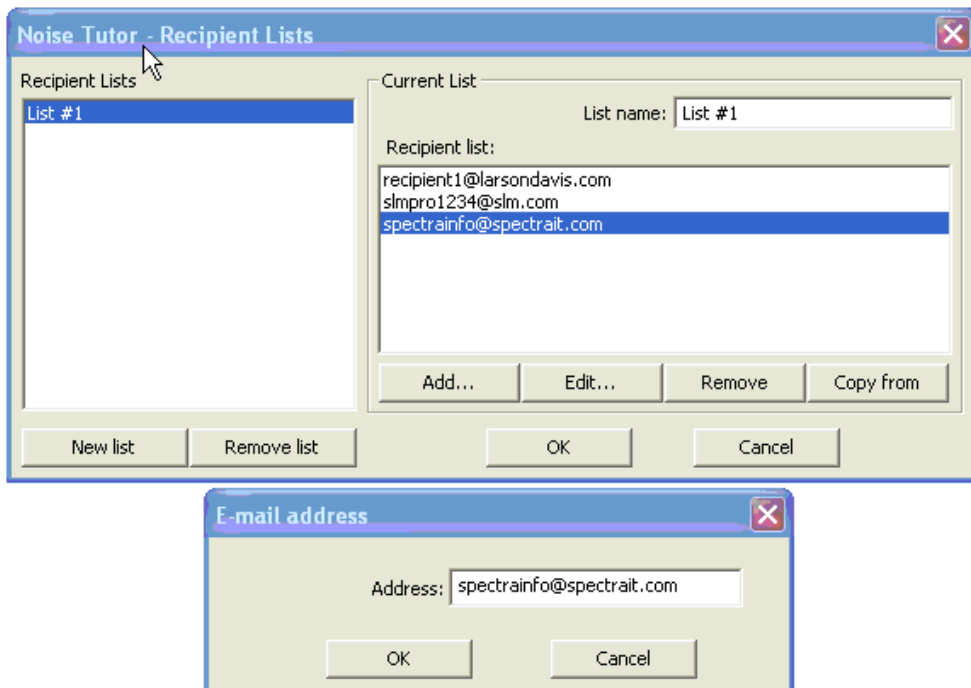
**FIGURE 3-9 Main Setup**

**Step 9** Add a recipient list, as described in the previous section.

**Step 10** On the Setup menu, click **Realtime Report** and then click **E-mail 1...**

**Step 11** Select **Enable E-mail report 1 service**.

**Step 12** In the **Recipients list** box, select the recipient list to which the sound level data will be sent, as shown in FIGURE 3-10.



**FIGURE 3-10 Recipient List Set-up**

**Step 13** In the **Subject** box, type the subject.

**Step 14** In the **Message text** box, type the e-mail message.

**Step 15** In the **Attachments** section, select the desired graphic report attachment options to include in the e-mail.

**Step 16** Specify the height and width dimensions for the graphs in the attachment.

**Step 17** Select the **Include the PC power status information** option, if desired.

**Step 18** Click **OK**.

**Step 19** Verify that **Internet Upload** on the **Commands** menu is checked.

**Step 20** Configure other NoiseTutor data transmission options and begin taking sound level data by clicking **Start** on the **Commands** menu.

## Create and Publish Graphical Reports to Web Site

---

*Note: The NoiseTutor station View menu enables the display of log files, where operations are recorded. It also enables the log of Internet connection statistics, or the logs of debug messages. Such log files can be helpful in debugging wireless modem dial-up connections.*

*Larson Davis strongly recommends that you specify, select, or accept all defaults for your configuration, as demonstrated in this manual.*

To create and publish reports of sound level data to a website, follow these steps:

**Step 1** Create a web site that will accept graphical reports. This can be done using the NoiseTutor Server Configuration Tool located on the NoiseTutor CD.

**Step 2** On the **Setup** menu, click **Working Mode**. Select **Realtime Report** to deliver only graphical reports to a web site. Select **Data File + Realtime Report** to deliver both data files and graphical reports.

**Step 3** On the **Setup** menu, click **Realtime Report** and then click **Web ...**.

**Step 4** On the Web Report Service Setup box, select **Enable the web report service**, as shown in FIGURE 3-11.

**Step 5** Specify a FTP site address by typing your user IP address or the local host IP address.

**Step 6** Type the default FTP site User name **UploadUser**.

**Step 7** Type your FTP site password.

**Step 8** If you have specified the default values in configuring your server, as shown in this manual, type a forward slash (/) for Folder name. This specifies your virtual directory. Otherwise, type the path to the location you have specified in configuring your server.

**Step 9** Click **New...**.

**Step 10** On the **Web Graph** box, select the reports to be published to the website: Either **Time History** or **Sonogram** or both, as shown in FIGURE 3-11.

**Step 11** In the **History** box, select the template of the Time History report, as shown in FIGURE 3-11. Templates can be configured using the Report Set-up menu.

**Step 12** In the **Time Length** box, select the length of the time axis in the graphical reports, as shown in FIGURE 3-11.

**Step 13** In the **Update Every** box, select the update interval, as shown in FIGURE 3-11.

**Step 14** Click **OK**.

**Step 15** Verify that **Internet Upload** on the **Commands** menu is checked.

**Step 16** Configure other NoiseTutor data transmission options and begin taking sound level data by clicking **Start** on the **Commands** menu.

**WARNING!:** Do not change the specification in the **Filename** box. Leave the box exactly as shown in FIGURE 3-11. If you modify this setting, your system will not function correctly.

**Noise Tutor - Web Report Service Setup**

☒ Enable the Web report service

FTP address:

User name:

Password:

Folder name:

| Type | Duration | Update | Width | Height | Filename |
|------|----------|--------|-------|--------|----------|
|------|----------|--------|-------|--------|----------|

New... Edit... Remove Import... Export...

Advanced settings... OK Cancel

**Web Graph**

☒ Time History History:

☐ Sonogram

Time length:

Update every:

Width (pixels):  Height (pixels):

Additional data displayed

☐ Hourly levels ☐ Day/Evening/Night levels

☐ Ldn ☐ Lden

Filename:

File name is the destination name on the ftp server (including any required folder).  
The filename can contain the following wildcards that will be replaced at run time.

%SN% will be replaced by the instrument serial number

%MODEL% will be replaced by the instrument model name

OK Cancel

**FIGURE 3-11 Web Service Report Set-up**

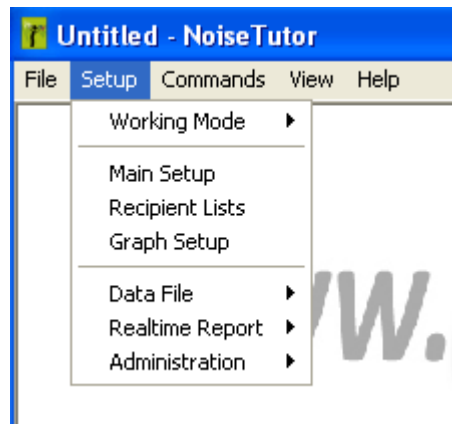


# NoiseTutor Station Setup Menu

This chapter provides information for the commands in the **Setup** menu of the NoiseTutor station, all of which affect data reporting for your system.

*The Setup commands described in this chapter apply to the NoiseTutor station, not the server.*

Figure 4-1 shows the **Setup** menu commands for the NoiseTutor station.



**FIGURE 4-1 Setup Menu Commands**

Table 4-1 lists the commands in the **Setup** menu and describes their basic functions.

| Command                  | Usage  |
|--------------------------|--|
| Working Mode             | Specifies Data File or Realtime Reporting  |
| Main Setup               | Changes main application settings or SMTP server settings                                |
| Recipient Lists          | Defines the recipient lists used in the E-mail service                                   |
| Graph Setup              | Changes the settings of graphs used in E-mail messages for web publishing                |
| Data File (E-mail)       | Changes the settings of graphs used in E-mail messages and for web publishing            |
| Data File (FTP)          | Changes the settings for the FTP upload service used in “Data File” working mode         |
| Realtime Report (E-Mail) | Changes the settings for the e-mail services used in the “Real-time Report” working mode |
| Realtime Report (Web)    | Changes the settings of the web publishing services                                      |
| Administration           | Changes the settings for e-mail messages sent to system administrators                   |

**Table 4-1 Setup Commands and Functions**

## Working Mode

---

The **Working Mode** command provides two options for operating the NoiseTutor station: the **Data File** mode and the **Realtime Report** mode.

The **Data File** working mode downloads the data file from the connected analyzer and sends it by e-mail to a recipient list or uploads it to an FTP site. This is the principal mode. It is usually active as it handles the data measured by the analyzer. It enables the user to automatically receive data through e-mail or through an FTP server. The NoiseTutor station keeps a copy of sent data on the local PC, thereby making a backup copy of the data.

The **Realtime Report** working mode keeps a continuous connection with the instrument, continuously reading the current level measured by the analyzer. It produces a graphical report that can be sent to a recipient list via e-mail or that can be used for web publishing.

It is possible to use both modes simultaneously. In this case, the **Realtime Report** mode is suspended during the data download from the instrument, after which it is then automatically restarted.

## Main Setup

The **Main settings** command can be divided in two logical groups: settings related to the application itself, and settings for the SMTP server. The Main Setup box is shown in FIGURE 4-2. Table 4-2 and Table 4-3 define both the application settings and the SMTP server settings.

Noise Tutor - Main Setup

Store folder: C:\Program Files (x86)\NoiseTutor\Archive

☒ Zip files before sending to mail or ftp

Check instrument time every: Never

Update when difference is greater than: 10 s

Updating the instrument clock require a stop and a restart of the measurement

Data File Download

Check for new files every: 1 hour

☐ Synchronize

Power saving: None

(only if waiting for more than 5 minutes)

☐ Restart Windows every: 1 day

Keep the PC on for remote maintenance connection

☐ Period 1 starting from: 00:00:00 Duration: 10 min

☐ Period 2 starting from: 00:00:00 Duration: 10 min

SMTP

SMTP mail server: smtp.larsondavis.com

Send address: NoiseTutor@pcb.com

☒ Use E-mail authentication

SMTP Port: 25

Login name: larsondavis

Login password: \*\*\*\*\*

Information request address: LarsonDavis@pcb.com

OK Cancel

FIGURE 4-2 Main Setup

| <b>Setting</b>  | <b>Description</b>   |
|---|--|
| Store Folder  | The folder on the local hard-disk where the downloaded files are saved   |
| Zip files before...   | Select this check box to zip the data files before attaching to an e-mail, or uploading to an FTP site.  |
| Check Instrument time   | All supported instruments have an internal clock. Use this field to keep the internal clock synchronized with the PC clock. Checking the clock does not require a stop in measurement. To change the internal clock, the measurement must be stopped and then restarted again after the clock change.  |
| Update when difference is greater than                        | The value in seconds used to check the internal clock. When the difference between internal clock and PC clock is greater than this value, the internal clock is updated.  |
| Data File Download  | Sets the time between two download operations. If the synchronize check box is selected, the download time is synchronized at the specified hour, starting from midnight.  |
| Send the PC to “Standby” when waiting for more than 5 minutes | Enables the PC to enter standby between downloads. This field is disabled if the working mode “Realtime Report” is enabled.  |
| Restart Windows every   | Windows can become unstable if the system operates for long periods of time. With this option, you can reboot the operating system automatically after a specified number of days.   |
| Keep the PC on for remote maintenance                         | This group of parameters enables defining two time periods during the day that the PC must remain turned on, independently of the download time. In this manner, it is possible to remotely connect to the system (using one of the several available) to perform administrative tasks. If you are using a dial-up connection with a wireless modem you may need to set the dial-up software to automatically connect when Windows is started. |

**Table 4-2 Main Setup Application Setting**

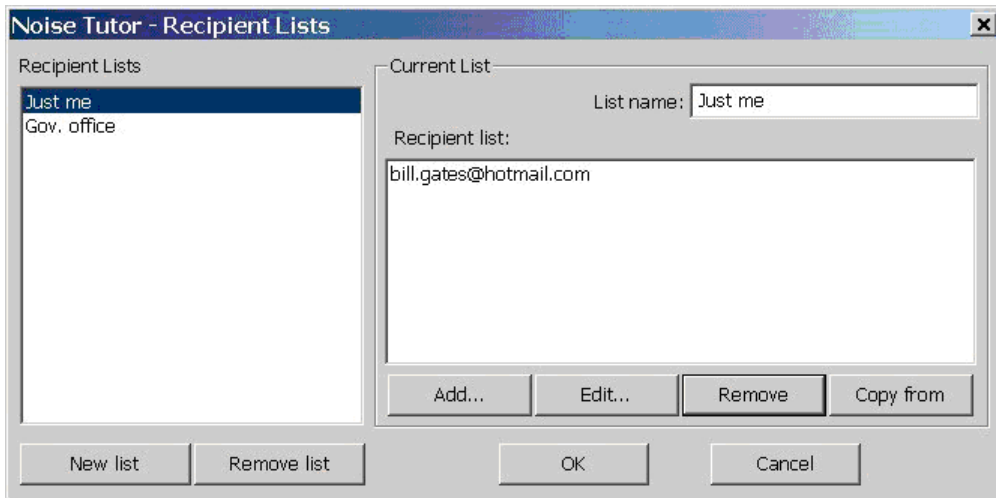
| Setting                   | Description  |
|---------------------------|--|
| SMTP mail server          | The name of the SMTP mail server. Normally this address is provided by the Internet service provider.                                  |
| Use E-mail authentication | Select this option if the mail server requires authentication. If selected, you must also enter the Login name and the Login password. |
| Login name                | Login name for authentication  |
| Login password            | Password required for the authentication   |
| SMTP port                 | Port number to access the SMTP server. Normally it is 25. Do not change this value unless required by the Internet provider.           |
| Information request       | Your name and personal e-mail address. This information is appended to the end of e-mail messages to simplify information requests.    |

**Table 4-3 Main Setup SMTP Server Settings**

## Recipient Lists

---

The **Recipient Lists** command allows you to define the recipient lists for the outgoing e-mails, as shown in FIGURE 4-3. It is possible to define an unlimited number of lists. To enable the use of e-mail services, at least one recipient list must be defined. Click the **New list** button to create a new recipient list. Click the **Remove list** button to delete selected lists. Table 4-4 defines the Recipient List Window Settings.



**FIGURE 4-3 Recipient List**

| Setting        | Description  |
|----------------|--|
| List name      | The name of the list used throughout the program. Two lists cannot have the same name. |
| Recipient list | E-mail addresses specified in the current recipient list                               |
| Add            | Adds a new e-mail address  |
| Edit           | Edits the selected e-mail address  |
| Remove         | Deletes the selected e-mail address  |
| Copy from      | Copies all addresses from another recipient list                                       |

**Table 4-4 Recipient List Editing Controls**

## Graph Setup

---

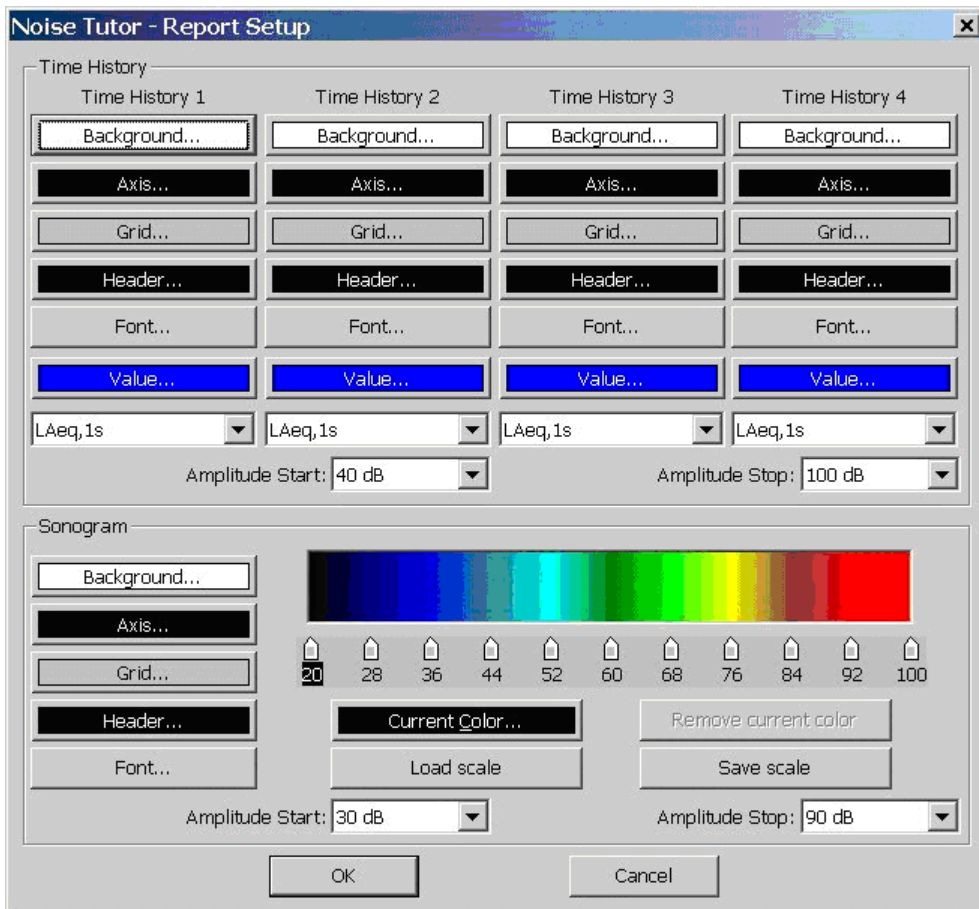
The **Graph Setup** command launches the Report Setup box, where you can customize graphs for reports, e-mail attachments, or the web, as shown in FIGURE 4-4.

You can define up to four time history graphs. For graphs, specify the following:

- Background color
- Axis color
- Grid color
- Header color
- Font color
- Value trace color

The settings for Amplitude Start and Stop are common for all four time histories. Aside from color scale settings, most settings are the same as those for time history.

For sonograms, the color scale settings are marked by a series of key points, where a particular sound level is associated with a specific color. Colors between two key points are calculated by interpolation. Initially, only two key points are defined, but you may add other key points as you like. The key points are represented by markers at the bottom of the color scale. Table 4-5 describes how to edit the key points.



**FIGURE 4-4 Graph Setup**

| Action                          | Description   |
|---------------------------------|---|
| Add a key point                 | Click a place on the key points bar.  |
| Remove a key point              | Select the key point and drag it outside the bar, or select a key point and click on the Remove current color button. |
| Change the level of a key point | Select the key point and drag it with the mouse.  |
| Change the color of a key point | Select the key point and click on the Current color button.   |

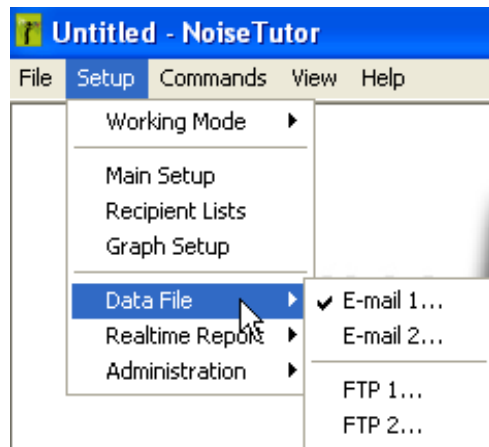
**Table 4-5 Editing Keypoint Instructions**

A color scale can be saved or loaded from a disk using the **Load scale** and **Save scale** buttons.

## Data File

---

The **Data File** command launches setup boxes for delivering reports via e-mail or FTP in the Data File working mode. FIGURE 4-5 shows the **Data File** command options.



**FIGURE 4-5 Data File Setup**

## E-mail Service

The **E-mail 1...** and the **E-mail 2...** options launch the E-mail Report Service Setup box. Only these two e-mail services are provided. The settings are shown in FIGURE 4-6. Table 4-6 describes the settings for this box.

**Noise Tutor - E-mail Report 1 Service Setup**

☒ Enable E-mail report 1 service

Recipients list:

Subject:

Message text::

Send report every:

Graphic report to attach

|  | Width                            | Height                           |
|--|----------------------------------|----------------------------------|
| <input checked="" type="checkbox"/> Time History 1 | <input type="text" value="640"/> | <input type="text" value="280"/> |
| <input type="checkbox"/> Time History 2            | <input type="text" value="640"/> | <input type="text" value="280"/> |
| <input type="checkbox"/> Time History 3            | <input type="text" value="640"/> | <input type="text" value="280"/> |
| <input checked="" type="checkbox"/> Sonogram       | <input type="text" value="640"/> | <input type="text" value="280"/> |

OK Cancel

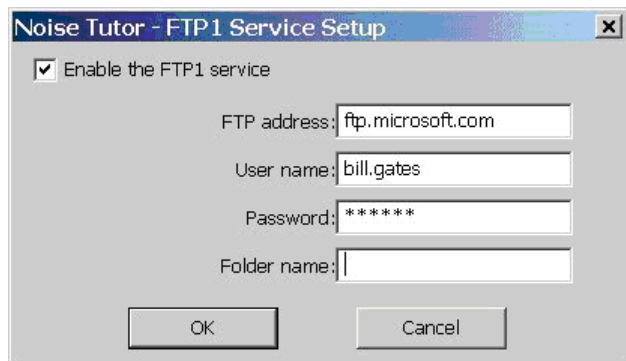
**FIGURE 4-6 “Data File” E-mail setup**

| Setting               | Description  |
|-----------------------|--|
| Enable E-mail service | Enables/Disables e-mail service  |
| Recipients List       | The recipient list for the e-mail service  |
| Subject               | The subject of the message   |
| Message text          | The text of the message. Type messages in such a way that they are not filtered by anti-spam software. |
| Time History 1        | Attaches a time history graph. On the right, specify the JPEG size in pixels.                          |
| Data File             | If selected, the file downloaded from the analyzer is attached to the message.                         |
| Include power status  | Includes information about the power supply status of the PC and of the analyzer in the message text.  |

**Table 4-6 E-mail File Settings**

## FTP Setup Service

The **FTP1...** and **FTP2...** options launch the FTP Service Setup box to setup the FTP upload service, as shown in FIGURE 4-7. Table 4-7 and Table 4-8 show the settings for FTP Service Setup.



**FIGURE 4-7 “Data File” FTP Setup Window**

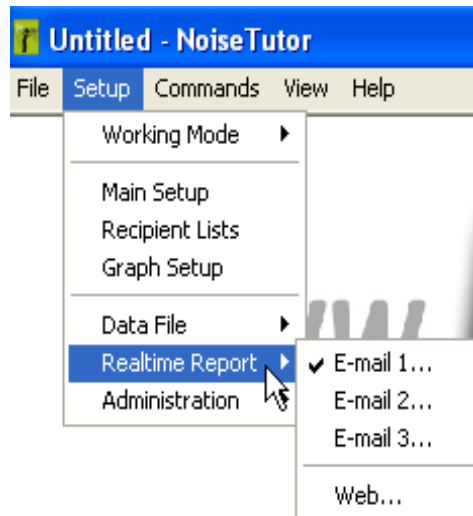
| Setting                | Description   |
|------------------------|---|
| Enable the FTP service | Enables/Disables the FTP service  |
| FTP Address            | The FTP server where the data files are uploaded. It is possible to enter the address either in canonical form (ftp.domain.x) or in numeric form (x.x.x.x). |
| Username               | This is the user name to establish the FTP connection.  |
| Password               | This is the password to establish the FTP connection.   |
| Folder name            | The name of the sub-folder where the data file is copied. If left empty, the files are copied to the root of the FTP site.                                  |

**Table 4-7 FTP Service Settings**

## Realtime Report Setup

---

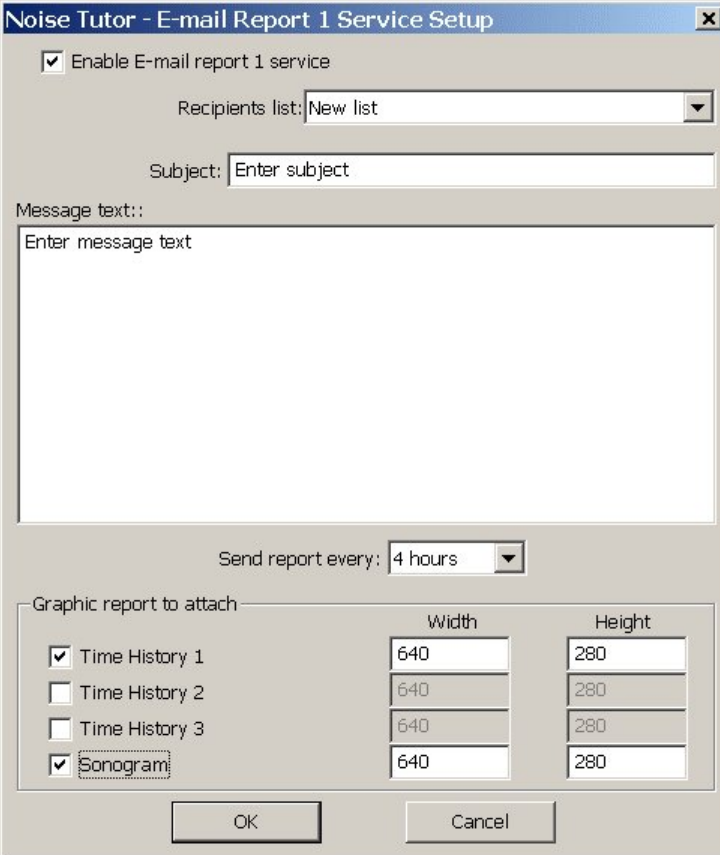
The **Realtime Report** command launches setup boxes for publishing real time reports in e-mail or on the web in the Realtime Report working mode. FIGURE 4-8 shows the **Realtime Report** command options.



**FIGURE 4-8 Realtime Report Setup**

## E-mail Publishing

The **E-mail 1...**, **E-mail 2...**, and **E-mail 3...** options launch the E-mail Report Service Setup box. Three e-mail services are provided, corresponding to the numbers in the command menu. The settings are shown in FIGURE 4-9. Table 4-6 describes the settings for this box. Table 4-8 describes the settings for E-mail Report Service Setup.



The dialog box is titled "Noise Tutor - E-mail Report 1 Service Setup". It contains the following elements:

- ☒ Enable E-mail report 1 service
- Recipients list:
- Subject:
- Message text:
- Send report every:
- Graphic report to attach:

|  | Width | Height |
|--|-------|--------|
| <input checked="" type="checkbox"/> Time History 1 | 640   | 280    |
| <input type="checkbox"/> Time History 2            | 640   | 280    |
| <input type="checkbox"/> Time History 3            | 640   | 280    |
| <input checked="" type="checkbox"/> Sonogram       | 640   | 280    |
- OK button
- Cancel button

**FIGURE 4-9 Realtime Report E-mail Setup Window**

| Setting               | Description  |
|-----------------------|--|
| Enable E-mail Service | Enables/Disables the e-mail service  |
| Recipients list       | The recipients list for the e-mail service   |
| Subject               | The subject of the message   |
| Message text          | The text of the message. Type messages in such a way that they are not filtered by anti-spam software. |
| Send report every     | Determines when the report message is sent   |
| Time History 1        | Attaches a time history graph. On the right, specify the JPEG size in pixels.                          |
| Time History 2        | Attaches a time history graph. On the right, specify the JPEG size in pixels.                          |
| Time History 3        | Attaches a time history graph. On the right, specify the JPEG size in pixels.                          |
| Sonogram              | Attaches a sonogram graph. On the right, specify the JPEG size in pixels.                              |

**Table 4-8 Realtime Report Settings**

## Web Publishing

*By configuring your server with default values with the Configuration Tool, as described in the chapter **Setting Up the NoiseTutor Server**, your graphs will be linked to web pages and be displayed within the pages. If you do not configure your server and station with default values, your IT professional will need to provide custom configuration to display your graphs on web pages.*

The **Web...** option launches the Web Report Service Setup box, as shown in FIGURE 4-10. The Web Report Service creates a JPEG format image—with a graph based on real-time data—and uploads it to the FTP site associated with the web site. The graph is then published on the web site.

**Noise Tutor - Web Report Service Setup**

☒ Enable the Web report service

FTP address:

User name:

Password:

Folder name:

| Type               | Duration | Update | Width | Height | Filename                |
|--------------------|----------|--------|-------|--------|-------------------------|
| TH(LAeq,1s) + Sono | 1 hour   | 5 min  | 640   | 400    | %SN%_%MODEL%_H1_1H.jpg  |
| TH(LAeq,1s) + Sono | 1 day    | 1 hour | 640   | 400    | %SN%_%MODEL%_H1_24H.jpg |
| TH(LAeq,1s) + Sono | 5 min    | 10 sec | 640   | 400    | %SN%_%MODEL%_RT_5M.jpg  |

**FIGURE 4-10 Web Publishing Setup**

| Setting                       | Description  |
|-------------------------------|--|
| Enable the Web Report Service | Enables/Disables Web Report service  |
| FTP Address                   | The FTP server where the data file must be uploaded. It is possible to enter the address either in canonical form (ftp.domain.x) or in numeric form (x.x.x.x). |
| Username                      | The user name to establish the FTP connection  |
| Password                      | The password to establish the FTP connection   |
| Folder name                   | The name of the sub folder where the data file is copied. If left empty, the files are copied to the root of the FTP site.                                     |
| New                           | Adds a new graph to the list   |
| Edit                          | Edits the graph to the list  |
| Import/Export                 | Moves the web graph setup from one station to another  |
| Advanced settings             | Opens the Advanced Settings window. This window displays the settings required to publish a graph on your site.  |

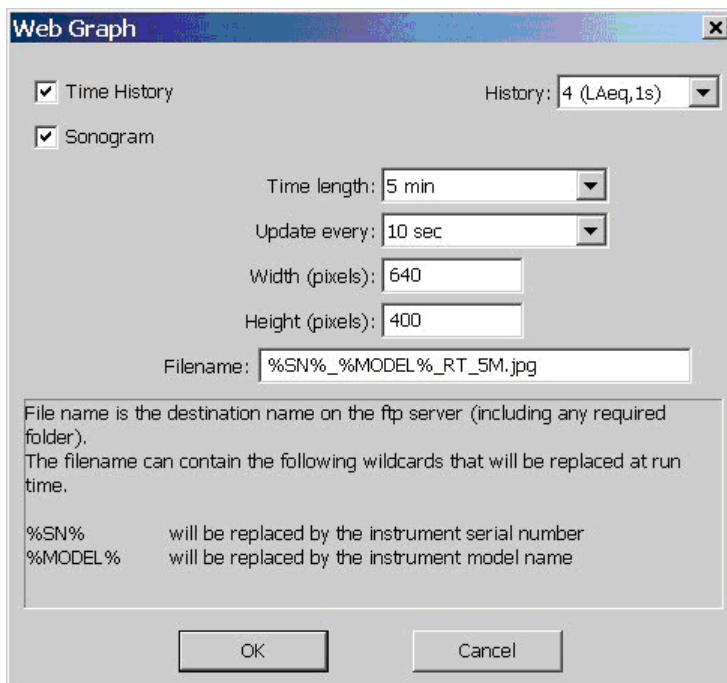
**Table 4-9 Web Publishing Settings**

Clicking the **New** button or **Edit** button on the Web Report Service Setup box launches the Web Graph box, as shown in FIGURE 4-11.

**WARNING!** Do not change the file name specified in the Web Graph box. The NoiseTutor station automatically populates this field.

Leave the name exactly as it is provided by the station, unless your IT professional is providing a custom configuration. Otherwise, if you modify this setting, your web publishing will not function correctly.

In the Web Graph box, you can specify that a single JPEG include a time history or a sonogram, or both. Do not change the file name. Wild cards are useful to distinguish JPEG names based on the model and serial number when the same web site is publishing data from more than one monitoring station. Table 4-10 describes the JPEG settings.



The image shows a 'Web Graph' dialog box with the following settings:

- ☒ Time History: History: 4 (LAeq, 1s)
- ☒ Sonogram
- Time length: 5 min
- Update every: 10 sec
- Width (pixels): 640
- Height (pixels): 400
- Filename: %SN%\_%MODEL%\_RT\_5M.jpg

File name is the destination name on the ftp server (including any required folder).  
The filename can contain the following wildcards that will be replaced at run time.

|         |  |
|---------|--|
| %SN%    | will be replaced by the instrument serial number |
| %MODEL% | will be replaced by the instrument model name    |

Buttons: OK, Cancel

**FIGURE 4-11 Web Graph Setup**

| Setting      | Description  |
|--------------|--|
| Time History | Includes a time history in the JPEG. On the right, specify one of the four available templates to be used.                               |
| Sonogram     | Includes a sonogram in the JPEG  |
| Time length  | Determines the length of the time axis. Independently of the axis length, the graphs display the last captured data.                     |
| Update every | Sets the update time interval. To keep the internet traffic manageable, select this value proportionally to the length of the time axis. |
| Width/Height | Size of the JPEG in pixels   |
| Filename     | The destination file name  |

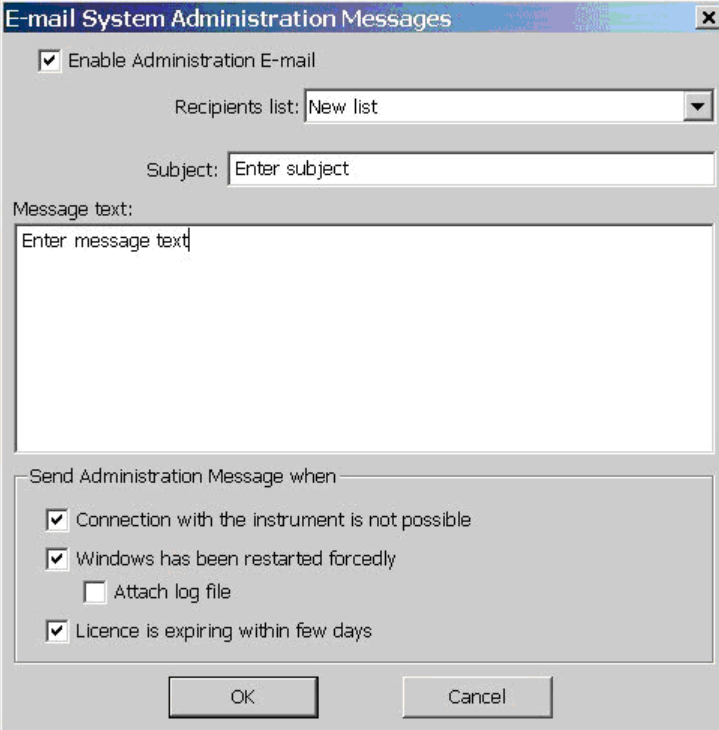
**Table 4-10 JPEG Settings**

## System Administration Messages

---

Use the System Administration Messages box, as shown in FIGURE 4-12, to setup the e-mail messages for system administrators. These recipient list for these messages should contain only the address of the administrator(s) of the system. These messages are sent for events that requires administrator intervention. There are two events available:

- When the connection with the instrument is not possible (or failed for any reason).
- When Windows is restarted automatically by NoiseTutor (usually because of a locked internet connection).



**E-mail System Administration Messages**

☒ Enable Administration E-mail

Recipients list: New list

Subject: Enter subject

Message text:  
Enter message text

Send Administration Message when

☒ Connection with the instrument is not possible

☒ Windows has been restarted forcedly

☐ Attach log file

☒ Licence is expiring within few days

OK Cancel

**FIGURE 4-12 System Administration Messages**

# Commands Menu

This chapter describes the functionality of the options on the **Commands** menu of the NoiseTutor station.

## Main commands

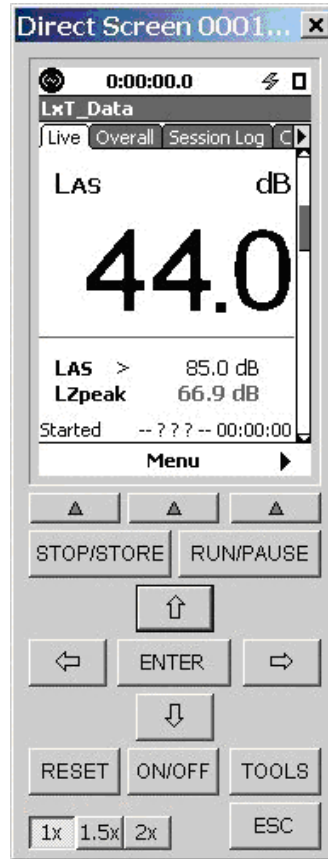
---

Use **Start** and **Stop** on the **Commands** menu to start and stop the NoiseTutor Station operations. Clicking the **Start** command begins the connection with the instrument, checks if there is data to be downloaded, and begins the operations for the enabled services.

To setup the NoiseTutor station so that it automatically begins the **Start** command, refer to the section “Installing the NoiseTutor Software” in the *Installation and Setup* chapter of this manual. The automatic restart is effectively executed with a delay of 30 seconds from the program run. This delay is needed to allow Windows to complete loading.

The **Stop** command ends the NoiseTutor Station operations and disconnects the analyzer, but does not terminate the sending of messages or the uploading of files. If the job queue is not empty, this operation continues even after the **Stop** command has been completed.

The **Direct Screen** command displays a window that schematically reproduces the analyzer itself, with the buttons positioned as they are represented on an analyzer keyboard. The instrument screen is continuously displayed; thus it is possible to operate remotely on the instrument, as if it were in your hands. FIGURE 5-1 shows an example of the Direct Screen window.



**FIGURE 5-1 Direct Screen**

# A

## Technical Specifications

The specifications contained in this chapter are subject to change without notice.

### System Power Requirements

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|   |  |
|---|--|
| Battery Runtime (continuous, streaming updates) | 18.5 hours, from full charge, typical at 25 °C |
| Battery Runtime (daily updates)                 | 3 days, from full charge, typical at 25 °C     |
| Charge Time                                     | 6 hours  |
| AC Input  | 90-240V, 50-60 Hz                              |
| Battery Voltage                                 | 12V  |
| Battery Type                                    | Lithium Ion                                    |
| Battery Capacity                                | 266 watt hours                                 |

### Physical

---

|                        |                                    |
|------------------------|------------------------------------|
| Weight                 | 18.25 lbs. (8.3 kg.)               |
| Dimensions (W x L x H) | 18 x 13 x 7 in. (46 x 33 x 18 cm.) |

### Environmental

---

|                       |   |
|-----------------------|---|
| Operating Temperature | - 40 to 176° F (- 40 to 80 °C)              |
| Humidity              | 0 to 99%, relative humidity, non-condensing |
| Enclosure             | Rated IP66                                  |

## Station PC (provided)

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|                  |           |
|------------------|-----------|
| Processor Speed  | 2 GHz     |
| Memory           | 2 GB      |
| Storage          | 16 GB     |
| Operating System | Windows 7 |

For specifications of 831 or SoundTrack LxT sound level meters, refer to the technical reference manuals for those products.

## Items not Included

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- Instrumentation Tripod (TRP003)
- Website hosting items (PC, Microsoft IIS, and FTP)
- SIM card for cell access
- Software to administer the PC remotely, such as logmein, radmin, or teamviewer



# B

## *Shipping Instructions*

You may encounter some restrictions when shipping the NoiseTutor station because it includes a lithium ion battery. At the time of this printing, Fedex provides services for shipping products with lithium ion batteries; therefore, Larson Davis recommends their services for this product. Additionally, when shipping, follow these guidelines:

**Step 1** Make sure the following are labelled and clearly visible on the outside of the shipping package:

- Class 9 hazard label
- Proper shipping name and United Nations (UN) assignment number: **UN 3481, Lithium Ion Batteries Contained in Equipment.**

**Step 2** Complete a "Shipper's Declaration for Dangerous Goods" and affix it to your packaging. The form for this declaration is provided by your courier service.

