Operation and Installation Guide

Trademarks

1.0 Introduction

The CV900V2, DX4020, D9133TTL-E, and the C900TTL-E are Network Interface Modules (NIMs) that either convert or intercept digital data into network data with the use of a network interface module by Lantronix® Inc. The D6680 is also a device produced by Lantronix Inc. As new features are added to these modules, the firmware might need updating. To update these modules, use the DeviceInstaller software.

The following information illustrates how to upgrade these NIMs. DeviceInstaller software has multiple capabilities, but only one function is needed and supported by Bosch Security Systems, Inc. as explained below. Pay attention to which hardware revision you are attempting to upgrade. Each revision of hardware requires specific software.

If the wrong software is loaded, it causes an inoperable unit that must be sent back to Bosch Security Systems, Inc. for repair.

This application is used only to upgrade firmware files to the network interface modules.

All other functions of this application are not supported by Bosch Security Systems, Inc.

2.0 DeviceInstaller Overview

This utility upgrades the following Conettix products:

- D6680
- DX4020
- C900V2
- D9133TTL-E
- C900TTL-E

	Hardware Revision 1 (CBXM-ERAD)	Hardware Revision 2 (CM-E2-RAD)	XPort-01	XPort-03
D9133TTL-E	cbx5884.rom	ltx5884.rom	N/A	N/A
C900TTL-E	cbx5884.rom	ltx5884.rom	N/A	N/A
DX4020	N/A	N/A	xpt_5883.rom	xpt03_5883.rom
C900V2	N/A	N/A	xpt_5883.rom	xpt03_5883.rom

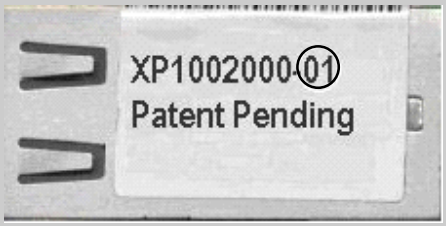
Table 1: Proper Software Version to Use Based on Hardware Revision

	CoBox Hardware Revision 1 (COBOX-EXT-ENET)	CoBox Hardware Revision 2 (COBOX-FL-01)
D6680	cbx5884.rom	ltx5884.rom

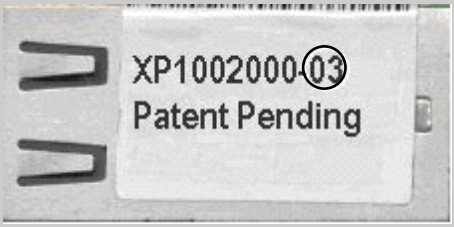
Table 2: Proper Software Version to Use Based on CoBox™ Hardware Revision

You can identify which XPort module you have by looking at the last two digits of the module's label.

XPort-01 label:



Xport-03 label:



You can identify the Conettix product's hardware version by looking at the label on the side of the product:

2.1 Requirements

The following is required to correctly use the DeviceInstaller application.

2.1.1 Operating System

- Microsoft Windows 98SE
- Microsoft Windows ME
- Microsoft Windows NT 4.0
- Microsoft Windows 2000 with Service Pack 2 or higher
- Microsoft Windows XP

2.1.2 Other Software

- Microsoft Internet Explorer, v5 or later.

3.0 Installation

3.1 Software Installation

The DeviceInstaller is distributed as a self-extracting executable application. It is included on the D6200 CD ROM.

To install the DeviceInstaller application, perform the following procedure:

1. Insert the D6200 CD-ROM Communications Receiver/Gateway into the host computer's CD-ROM drive.

   Double-click the **My Computer** icon in the **Start** menu or open **Windows Explorer** and double-click the letter of your CD-ROM to view the CD-ROM files.
2. Double-click the **Network Interface Module** folder.
3. Double-click the Programmer folder.
4. Double-click the **DeviceInstaller.exe** icon to start the installation process.
5. When the icon is double-clicked, the InstallShield® Wizard starts extracting files to install the DeviceInstaller application.

   A progress bar appears showing the progress of reading the contents of the package.
6. The DeviceInstaller Setup starts and prepares the InstallShield Wizard for the remaining installation process.

   A progress bar advances across the bottom showing the progress.
7. The Lantronix DeviceInstaller Setup screen appears, indicating that DeviceInstaller is installed.

   Click **Next** > to continue.
8. The License Agreement screen appears next. To continue, click **Yes**.

   Clicking **No** aborts the installation.
9. The next screen to appear shows the installation destination for the DeviceInstaller application. The installation path appears under **Destination Folder** at the bottom of the window.

   To select a new location, click **Browse** to open a smaller window where you can select a new installation location.

   After selecting a location, click **OK** to continue.

   Click **Next** > to continue.
10. When the next window appears, select the type of setup from three options:
    - **Typical** – Installs the most common options and is recommended for most users.
    - **Compact** – Installs the minimum number of options to run the application.
    - **Custom** – Allows for the selection of options to install, and is recommended for advanced users.

      Choose **Typical** (if not already selected) and press **Next** > to continue.
11. When the next window appears, select the program folder for storing the DeviceInstaller program icons.

    Type a new name into the space if you want a different name.

    Click **Next** > to continue.
12. Before the installation files are copied to the PC, a new window appears showing the destination for the program files and program shortcuts.

    To change the locations shown, click < **Back** and follow the instructions in Step 9 on page 5.

    Click **Next** > to continue.
13. A Setup Status window appears showing the files that are being installed, where they are being installed, and a progress bar showing the progress with a percentage.
14. When the progress bar is complete and the percentage is 100%, all files are copied and installed on the PC.
15. A new window appears stating that the installation is complete.

    An option is offered to create a shortcut to DeviceInstaller on the desktop.

    Place a check in the box to create a shortcut on the desktop.

Click **Finish** to complete the installation.

16. Reboot the PC to ensure that the DeviceInstaller installed properly.

3.2 Update Procedure

After installing the DeviceInstaller program, run the patch program **DeviceInstaller203upd.exe**. This update provides additional NIM devices that are not available in the default version.

If you run DeviceInstaller203upd.exe immediately after installing DeviceInstaller.exe, an error might occur. Before running the update, check the Windows Task Bar to make sure DeviceInstaller.exe is finished. If there is a program slot open in the task bar, the DeviceInstaller.exe is finished installing but is still transferring files in the background. If an error occurs, wait until the program slot disappears from the Windows Task Bar before running the update again.

1. Insert the D6200 Communications Receiver/Gateway CD-ROM into the host computer's CD-ROM drive.

   Double-click the **My Computer** icon in the **Start** menu or open **Windows Explorer** then double-click the letter of your CD-ROM to view the CD-ROM files.
2. Double-click the **Network Interface Module** folder.
3. Double-click the Programmer folder.
4. Double-click the **DeviceInstaller203upd.exe** icon to start the installation process.
5. When the icon is double-clicked, the InstallShield® Wizard starts extracting files to install the DeviceInstaller 2.03 application.

   A progress bar appears showing the progress of reading the contents of the package.
6. The DeviceInstaller Setup starts and prepares the InstallShield Wizard for the rest of the installation process.

   A progress bar advances across the bottom showing the progress.
7. The Lantronix DeviceInstaller Setup screen appears, stating that DeviceInstaller is installed.

   Click **Next** > to continue.
8. A new window appears stating that the installation is complete.

   Click **Finish** to complete the installation.
9. The DeviceInstaller 2.03 application is now installed.
10. Double-click the DeviceInstaller icon to open it.
11. Select **Help → About.**
12. Check the version number to ensure that the installation completed successfully. The version number should be 2.03.

3.3 Uninstalling DeviceInstaller

To uninstall the DeviceInstaller application, follow the procedure for your operating system.

3.3.1 Windows 98SE/ME

1. Go to **Start → Settings → Control Panel** to open the control panel.
2. When the Control Panel window opens, double-click the Add/Remove Programs icon.
3. The **Add/Remove Programs** utility starts.

   Scroll to **DeviceInstaller** and click once to select it.
4. To remove the program, click the Add/Remove button to start the removal process.
5. Continue with the steps in *Section 3.3.3 DeviceInstaller Uninstall Procedure* on page 6.

3.3.2 Windows NT4.0/Windows 2000/XP

1. Select **Start → Settings → Control Panel** to open the control panel.
2. When the Control Panel window opens, double-click the **Add/Remove Programs** icon.
3. The Add/Remove Programs utility starts.

   Scroll to **DeviceInstaller** and click once to select it.

   To remove the program, click the **Change/Remove** button to start the removal process.
4. Continue with the steps in *Section 3.3.3 DeviceInstaller Uninstall Procedure* on page 6.

Installation

3.3.3 DeviceInstaller Uninstall Procedure

The following steps describe the uninstall procedure for the DeviceInstaller application, regardless of the operating system.

1. The DeviceInstaller Setup starts and prepares the InstallShield Wizard for the rest of the uninstall process.

   A progress bar advances across the bottom showing the progress.
2. When the uninstall process is completed, another screen appears with three options:
   - **Modify** – allows new program components to be added or existing program components to be deleted.
   - **Repair** – reinstalls the program components that were installed in the previous setup. This is useful if the program is corrupted and does not run properly.
   - **Remove** – removes the program from the PC.

   The **Remove** option is selected automatically. Click the **Next** > button to continue.
3. A confirmation window appears prompting you to confirm the program's removal.

   Click **OK** to continue. A window appears showing an animation of files flying from a folder and disappearing. A task bar is at the bottom showing the progress of the removal.
4. When the Remove process is completed, a new window appears stating that all components were successfully removed.

   Click the **Finish** button to close this window.

4.0 Operation

4.1 Main Window

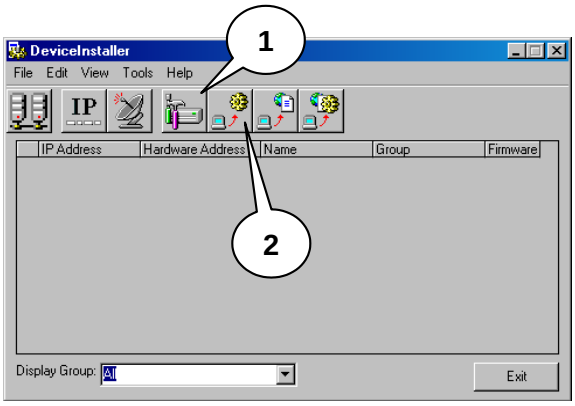


Figure 1: DeviceInstaller Main Screen

Callout	Name	Description
1	Manage device configuration 	This button enables the configuration information for the devices. For more information, refer to *Section 4.2.1 Query the Device*.
2	Upgrade firmware file 	This button is used to upgrade the firmware of the selected device. For more information, refer to *Section 4.2.2 Upgrade Firmware File* on page 8.

Table 3: DeviceInstaller Shortcut Icons

4.2 Procedures

The IP Addresses, Hardware Addresses, and Firmware Versions used in these procedures are different from the devices on your network. They are for demonstration purposes only.

4.2.1 Query the Device

1. Select **Tools → Query Device**… to open a dialog and find the device on the network.

You can obtain the IP addresses and hardware addresses of the devices on your network from the network account database you are currently using.

2. To find a device, type in the IP address in the **Enter IP Address** or **Name** field.

   Example: To find the IP address 172.30.2.6

   Type 172.30.3.6

3. Click the **Get Device Information** button to have DeviceInstaller search the network for that IP Address.

4. If the IP address is found, information is returned about that device.

If the module is a Revision 1 hardware device with firmware Version 3.6, DeviceInstaller does not find it when you perform the query. You can verify this version only by connecting to the module using telnet. The update process described in *Section 4.2.2 Upgrade Firmware File* on page 8 works when you select the 3Q firmware type.

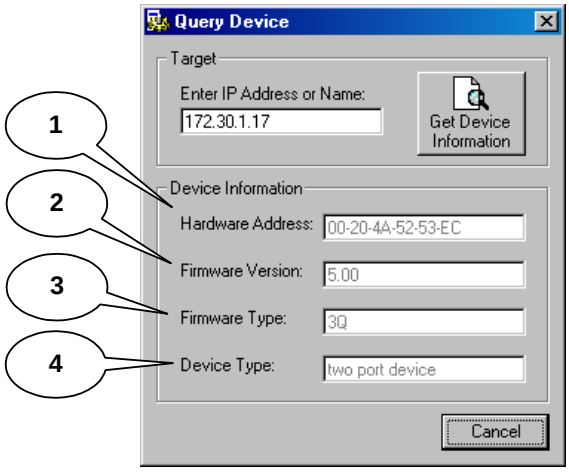


Figure 2: Query Device Fields

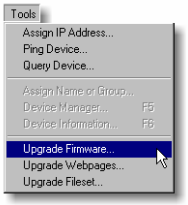
Callout	Description
1	**Hardware Address** – A 12-digit (6 byte) code uniquely defining each device (or node) on the network (the MAC Address).
2	**Firmware Version** – The current version of firmware the device is running.
3	**Firmware Type** – The type of firmware the device is running.
4	**Device Type** – Whether the device has one port or two ports. Each type uses a different firmware upgrade file. Refer to *Section 4.2.2 Upgrade Firmware File.*

Table 4: Description of Fields (refer to *Figure 2*)

4.2.2 Upgrade Firmware File

After you record the information about all the devices, you can upgrade the firmware:

1. **Select Tools → Upgrade Firmware…** to start the firmware upgrade process.



2. The Upgrade Firmware dialog box appears. There are several fields that require information:

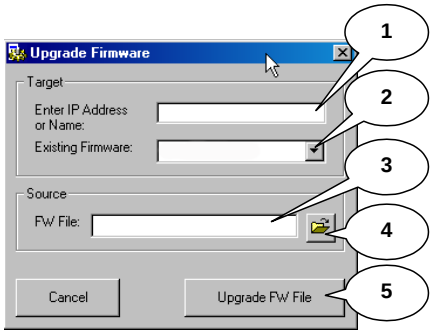


Figure 3: Upgrade Firmware Fields

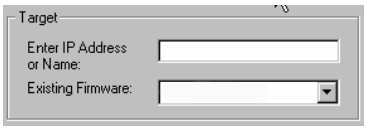
Callout	Description
1	**Target:Enter IP Address or Name*** – The IP Address or Name of the device that needs upgrading.
2	**Target:Existing Firmware** – Set the type to the firmware that was returned during the device query (refer to *Section 4.2.1 Query the Device* on page 7).
3	**Source:FW File** – The location of the firmware file on the PC.
4	**Browse** button – Opens a navigation box to select the location of the firmware file.
5	**Upgrade FW File** button – Clicking this button starts the process.

*A network device (such as a C900TTL-E, C900V2, D9133TTL-E, or DX4020) can be identified by a programmed IP address (for static IPs networks) or name (for Dynamic Host Configuration Protocol [DHCP] networks). If you are configuring a network device for DHCP, you can establish a unique name during the initial telnet programming session to differentiate the devices on the network (refer to *Using Telnet to Finish the Configuration* sections for the C900TTL-E, C900V2, D9133TTL-E, or DX4020 installation guides).

Table 5: Description of Fields (refer to *Figure 3)*

3. Enter the IP Address or name of the device that needs the firmware upgrade.

   For this example, type 172.30.1.13



4. Select the Firmware Type (3Q, 3L, X1, or X3) that was identified during the procedure described in *Section 4.2.1 Query the* Device on page 7.

   If the Firmware Type identified above indicates **X2**, select **X3** from the Existing Firmware drop-down menu.

5. Click the Browse button to open a browse dialog box. Select the correct location of the firmware file. Normally the file is stored on the D6200 CD-ROM in the **Network Interface Modules → Firmware** folder.

   The default location is **C:\Program Files\DeviceInstaller\Firmware**. The Open dialog boxes look different depending on the PC's operating system.

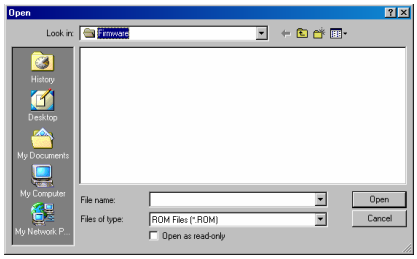


Figure 4: For Windows NT 4.0/2000/XP

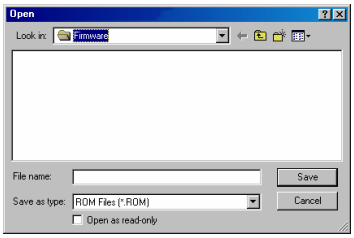
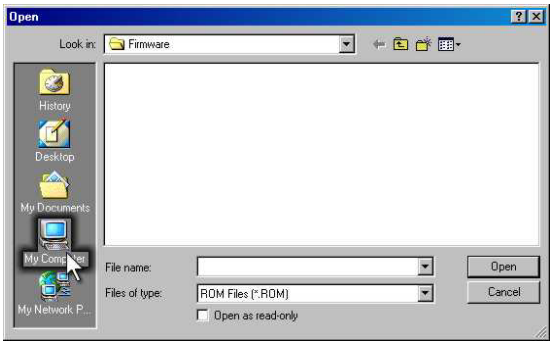


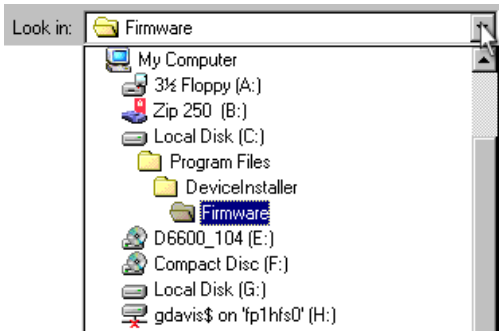
Figure 5: For Windows 98SE/ME

6. For this example, the firmware files are on the same CD-ROM as the DeviceInstaller Installation file and reside in a directory based on the hardware revision of the device (refer to *Table 2* on page 2).

   In the Open dialog box, click the **My Computer** icon.

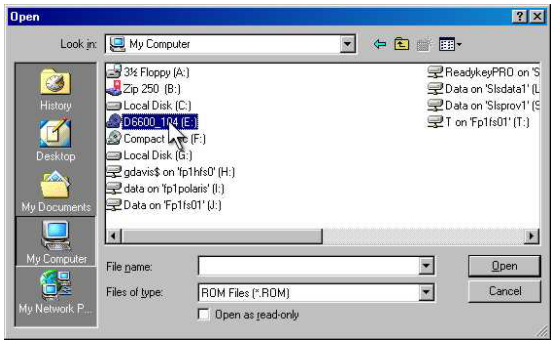


If using Windows 98SE or ME, click the drop down arrow in the **Look in**: box and select **My Computer**.

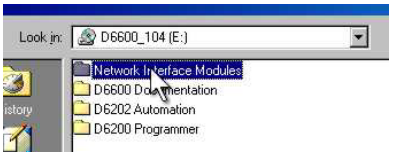


7. Double-click the **D6600_104** icon for the CD-ROM.

The D6600_104 title of the CD-ROM is different for the version you have.



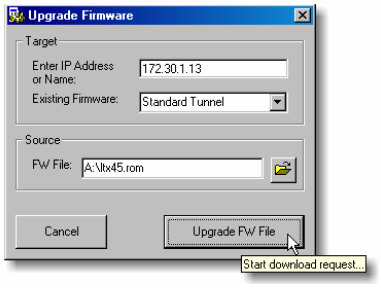
8. Double-click the **Network Interface Modules** directory.



9. Double-click the **Revision 2 hardware** directory.

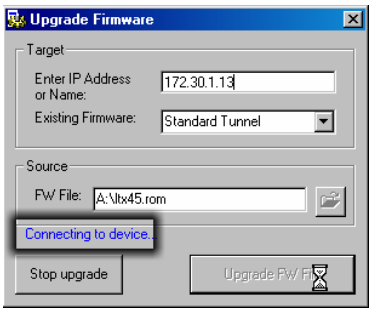
10. For this device, click the ltx45.rom file and then the Open button.

11. At the Upgrade Firmware window, the path to the firmware file is filled in (for this example, it is **E:\Network Interface Modules\Revision 2 hardware\ltx45.rom**).
Click the **Upgrade FW File** button to upgrade the device.



12. A small status message appears above the **Stop Upgrade** button showing the status of the transfer.

    The DeviceInstaller application connects to the device, starts sending blocks of data, reboots the device with the new version, and then displays **Done**.



13. When the upgrading is complete, an information box appears stating **File upgrade successful** and the device appears in the status table.

    In this example, the firmware version is 4.50.