Operation and Installation Guide

1.0 Introduction

The DX4020, D9133TTL-E, and the C900TTL-E are Network Interface Modules (NIM) that either convert or intercept digital data into network data with the use of an OEM 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 may need to be updated. In order to update these modules the DeviceInstaller software must be used.

The following information illustrates how to upgrade these modules. This software has multiple capabilities but only one function is needed and supported by Bosch Security Systems as explained below. Please pay close attention to which hardware revision you are attempting to upgrade. Each revision of hardware requires specific software.

⚠ CAUTION

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

Note: *This application is only used to upgrade firmware files to those devices*

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

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DeviceInstaller

DeviceInstaller Overview

2.0   DeviceInstaller Overview

This utility upgrades the following NetCom products:

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

	Hardware Revision 1 (CBXM-ERAD)*	Hardware Revision 2 (CM-E2-RAD)*	Hardware Revision 3 (Xport®)
D9133TTL-E	cbx527.rom	ltxe55c.rom	N/A
C900TTL-E	cbx527.rom	ltxe55c.rom	N/A
DX4020	N/A	N/A	xpte15d.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	cbx527.rom	ltxe55c.rom

Table 2: Proper Software Version to use based on CoBox™ Hardware Revision

Note: The hardware version can be identified by the label on the side of the NetCom Product (refer to Figure 1).

Figure 1: Example NIM Label

2.1   Requirements

The following is required to correctly use the DeviceInstaller application.

2.1.1   Operating System

- Microsoft Windows 98
- Microsoft Windows Me
- Microsoft Windows NT® 4.0
- Microsoft Windows 2000 with Service Pack 2
- 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 D6600 CD-ROM.

To correctly install the DeviceInstaller application, please follow the procedures below:

1. Insert the D6600 Communications Receiver/Gateway CD-ROM into the host computer's CD-ROM drive.

    Double-click on the **My Computer** icon in the **Start** menu or open **Windows Explorer** then double-click on the letter of your CD-ROM to view the CD-ROM files.

2. Double-click on the **Network Interface Module** folder.

3. Double-click on the Programmer folder.

4. Double-click on the **DeviceInstaller.exe** icon to start the installation process.

5. Once 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 rest of the install process.

    A progress bar advances across the bottom showing the progress.

7. A new screen appears entitled Lantronix DeviceInstaller Setup saying DeviceInstaller is installed.

    Click <u>Next</u> > 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 install destination for the DeviceInstaller application. The install path is shown under **Destination Folder** at the bottom of the window.

    To select a new location, click the <u>Browse</u> button to open a smaller window where a new install location can be selected.

    When finished, click **OK** to continue

    Click **Next** > to continue.

10. At the next window to appear, select the type of setup. There are three options:

    - **Typical** – This option installs the most common options and is recommended for most users.

    - **Compact** – This option installs the minimum number of options to successfully run the application.

    - **Custom** – This option allows for the selection of which options should be installed and is recommended for advanced users.

        Choose the **Typical** option (if not already selected) and press **Next** > to continue.

11. At the next window to appear, select the program folder for storing the DeviceInstaller program icons.

    A new name can be typed into the space if the one displayed is not desired.

    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 to, and a progress bar showing the process's progress along with a percentage.

14. When the progress bar is complete and the percentage is 100%, all the files are copied and installed on the PC.

15. A new window appears saying the installation is complete.

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

    Placing a check in the box creates a shortcut on the desktop.

DeviceInstaller

Installation

Click **Finish** to complete the installation.

16. The DeviceInstaller application is now installed.
17. Reboot the PC to ensure that the DeviceInstaller installed properly.

3.2 Update Procedure

After you have installed the DeviceInstaller program, you will need to run the patch program **DeviceInstaller202upd.exe**. This update corrects a problem that prevents you from upgrading NetCom NIM devices that were previously programmed with encryption.

> **IMPORTANT**
>
> *If you run DeviceInstaller202upd.exe immediately after installing DeviceInstaller.exe, you may get an error. 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 has finished installing but is still transferring files in the background. If you get an error, wait until the program slot disappears from the Windows Task Bar before running the update again.*

1. Insert the D6600 Communications Receiver/Gateway CD-ROM into the host computer's CD-ROM drive.

   Double-click on the **My Computer** icon in the **Start** menu or open **Windows Explorer** then double-click on the letter of your CD-ROM to view the CD-ROM files.

2. Double-click on the **Network Interface Module** folder.

3. Double-click on the Programmer folder.

4. Double-click on the **DeviceInstaller202upd.exe** icon to start the installation process.

5. Once the icon is double-clicked, the InstallShield® Wizard starts extracting files to install the DeviceInstaller 2.02 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 install process.

   A progress bar advances across the bottom showing the progress.

7. A new screen appears entitled Lantronix DeviceInstaller Setup saying DeviceInstaller is installed.

   Click **Next** > to continue.

8. A new window appears saying the installation is complete.

   Click **Finish** to complete the installation.

9. The DeviceInstaller 2.02 application is now installed.

10. Double-click on the DeviceInstaller icon to open it.

11. Select **Help** → **About**.

12. You can check that the installation was completed successfully by checking the version number, which should be 2.02.

3.3 Uninstalling DeviceInstaller

To uninstall the DeviceInstaller application, follow the procedures below based on the Operating System used.

3.3.1 Windows 98/Me

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

   Scroll down 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 5.

3.3.2 Windows NT4.0/Windows 2000/XP

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

   Scroll down 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 5.

3.3.3   DeviceInstaller Uninstall Procedure

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

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. Once uninstall is done, 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 by the previous setup. This is useful if the program has become corrupted and does not run properly.

    - **Remove** – removes the program from the PC.

    The **Remove** option is automatically selected. Click the **Next** > button to continue.

3. A confirmation window appears prompting you to confirm the program's removal.

    Click **OK** to continue.

4. 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.

5. When finished, a new window appears saying all components were successfully removed.

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

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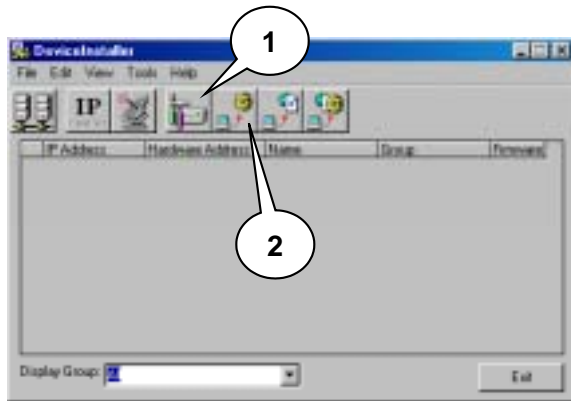
Operation

4.0 Operation

4.1 Main Window

Figure 2: DeviceInstaller Main Screen

Callout	Name	Description
1	Manage device configuration	This button enables the configuration information for all the devices that were to be individually changed. For more information, see *Section 4.2.1 Query Device.*
2	Upgrade firmware file	This button is used to upgrade the firmware of the selected device. For more information, see Section 4.2.2 Upgrade Firmware File.

Table 3: DeviceInstaller Shortcut Icons

4.2 Procedures

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

IMPORTANT

4.2.1 Query Device

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

Note: *The IP Addresses and Hardware Addresses of the devices on your network can be obtained from the NetCom Account Database you are currently using.*
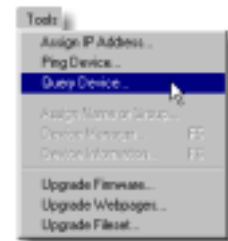
2. To find a device, type in the IP address in the **Enter IP Address** or **Name** field.

   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.

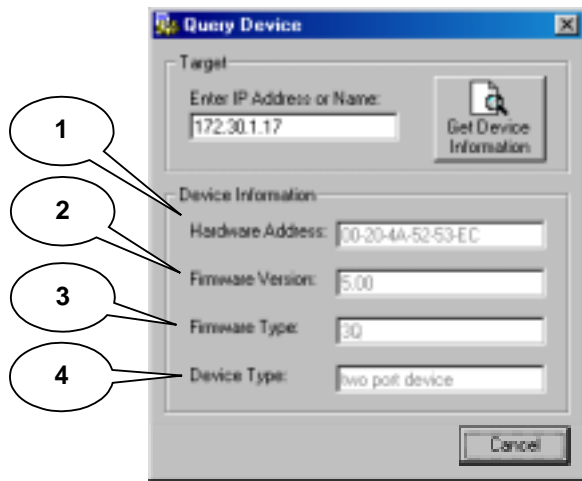4. If the IP address is found, information is returned about that device.

Figure 3: Query Device Fields

Callout	Description
1	**Hardware Address** – A 12-digit (6 byte) code uniquely defining each device (or node) on the network (also referred to as 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. See *Section 4.2.2 Upgrade Firmware File.*

Table 4: Description of Fields (refer to *Figure 3*)

4.2.2   Upgrade Firmware File

Once the information about all the devices is recorded, the firmware can be upgraded

1. **Select Tools → Upgrade Firmware…** to start the firmware upgrade process.
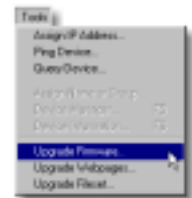
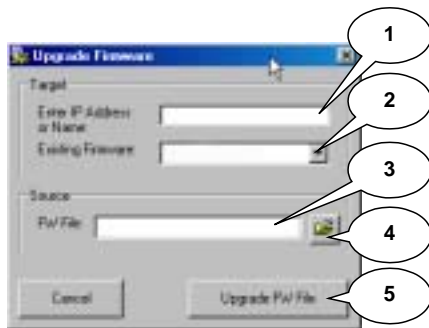2. The Upgrade Firmware dialog box appears. There are several fields that require information:

Figure 4: 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 (See *Section 4.2.1 Query Device*).
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 actual process.

*A network device (such as a C900TTL-E, 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 configuring a network device for DHCP, a unique name can be established during the initial Telnet programming session to differentiate the devices on the network (see *Using Telnet to Finish the Configuration* sections for the C900TTL-E, D9133TTL-E or DX4020 installation guides.

Table 5: Description of Fields (refer to *Figure 4)*

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

   For this example, type 172.30.1.13

4. Select the Firmware Type: 3L, 3Q, or X1 (see *Table 6*)

5. Click the Browse button to open a browse dialog box to select the correct location of the firmware file. Normally it is stored on the D6600 CD in the **Network Interface Modules → Firmware** folder.

   The default location is **C:\Program Files\DeviceInstaller\Firmware**. The Open dialog boxes looks different depending on the operating system on the PC.
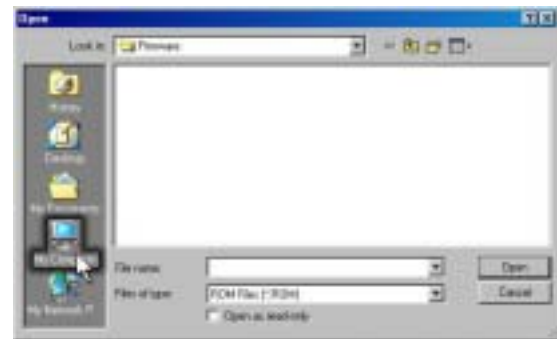
Figure 5: For Windows NT 4.0/2000/XP   Figure 6: For Windows 98/Me

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 (see *Table 2*).

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

	D9133TTL-E	C900TTL-E	DX4020	D6680
Hardware Revision 1 (CBXM-ERAD)*	3Q	3Q	n/a	n/a
Hardware Revision 2 (CM-E2-RAD)*	3L	3L	n/a	n/a
Hardware Revision 3 (Xport®)	n/a	n/a	X1	n/a
CoBox Hardware Revision 1 (COBOX-EXT-ENET)	n/a	n/a	n/a	3Q
CoBox Hardware Revision 2 (COBOX-FL-01)	n/a	n/a	n/a	3L

Table 6: Firmware File Types

Note: *If using Windows 98 or Me, click the drop down arrow*
         in the Look in: *box and select* My Computer*.*
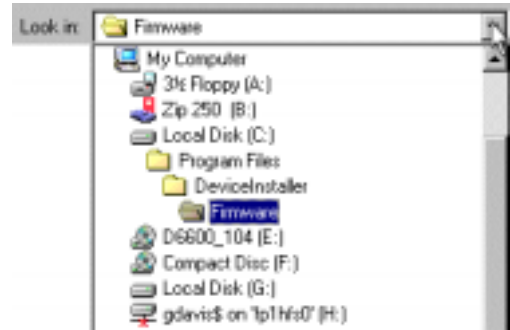
7. Double-click on the **D6600_104** icon for the CD-
ROM.

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

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

9. Using *Figure 1* as an example, double-click on the
Revision 2 hardware directory.

10. For this device, click on 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.

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

    The Firmware version is 4.50.

Notes: