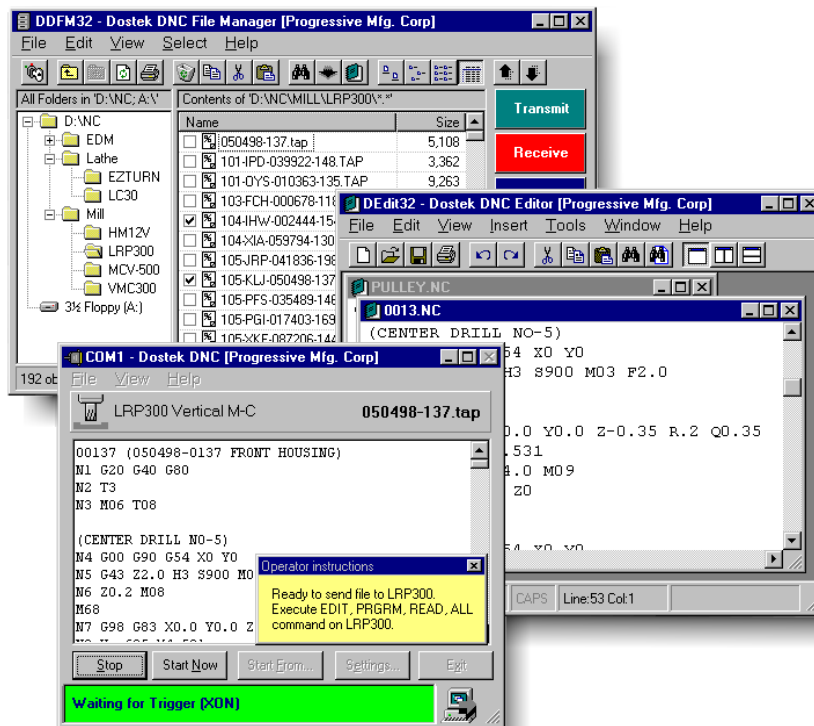


Dostek DNC

Lite Edition Software

2010 Edition

Getting Started Guide



DOSTEK

Dostek Incorporated
238 Westheights Drive
Kitchener, Ontario
Canada N2N 1J9
Tel (519) 742-5721
Fax (519) 741-8669
www.dostek.com

Table of Contents

Introduction	1
Documentation	1
1 Installing Dostek DNC	2
1.1 Installing Dostek DNC	2
2 Software Overview	5
Navigator - DDNav	5
File Manager - DFileMgr	5
Communication - DDNC	7
Editor - DEditor	7
Configuration - DConfig	7
Tools and Utilities	7
3 Configuring Dostek DNC	8
Configuring General and Communication Settings	8
Configuring File Manager	8
Configuring DNC Editor	8
4 Using Dostek DNC	9
4.1 Sending a File to the CNC	9
4.2 Receiving a File from the CNC	10
4.3 Managing Files	11
4.3.1 Selecting Files and Folders	11
4.3.2 Managing Root Folders	11
4.3.3 Creating, Renaming and Deleting Files and Folders	12
4.3.4 Copying and Moving Files and Folders	12
4.3.5 Finding a File	12
4.3.6 Viewing and Printing Files	13
4.3.7 Editing and Reformatting Part Programs	13
4.3.8 Refreshing the File List	13
4.3.9 Comparing Files and Advanced Searching	13
5 Data Backup - Planning for Disaster	14
6 Troubleshooting	15
6.1 Resolving Installation Problems	15
6.2 Resolving Software Problems	15
6.3 Resolving CNC Communication Problems	16
6.4 Submit Configuration and Data Files	16
7 Technical Support	17

Dostek Model 440A Behind-the-Tape Reader (BTR) Software Guide

This Guide explains how to use the Dostek DNC Lite Edition software included free with purchase of the Dostek Model 440A Behind-the-Tape Reader (BTR).

In this guide, you will learn about:

1. Software Installation	2
2. Software Overview	5
3. Configuring Dostek DNC	8
4. Using Dostek DNC	9
5. Data Backup - Planning for Disaster	14
6. Troubleshooting	15
7. Technical Support	17

Documentation



The following additional documentation is available:

PDF manual. Online copies of the full *Dostek DNC User Guide* and *Dostek DNC Configuration Guide* are installed on your computer along with the Dostek DNC software. To view the manuals, start the Dostek DNC Navigator application (page 5) and select the "Documents" tab.

Application notes. Application notes covering a variety of topics are installed on your computer as PDF files. To view the application notes, start the Dostek DNC Navigator application, select the "Application Notes" tab, and then click **Application note selector**.

Online help. Several online help files are included with the Dostek DNC software. To view help files, look in the **Help** menu in the Dostek DNC applications, or select the "Help" tab in Dostek DNC Navigator. Available files include:

DostekDNC.chm	Master help. All help files combined into a single file.
GettingStarted.chm	Getting Started guide.
ComTest.chm	Communication Testing and Troubleshooting
DConfig.chm	Dostek DNC Configuration
DTerminal.chm	Dostek DNC Com Test Terminal (see the topic "Using BTR Test Features")

1 Installing Dostek DNC



This section explains how to install the Dostek DNC software.

If you are installing Dostek DNC for the first time, go to Section 1.1, "Installing Dostek DNC."

If you are updating an existing copy of the Dostek DNC software:

- If the current software is working properly, see "Updating Dostek DNC" below.
- If the current software is not working properly, see "Replacing Dostek DNC" below.

Updating Dostek DNC

To update an existing, working, copy of the Dostek DNC software:

1. Make a backup copy of your computer's "C:\Dostek DNC\Settings" folder. This folder contains your current Dostek DNC software configuration options.
2. Go to Section 1.1, "Installing Dostek DNC."

Replacing Dostek DNC

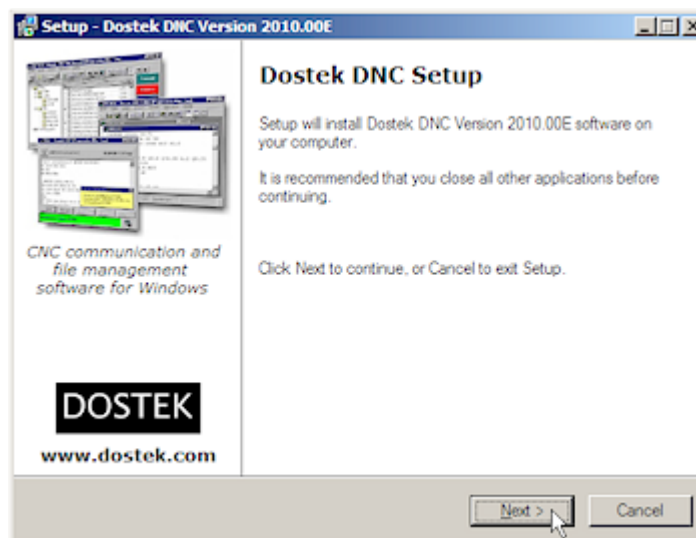
To replace (erase and reinstall) an existing copy of the Dostek DNC software:

1. Make a backup copy of your computer's "C:\Dostek DNC\Settings" folder. This folder contains your current Dostek DNC software configuration options.
2. Uninstall Dostek DNC using "Programs" or "Install/Remove Programs" in the Windows Control Panel.
3. Erase your computer's "C:\Dostek DNC" folder.
4. Go to Section 1.1, "Installing Dostek DNC."

1.1 Installing Dostek DNC

To install Dostek DNC:

1. Insert the Dostek DNC software CD in your computer's CD or DVD drive. Setup starts automatically within a few seconds.



2. Follow the on-screen instructions to complete the installation. When finished, Setup automatically starts the Dostek DNC First-Time Setup wizard.



First-Time Setup Wizard guides you through:

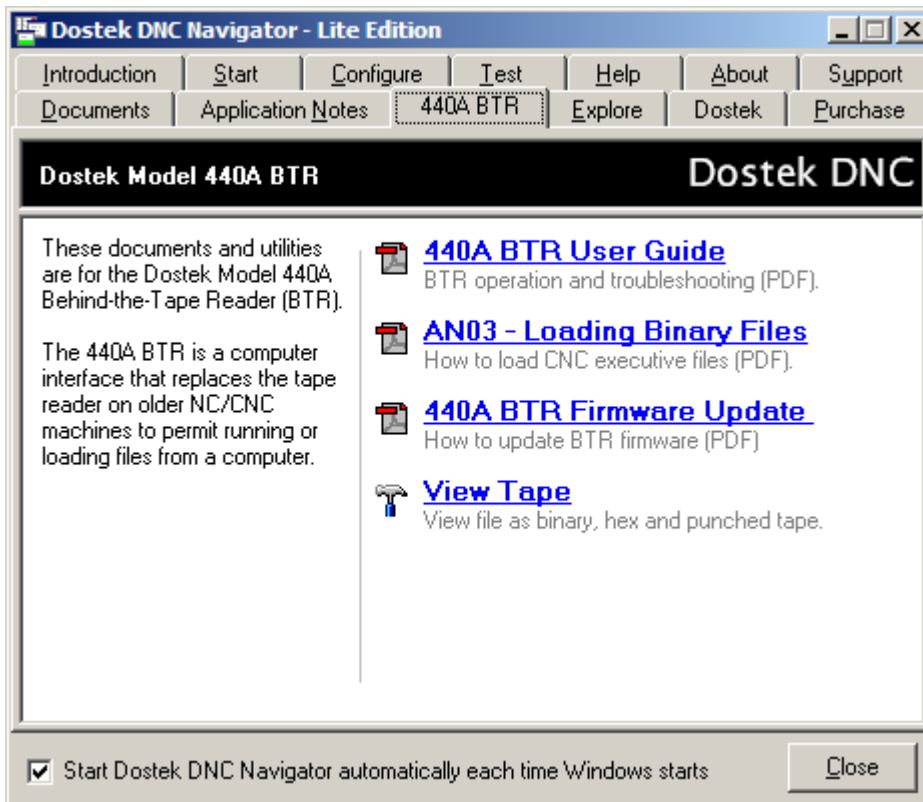
- ✦ Restoring a previous Dostek DNC configuration.
- ✦ Installing your software license key.
- ✦ Viewing the Getting Started Guide.
- ✦ Setting up file locations and program shortcuts.
- ✦ Selecting from the supplied sample CNC configurations.
- ✦ Learning about backing up your data.

3. When the wizard prompts you to "Choose setup mode," choose one of the following options:
 - ✦ If you are installing Dostek DNC for the first time, select **New Installation** and continue following the wizard's on-screen instructions.
 - ✦ If you are updating an existing, working, copy of the software, select **Keep existing configuration**, or simply click **Cancel**.
 - ✦ If you are replacing a previous copy of the software, and you have saved a copy of your previous configuration settings, select **Load previously-saved configuration**, and follow the wizard's on-screen instructions to restore your previous settings.

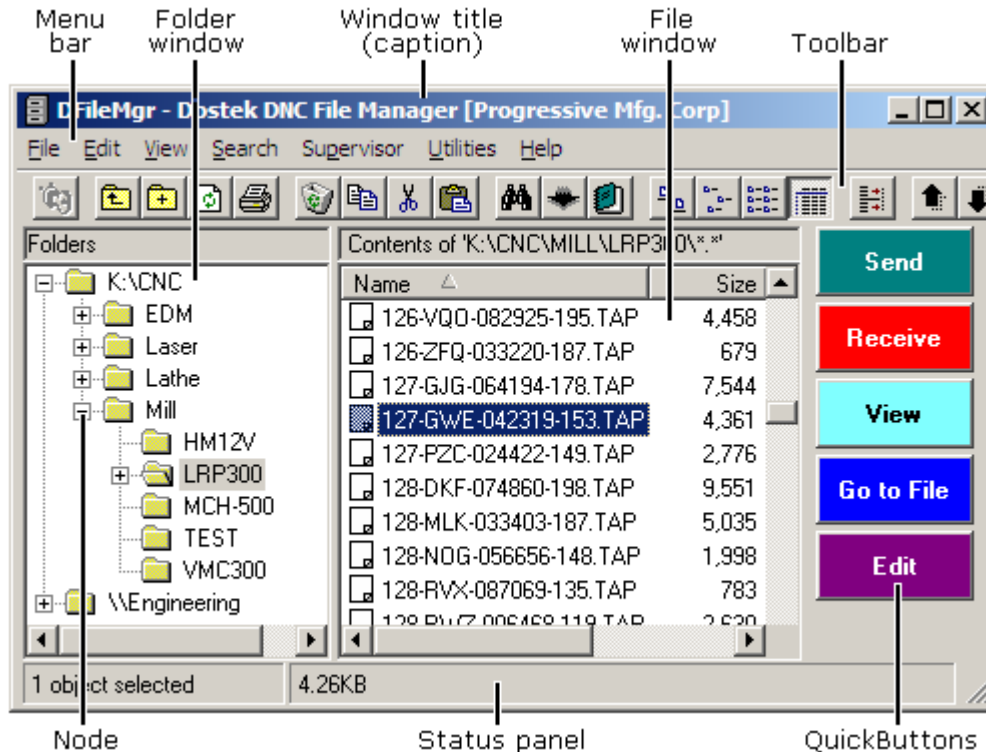
When finished, First-Time Setup Wizard automatically starts the Dostek DNC Navigator application.

Notes:

- > If Setup does not start automatically, browse the CD and open "Setup.exe".
- > The Dostek DNC software CD is shipped in a plastic pouch fixed inside the front cover of the manual.



Dostek DNC Navigator (DDNav.exe)



Dostek DNC File Manager (DFileMgr.exe)

2 Software Overview

Dostek DNC is a suite of applications that work together to provide file management, editing and DNC communication.

With Dostek DNC, you can:

- Transfer programs and data between the computer and CNC machine tools.
- Upload, download, and drip feed with data transfer rates up to 38,400 baud.
- Edit files, including: copy and paste, search and replace, reformat and renumber.
- Manage files, including: view, search, copy, rename, filter, and delete.
- Configure communication parameters and protocols to work with virtually any CNC machine.
- Configure security and logging to control access and track activity.
- Work with standard Windows PCs (Windows XP through Windows 7).
- Work with multi-port serial cards and hubs (Ethernet and USB, wired and wireless).

The following paragraphs provide an overview of the main software components.

Navigator - DDNAV



Dostek DNC Navigator provides links to Dostek DNC applications, documents, help files, and more. Links are categorized by tabs so you can quickly find what you need.

To start Navigator, click **Start, All Programs, Dostek DNC, Dostek DNC Navigator**. You can also start Navigator from the Help menu in another Dostek DNC application.

To guide new users, Navigator starts automatically each time Windows starts. You can clear this option when you become familiar with the software.

File Manager - DFileMgr

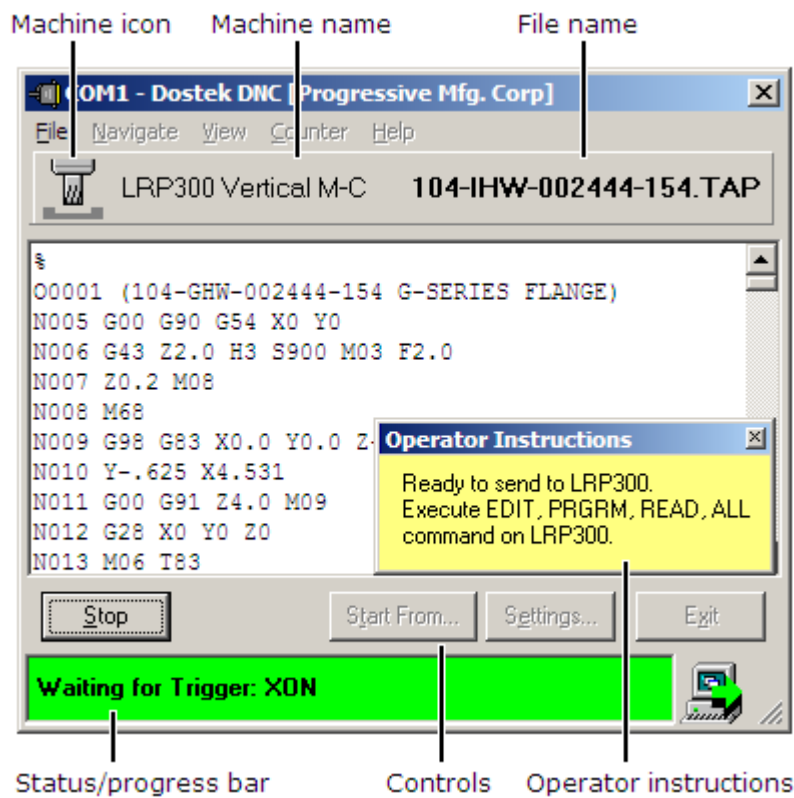


Dostek DNC File Manager has the familiar look and feel of classic Windows Explorer, but is easier to use and provides many enhancements and security features. With File Manager, you can:

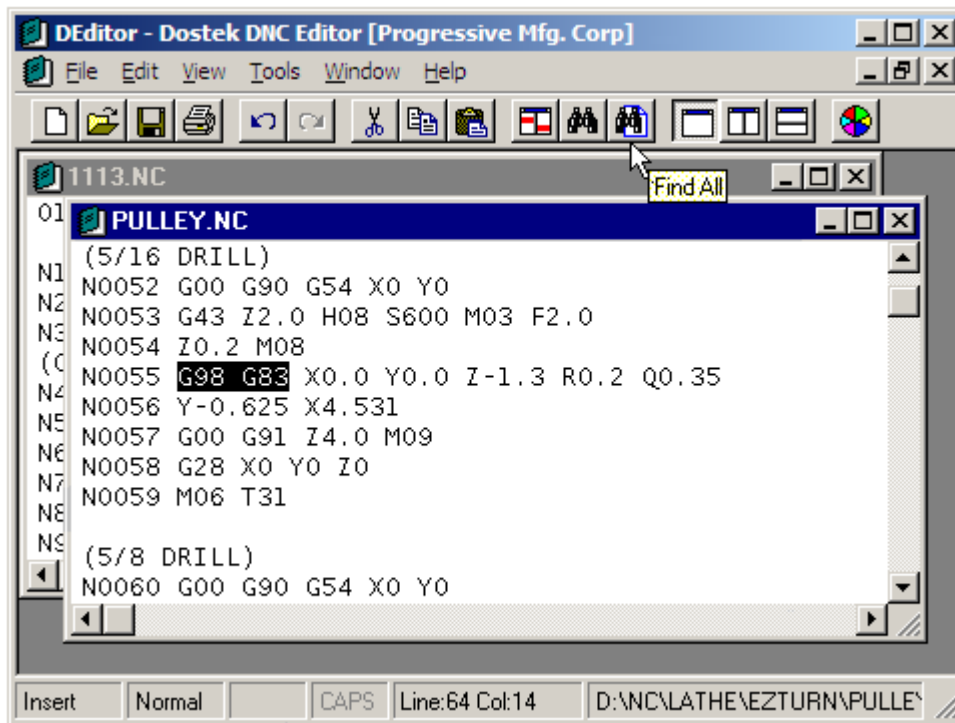
- Organize your files however you like. You decide which folders to view. You can include folders on the computer's hard drive, a network drive or a removable media.
- Browse folders and select files.
- View, print, copy, rename and delete files.
- Customize "QuickButton" command buttons and Utilities menu.
- Limit access to specific folders and file types.
- Require a password to modify files.

To start Dostek DNC File Manager, you can:

- Click the Windows **Start** button, point to **All Programs, Dostek DNC**, and then click **Dostek DNC File Manager**.
- Click the **File Manager** shortcut on the Windows Desktop or Quick Launch toolbar.



Dostek DNC Communication (DDNC.exe)



Dostek DNC Editor (DEditor.exe)

Communication - DDNC



Dostek DNC Communication transfers files between the computer and CNC machine tools. With Dostek DNC Communication, you can:

- Load, save and drip feed with transfer rates up to 38,400 baud.
- Stop, start, repeat, or restart anywhere in the file when drip-feeding.
- Automatically store received programs according to the program name or part number.
- Automatically select a machine configuration according to the current file folder.
- Display customized on-screen operator instructions.

Editor - DEditor



Dostek DNC Editor is a multiple-document editor for CNC part programs and text files. With Dostek DNC Editor, you can:

- Open multiple files of virtually unlimited size.
- Copy text between files.
- Search and replace text.
- Undo and redo changes.
- Reformat CNC part programs (expand, compress, resequence and reformat numbers).

Configuration - DConfig



Dostek DNC Configuration lets you quickly configure software options and communication parameters. With Dostek DNC configuration, you can:

- Configure general settings including file locations, security settings and global options.
- Configure CNC communication settings including baud rate, parity and flow control options.
- Choose from sample configurations for most CNC models.
- Create a separate configuration for each CNC.
- View a detailed help page, with practical examples, for each configuration category.
- Record notes for each configuration.
- Use the New Device Setup Wizard to guide you through CNC communication configuration options.
- Use the Configuration Manager Wizard to quickly back up and restore configuration information.

Tools and Utilities

For more information about Dostek DNC's tools and utilities, open Navigator and click **Getting Started Guide**.

3 Configuring Dostek DNC

After you complete the Dostek DNC First-Time Setup Wizard, the software is ready to use. However, Dostek DNC offers many options that let you configure the software to suit your needs and preferences.

Configuring General and Communication Settings



To use the Dostek DNC Configuration application (DConfig) to change general settings and CNC communication settings:

1. Start the Dostek DNC File Manager.
2. Do one of the following:
 - To change general settings such as file locations and security settings, click **Configure Dostek DNC** in the **Supervisor** menu.
 - To change CNC settings such as baud rate, flow control and data format, click **Configure devices (CNCs)** in the **Supervisor** menu.

Settings are organized by "tabs" to make it easy to find the setting you need. Detailed help is provided. To learn about settings found on a particular tab, click **Help** in the **Help** menu.

Notes:

- > Sample device configuration files are provided for a variety of CNCs. To use a sample configuration, click **Import sample configuration** in DConfig's **File** menu.
- > You can also start the Dostek DNC Configuration application from the Configuration tab in Dostek DNC Navigator, and from the Windows Start menu.

Configuring File Manager

To change File Manager options:

- Click **Options** in the **Supervisor** menu, and then do one of the following:
 - Select the **View Preferences** tab to change display preferences.
 - Select the **File Type Filters** tab to change the types of files that are displayed.
 - Select the **QuickButtons** tab to add or change QuickButtons.
 - Select the **Utilities** tab to add or change commands on the Utilities menu.

Configuring Editor

To change the Editor font, which is also used for printing and viewing, click **Preferences** in the Editor's **File** menu.

To change the page layout and font size used for printing, click **Page Setup** in the Editor's **File** menu.

4 Using Dostek DNC

Before you get started, here are a few things you should know about Dostek DNC:

Multi-Tasking. Dostek DNC's modular design means you can simultaneously open multiple windows. For example, you can have the File Manager, Editor and Communication windows all open at the same time. Switch between windows by clicking in the Windows taskbar or by pressing Alt+Tab.

Single Instance. You can only open one copy (instance) of most applications. If you try to open a new copy of an application that is already open, the existing window automatically pops to the top. Although you can only open one Editor window, you can open multiple files within the editor.

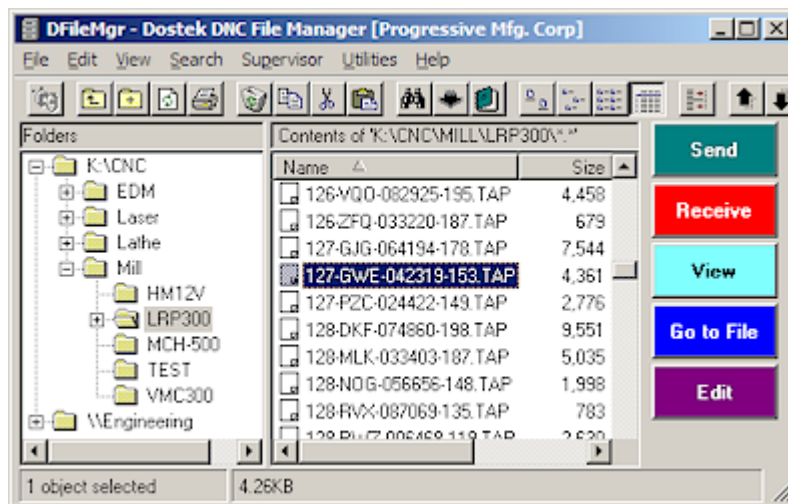
Tooltips. You can get a hint about the purpose of most of the software features (toolbar and command buttons, lists and text boxes, and so on) by hovering the mouse over them.

4.1 Sending a File to the CNC

Sending a file to the CNC is a simple 3-step process with Dostek DNC:

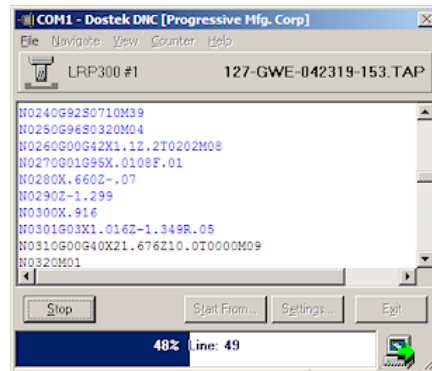
STEP 1 - Start Dostek DNC File Manager.

With File Manager, folders are shown in the left window, and files in the right window.



STEP 2 - Select a file and click 'Send'.

In File Manager, find the file you want to send, select it, and then click **Send**. File Manager launches the Communication application (DDNC) to send the file to the CNC.



If you created more than one CNC configuration file, the DDNC "Settings" window appears automatically to let you pick a configuration.

When you are using a Dostek 440A BTR, DDNC immediately starts sending data to the BTR. Progress of the transfer is displayed in the status panel at the bottom of the window.

If your computer is connected directly to the CNC's RS-232C serial port (you are not using a Dostek 440A BTR), DDNC pauses and indicates "Waiting for trigger" in the status panel at the bottom of the window.

STEP 3 - Go to the CNC, and start a Load or Run transfer.

Execute a read, load or run command on the CNC. You don't need to wait for the entire file to load into the BTR memory.

4.2 Receiving a File from the CNC

Receiving a part program file from the CNC is also easy:

1. In Dostek DNC File Manager, select the folder you want to store the file into, and then click **Receive**. File Manager opens the Communication application (DDNC) to handle the transfer.
2. Go to the CNC, and start a punch transfer. The received data scrolls in the DDNC window.

Note:

- > To receive a file from the CNC, the CNC's puncher output must be connected to the computer, either directly to a COM port or indirectly via a Dostek 440A BTR.

4.3 Managing Files

This section explains how you can use Dostek DNC to:

- Select files and folders
- Manage root folders
- Create, renaming and deleting files and folders
- Copy and move files and folders
- Find a file
- View and print files
- Edit and reformat files
- Refresh the file display
- Compare files and use advanced searching

4.3.1 Selecting Files and Folders

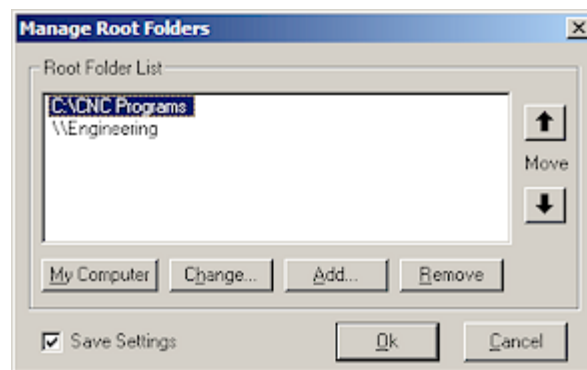
To use or modify a file or folder, you must first select it:

- To select a single file, click the file.
- To select more than one consecutive file, press and hold the **Shift** key while clicking files.
- To select more than one non-consecutive file, press and hold the **Ctrl** key while clicking files.
- To select all files, click **Select all files** in the **Edit** menu.
- To clear file selections, click **Clear selections** in the **Edit** menu.

4.3.2 Managing Root Folders

To select the folders File Manager displays in it's folder window:

1. On the **File** menu, click **Manage root folders**. The "Manage Root Folders" window opens, showing a list of all "root" folders currently displayed in File Manager.



2. Do one of the following:
 - ✦ Click **My Computer** to provide access to the root folder of all local and network drives.
 - ✦ Click **Add** to add another folder to the list.
 - ✦ Click **Remove** to remove a folder from the list.
 - ✦ Click **Change** to replace a folder in the list with a different folder.
 - ✦ To rearrange the order of root folders, select a folder and then click the **Up** or **Down** "Move" button

Note:



- > You can also open the "Manage Root Folders" window by clicking it's icon in File Manager's toolbar.

4.3.3 Creating, Renaming and Deleting Files and Folders

To rename or delete an existing file or folder, select the file and click **Delete file** or **Rename file** in the **File** menu.

To create a new file or folder:

1. In the folder window, select a folder in which to create the new file or folder.
2. In the **File** menu, point to **Create new** and then do one of the following:
 - Click **New file** to create a new file.
 - Click **New folder** to create a new folder.
 - Click **New duplicate file** to create a duplicate copy of the currently-selected file.
3. Type a name for the new file or folder, and then click **OK**. The new file or folder is created in the file (right-hand) window.

Note:

- > **New duplicate file** is available only when one file is selected.

4.3.4 Copying and Moving Files and Folders

Use standard Windows methods for copying and moving files and folders:

- Copy and paste
- Cut and paste (delete original file or folder after copying)
- Drag and drop

When you drag and drop files or folders, File Manager displays a menu when you release the mouse button. This prevents you from accidentally moving files.

- Click **Copy** to add a copy of the items to the new location.
- Click **Move** to move the files from the previous location to the new location.
- Click **Cancel** if you change your mind.

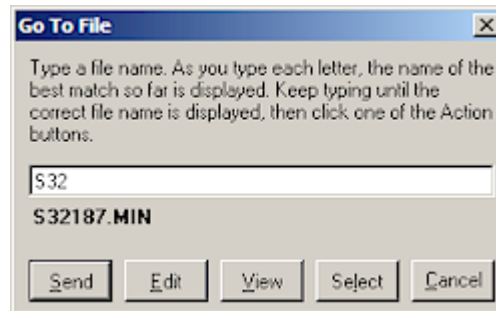
Note:

- > File Manager displays a warning before replacing an existing file or folder.

4.3.5 Finding a File

To find a file in the current folder:

1. On the **File** menu, choose **Go to file**. The "Go to file" window opens.



2. Type a file name. As you type, File Manager shows the name of the file that most closely matches what you have typed so far.
3. When the name of the file you are looking for appears, do one of the following:
 - ✦ Click **Send** to send the file to the CNC.
 - ✦ Click **Edit** to open the file in the Editor.
 - ✦ Click **View** to view the file.
 - ✦ Click **Select** to select the file and close the "Go to file" window.
 - ✦ Click **Cancel** to close the dialog box.

Note:

> You can also open the "Go to file" using the following methods:



- ✦ Click the **Go to file** icon in File Manager's toolbar.
- ✦ Click File Manager's **Go to file** QuickButton.
- ✦ Press **Ctrl+G**.

4.3.6 Viewing and Printing Files

To view or print a file, select it and then click **View** or **Print** in the **File** menu.

Printing Files

To change printing options such as headers, margins, font size and page layout, click **Page setup** in the Editor's **File** menu.

The Editor's font preference is used for printing. To change the setting, click **Preferences** in the Editor's **File** menu.

Note:

- > You can also print a file by opening it in the Editor and clicking **Print** in the Editor's **File** menu.

Viewing Files

While viewing a file, you can:

- Click **Print** in the **File** menu to print the file.
- Click **Edit** in the **File** menu to open the file in the Editor.
- Click **Send to CNC** in the **File** menu to send the file directly to the CNC.
- Click **Find** in the **Search** menu to search for text.
- Press **F3** to search again for the same text.
- Press **F5** and **F6** to quickly view the previous or next file.

4.3.1 Editing and Reformatting Part Programs

To edit a file, select it and then click **Edit** in the **File** menu.

With the Editor, you can:

- Open more than one file.
- Copy and paste or cut and paste text between open files.
- Search and replace text.
- Click **Save as** in the **File** menu to save the file with a different name
- Click **Block numbers** in the **Tools** menu to sequence or resequence part program files
- Click **Convert numeric values** in the **Tools** menu to reformat numeric values
- Click **Reformat** in the **Tools** menu to reformat part programs by any of:
 - Adding or removing spaces between words.
 - Converting letters to upper case.
 - Trimming leading and trailing spaces.
 - Filtering (removing) non-standard characters

4.3.2 Refreshing the File List



Other Windows applications can create and modify files in the folders File Manager is displaying. File Manager does not track these changes, so new files don't appear until the next time you open the folder. To manually update the display, click **Refresh** in the **View** menu, or click the Refresh icon in the toolbar.

4.3.3 Comparing Files and Advanced Searching

Side-by-side file comparison lets you compare two versions of a file to find differences or track changes.

Advanced searching lets you search files and folders to find text. For example, you can see a list of all files containing a particular part number.

These features are available with a Dostek DNC Professional Edition software upgrade. Contact Dostek for more information.

5 Data Backup - Planning for Disaster

To protect your investment against computer failure or loss of data, take the following basic precautions:

- Make a duplicate copy of your Dostek DNC software CD. For example:
 - Copy the CD to another CD.
 - Copy the CD content to a shared folder on your network file server.
- Make regular backup copies of your CNC data files.
- Make a backup copy of your Dostek DNC configuration files after initial installation and then any time you change configuration settings.
- Store your manual and software CD in a secure location so you can find the CD when you need to reinstall the software.

Note:

- › To make a backup copy of your Dostek DNC configuration files, click Express Backup in the Tools menu in the Dostek DNC Configuration application.

In addition to these basic precautions, consider the following additional ways to protect your investment.

Make multiple backup copies. Two copies is better than one. Store your backup copies in secure locations where you can find them when you need them.

Make an off-site backup copy. Store at least one copy of your data off-site. You can:

- Copy your data to CDs, DVDs or a portable drive.
- Copy your files to Web-based storage, such as SkyDrive (Microsoft) or Google Docs.
- Subscribe to an automatic off-site backup service like Carbonite Online Backup.

Prepare a written disaster recovery plan. Make a detailed recovery plan. Write down how and where your data is backed up. Test your procedure, and review it at least annually.

Set up a backup computer. Install your software and data on a second computer so you can quickly replace your main computer when it fails. Update the data files and test the computer every few months.

Add Dostek DNC to your regular backup. If you have an in-house data backup system, consider adding Dostek DNC's "Settings" folder to the backup.

Write down your CNC's communication parameters. Write them down in the CNC's manual, or in the "Notes" tab in the Dostek DNC Configuration application.

Save your CNC parameters. Most CNC's let you output all of the parameters to a computer. Use Dostek DNC to save the data in a disk file. Include the date in the file name so you know when the parameters were saved. If your CNC ever loses its parameter memory, you can load the data from the computer instead of typing it all in by hand.

6 Troubleshooting

This section helps you with:

- Resolving installation problems (Section 7.1)
- Resolving software problems (Section 7.2)
- Resolving CNC communication problems (Section 7.3)

For more information about troubleshooting procedures, download the *Technical Support Procedures* document from the Support page on the Dostek Web site.

6.1 Resolving Installation Problems

If you encounter a problem while installing the Dostek DNC software:

- Write down, print or save a screen image of every error message.
- To install the software, log on to your computer using an account with administrator privileges.
- Ensure that all other Windows applications are closed before starting the installation.
- Carefully read and follow all messages and instructions displayed on your computer screen during installation.
- Fully complete the Dostek DNC First-Time Setup Wizard. It starts automatically when the software installation is completed.
- Try installing Dostek DNC on a different computer. There may be a problem with your computer. Windows computers can become unstable over time due to viruses, spyware, registry corruption, installation of non-compliant applications, and so on.

6.2 Resolving Software Problems

If you encounter a problem when you start the Dostek DNC software or perform a specific task:

- Write down, print or save a screen image of every error message.
- Write down exactly what you were attempting to do when the problem occurred, including the commands or key sequences you pressed.
- Restart the computer and try again. Windows computers can become unstable or low on resources.
- Ensure the computer's disk drive is not full.
- If you are attempting to access files on a network resource, ensure the network is working properly and you have sufficient privilege.

6.3 Resolving CNC Communication Problems

Note: Follow these instructions when troubleshooting communication problems with a CNC that is connected directly to the computer. To troubleshoot communication problems with the Dostek Model 440A Behind-the-Tape Reader (BTR), see Section 6.3.1 and Section 7 in the *Dostek 440A BTR User Guide*.

If you encounter a problem when you upload, download or drip feed:

- Write down, print or save a screen image of every error message displayed by the software or by the CNC.
- If the CNC displays an alarm, find the alarm description in the CNC manual and write it down or make a copy of the manual page.
- Use the sample device configuration provided for your CNC, and carefully read the notes provided in the "Notes" tab. To use a sample configuration:
 - a) Start the Dostek DNC Configuration application.
 - b) On the **File** menu, click **Import sample configuration**.
 - c) Click the **Notes** tab and read the comments and instructions.
- Keep notes. Before you change anything (on the computer or the CNC), write down the current setting, the new setting, and the reason for the change.
- View the *Communication Testing and Troubleshooting* help file (Navigator Help tab) for detailed recommendations for typical communication problems. Go to the 'Problem Topics' section and find the topic heading that most closely describes your problem.

6.4 Submit Configuration and Data Files

To diagnose your problem, Dostek may require a copy of your Dostek DNC configuration files and/or a copy of one of your CNC part programs. You can submit files to Dostek by email.

To submit your Dostek DNC configuration files by email:

1. Start the Dostek DNC Configuration application.
2. On the **File** menu, point to **Explore Folder**, and then click **Dostek DNC Settings**. The Dostek DNC "Settings" folder opens in a Windows Explorer window.
3. On the Explorer window's **Edit** menu, click **Select All**. All files in the Settings folder are selected.
4. On the **File** menu, point to **Send To**, and then click **Mail Recipient**. A new mail message opens.
5. Type **support@dostek.com** in the **To** box.
6. Click **Send**.

Note:

- › If the computer does not have an email application installed, instead copy the files to another computer with email.

7 Technical Support



This section explains how to contact Dostek if you need help.

When contacting Dostek, provide the following information:

- Your name, company name, telephone, and e-mail
- Your Dostek DNC software serial number and software version number. This information is displayed when you click **About** in Dostek DNC's **Help** menu, and is also recorded on the media page at the front of your printed manual.
- If the CNC machine or the Dostek DNC software displays an alarm or error message, write down the entire message.

Free Technical Support

Free technical support is always available by e-mail and fax:

e-mail: support@dostek.com
Fax: 519-741-8669
Web: www.dostek.com

Visit the Support page on the Dostek Web site for free access to the latest support updates and help files.

Remote Support and Training

Remote technical support and training is a fast and cost-effective option. With remote support, Dostek connects to you by telephone and to your computer by Internet. Dostek can remotely configure your software, provide training or analyze problems.

Telephone Technical Support

Toll-free telephone technical support is available at no charge for a limited time after your purchase. Thereafter, telephone support is available at reasonable cost. However, don't hesitate to call; if your questions is simple, we can likely help you without charge.

Toll free: 888-355-5735 (Toll free from USA and Canada)
Direct: 519-742-5721
Hours: 8 am to 5 pm EST