



# CodeLight Installation & Configuration

CodeLight barcoding module provides an electronic method of order cycle processing and physical inventory.

To run this module you must set up a Host System and a Remote Warehouse PC. The remote PC gets data from the host system, uses the data to accomplish barcode processing and then sends the updated data back to the host system.

CodeLight installation primarily occurs on the Remote Warehouse PC.

## Before you begin

- Install FACTS 7 (including the latest monthly update) on the Host system with the CodeLight module flag set to Y in the System Control F/M and the Company Control F/M. Both programs can be accessed by selecting *System Management* → *File Maintenances* in FACTS.
  - If you have not installed FACTS 7 yet, refer to Chapter 2 for UNIX systems or Chapter 4 for NT systems. If you are upgrading the host system to FACTS 7 also refer to Chapter 3 (UNIX) or Chapter 5 (NT) for instructions.
- After FACTS has been installed on the host system, make a copy of the host system and FTP it to the Remote Warehouse PC.
- If you are updating from a previous version of FACTS, make sure there is no data “in transit” between the host and remote systems. In addition, verify that there is no information left on the handheld unit that still has to be processed.
- Set up the barcode printer on the Remote Warehouse P/C and run a test print to make sure it is configured properly.

- Create a printer ID and ProvideX link file for the barcode printer, if you use one. For more information on setting up printers in FACTS, refer to the “Printers, drivers and link files” section in Chapters 2 (UNIX) and 4 (NT).

## Configuring the host system

### Setting up Warehouse F/M

1. Sign into FACTS on the Host System.
2. Select Warehouse F/M from the menu (*Inventory Control*→*File Maintenances*→*Infrequent File Maintenances*→*Warehouse F/M*).

If your company has more than one warehouse using the barcode module, repeat the following steps for each warehouse.

3. Enter the warehouse code or press F2 to search.
4. Select the options that you want to use – Sales Orders, Purchase Orders Cycle Counts and/or Warehouse Transfer.

Refer to the CodeLight user’s manual for feature descriptions. Set up these fields for every warehouse that will use CodeLight.

5. Enter **clu** in the Data Transfer Link input. This is the default data transfer link file copied to the host system when you installed FACT 7.
6. **Save** and **exit**.

The screenshot shows the 'Warehouse F/M (ICF970)' window. At the top, the 'Warehouse' field is set to '01' and 'Atlanta Warehouse'. Below this are three tabs: 'Main', 'Multiple Warehouses', and 'Third Party'. The 'Main' tab is active, showing a 'Codelight' section with four checked options: 'Sales Orders', 'Purch Orders', 'Cycle Counts', and 'Whse Transfer'. The 'Data Transfer Link' field contains 'clu'. To the right of these options are four buttons: 'Save', 'Delete', 'New', and 'Exit'. Below the 'Codelight' section is a 'Clippership' section with 'Use Clippership' (unchecked), 'Transmit to Clippership' (unchecked), 'Clippership Timeout' (set to 0), and a 'Clippership Directory' text box. At the bottom of the window is a status bar that says 'Enter the link file for data transfer'.

## Setting up CodeLight Static Control F/M

1. Access this program by entering the access code **CL** and selecting *File Maintenances*→*Static Control F/M* from the menu.
2. Enter the printer designation from Printer F/M to indicate which device the barcode printer is using. The printer designation in FACTS should be the name of the ProvideX link file you created for this printer.
3. Press Enter (CR) to end changes.
4. Enter Y to save changes.
5. Press F4 to exit.

## Installing CodeLight on the Remote Warehouse P/C

The installation process requires that you run through the setup on the FACTS Install CD twice. The first pass installs ProvideX and the CodeLight drivers; the second pass installs WindX.

### Installing ProvideX and the CodeLight drivers on the Remote Warehouse P/C:

1. Close all Windows programs before you begin installation.
2. Place the FACTS Installation CD in the CD-ROM drive.
3. Choose *Start*→*Run*. Click **Browse** and select the **Setup.exe** file on the CD. Click **OK** in the Run dialog box to begin the installation.
4. Choose **Next** at the Welcome screen.
5. Choose **Yes** to accept the Software License Agreement. Select **No** if you do not accept the agreement and exit the setup.
6. Choose **Next** at the User Information window. This information defaults from the Windows registry.
7. In the Setup Type window, select **ProvideX Applications and CodeLight** from the list box. Choose **Next** to continue.
8. Choose **ProvideX 32-bit 4.12c** and **CodeLight Drivers** in the Select Components window. Make sure the Destination Folder is the same location into which you copied FACTS 7.  
  
For example, if you copied FACTS into C:\Ssi7, then install to C:\Ssi7.  
  
Choose **Next**.
9. Choose **Yes** to install ProvideX 4.12c in the pop up window.
10. Choose **Next** at the ProvideX Welcome Screen.

11. Choose **Yes** to accept the Software License Agreement and continue.
12. Change the Destination Location folder so that ProvideX installs in the ssi7 folder.  
  
For example, if you copied FACTS 7 into C:\Ssi7, change the ProvideX destination directory to  
  
C:\Ssi7\Pvx  
  
The installation procedure automatically creates Ssi7 if it does not already exist on your system.  
  
☞ If you install ProvideX to the default location (C:\pvx), connectivity problems will occur when you try to run the Remote Warehouse PC.
13. Select the **Typical** installation and choose **Next**.
14. Choose **Next** to accept the default Program Folder Name.
15. Review the current settings. Choose **Back** if you need to make any changes to previous screens. Choose **Next** to begin decompressing files and setting up icons.
16. Choose **No** if a Library Update dialog box appears.
17. Choose **OK** in the Activation Recorded box.
18. Check the box to view the ProvideX readme.txt file and select **Finish** to complete the ProvideX Setup.
19. Select **Finish** to complete the FACTS 7 Setup.
20. Begin the WindX installation. Do not remove the CD and do not restart your computer.

#### Installing WindX on the Remote Warehouse PC:

1. Choose *Start→Run*. Click **Browse** and select the **Setup.exe** file on the CD. Click **OK** in the Run dialog box to begin the installation.
2. Choose **Next** at the Welcome screen.
3. Choose **Yes** to accept the Software License Agreement. Select **No** if you do not accept the agreement and exit the setup.
4. Choose **Next** at the User Information window. This information defaults from the Windows registry.
5. In the Setup Type window, select **ProvideX Applications and CodeLight** from the list box. Choose **Next** to continue.
6. Choose **WindX 32-bit 4.12c** in the Select Components window. Make sure the Destination Folder is the same location into which you copied FACTS 7.

For example, if you copied FACTS into C:\Ssi7\pvx, then install to C:\Ssi7\pvx.

Choose **Next**.

7. Choose **Yes** to install WindX 32-bit 4.12c.
8. Choose **Next** at the WindX Welcome Screen.
9. Choose **Yes** to accept the Software License Agreement and continue.
10. Change the Destination Location folder so that WindX installs in the ssi7\pvx\ folder.

For example, if you copied FACTS 7 into C:\Ssi7, change the WindX destination directory to

C:\Ssi7\Pvx

If you install ProvideX to the default location (C:\pvx), connectivity problems will occur when you try to run the Remote Warehouse PC.

11. Select the **Typical** installation and choose **Next**.
12. Choose **Next** to accept the default Program Folder Name.
13. Review the current settings. Choose **Back** if you need to make any changes to previous screens. Choose **Next** to begin decompressing files and setting up icons.
14. Choose **No** if a Library Update dialog box appears.
15. Choose **OK** in the Activation Recorded box.
16. Select **Finish** to complete the WindX Setup.
17. Select **Finish** to complete the FACTS 7 Setup.

- You are now ready to configure the host system and remote warehouse PC.

## Configuring the Remote Warehouse PC

The Remote Warehouse PC configuration requires setup in the following programs:

- Directory/Commands F/M (CLF992) establishes connection to the host system.
- (Remote) Static Control F/M (CLF 990) sets up defaults and options for the remote CodeLight system.

### *Telnet users*

Before you begin configuring Directory/Commands F/M, configure WindX for Telnet.

#### **To configure WindX for Telenet:**

1. In the Windows Taskbar, select Start→Programs→WindX 32-bit→WindX 32-bit.
2. Choose the Settings menu.
3. In the Configuration Settings window, set **Line** to Telnet.
4. Enter the host's IP address and choose **OK** to save and exit.

### *\*NTSLAVE users*

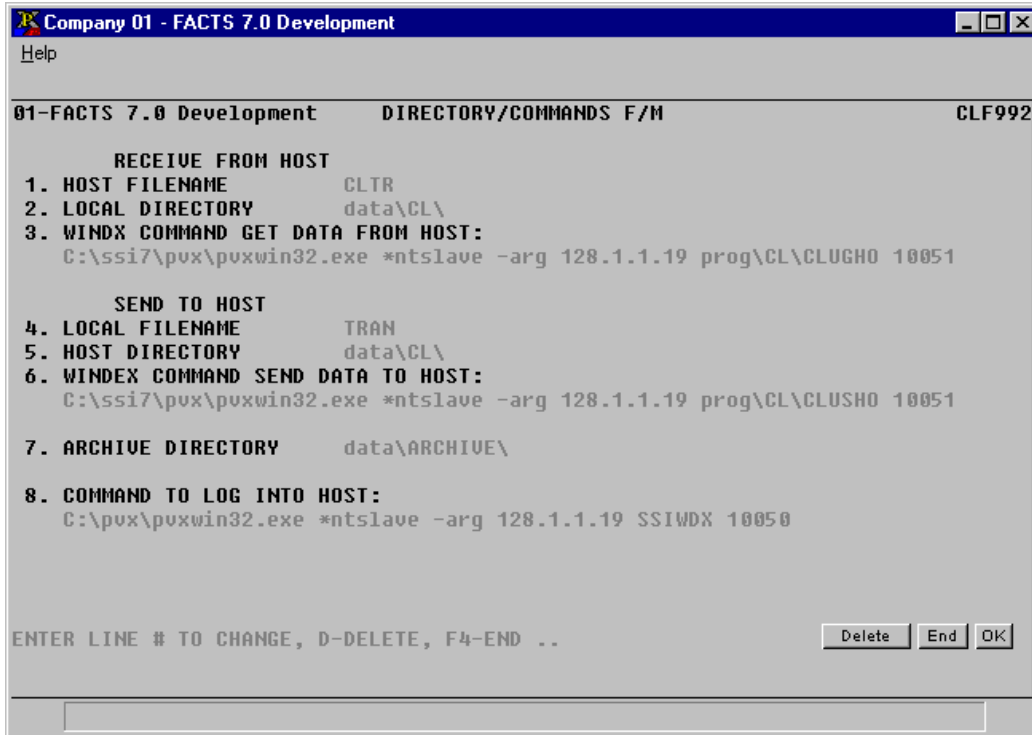
Before you begin, make sure you know the host's IP address and locate an open TCP/IP socket. The socket number is optional, but it can help prevent CodeLight from interfering in other TCP/IP services.

## Directory/Commands F/M

This program enables you to define the files and command paths that need to be used to transfer data between the host and remote warehouse PC.

Use WindX to establish connectivity between the two systems. You can use either the \*NTHOST/\*NTSLAVE or Telnet connectivity method.

See [Chapter 1](#) for more information WindX, \*NTHOST/\*NTSLAVE and Telnet.



This screen capture illustrates what should appear in the command lines (3, 6 and 8) if you are using the \*NTHOST/\*NTSLAVE connectivity method in WinDX.

This example assumes host system running Windows NT.

### To begin configuration:

1. Double click on the FACTS 7 CodeLight Remote icon to launch FACTS on the remote warehouse PC and sign into FACTS.
2. In the FACTS Master Menu, enter the access code **CL2** to access the Remote CodeLight master menu.
3. Start with the Directory/Commands F/M (*CodeLight Remote Warehouse Master Menu*→*File Maintenance*→*Directory/Commands F/M*) program to establish the connection between the host system and the remote warehouse PC.

### Receive from Host

1. Enter CLTR as the **Host Filename**. This is a default file name created during the FACTS installation that automatically updates as the remote warehouse PC and the host system transfer data to each other.
2. Enter the relative path to the CodeLight data directory the host system.  
*Example:* data\CL\  
You must end the path with a forward slash.
3. The command line information depends on the connectivity method used.

#### **\*NTHOST/\*NTSLAVE Example:**

```
C:\Ssi7\pvx\pvxwin32.exe *ntslave -arg 128.1.1.19 prog\CL\CLUGHO 10051
```

This command line must execute the CLUGHO program. Make sure the permissions on this program are *not* set to read only.

If the host system runs on UNIX the line should appear as follows:

```
C:\Ssi7\pvx\pvxwin32.exe *ntslave -arg 128.1.1.19 ./prog/CL/CLUGHO 10051
```

***Telnet Example:***

```
C:\Ssi7\pvx\pvxwin32.exe windx -arg windx.cfg auto
```

This command line instructs the system to run WindX using the Telnet Configuration Settings you created.

The *auto* command instructs the system to automatically start WindX at the UNIX login prompt.

***Send to host***

4. Enter TRAN as the **Local FileName**. This is a default file name created during the FACTS installation that automatically updates as the remote warehouse PC and the host system transfer data to each other.
5. Enter the relative path to the CodeLight data directory on the remote warehouse PC.

*Example:* data\CL\

6. Enter the full path to the ProvideX executable and indicate the program that should be run.

***\*NTHOST/\*NTSLAVE Example:***

```
C:\Ssi7\pvx\pvxwin32.exe *ntslave -arg 128.1.1.19 prog\CL\CLUSHO 10051
```

This command line must execute the CLUSHO program. Make sure the permissions on this program are *not* set to read only.

If the host system runs on UNIX the line should appear as follows:

```
C:\Ssi7\pvx\pvxwin32.exe *ntslave -arg 128.1.1.19 ./prog/CL/CLUSHO 10051
```

***Telnet Example:***

```
C:\Ssi7\pvx\pvxwin32.exe windx -arg windx.cfg auto
```

This command line instructs the system to run WindX using the Telnet Configuration Settings you created.

The *auto* command instructs the system to automatically start WindX at the UNIX login prompt.

7. Enter the location of the directory on the remote warehouse PC in which you want CodeLight to archive data. The path must end in a slash.

*Example:* data\ARCHIVE\

The program defaults to \ARCHIVE\. If you enter a directory that does not already exist on the remote PC, the program asks if you want to create it.



Type **YES** in the selection prompt and press Enter.

8. *UNIX hosts only:* Enter the command required to log into the host system from the remote warehouse PC.

This program must execute SSIWDX.

*\*NTSLAVE Example:*

```
C:\Ssi7\pvx\pvxwin32.exe *ntslave 128.1.1.19 SSIWDX 10051
```

*Telnet Example:*

```
C:\Ssi7\pvx\pvxwin32.exe windx -arg windx.cfg auto
```

9. Press Enter (CR) to end changes.
10. Enter **Y** to save changes (enter **N** to make additional changes).
11. Press F4 to exit.

## Configuring CodeLight Static Control F/M (Remote)

Access this program by entering the access code **CL2** and selecting *File Maintenance*→*Static Control F/M*.

Company 01 - FACTS 7.0 Development

Help

01-FACTS 7.0 Development      STATIC CONTROL F/M      CLF998

SYSTEM CONFIGURATION		DOCUMENT PRINT CONTROLS	
1. HANDHELD UNIT COM PORT	1	16. TICKET FORM DEPTH	66
2. BARCODE LABEL PRINTER ID	P1	17. USE PREPRINTED FORMS	N
3. WAREHOUSE	01	18. ITEM DESCRIPTION	1
HANDHELD CONFIGURATION		19. ITEM LENGTH TO PRINT	20
4. ITEM # JUSTIFICATION	R	20. PRINT PRICES	N
5. SORT ORDERS BY BIN	N	21. TITLE SHIPPING TICKET PRINT	
6. USE TUBS FOR PICKING	N	22. LABEL FORMAT	4
7. SORT PO RECEIPTS BY BIN	N	DEFAULTS	
8. REQUIRE BIN BARCODE SCAN	Y	23. DEFAULT LABEL QTY	0
9. ASSIGN BIN LOCATIONS	Y	24. DEFAULT SO SORT ORDER	0
10. VERIFY UM	N	25. DEFAULT PO SORT ORDER	0
11. DOWNLOAD QUANTITY	0	26. DEFAULT WT SORT ORDER	0
12. FILE SIZE: DOCUMENT	1000	PASSWORDS	
13. SERIAL/LOT	150	27. DOCUMENT STATUS CHANGE	SSI
14. MEMO	150		
15. MAXIMUM CYCLE COUNTS	50		

LINE # TO CHANGE (F2-CONTINUED), D-DELETE, F4-END ..

Delete End OK

### System Configuration

1. Enter the COM Port to which the hand held cradle is connected.
2. Enter the Printer ID for the Barcode Printer. This is the two-character code FACTS printer ID created in the System Management Printer F/M. This is not the ProvideX link file name.
3. Indicate the warehouse for which the remote warehouse PC processes orders.

### Hand Held Configuration

4. Choose whether to pad item numbers on the right or left. In other words, select right or left justification for the item number.
  - Make sure this is set to the same justification method as the one indicated in *System Management*→*File Maintenances*→*Company Control F/M*.
5. Indicate whether the system should sort and process orders on the handheld unit by bin location. The program defaults to N.
6. Indicate whether the handheld device should prompt for tub numbers when processing orders to ship. The system saves tubs with the document. The program defaults to N.

7. Indicate whether the system should sort and process PO receipts by bin location. The program defaults to N.
8. Indicate whether the hand held device should require scans of bin locations. The program defaults to Y.
9. Indicate whether the hand held device should prompt for bin location entry if the bin location is blank. The program defaults to Y.
10. Indicate whether the system should verify units of measure for shipments. The program defaults to N.
11. Select the Sales Order quantity type – Committed or Ordered – to send to the hand held device. The program defaults to Ordered.
12. Enter the maximum number of documents allowed in the hand held. The system supports 1 to 1000 documents.
13. Enter the maximum number of serial/lots allowed in the hand held device. The system supports 1 to 1000 numbers.
14. Enter the maximum number of memos allowed in the hand held device. The system supports 1 to 1000.
15. Enter the maximum number of cycle count records to send to the hand held device per batch (1-999).

#### *Document Print Controls*

16. Enter the depth of the ticket form in lines at six lines per inch. Examples:  
Enter 42 to create a 7-inch form and print 14 line items per form (seven line items if you choose to print both descriptions)  
Enter 51 create an 8.5-inch form and print 24 line items per form (12 if you are printing both descriptions)  
Enter 66 to create an 11-inch form and prints 40 line-items (20 if you set both descriptions to print).  
The program defaults to 42.
17. Indicate whether or not you are using preprinted forms. The program defaults to N.
18. Choose whether to print Item Description 1, 2 or both on the shipping and transfer tickets.
19. Enter the length of the item number (four to 20) to print on tickets.
20. Indicate whether to print prices on shipping tickets.
21. Enter a title to print on the shipping ticket when printing through Shipping Ticket Print.

22. Select the label format to use.

- 1 – large
- 2 – small
- 3 – small with UM
- 4 – small with UM and horizontal format.

#### *Defaults*

- 23. Select the type of quantity that should appear when the system prints labels from the Purchase Order view. Choose from Ordered or Received. The program defaults to Ordered.
- 24. Select the default sort order for the Sales Order Status screen: Order number, customer code and request date or request date and customer code. The program defaults to order number.
- 25. Select the default sort order for the Purchase Order Status screen: Order number, vendor code and promised date or promise date and vendor code. The program defaults to order number.
- 26. Select the default sort order for the Warehouse Transfer In/Out screens: Ticket number, warehouse code and date, or date and warehouse code. Transfers In are sorted by the shipped date. Transfers Out are sorted by the requested date.

#### *Passwords*

- 27. Create a password for changing document status.

## Configuring the COM port in Windows

The COM port entered in the first input of the Remote Static Control F/M must be configured in the Windows operating system.

#### **To configure the COM port:**

- 1. From the Windows Taskbar, select *Start→Settings→Control Panel→System→ Device Manager→Ports (COM & LPT)*.
- 2. Select the port indicated in the Static Control F/M and choose **Properties**.

- Establish the following communications settings for the remote PC on the Port Settings tab.

**Baud Rate**            **9600**  
**Parity**                **Even**  
**Data Bits**            **7**  
**Stop Bits**            **1**  
**Flow Control**    **None**

## Configuring the Handheld Device

### *Configuring the Settings on the Janus D2020 Communications Dock Station*

- The Cable goes from the COM port on the PC to the Network Port on the back of the Communications DOCK. DIP switch settings on the back of the dock are 1,2,4 down and 3 up. Hand Held is placed with screen up and the reader status LED marked Transmit | will be on if reader is placed correctly in the dock station.

- Use a Null Modem 3 Wire Only Cable.

DB-25	to	DB-25		DB-25	to	DB-9
2	-----	3		2	-----	2
3	-----	2		3	-----	3
7	-----	7		7	-----	5

**Table 1 – Recommended Intermec Cables**

Part Number	Cable Description
047569	9 pin to 25 pin
047286	25 pin to 25 pin

### *Configuring the Communications Setting on the Janus 2020 Handheld Computer*

- Get to a C prompt on the handheld (the handheld should boot up to a C prompt).
- Type in: **IC**
- Press **Enter**.
- On the Configuration menu, use the arrow key to highlight **Com** and press **Enter**.
- When **Com1** appears in the handheld display, press **Enter**.
- The handheld now displays four options: Dock Port, Configure, Activate, UART Restore. Use the down arrow to highlight **Configure** and then press **Enter**.

7. The handheld displays five options: User-def, Pt-to-pt, Poll Mode D, Multi-Drop, PC Std. Use the down arrow to highlight **Pt-to-pt** and then press the enter key.

➤ **Prior versions of FACTS/CodeLight have utilized Polling Mode D as the communications protocol. The CodeLight 7.0 version utilizes a Point to Point communications protocol.**

8. In the screen that allows you to set the baud rate, parity, data bits, and stop bits, use the right/left arrow keys to view the selections for these fields, and establish the following settings:

<b>Baud Rate</b>	<b>9600</b>
<b>Parity</b>	<b>Even</b>
<b>Data Bits</b>	<b>7</b>
<b>Stop Bits</b>	<b>1</b>

9. Once this information is set, make sure the **Next** option is highlighted and press **Enter**. In the Delays screen, do not change the Delays settings. Use the down arrow to highlight **Next** and press **Enter**.
10. The next field offered is **Flow Control**. Use the left arrow to select **None**, and press **Enter**.
11. Use the down arrow to highlight **OK** and press **Enter**.
12. This will take you back to the **Configuration** menu, hit the left arrow key twice to highlight **File** and press **Enter**.
13. Press the up arrow once to highlight the **Exit** key and press **Enter**.
14. When you are prompted to **Update Online Configuration**, make sure **Yes** is highlighted and press **Enter**. You should now be back at the C prompt on the handheld.
15. Type in: **irl -ii**. Use the f shift key+4 to get the - character. If you are reloading the handheld with new control parameters, then enter the **Clear Data ...** option. This is where you leave the handheld to have the IRL Code loaded.

#### *Download the IRL Code to the Handheld Unit*

1. From the Remote PC CodeLight Menu, select File Maintenances, then Download Code to Handheld Unit.

This download takes approximately 7 minutes. Both the handheld and the PC display a status of the number of lines loaded.

The hand held displays a copyright notice if the download is successful.

2. Press **Enter**. The handheld prompts you to assign a unique letter or number (0-9, A-Z) to identify this unit to the Warehouse PC.

Each time someone downloads a document to a handheld unit, the status screen on the Warehouse PC displays this ID next to the document downloaded.

The hand held displays an error message if the download is unsuccessful. It may also return to the IRL menu or remain locked during the compile.

To clear any of these issues, press Enter on the hand held to display the error message.

Clear the data from the menu and run the download again.

➤ *You are now ready to begin using CodeLight*

## Troubleshooting

### *Cables*

There are several reasons why Interlink may not find the connection to the Janus. One of the most common causes is the use of anything other than a standard 3-wire null modem cable. Refer to **Table 1** for the recommended Intermec cables.

If you choose to not use these cable and would like to make or modify your own cable, please keep in mind that *any additional wires* may cause Interlink to fail to connect. The only wires needed are receive (Rx), transmit (Tx), and signal ground (SG). On a 25-pin connector, these are pins 2,3, and 7.

### *Janus 2020 Handheld Computer*

A discharged battery pack will cause the handheld to loose both the data and the IRL program used by Codelight. Keep a spare charged battery pack.

Error Codes displayed by the handheld when transmitting data:

- 1 Time Out (Bad Connection, usually not seated well in the communications dock). Make sure that the reader status LED marked | (Transmit) is on when the handheld is placed in the communications dock.
- 2 Overflow (Memory Overflow in the handheld)
- 4 Protocol Error (Incorrect Settings in one of the com ports)
- 5 Incorrect Terminal Mode (Incorrect Settings in the handheld)

If the handheld locks up, you can reboot by entering CTL, ALT, shift F+. keys.

If the handheld becomes locked up and cannot be turned off or on by pressing the I/O key, then press I/O-5-down arrow to turn on/off the reader. When you turn the reader on, the reader displays the Boot Loader menu. Reboot the reader.

### *Janus D2020 Communications Dock*

The communications cable should be connected to the **Network** port on the communication dock. For RS-232 communications with a PC ensure the dip switches are set as shown below in **Table 2**. Make sure dock has power supply attached. Also, make sure that the reader status LED marked | (Transmit) is on when the handheld is placed in the communications dock.

**Table 2 – Communications Dock Switch Settings**

DIP Switch	Setting
1	OFF
2	OFF
3	ON
4	OFF

## Using Interlink/Interserver

### *Overview*

Use these programs if you need to upgrade the utilities or reader applications on the handheld.

Interlink and Interserver are a pair of application programs used to transfer files between two PCs or a PC and a Janus. When the Interlink/Interserver programs are used, the drives on one PC become available for use on another PC, making it possible to move, copy, or create files from one PC to the other.

The computer running *Interlink* is considered to be the *client* or *remote* PC. The computer running *Interserver* is considered to be the *server* or *local* PC.

For example, if you want to update the C: drive of a Janus, and you need to copy the contents of the Janus C: drive to the PC, you would use Interlink on the PC and Interserver on Janus.

### *Install Interlink/Interserver*

Install Intermec's "Interlink/Interserver" software on the Remote PC. (see Intermec Fax document #2236, Using Interlink/Interserver)

Interlink/Interserver will allow you to load/modify software on the handheld device.

### *Download version 3.04 (Y2K compliant) firmware from Intermec*

The software (or firmware) that runs the handheld device must be Intermec's latest version, which is Y2K compliant

Use a Web browser to access Intermec's site - [www.intermec.com](http://www.intermec.com), and select the following links: *Main*→*Support*→*Product Support*→*Downloads*

Download version 3.04 (for 1mg)



See Intermec's Fax document #2217 *Upgrading Software* for instructions on how to install the new handheld firmware.

#### Preparing the PC

1. Before Interlink / Interserver can be used, a modification must be made to the PC's CONFIG.SYS file. The modification consists of adding the following line to the CONFIG.SYS file:

*Device=C:\Interlink.exe/Drives:7/Noprinter*

The *Device=C:/Interlink.exe* statement tells the PC where the Interlink program is located. This examples assumes that *Interlink.exe* is located in the root directory on the C: drive.

The *Drives:7* statement sets the maximum number of drives that will be re-mapped when the Interlink connection is established. You may need to change this parameter to a higher number depending on the number of locally available drives in you PC.

The */Noprinter* statement prevents printer ports from being redirected when Interlink is started. (By default, Interlink performs redirection on all printers.)

2. Modifications may also need to be made to the *Autoexec.bat* file. If your PC loads the *Smartdrv* disk caching program (and it probably does), you must specify the Janus drives that are not to be cached. Drive caching may interfere with the operation of Interlink/Interserver.

Find and edit the *Smartdrv.exe* entry in the *Autoexec.bat* file to resemble the following line:

*C:\DOS\SMARTDRV.EXE d- e- f- g- h-*

For each drive that you do **not** want re-mapped, add that drive letter followed by a minus (-) sign. In the example above, drive **D**, **E**, **F**, **G**, and **H** are being designated as "non-cached" drives.

If you do not see a line containing the *Smartdrv.exe* statement in your *Autoexec.bat* file, you will not need to make any modifications.

Once the modifications have been made to the *Config.sys* and *Autoexec.bat*, turn the PC off and connect the Janus to an available COM port on the PC. Recommended connecting cables are shown in **Table 1**.

#### *Software Issues*

There are software issues that can also cause Interlink not to connect. Some of the most common are:

SMARTDRV.EXE – Disk caching program, typically loaded in the AUTOEXEC.BAT file.

SHARE.EXE – Allows file sharing over a network, typically loaded in the AUTOEXEC.BAT file.

Both of these programs can be temporarily "remarked" out to see if this will help in establishing a connection. Edit the line(s) in the AUTOEXEC.BAT file as shown in the example below, adding "REM" to make the line(s) inactive.

Original Line:	<i>C:\DOS\SMARTDRV.EXE</i>
Edited Line:	<i>REM C:\DOS\SMARTDRV.EXE</i>

The DOS 6.XX or higher version of *INTERLNK.EXE* will usually work properly. In the event of difficulty, copy the Intermec version of Interlink from the supplied companion disks. Be sure to change the path in the device statement of *CONFIG.SYS* to reflect the location of the new *INTERLNK.EXE*.

### *Networked PC's*

If the PC you are trying to connect to is on a network, Interlink / Interserver may try to re-map the network drives. Try logging out of the network and executing Interlink again.

Another possible source of difficulty is when Interlink maps one of the Janus drives to a network drive that you normally have access to. (For example, if you normally have a **G:** drive available as part of your network, and the Janus **C:** drive gets re-mapped to your PC's **G:** drive.) In this case, you can specify exactly which drive you would like Interlink to map to. The syntax is:

***INTERLINK G:=C:***

This will execute Interlink and map the PC's G: drive to the Janus C: drive.

### *Windows 95/98*

To run Interlink/Interserve under Windows 95/98:

1. Using Windows Explorer, find and highlight the file named "*COMMAND.COM*" in the Windows directory, then drag it to an open spot on the desktop. Right-click on this icon and select **Properties** from the menu.
2. Near the top of the **Properties** dialog box you will see "*COMMAND.COM*" displayed in a text box. Edit the name displayed in the text box to read "Interlink".
3. Next, select the **Program** tab, then click on the checkbox labeled "**Close on exit**".
4. Click on the button labeled "**Advanced**".
  - a. Click on the checkbox labeled "**MS-DOS mode**".
  - b. Select the radio-button labeled "**Specify a new MS-DOS configuration**".
  - c. Modify *CONFIG.SYS* by adding the following line:  
***device=c:\interlnk.exe/drives:7/no printer***
  - d. Click the "**OK**" button, then click "**OK**" again to accept the configuration changes.
5. When you start Interlink from the desktop icon, Windows will exit and then run Interlink. Windows will restart when you exit Interlink.

### *Windows NT/NT Workstation*

Interlink/Interserver will not run under Windows NT/NT Workstation.

### **Janus-to-PC drive letter re-mapping example**

[need to insert figure]

Figure 1 – Janus-to-PC drive letter re-mapping example

When Interlink/Interserver is used to connect a Janus to a PC, the Janus drives appear as additional (re-mapping) drives on the PC, starting at the next available drive letter. The actual drive letters you see may vary depending upon the number of drives in your PC and whether or not you are connected to a network.

Note: Because of the way Interlink/Interserve works, two “phantom” drives (not shown) will be seen on the PC display. These drives correspond to what would be the A: and B: drives on the Janus if they existed. These “phantom” drives will normally appear as the first two additional drives.

## Starting Interlink / Interserver

1. Turn the PC on. Interlink will attempt to establish a connection as it executes the added line in the *Config.sys* file. If the Janus device is not detected, Interlink will display a “**Connection not established**” message. Verify the cabling is correct and that the Janus is turned on, then restart the PC.
2. Start Interserver on the Janus by typing **intersvr** from the C: prompt. An interlink screen will appear showing the drives available for redirection on the server.
3. To establish the connection now, type **interlink** on the PC. The client (PC) will search all COM ports and attempt to establish a connection. When the connection is established the Interserver display will show which drives are connected and their associated or re-mapped drive letter on the client PC. Refer to Figure 1 for an example of drive letter re-mapping.

## Upgrading Software

1. On your PC create a subdirectory on drive C: by typing  
**md janus**
2. Change to this directory by typing:  
**cd \janus**
3. Insert the Janus Companion Disk 1 in the floppy disk drive and copy the image file to the janus subdirectory by typing:  
**copy a:img\*.exe**
4. The image file copied to the C: drive is named imgX\_yzr, where X is the software revision. This should match the software revision on your Companion Disk. There is an alpha character that may or may not be if it is it needs to be included in all the following references. Execute this self-extracting program that contains compressed files by typing the file name at the DOS prompt. The files that are extracted will be:

1 MB units	4 MB units
SYSTEM_x.yzr	CDRIVEEx.yzr
USER_x.yzr	DDRIVEEx.yzr
OTP2MEGx.yzr	SYSTEMx.yzr
LOADER.EXE	LOADER.EXE

5. Connect the Janus communications dock or optical link adapter to your PC using cables:  
052908 (PC DB25) or 047569 (PCDB9) for the JD20X0 Communications Dock or  
047569 (PC DB25) or 059167 (PC DB9) for the JL20X0 Optical Link Adapter

6. Force the Janus to the Boot Loader menu by first turning the unit OFF (I/O key). Then press **F3**, **left arrow**, and **2** simultaneously. Then press **2** once more. Turn the unit **ON** by pressing I/O key. Janus should now be displaying the Boot Loader menu. Select **LOAD** and press **ENTER**. Place Janus in the communication dock or connect to the optical adapter.
7. The program **LOADER** is used to transfer the files from the PC to the Janus. There is a command line switch for **LOADER** which will be displayed if you type:

**LOADER/?**

**LOADER** accepts the following command syntax:

For 1 MB Units,

**LOADER/SYS=SYSTEM\_x.yzr \USER=USER\_x.yzr \ APP=OTP2MEGx.yzr \COMx**

For 4 MB Units,

**LOADER/SYS=SYSTEMx.yzr \USER=CDRIVEx.yzr \ APP=DDRIVEx.yzr \COMx**

NOTE: There is a <space> in the above command after each command line option.

**/SYS** loads the SYSTEM\_x.yzr or SYSTEMx.yzr on the Janus flash ROM memory

**/USER** loads the USER\_x.yzr or CDRIVEx.yzr on the Janus C: drive

**/APP** loads the OTP2MEGx.yzr or DDRIVEx.yzr on the Janus D: drive

**/COM** specifies which COM port the PC is using to connect to the Janus.

**/B** is an optional command line switch that can be added to show the baud rate to 38,400 baud. Note: the DEFAULT baud rate is 57,600.

8. After running the above command, press ENTER on your PC's keyboard. Janus will automatically return to the Boot Loader Menu.
9. Upon completion of the software upgrade, the PC will return to a DOS prompt and the Janus will display "System Has Reset, Please Reboot". Verify REBOOT is highlighted and depress ENTER.

The software upgrade process is complete.

**If you are using an International keyboard**, the following steps must be performed to enable National Language Support.

1. Make a directory where you want to install this utility. You may use the same **janus** subdirectory created in step 1. Perform a **chdir** command to change to the directory.
2. Insert the Companion Disk #1 into the floppy disk drive and type:

**a:install [country]-[port]**

Where:

[country] specifies the language and keyboard the Janus will use.

[port] specifies the PC's COM port the reader is connected to.

For example, if using the French keyboard and the reader is connected to COM2, then type:

**a:install france -com2**

3. Upon completion of the installation, run one of the following commands:

**loadadd nls** This will automatically load NLS support.

**loadnew** This will; automatically load NLS support and any files in your C\_FILES/COMMON subdirectory. You can customize the startup files (autoexec.bat and config.sys) in the above subdirectory for use on the Janus.

**loadlang**      this works similar to loadnew, but only the startup files can be modified. No new files can be added, and any required drivers will not be loaded. This command is typically not recommended.

This will load all the required files and programs to use your Janus with your keyboard.