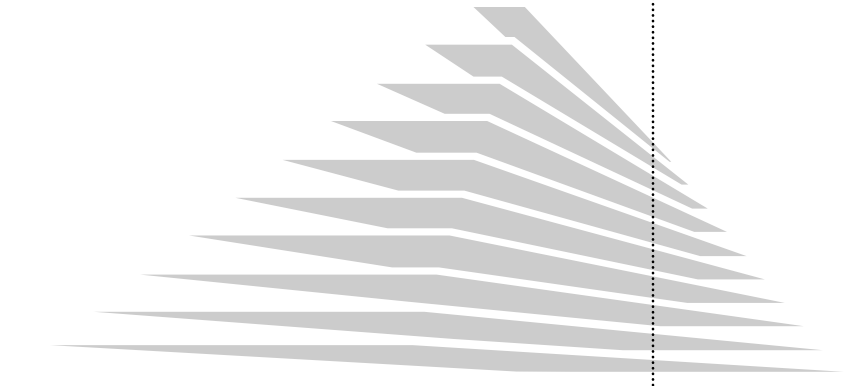


Keypoint[®]

Software Wedge for Windows

Data Technologies, Inc.



Thank you for purchasing Keyport, the state-of-the-art software wedge from Data Technologies, Inc. With Keyport you can easily scan bar codes into your Windows application.

This manual assumes you have a basic understanding of Windows and bar code technology.

Copyright Notice

This program is copyrighted by Data Technologies, Inc. This copyright is protected by United States Copyright Law and International Treaty provisions. Therefore you must treat this software just like a book, with the single exception that you may make a back-up copy for the sole purpose of protecting your investment from loss.

Datatech's address and phone number are on page 30.

Registration

When Keyport installs, it installs as a non-registered version. It will run for 30 days, or 40 executions, whichever comes first. During this time, you are invited to test Keyport to see if it meets your needs.

To register Keyport, you will need to enter an activation code. Choose "Register or Modify License..." from the Window menu. A dialog will pop up with a code shown that is to be passed to Datatech (this code is sometimes called a registration code.) If you have already purchased Keyport, you may have a floppy disk containing a valid license from Datatech. If you do, you may press the "Import from drive A:" button to read the license from the disk.

If not, you must call, FAX, or e-mail Datatech with payment information (Keyport lists for \$195) and the registration code. Datatech will give you an activation

*Our phone is
425-776-5729.*

code for Keyport (if you FAX the order to Datatech, be sure to include an e-mail address for the activation code to be sent to.) This activation code is keyed to the particular PC on which you have installed Keyport and will not work on other PCs. If you are getting the activation code via e-mail, you may cancel out of this dialog, and continue to use Keyport until the license arrives.

Datatech's Quality Ensurance Policy

We go to every length to ensure that our products are the highest quality available. As a token of our confidence in our products, Data Technologies, Inc., offers a thirty-day no-questions-asked money-back guarantee with Keyport.

Limit of Liability

Data Technologies, Inc., sells this product as is; no other warranty is made, expressed or implied. The guarantee on this product will not exceed the purchase price of this software. Specifically, Data Technologies will not be liable for direct, indirect, special, consequential, incidental, or other damages incurred during or pursuant to the use of this program.

Free Phone Help

Although our software is easy to use, you may have questions. If you can't find the answer in the documentation, write us a letter or give us a call. We are available between 9 a.m. and 4 p.m. Pacific Time.

Version 4.0

Keyport™ Version 4.0 is a 32-bit application and will not run under Microsoft® Windows® 3.1.

I n s t a l l a t i o n

Keyport

To install Keyport® 4.0:

- Place the Keyport CD into your CD drive.
- If your computer has autorun enabled, the set-up program should run automatically. If not, run Setup.exe on the CD by click the **Start** button on your PC and selecting **Run/Run...**
- Follow the directions given by the installation program to install Keyport completely.

The set-up program will suggest a location to which you will install Keyport. You may specify a new location by pressing the **Change** button in the installation dialog box.

T h e B a s i c s

What Keyport Does

Keyport is designed to work with a bar code reader connected to a serial port on a PC running Windows® (either 95, 98, NT, or 2000). Keyport can be used as either a simple wedge or as a powerful transaction manager.

Key Mapping

When Keyport is active, ASCII data received from the serial port can be sent as keystrokes to the active window. When it is sent as keystrokes, you can have the data translated using a key map. Keyport can't send keystrokes to an application that is not designed to run in Microsoft Windows.

Customized Transaction Processing

Keyport can also help you build a customized interface so that you can scan the data you need quickly and accurately. You can adjust the number and types of fields, set individual audio cues, and more.

See page 17 for details on key mapping.

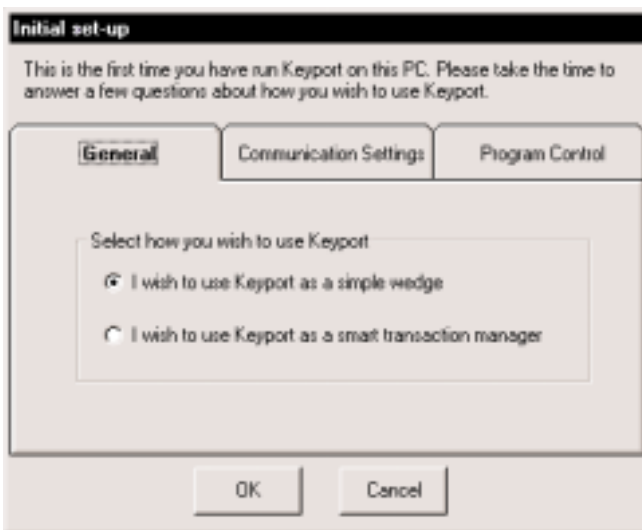
See page 13 for details on customizing transactions.

Starting Keyport

The installation places a shortcut to the Keyport program under **Programs** in the **Start** menu. Click the program icon to bring up the main Keyport window.

The First Time You Run Keyport

When you load Keyport for the very first time, it will open to the following dialog box:



Here you can set Keyport's various communication and program settings, but the most important question here is what you wish to do with Keyport.

See page 11.

To try out the sample transactions, see page 24.

I Wish to Use Keyport as a Simple Wedge

If this is all you need Keyport for, that's fine. It will run as a software wedge for you. Later, if you would like to see the full capabilities of Keyport, you can reconfigure Keyport as you desire.

I Wish to Use Keyport as a Smart Transaction Manager

Selecting this choice will configure Keyport to run in transaction mode. In addition, two sample transactions are configured to demonstrate what can be done in transaction mode.

The Main Window

You can activate Keypoint processing by pushing the **Start** button (see illustration). Notice that when Keypoint is interpreting data, its title bar changes to read **Keypoint (Active)** and the label on the button toggles to **Stop**.

When Keypoint is activated, it starts processing ASCII data from the serial port and converting them to keystrokes or commands.

Clicking **Stop** deactivates the program's processing.

You can have Keypoint be active when started; see page 10.



T h e F i l e M e n u

Quit

*See page 10
to set this
preference.*

This selection quits Keyport. Depending on which preferences you have set, a dialog box may appear asking you to confirm that you wish to quit.

About Keyport...

This selection provides information about Keyport and Data Technologies, Inc.

The Window Menu

Keypoint

Options...

The **Options...** window lets you control the way Keypoint operates. There are three tabs you can select to change either the **Communication Settings**, **System Sounds**, or **Program Control** options.

You may select this if Keypoint is inactive.

Clicking **OK** saves your settings and exits the **Options...** dialog box. Clicking **Cancel** exits the dialog box without saving the settings that you changed.

Communication Settings

When the **Communication Settings** tab is selected, you can control how Keypoint reads data from the serial port.

Port: Keypoint can read COM1 through COM16.

Baud: Keypoint can communicate at 2400, 4800, 9600, 19200, or 38400 Baud.

Parity, data bits, stop bits, DTR, and RTS can also be configured to fit your needs.

System Sounds

When the **System Sounds** tab is selected, you can set the default sounds used by the Keypoint when it is active. These defaults will be used for each transaction you customize.

Keypoint supports sounds stored as WAV files.

Invalid Window: This error message will play if you attempt to scan a bar code into an active window for which no transaction is defined.

Transaction Complete: This message will play when the last field for the current transaction has successfully been gathered.

Program Control

Here you can change the basic way Keyport operates.

Active at Start-Up: When you check this, Keyport immediately becomes active when it runs. This is useful if you want to use Keyport whenever the computer boots.

Pop-Up Dialog for Errors: If this box is checked, Keyport will pop-up a dialog describing the error and suspend operation until you press OK. Otherwise, it will just beep and continue.

Confirmation Needed to Quit: This selection can provide a measure of safety that ensures you do not accidentally quit Keyport.

Always Confirm: When you check this box, Keyport will always ask you to confirm that you want to quit.

Confirm When Active: When you check this box, Keyport will only ask for confirmation if Keyport is currently active.

Never Confirm: When this is checked, Keyport will never ask you to confirm you want to quit.

Key Mapping...

This selection opens the Key Mapping window, which is described starting on page 15.

You may select this if Keyport is inactive.

Trace....

This opens the **Com Port Input Trace** window. This dialog box allows you to see the actual bytes coming in from the serial port (it does not translate bytes into keystrokes or commands). With this you can see if the device's communications settings are interfacing with Keyport properly, as well as check the data being sent to ensure proper transaction formatting.

While the trace is running, Keyport intercepts all scanned data. None of the data will be transmitted to any transaction windows.

With the radio buttons at the top of the window, you can select to have the input data translated into either character names (so that a carriage returns appears as "<CR>") or ASCII (wherein a carriage return appears as "\$0D").

Register or Modify License...

See page 1 for an explanation of how to register Keyport.

Transfer License...

If you wish to move a registered copy of Keyport to another PC, this option will write the license information out to a floppy disk. You may then load Keyport onto the new PC, and read the license from this floppy as discussed on page 1.

Make sure you have a formatted floppy disk in drive A: before selecting this menu choice.

You may select this if Keyport is active.

The Transaction Menu

[Custom] Transaction...

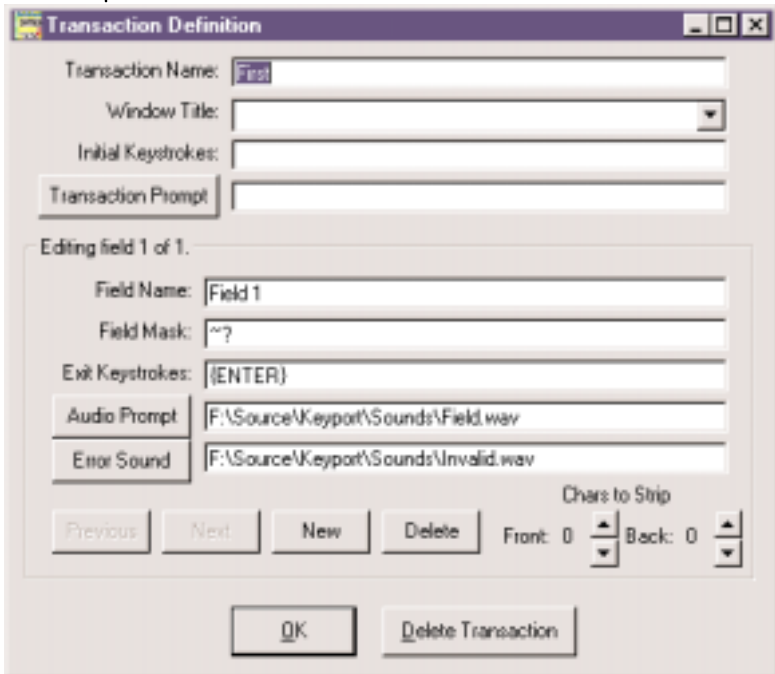
Keypoint allows you to create customized transaction processes, defining them to interface with different application windows. As you do so, new menu items will appear in this menu, labeled with the names of your transactions. Selecting one of these menu items will load that transaction into Keypoint and open the Transaction Definition window.

To see how to make a custom Transaction, see page 20.

New Transaction...

Selecting this item creates a new transaction and opens the Transaction Definition window.

See page 13.



Keyport allows you to create up to ten custom transactions, allowing your bar code reader to interact with up to ten separate application windows. You do not need to use transactions; if you choose not to, Keyport will simply act as a wedge to translate your bar code input to the active window.

There are two areas in this window; the Transaction Controls, which let you define certain parameters for the whole transaction file; and the Field Controls, which let you adjust the order and type of data to be scanned for each field in the transaction.

Pressing **OK** accepts the transaction with the changes you made. Pressing **Delete Transaction** erases the transaction and takes you back to the main window.

Transaction Controls

Transaction Name

This is the name you wish to give the transaction. It will appear in the Transaction Menu as a selection.

Window Title

This field holds the name of the transaction's application window. You may either enter it by hand, or select it from a dropdown list containing all the windows Keyport can find that are currently running on your PC.

Initial Keystrokes

If you have any keystrokes you want performed before beginning each transaction (for example, tabbing to the appropriate field), you may enter them here. These keystrokes will be executed before the first field is keyed into the application for the transaction.

Use of transactions requires that a character be assigned to the FS command, see page 24.

Key mapping is on page 17. See page 15 for exit keystrokes.

Transaction Prompt

You may select a sound (stored as a WAV file) to play at the start of the transaction. For example, you may want to record a sound that says, "Inventory control, ready for data."

Field Controls

Everything in this area of the window edits the individual fields scanned for a transaction. The top left corner of this area shows you which field of the transaction you are working on.

Field Name

This is simply a label to remind you what the data represent in the field you are editing.

Field Mask

With the field mask, you can have Keyport check incoming data to ensure that the proper bar codes are being scanned. Keyport checks the data being sent (before exit keystrokes are added), and compares those data against this mask. The data must fit the mask completely. The mask uses characters with special meanings:

- @ This character matches upper- and lower-case a-z only.
- # This character equals the numeric digits from 0-9.
- ? This character will accept any printable character.
- ~ This is a prefix that indicates that any number of the following character is acceptable (even zero).

All other characters in the mask are treated literally. So, for example, let's assume you want to make sure that the user scans a part number for a given field and all your part numbers begin with "PA" and follow with one or more digits. If you set your field mask to "PA", only scans that are *exactly* "PA" will be accepted. If you set your field mask to "PA~?", any scan that starts with PA will be accepted.

However, you might want to ensure that the user scans a bar code with at least one digit following the "PA". Use "PA#~#", and Keypoint will ensure that at least one digit follows the PA. It may seem that you could use the mask "PA~##", but this will not work. Keypoint scans the field mask from left to right. Keypoint will compare the P and A, then use all the remaining digits to fill the ~# part of the mask. That leaves nothing left over for the final # character in the mask.

Exit Keystrokes

These keystrokes are added after the scan has been converted into keystrokes. You may wish to use these to navigate the window before entering the next scan.

Audio Prompt

This sound will play when Keypoint is ready for the field to be scanned.

Error Sound

This sound plays when the scanned data do not match the Field Mask.

Do you need to wait for a screen to process? See {PAUSE}, page 26.

Chars to strip: Front

Here you can set how many characters to strip from the front of the scanned data. These characters are stripped after the scan is compared to the mask.

Chars to strip: Back

Here you can set how many characters to strip from the back of the scanned data. These characters are stripped after the scan is compared to the mask.

The Buttons

The **Previous** and **Next** buttons navigate you through the various fields available for this transaction.

The **New** button creates a new field at the end of the set of fields, while the **Delete** button deletes the field you are currently editing.

The Key Mapping Window

Keypoint

In this manual, the terms ASCII data and bytes are used interchangeably and refer to data being sent to the serial port. ASCII data refers to data being sent to the serial port, and byte is the standard computing term for information containing eight bits.

This window allows you to control how ASCII data from the serial port are mapped to the keystrokes and commands to be sent to the active window. It also has its own **Mapping File** menu.

Clicking **OK** saves your work and closes the window. **Cancel** closes the window without saving alterations to the key mapping you may have made.

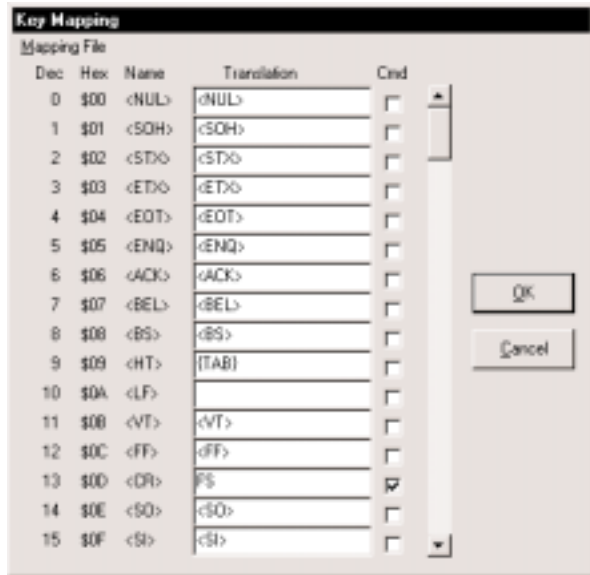
Key Mapping Columns

The columns of the dialog box show how the data from the serial port are currently being mapped. Sixteen different values can be shown at a time. The scroll bar on the right lets you pan up and down through the list.

The columns labeled **Dec** and **Hex** give the decimal and hexadecimal representation of the ASCII data. Bar code readers can send ASCII data values from 0 to 127.

The **Name** column shows an interpretation of the ASCII data as characters. For example the byte A is shown as A, but a carriage return is shown as [CR].

The column labeled **Translation** shows how ASCII data are translated before being sent as keystrokes to the active window. You can edit these to change how the ASCII data are mapped. For instance, if you change the translation of ASCII 65 (the letter A) to the string "Hi, there", then whenever you scan a bar code



containing the letter A, Keyport (if active) sends the keystrokes “Hi, there” to the active window.

The column labeled **Cmd** is used when you want Keyport to execute a command when receiving bytes. Allowable commands are listed starting on page 23.

Certain keystrokes (arrow keys, the page-up key, etc.) do not appear, and must be entered using special codes. See the Appendix to see how these keystrokes can be entered.

The Mapping File Menu

Open...

This menu selection lets you load a previously saved keyboard mapping file.

Save As...

This menu selection lets you save the current key mapping as a file that can be loaded later.

Revert to Original

This menu selection undoes every change you made to the keyboard mapping from the time that you most recently opened the **Key Mapping...** dialog box.

Default Map

This menu selection changes the current mapping to the default map.

Default Map (Caps Lock On)

This menu selection is just like the Default, except for the letters of the alphabet. Keyport assumes that if you have your Caps Lock on, you want all letters to be capitalized. Thus it maps all letters to their lowercase equivalent, so that when the PC processes them, they will all be output as capital letters.

D e m o T r a n s a c t i o n s

The settings were all set automatically by Keyport. To see how this can be done, see page 22.

What Is This?

When configured as a transaction manager, Keyport contains sample transactions to demonstrate its power quickly and easily.

One transaction operates with WordPad and expects to gather a order number followed by a part number and a quantity. The other transaction is supposed to go into Notepad, and is set to gather one field containing any data.

If you follow through this demo script, you'll get a better idea of how to use Keyport to its fullest capabilities.

Selecting a Custom Transaction

To begin, start Notepad, WordPad, and Keyport. Press Keyport's Start button. Bring the WordPad window to the front, so that's it's the active window. You should hear Keyport say "WordPad transaction" (letting you know that it is ready to handle the appropriate transaction) followed by "Please enter order number" (letting you know what you are expected to scan.)

Bring Notepad to the front. You should hear Keyport say "Notepad - untitled" followed by "scan next bar code." These sounds are completely configurable and can even be eliminated if desired. Bring Wordpad back to the front (and hear Keyport acknowledge the action.)

To set this WAV file, see page 9.

Scanning and Error-Checking Fields

Scan the following bar code for part number:



P102675

The part number is entered in the WordPad window, and Keyport gets ready for you to scan quantity. Next scan this bar code to enter the quantity:



50

Keyport enters the data, plays the wav file for a completed transaction, and prepares for a new transaction.

Now scan in a second part number and quantity:



P186567



100

Now to show you how errors are handled. Scan the bar code below, and the invalid part number following:

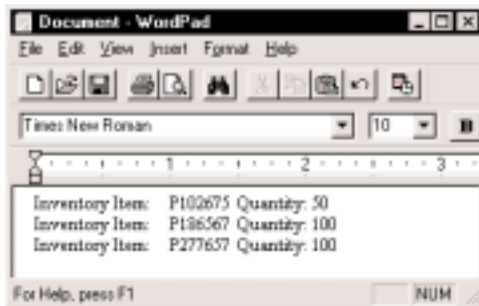


P277657



54-2

Keyport won't accept the scan, as it doesn't pass the mask. Instead, scan the "100" bar code above again. That's all there is to it! Your window should look like this:



Commands

ASCII data can be converted into *commands* in addition to keystroke sequences. In order to convert an ASCII byte into a command, enter the command and click the corresponding check box in the **Cmd** column of the **Key Mapping** window.

The following commands are allowed:

RUN

Description: Runs an application and brings it to front as the active window. If the window's title is not included in the command, the application is opened every time the command is issued. If the window title is included in the command, and the application is running, the application is not opened again, but the designated window is merely brought to the front.

Syntax: RUN ApplicationPath|WindowTitle
(optional)

Example:

```
Run C:\WINDOWS\NOTEPAD.EXE
```

```
Run C:\WINDOWS\NOTEPAD.EXE|Untitled -  
Notepad
```

FRONT

Description: Brings a window to the front. The application must be running at the time the command is issued.

Syntax: FRONT WindowTitle

Example: Front Untitled - Notepad

FS (*Field Separator*)

Description: This command is only used (and required) in conjunction with transactions. When Keyport receives this command (usually triggered by a converted or “mapped” CR, LF, or ETX), Keyport interprets the command as an end of the current field and advances to the next field in the transaction.

Syntax: FS

Example: FS

PROMPT

Description: When this command is issued, Keyport replays the last audio prompt for the user. This is helpful for when workflow has been interrupted.

Syntax: PROMPT

Example: Prompt

RESET

Description: This command starts the current record all over again. Keyport will give the audio prompts for the start of a new scan.

Syntax: RESET

Example: Reset

Mapping Keys that Are Not Displayable

Most keystrokes can be represented by entering the characters themselves. For example: To translate the bar code character “A” to a keystroke “A”, just place the cursor in the appropriate box, and press the A key. To translate the bar code character “A” to the string “Hi, there”, place the cursor in the appropriate box, and press the keys that spell “Hi, there”.

However, the Control key, the Alt key, and the Shift key don’t enter keystrokes *per se*, but modify the keys that are pressed. Their keystrokes modified by these keys are represented by a two character sequence. The first character indicates which modifier key is pressed (+=shift, ^=control, and %=alt), and the second is the keystroke modified. Thus to specify a control-C, enter “^C”. For the plus, carat, and percent keys themselves, use {+}, {^}, and {%}.

Here’s a list of special keys and how to enter them.

| <u>Key</u> | <u>Translation</u> |
|-------------------------------|--------------------|
| + | {+} |
| ^ | {^} |
| % | {%} |
| ~ | {~} |
| { | {{} |
| } | {}} |
| [| {[} |
|] | {]} |
| ↓ | {DOWN} |
| ← | {LEFT} |
| → | {RIGHT} |
| ↑ | {UP} |
| (| {(} |
| (continued on following page) | |
|) | {)} |
| Backspace | {BS} |

| | |
|------------------|----------|
| Break | {BREAK} |
| Carriage Return | {ENTER} |
| Del | {DEL} |
| End | {END} |
| Enter | {ENTER} |
| Esc | {ESC} |
| Help | {HELP} |
| Home | {HOME} |
| Insert | {INSERT} |
| Pause one second | {PAUSE} |
| Page Down | {PGDN} |
| Page Up | {PGUP} |
| Print Screen | {PRTSC} |
| Tab | {TAB} |
| F1 | {F1} |
| F2 | {F2} |
| F3 | {F3} |
| F4 | {F4} |
| F5 | {F5} |
| F6 | {F6} |
| F7 | {F7} |
| F8 | {F8} |
| F9 | {F9} |
| F10 | {F10} |
| F11 | {F11} |
| F12 | {F12} |
| F13 | {F13} |
| F14 | {F14} |
| F15 | {F15} |
| F16 | {F16} |

Legal Notices

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