The **ASP Barcode System for HP Records Manager** is an Australian product by:

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Introduction

HP Records Manager (HPRM) provides an electronic document and records management system (EDRMS) solution to meet the demands of government agencies, regulated industries, and global organizations.

The ASP Barcode System for HP Records Manager adds barcode scanning capabilities to HP Records Manager, using the cost-effective Denso BHT-1500 series terminal.

HP Records Manager was formerly known as HP TRIM, and some parts of this document and the terminal program may refer to it by this older name.

Prerequisites

This document assumes that you are a confident user of HP Records Manager.

It’s not strictly necessary to have HP Records Manager installed on the computer that you will connect the barcode terminal to, but it certainly makes data transfer easier. If HP RM is not installed, you will need to go to another computer where it is installed to complete the data transfer. And that’s no fun!

Any computer that uses the Windows 7 or later operating system and has a free USB port is suitable for use with the ASP Barcode System for HP Records Manager.

Note that two programs need to be installed on the computer that you will be using the barcode terminal with – the Denso USB-COM Port drivers, and the ASP HP RM Data Transfer Utility. You may need help from your IT team to install these programs on your computer if it has restricted access.

See page 19 of this manual for configuration and installation instructions – you have to set everything up before you can use this system.
Using the Barcode Terminal

This release of the ASP Barcode System for HP Records Manager uses the Denso BHT-1500 barcode terminal. Other terminals are also available.

Denso BHT-1500 Series Terminal

The Denso BHT-1500 series terminal, pictured on the right, provide all the durability and performance features required for demanding and tough work environments.

The Denso BHT-1500 terminal uses a proprietary operating system, and does not have a touch screen.

To turn the terminal on, press and hold down the power button (at the bottom centre of the unit) until the screen turns on and displays the “Now loading” message. To turn the terminal off, press and hold down the power button until the screen displays the “Shutdown in progress” message.

Reading Barcodes

Ensure that the terminal is turned on, and at a place in the program where barcodes can be scanned, then press the large blue SCAN button just below the Denso logo.

Hold the terminal about 3 to 30cm back from the barcode, and direct the scanning beam onto the barcode. When the barcode has been read successfully, the terminal will beep and the blue indicator LED at the top of the screen will flash briefly.

If the terminal fails to read the barcode, change the scanning angle or the distance from the barcode, and try again.
The Barcode Terminal keypad

The keyboard layout of the Denso BHT-1500 terminal is shown below.

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Function and Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>Scan Key</td>
<td>Used to scan barcodes.</td>
</tr>
<tr>
<td>(2)</td>
<td>Cursor Keys</td>
<td>Used to move the cursor and select menus.</td>
</tr>
<tr>
<td>(3)</td>
<td>Magic Key [M1]</td>
<td>The M1 and M2 keys are assigned as scan buttons by default.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Press and hold down the M1 key to display the following setting screens when set to the</td>
</tr>
<tr>
<td></td>
<td></td>
<td>default.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Volume</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Vibrator</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- LCD display brightness</td>
</tr>
<tr>
<td>(4)</td>
<td>Magic Key [M2]</td>
<td></td>
</tr>
<tr>
<td>(5)</td>
<td>Backspace/Clear key</td>
<td>Deletes the last entered character (backspace). When pressed and held for 1 second or</td>
</tr>
<tr>
<td></td>
<td></td>
<td>more, cancels entry and returns the LCD display to the previous screen (clear)</td>
</tr>
<tr>
<td>(6)</td>
<td>Enter Key</td>
<td>Press to finalize entered data or execute operations.</td>
</tr>
<tr>
<td>(7)</td>
<td>Numeric Keys</td>
<td>Used to enter data.</td>
</tr>
<tr>
<td>(8)</td>
<td>Shift Key</td>
<td>Used in combination with the other keys for special input procedures.</td>
</tr>
<tr>
<td>(9)</td>
<td>Function Keys</td>
<td>Used to select programmed functions within the program.</td>
</tr>
<tr>
<td>(10)</td>
<td>Power Key</td>
<td>Turns the power on and off.</td>
</tr>
</tbody>
</table>

In most applications, the only time you’ll need to use the keypad is to enter data such as quantities, and these are usually numeric only. The barcode terminal was designed to make this kind of data entry fast and simple.

**Numeric input** is the default mode. In this mode, you can enter numbers just by pressing the numeric keys. If you need to enter letters or other characters, the barcode terminal has an **Alphabet input** mode, indicated by a small **ALP** icon on the status line at the bottom of the display.

To change modes, you must be at a prompt that allows keyboard input. Then, press and release the **SF** key (near the bottom right of the keypad, just above the yellow **F4** key). You can now enter the characters above each numeric key, by pressing a numeric key one or more times.

Pressing a key once displays the first letter on the key, pressing a key twice displays the second letter, and so on, similar to an old-style mobile phone keypad. Keep pressing and you’ll get lower case letters, then cycle back to upper case, and so on.

Once you have the letter that you want, press the **ENT** key to enter that letter. The keypad will stay in alphabet mode until you press the **SF** key again, and then the **ALP** icon will disappear.
Loading the batteries

The Denso BHT-1500 can use either three non-rechargeable AAA Alkaline batteries or three rechargeable AAA eneloop batteries.

You must not mix battery types!

1. Slide the battery cover lock (1) in the direction indicated by the arrow and remove the battery cover (2).

2. Make sure to set the battery selector switch to the correct battery type.
   To ensure correct operation of the battery power level indicator and the charging function, you must select the correct battery type – alkaline or rechargeable.

3. Make sure that the new batteries are correctly oriented when inserting them. Insert the new batteries in the direction indicated by the arrow.
   Do not use batteries other than those specified above.

4. Insert the battery cover tab (1), and then close the battery cover (2). The battery cover is now locked in position (3).
Battery Power Level Indicator

The battery power level is indicated by the battery icon at the bottom left of the display. Battery power is indicated in four levels:

- Full charge: 
  - The battery is fully charged.
- Partial depletion: 
  - The battery is partially depleted.
- Low charge: 
  - The battery is low. Charge or replace with new batteries.
- Almost flat: 
  - The battery is almost flat. Charge immediately or replace with new batteries right now.

You can also check the battery voltage in bar graph form at any time by holding down the SF key and pressing the ENT key.

About the Battery Level Indicators

- The battery power level indicators do not accurately reflect the battery residual power and should only be used as a guideline.
- The battery power level will fluctuate due to terminal operation, and therefore differences may occur between the actual battery voltage and the displayed indicator.
- Ensure that you replace or charge the batteries as soon as possible before the battery power is completely depleted.
Charging the Batteries

If you have fitted eneloop rechargeable batteries to your terminal, you can charge the batteries by plugging the terminal into the communications cable, and plugging the cable into a USB connector on your PC.

Note that you cannot recharge alkaline batteries.

Battery Charging Indication

When the terminal is in its cradle, and the cradle is connected to a power supply, the terminal’s battery will be charged. An indicator above the middle of the display shows charging status.

Orange  The battery is being charged.
Red Flashing  Charging is halted due to a battery pack error, or the surrounding temperature is out of the charging temperature range. Charging will begin again when the temperature returns to within the charging temperature range of approx 0°C to 40°C.

The indicator will also flash red if the terminal is fitted with alkaline batteries but the communications cable is left connected to a USB port when the terminal is turned off. This is to let you know that you cannot charge alkaline batteries.

Green  Battery charging is complete.

Power Saving and Auto Off

To conserve battery power when the terminal is not in active use, the Denso BHT-1500 terminal lowers the display brightness after a preset amount of time, and then turns off after a further preset time. To restore the terminal to its prior state, just press the Power button briefly.

These settings can be changed from the settings menu, as described in the next section.
Changing the Default Settings

The volume, vibrator, LCD display brightness, and power save settings can be changed at a special screen that you can open by pressing and holding down the M1 key for at least one second.

Use the ▲ and ▼ cursor keys to select the item to be changed, then use the ◀ and ▶ keys to change the setting.

To exit from the settings screen, press any of the following keys.

- Long press of M1 key
- Backspace/Clear key
- Enter key

<table>
<thead>
<tr>
<th>Item</th>
<th>Details</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOLUME</td>
<td>Used to set the volume of the speaker that notifies the user when barcode scanning is complete. The volume can be adjusted in 4 levels: Mute → Lo → Mid → Hi</td>
<td></td>
</tr>
<tr>
<td>VIBRATOR</td>
<td>Used to turn ON / OFF the vibrator that notifies the user when barcode scanning is complete.</td>
<td>ON, OFF</td>
</tr>
<tr>
<td>BRIGHTNESS</td>
<td>Used to set the backlight brightness of the LCD display. The brightness can be adjusted in 5 levels.</td>
<td>Levels 1 to 5</td>
</tr>
<tr>
<td>BRIGHTNESS (PS)</td>
<td>Used to set the backlight brightness of the LCD display during power save mode. The brightness can be adjusted in 6 levels.</td>
<td>Levels 0 to 5</td>
</tr>
<tr>
<td>POWER SAVE</td>
<td>Used to set the time until the LCD display backlight is dimmed when not in use in order to save power.</td>
<td>1-second units (max 30 seconds)</td>
</tr>
</tbody>
</table>
Using the ASP HP RM Barcode System

Main Menu

The Main Menu of the ASP HP RM terminal program is shown on the right.

At the very top of the screen, the name of the program (TRIM V7.2c) is shown.

Below that, the five functions of the program are shown.

To select a function from the main menu, press the numeric key corresponding to the function – for example, to scan barcodes, just press the 1 key.

Scan Barcodes

This function allows the operator to perform a variety of activities on documents and other items.

Near the top of this screen, the date and time of the last entry is displayed. If you haven’t scanned anything yet, this will be the date and time when this screen was opened.

From this screen, you can press the F1 key (the red button on the lower left of the keypad) to display a list of HP RM activities that you can select from. Alternatively, you can scan an activity from a barcoded sheet.

If you’ve already scanned barcodes or activities, the last barcode scanned will be displayed above the “?” prompt at the bottom of the screen.

To exit from this screen back to the Main Menu, press the ENT key twice.
Download

When you select Download from the Main Menu, the terminal will ask if you are ready to download.

This is so you can make sure that the communications cable is connected to the terminal, and to a USB port on your computer, and that the HP Records Manager program is ready to accept the download.

Once you’ve confirmed you’re ready, press the 1 key to continue, or the 2 key to abandon the download and exit to the Main Menu.

The terminal will then display the screen shown on the right.

Once all of the data has been downloaded into HP RM, the terminal will automatically enter the Clear Memory function, as described on the next page.
Clear Memory

This function allows you to delete and permanently remove stored data from the terminal.

This function would normally only be used after you have downloaded the stored data to HP Records Manager, but could also be used if you had been demonstrating or testing the terminal and do not want to keep the test data.

From this screen, you can press the 1 key to delete the data, or the 2 key to Cancel and return to the Main Menu without deleting the data.

Once the data has been deleted from the scanner, it cannot be recovered. So, the program next asks you to confirm that you really do want to delete the data.

Press the 1 key to delete the data, or the 2 key to Cancel and return to the Main Menu without deleting the data.

If you try to clear the memory when there is no data stored in the scanner, the screen on the right will be displayed.
Memory Left

The Memory Left screen displays the approximate number of barcodes that are currently stored in the memory of the scanner. The figure is approximate because some of the memory is taken up by periodic time and date stamps that are automatically added to the data stored in memory.

To exit from this screen back to the Main Menu, press any key.

Configuration

This function displays the Configuration Menu, which allows the operator to change a number of settings.

As with the Main Menu, press the numeric key corresponding to the required function – for example, to set the time and date, just press the 2 key.

To exit from this screen back to the Main Menu at any time, press the 0 key.

Set Options

Keybeep Option
If this option is turned on, the terminal will emit a short beep every time a key is pressed.

This can be helpful in a noisy environment, but in a quiet office, you’ll probably want to turn it off.
Vibrate Option
If this option is turned on, the terminal will vibrate each time the beeper sounds (after scanning a barcode, or for error messages).
This option can also be helpful in noisy environments.

ITF Symbology Option
With this option turned on, the terminal will scan ITF (Interleaved 2 of 5) barcodes.
We recommend that this option be turned off unless you specifically need to scan ITF barcodes, because ITF is an unreliable barcode symbology that is known for scanning errors.

ITF-14 Symbology Option
With this option turned on, the terminal will scan ITF-14 (14 digit Interleaved 2 of 5) barcodes.
ITF-14 is a special form of ITF barcode that contains exactly 14 digits, and is a lot less likely than IFT to produce scanning errors. However, we again recommend that this option be turned off unless you specifically need to scan ITF-14 barcodes.
**Full ASCII Code 39 Symbology Option**

With this option turned on, the terminal will scan Full ASCII Code 39 barcodes.

Normally, the Code 39 barcode symbology only includes upper case letters, numbers, and a few punctuation marks. Full ASCII Code 39 allows any character to be included in a Code 39 barcode by using special two character sequences to encode the otherwise unavailable characters. However, this makes the barcodes longer, and there is also a possibility of incorrectly decoding some Code 39 barcodes if this option is enabled when it is not required. So, again, we recommend that this option be turned off unless you specifically need to scan Full ASCII Code 39 barcodes.

**Set Time/Date**

This configuration item allows you to set the terminal’s date and time.

The first screen prompts you to enter a new date. If you don’t want to change the date, just press the **ENT** key at the **Date:** prompt.

The date should be entered as two digits for the day of the month (00 – 31), a full stop, two digits for the month number (01 – 12), another full stop, then finally four digits for the year number.

The second screen prompts you to enter a new time. If you don’t want to change the time, just press the **ENT** key at the **Time:** prompt.

The time should be entered in 24-hour format, with two digits for the hour (00 – 23), a full stop, two digits for the minutes (00 – 59), another full stop, then two digits for the seconds (00 – 59).
Clear Memory

This function allows you to delete and permanently remove stored data from the terminal.

Remember that once the data has been deleted from the scanner, it cannot be recovered.

This function operates identically to the Clear Memory function described earlier in this document.
**Downloading from the Terminal into HP RM**

This section assumes that you have already installed and configured the **Denso USB-COM Port drivers**, and configured the **HP Records Manager** as described on the following pages.

*If you haven’t already installed and configured everything, skip ahead and do it now. You can’t continue until you’ve set everything up properly.*

**Step-by-step**

1. Connect the Denso BHT-1500 cradle or desk adaptor to your PC via its USB cable. If you’re using the cradle, make sure it’s connected to power.

2. Make sure that your Denso BHT-1500 terminal is turned on and insert it into its cradle or desktop adaptor.

3. Select **Download** from the Main Menu on the terminal. Don’t answer the **Are you ready to download?** question yet.

4. Open the HP Record Manager program and go to the **View** menu and select the **Activity Log Pane** if it is not already selected.

5. Go to the HP Record Manager **Tools** menu and select **Physical Tracking** and then **Read Barcodes**.

6. Click on the **Barcode Scanner** that you have defined if it is not already selected, then click on the **OK** button. This will open the **Read Barcode Scanner** screen, where you can set the required options for your circumstances.

7. Click on the **OK** button to load the data into HP RM.

8. Press the 1 key on the terminal in answer to the **Are you ready to download?** Question. This will start the download.

9. The **Activity log** section of the HP Record Manager screen will show the results.

10. If the data has been successfully loaded into HP Record Manager, you can clear the memory on the terminal.
The Activities File

To allow activities to be selected on the screen of the scanner rather than scanned from a barcode sheet, a text file containing the required activities has to be created on the PC and sent to the terminal using the BHT Transfer Utility, which is described on the following pages.

Shown below is an example activity file being edited with Notepad:

```
<table>
<thead>
<tr>
<th>File</th>
<th>Edit</th>
<th>Format</th>
<th>View</th>
<th>Help</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTIVITY.TXT - Notepad</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#</td>
<td>Assignee,CLOC,1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Set</td>
<td>Retention Schedule,CAUT,1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Set</td>
<td>Container,CPUT,1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enclose In Container,CENC,1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete Action,CASE,1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reassign Action,CARE,1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete Current Action,CCSS,1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reassign Current Action,CCRR,1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add To Records Work Tray,CWRT,1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Make Inactive,CIDC,1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Archive Local,CLDC,1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Archive Interim,CTDC,1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Archive Permanent,CFDC,1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Destroy,CDDC,1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Set Home Location,CHOM,1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Move To Home Location,CM2H,1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>End Transmission,CEOF,1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
```

Each line of the activities file must contain three parts, each separated with a comma, as you can see above.

The first part of each line is a text description of the activity, the second part is the barcode code for the activity, and the third part is a 1 or 0, with 1 meaning that the activity on that line is enabled and can be selected on the scanner, and 0 meaning that the activity is disabled. Disabled activities are not shown in the list displayed when the user presses the F1 key on the Scan Records screen.

**Note that this file must be created and edited with a text editor like Notepad, and not with a word processor like Microsoft Word. For convenience, this file should be called ACTIVITY.TXT**
The format of this file is very strict – the description must be no longer than 20 characters, the barcode must be no longer than 4 characters, and the final character must be a single 1 or a 0 character.

If any of these fields are longer, they will be truncated and the extra characters will be lost, and if any of these three well-defined fields are missing, or extra fields are added, or a character other than a comma is used to separate the three fields, the BHT Transfer Utility will display an error message and the file will not be loaded into the scanner.

Note that with the current release of the HP TRIM/Records Manager program, the ACTIVITY.TXT file must be manually maintained with Notepad (or a similar program) and each time it is changed, the file must be loaded into the scanner(s) using the BHT Transfer Utility program, which is described on the following pages.
How to send the Activities file to the scanner

This section assumes that you have already installed and configured the Denso USB-COM Port drivers, and have installed and configured the BHT Transfer Utility as described on the following pages.

If you haven’t already installed and configured everything, skip ahead and do it now. You can’t continue until you’ve set everything up properly.

Open the BHT Transfer Utility and leave it on its main screen.

Next, you need to get into the BHT1500 scanner’s SYSTEM MENU. Turn the scanner off if it’s on, then press and hold down the SF key and the 1 key and while you’re holding them both down, turn the scanner on. Release all of the keys when the screen turns on. If you don’t see the SYSTEM MENU, turn the scanner off, wait a few seconds, and try again.

Once you’re in the SYSTEM MENU, press the 2 key to highlight the 2:DOWNLOAD menu entry, then press the ENT key to enter the DOWNLOAD menu. The 1:FILE entry will be highlighted, so just press the ENT key again to get to the DOWNLOAD FILE menu.

Now, place the scanner into its Cradle, or attach its Desk Adaptor. Make sure that the cradle or adaptor is plugged into the correct USB port on your PC. If you’re using a cradle, make sure it’s connected to power.

On the BHT Transfer Utility, open the Send to unit menu and click on Data file(s). Your Activities file should now be loaded into the scanner.

Note that if you take too long to do all this, the scanner may beep several times and display a Communications error message with a Retry option. 1:YES will already be highlighted, so just press ENT to retry.

If you take a really long time, the scanner may turn off. If so, you’ll need to start again from the beginning and get into the SYSTEM MENU again.
Installing and Configuring the Denso USB-COM Port Driver

Note: You must install the Denso USB-COM Port Driver before you connect the Denso BHT-1500 terminal to your PC, otherwise Windows may install an incorrect driver.

The Denso USB-COM Port Driver is available for download from ASP’s web site, at:


Download the .zip file to a convenient place on your PC, then open it and run the setup.exe file within it.

Then, simply follow the on-screen instructions.

Note that you may need help from your IT team to install these programs on your computer if it has restricted access.

Once the driver is installed, plug in your Denso BHT-1500 terminal. Windows will detect it, and assign it to the serial port that the Denso USB-COM Port Driver has reserved. However, we need to know this serial port number, and Windows is keeping it hidden from us.

To find this hidden information, go to the desktop of your computer, and right-click on the Computer or My Computer icon. Select Properties. From the screen that opens, find the link for Device Manager, and click on it. Windows Device Manager will then open, which lists all of the hardware in your computer.

Find the line that says Ports (COM & LPT) and click on the little arrow to the left. This will open the list of ports. One of the items in the list will say DENSO WAVE Active USB-COM Port with a COM port number in brackets (for example, it’s COM4 on my PC). This is the number we need, so write it down somewhere safe.

You can now close Device Manager and any other screen you had to open to get there.

Please note that you must always connect the BHT-1500 scanner to the exact same USB port each time, because that is the port that the USB-COM Port Driver is configured to use. If you connect the scanner to a different port, it will not work.
**ASP’s BHT Transfer Utility**

Note: You must install the Denso USB-COM Port Driver before you try to configure the BHT Transfer Utility.

ASP’s BHT Transfer Utility is a general purpose program used to download data from, and upload data to, the Denso range of scanners to your PC. The main screen of the transfer utility is shown on the right.

Note that with HP TRIM/Records Manager, the BHT Transfer Utility is used only to upload the ACTIVITY.TXT file into the scanner.

Before you can use the BHT Transfer Utility for the first time, you’ll need to configure it. The main settings are the **COM port** and the **baud rate**. On the example screen on the right above, you can see that the program is set to use **COM4**, and the baud rate is set to **115200**.

To change the COM port, select **Communication…** from the **Setup menu**, to open the screen shown on the right. Select your COM port from the drop down list - note that only COM ports that are actually installed on your computer, and that are not already in use by other programs, are listed.

If you have successfully installed the Denso USB-COM Port Drivers as described on the previous page, one of the COM port entries will contain the words **“DENSO WAVE Active USB-COM Port”**, as shown in the example screen above. That will be the port that you need to select on this configuration screen.
If you need to change the baud rate, click on the **Advanced** button to open the screen on the right.

The correct baud rate for use with the HP TRIM/Records Manager program is **9600**, and this can be changed by clicking the down arrow at the right of the **Bits per second** field and selecting the baud rate from those listed. We’ve already done this on the example screen on the right.

No other setting on this screen should be changed. The number of **Data bits** should remain set to **8**, **Parity** should be set to **None**, the number of **Stop bits** should be set to **1**, and **Flow control** should stay set to **None**.

Once you’ve configured these settings, click the **OK** buttons until you’re returned to the main BHT Transfer Utility screen.

Next, we need to tell the BHT Transfer Utility how to handle the **ACTIVITY.TXT** file.

Select **Data Files** from the **Setup menu** to open the **Data files setup** screen, as shown on the right.

This screen has a large number of options and configurable settings, but for HP TRIM/Records Manager, we only need to change a few items.
The first step is to click on the **Add a file...** button on the left side of the screen, which will open a screen as shown on the right. Enter the filename **ACTIVITY.TXT** in uppercase, exactly as shown here, then click on the OK button.

Next, click on this new filename in the Defined data files area of the screen on the left. The filename itself needs to be highlighted, and it doesn’t matter at this stage if the checkbox to the left of the filename is selected or not.

Next, we need to define where the **ACTIVITY.TXT** file is on your computer, and the format of the data in the file. We will end up with the **Input File** portion of the screen looking like the example screen on the right.

Click on the ... button to the left of the filename in the example screen above. Locate the **ACTIVITY.TXT** file on your computer. In our example, the file is in the root folder of the **C:** drive – on your computer, it will probably be somewhere else.

Next, click on the **Insert** button (above the **Remove** button near the bottom middle of the example screen above. This will create an entry in the **Fields** section of the screen that says **Field_1:16**. Use the tiny up and down arrow buttons above the **Insert** button to change the length from 16 to 20, as in the example screen above.

Next, click on the Insert button again to define field 2 and change its length to 4. Then, click on the Insert button again to define field 3 and change its length to 1. The **Fields** section of your screen should now look exactly the same as our example screen.

Finally, ensure that the checkbox to the left of the **ACTIVITY.TXT** filename in the Defined data files section of the screen is ticked. This ensures that the ACTIVITY.TXT file will be uploaded to the scanner when you select **Data file(s)** from the BHT Transfer Utility **Send to unit** menu.

Click on the **Save** button at the bottom of the screen to save this configuration. The BHT Transfer Utility is now configured to work with the HP TRIM/Records Manager program.
**Configuring HP Records Manager**

**HP Records Manager** has to be configured to receive data via the same serial port that the Denso USB-COM Port driver is set to. You should only need to do this once, provided that you always connect the Denso BHT-1500 communications cable to the same USB port.

Open HP Records Manager, then go to the **Tools menu** and select **Physical Tracking** and then **Define Barcode Scanners**, as shown on the right above.

This will open the **Barcode Scanners** screen, as shown on the right.

Right-click in the top area of this screen and select **New Barcode Scanner** from the menu that pops up.

This will open the **New Barcode Scanner** screen, as shown on the right below.
On the **General tab**, type in a **Name** for the scanner. Denso BHT-1500 might be a good choice, but you can call it anything you like.

Untick both the **Does scanner send ID label first?** and the **Does scanner send EOF label at end?** options.

On the **Connection tab**, select the **Serial Communications** option.

Then, select the **Serial Port** that the **Denso USB-COM Port driver** is set to – you noted this down when you installed the driver in the previous section.

Leave all of the other Serial Communications settings at their defaults – the **Baud Rate** should be 9600, **Parity** should be None, **Data Bits** should be 8, **Stop Bits** should be 1, and **Flow Control** should be RTS.

Ensure that the **Does scanner need an acknowledgement character?** option is not checked.

Finally, click on the **OK** button to save the new barcode scanner configuration.
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