

READ ME FIRST

Product Installation Instructions

(For use with TROY MICR / IRD 2300, 4200, and 4300 Security Printing Solutions)

Introduction

Your TROY Security Printing Solution offers value-added functionality and the flexibility to integrate smoothly with your check-printing system. Use the **TROY Security Printing Solutions** CD to install the necessary Hewlett-Packard LaserJet printer drivers and TROY support files. To ensure successful software installation, perform the following steps in sequential order. The documentation and installation files contained on the **TROY Security Printing Solutions** CD will be needed in the event that your TROY Security Printing Solution is reinstalled in a new location or after service has been performed. In order to best install and setup your new TROY product, use this **Quick-Start Guide** and the Hewlett-Packard **Getting Started Guide**.

Package Contents

- TROY Security Printing Solutions CD
- TROY Security Printing Solutions Information Sheet
- TROY Software License Agreement
- TROY MICR Document Template
- TROY Security Printing Solutions User's Guide (provided in PDF format on the CD)
- TROY MICR Basics Handbook (provided in PDF format on the CD)
- TROY Security Printing Solutions Quick-Start Guide (this document)

IMPORTANT: If you purchased a TROY DIMM Solution, please refer to the DIMM installation instructions provided with the TROY product to install the DIMM into your Hewlett-Packard LaserJet printer **before** proceeding with these setup instructions. After the TROY DIMM has been installed in your printer, proceed to Step #2 in this document to install the required TROY support files. In addition, a MICR toner cartridge must also be installed in your printer to print MICR documents using the TROY DIMM Solution.

STEP 1: Unpack / Setup the TROY Security Printing Solutions Printer

1. Follow ONLY the unpacking and setup procedures described in the Hewlett-Packard **Getting Started Guide** (supplied in this startup package for TROY Security Printing Solutions printers only), and then proceed to step #2 to install the appropriate PCL 5e printer driver provided on the **TROY Security Printing Solutions** CD. Do NOT use the Hewlett-Packard CD to install the printer software for this installation process.
2. Be sure to install the TROY MICR toner cartridge (supplied with TROY Security Printing Solutions printers only) in the same manner as described for the standard toner cartridge. The TROY MICR toner cartridge must be installed in your TROY printer or Hewlett-Packard printer to print MICR documents.

STEP 2: Install the HP PCL 5e Printer Driver for Microsoft® Windows™

NOTE: Use only the *TROY Security Printing Solutions* CD to install the Hewlett-Packard PCL 5e printer driver designated for your Hewlett-Packard or TROY printer. Some software screens may differ slightly in appearance between operating systems.

NOTE: Some of the steps below may differ slightly depending on your operating system.

1. Close all applications before installing the HP PCL 5e printer driver.
2. Insert the *TROY Security Printing Solutions* CD into your computer CD drive.
3. Before beginning the installation process, you will need to know the operating system you are using on your computer. If you already know the operating system you are using, proceed directly to step #4. If you are not sure, right-click on *My Computer* (located on the Windows desktop), and then click on *Properties* to view the type of operating system installed on your computer.
4. From the *Start* menu, click on *Settings*, and then click on *Printers*.
5. Double-click on *Add Printer*, click on *Next*, choose *Local Printer*, and then click on *Next*. If you are using Windows 2000/XP, skip down to Step 12, and then proceed with Steps 6 through 11.
6. From the *Add Printer Wizard* window, click on *Have Disk*.
7. From the *Install From Disk* window, click on *Browse*.
8. From the *Open* window, click on the down-arrow in the *Drives* box to select the CD-ROM drive on your computer.
9. Double-click on the appropriate folder for the operating system you are using (e.g., Win98, etc.).
10. Double-click on the appropriate subfolder for the model printer you are using (e.g., 2300, 4300). If applicable for your model of printer, be sure to select either the USB or standard parallel (LPT1) printer. Click on *OK* to close the *Open* window, and then click on *OK* to close the *Install From Disk* window.
11. Select the appropriate printer driver for your printer model, and then click on *Next* to continue the driver installation. You will be given the choice to either replace or keep the existing driver. It is recommended that you always replace the existing driver. Click on *Next* to continue. If you are using Windows 2000/XP, skip down to Step 13.

NOTE: Two versions of the 2300 printer driver exist on the TROY Security CD. Choose the 2300L printer driver if you are installing the TROY MICR 2300 printer, or choose the 2300 printer driver if you are installing either the TROY MICR 2300 Secure or the TROY 2300 MICR Secure EX printer.

12. Select the appropriate printer port from the displayed list (usually LPT1), then click on *Next* to continue. If you are using Windows 2000/XP, go back and perform Steps 6 through 11 to complete the driver installation. Otherwise, for Windows 98SE/ME operating systems, the printer name will be highlighted.
13. For easy printer identification, it is recommended that you change the highlighted Hewlett-Packard printer name to the name of the TROY printer you are installing (e.g., *TROY MICR 4200 Secure EX Printer*) by typing over the highlighted printer name. If you want to use this printer as your default printer, be sure to select this printer as the default printer. If you are using Windows 2000/XP, choose to either share or not share your printer over the network.
14. Click on *Yes* to print a test page to verify that your printer driver was installed correctly, and then click on *Next* to continue.
15. Click on *Finish* to complete the installation. The printer driver installation will proceed automatically and add the printer icon to the printer folder.

STEP 3: Install the TROY Support Files for Microsoft® Windows™

NOTE: The Hewlett-Packard PCL 5e printer driver must be installed on the host computer prior to loading the TROY support files.

The TROY metrics file contains the required escape sequences that are used to “call” the TROY security and/or barcode fonts installed in the TROY Security Printing Solution (via the TROY MICR DIMM). When properly installed, the TROY metrics file will be associated with the PCL 5e printer driver used by your TROY printer to enable printing of the actual fonts installed in the printer. By associating the metrics file with the printer driver, the TROY TrueType screen fonts will be automatically replaced with the actual TROY fonts at print time. If the TROY metrics file is not properly installed, then the TROY TrueType screen fonts will print instead of the actual TROY installed printer fonts.

Install the TROY Metrics File for Windows™ 98, ME, 2000/NT4.0, XP

1. Close all applications before installing the TROY Font support files.
2. Insert the *TROY Security Printing Solutions* CD into your computer CD-ROM drive.
3. From the Microsoft Windows *Start* menu, click on *Settings*, and then click on *Printers*.
4. Right-click on your TROY Security Printing Solution icon, and then click on *Properties* from the pull-down menu. If multiple printers are installed, make sure the correct printer icon is selected that corresponds to your TROY Security Printing Solutions printer.
5. Click on the *Configure* tab located at the top of the *Properties* window.
6. Within the *Other Options* category, click on the *More* button. Some printer driver versions may not display the *Other Options* category. If this is the case, simply skip to the next step.
7. Within the *Fonts* category, place a check mark in the *Font DIMMs* check-box, and then click on the *Configure* button (with some printer driver software versions, the *Configure* button may already be “clicked”). A new window will open labeled *Configure Font DIMMs*.
8. Click on the *Add* button to open the *Add Font DIMM* window.
9. Click on the *Browse* button to open a Windows Explorer-style window. Click on the down-arrow in the *Drives* box to select the CD-ROM drive on your computer. Double-click on the top folder (root directory) from the list of folders. For international products, double-click on the *Intl* folder on the *TROY Security Printing Solutions* CD.
10. Click on the file (located in the left-hand window) named *TroySEC.hpd* or *TroySECINTL.hpd* (for International customers), and then click on *Open* or *OK* (the displayed window may vary depending on the operating system being used). With some printer drivers, the *Add Font DIMM* window will appear. If this window appears, click on *OK* to close the window.
11. Within the *Configure Font DIMMs* window, verify the installation by clicking on the **Font DIMM Name:** TROY Security Font Collection or TROY International Security Font Collection listed under **Installed DIMMs**. Within the **Fonts on DIMM** list, the TROY E-13B (enabled) along with other TROY fonts will be displayed.
12. Repeat Steps 9 through 11 to install the barcode fonts. Double-click on the barcode folder on the CD, and select the *TroyBAR.hpd* file. Verify the installation by clicking on the **Font DIMM Name:** TROY Barcode Font Collection listed under **Installed DIMMs**. Within the **Fonts on DIMM** list, the TROY barcode fonts will be displayed.
13. Close all remaining open windows. Please refer to the TROY Security Printing Solutions User’s Guide, Section 8 – *Using TROY Fonts* before using the installed fonts.

Install the TROY Screen Fonts for Windows™ 98, ME, 2000/NT4.0, XP

In addition to the TROY *printer* fonts that are permanently programmed into your TROY Security Printing Solution, the TROY *screen* fonts have been developed for display use only as a visual reference and for making positional adjustments to the MICR line. The TROY *screen* fonts display differently than the actual *printer* fonts to prevent unauthorized printing using the MICR *screen* fonts on other Windows-installed printers.

If the E-13B MICR *screen* font is used for printing, the inversely printed (white characters on black background) MICR *screen* font will not be readable by the bank reader/sorter machines. The uniquely displayed *screen* fonts ensure that the MICR font printed on your MICR documents is generated from a TROY Security Printing Solution and not from the Windows TrueType™ *screen* font. The TROY *screen* fonts are provided on the **TROY Security Printing Solutions** CD supplied with your TROY Security Printing Solution.

1. Close all applications before installing the TROY support files.
2. Insert the **TROY Security Printing Solutions** CD into your computer CD-ROM drive.
3. From the **Start** menu, click on **Settings**, and then click on **Control Panel**.
4. Double-click on the **Fonts** folder icon.
5. Click on **File**, and then click on **Install New Font...** A new window labeled **Add Fonts** will open and then a Windows Explorer-style window will open.
6. Click on the down-arrow in the **Drives** box to select the CD-ROM drive on your computer. Double-click on the top folder (root directory) from the list of folders. For international products, double-click on the **Intl** folder on the **TROY Security Printing Solutions** CD.
7. A list of TROY fonts will be listed within the **List of Fonts** section. Click on **Select All** to highlight all available fonts, and then click on **OK**. A processing window may appear while the installation process proceeds. Individual fonts may be selected if all the fonts are not needed.
8. Repeat Steps 5 through 7 to install the barcode screen fonts. Double-click on the barcode folder on the CD. Within the **List of Fonts** section, click on **Select All** to highlight all available barcode fonts, and click on **OK**. A processing window may appear while the installation process proceeds.
9. Close all remaining open windows. The TROY screen fonts are now installed.

NOTE: For International customers, the International numeric fonts are not resident on the TROY DIMM. These fonts are located on the **TROY Security Printing Solutions** CD in the “\Intl\Fonts” folder and can be added to the TROY DIMM using the TROY Printer Utility – Download Soft Fonts Option. These fonts are designed as non-scalable bitmapped fonts.

STEP 4: Install the TROY Software for Microsoft® Windows™

Install the TROY Printer Utility for Windows™ 98, ME, 2000/NT4.0, XP

The TROY Printer Utility provides useful functions for testing and managing your TROY Security Printing Solution through Microsoft® Windows™. This utility takes advantage of the Windows-installed printer collection, allowing access to any printer installed in the Windows environment. The printer connection may be local, network, or direct network connected. The TROY Printer Utility should be installed on the administrator's computer only. Some of the features of the TROY Printer Utility are provided for special applications and may not be intended for general use. Refer to the TROY Security Printing Solutions User's Guide, Section 4 – *Using the TROY Printer Utility* for more information.

1. Close all applications before installing the TROY Printer Utility application.
2. Insert the *TROY Security Printing Solutions* CD into your CD-ROM drive.
3. From the *Start* menu, click on *Run*, and then click on *Browse*.
4. Click on the down-arrow in the *Look In* box at the top of the window, and then click on the drive letter designated for the CD-ROM drive on your computer.
5. Double-click on the *TROY Printer Utility* folder.
6. Click on the file named *setup.exe*, click on *Open*, and then click on *OK* to start the installation process. Follow the screen prompts to complete the installation.

Install the TROY Port Monitor for Windows™ 98, ME, 2000/NT4.0, XP

The TROY Port Monitor allows each user to embed additional user-defined data and/or print commands (data encryption and TROY security commands) into the print data stream generated by their Windows application before it is sent to the printer. Once a port monitor is set up on the host computer, all this functionality takes place in the background without the need for user intervention.

Using the TROY Port Monitor or custom applications designed to print to TROY Security Printers, certain printer feature settings can be temporarily changed during a print job. When the print job has finished, the *EX* printer will automatically return to the original default feature configuration set by the administrator. Refer to Section 6 – *Using the TROY Port Monitor* for more information.

NOTE: To maintain MICR printing security and to allow users the ability to configure their MICR print jobs, the TROY Port Monitor must be installed on each host computer that will be used to print MICR documents on the TROY Security Printer.

1. Close all applications before installing the TROY Port Monitor.
2. Place the *TROY Security Printing Solutions* CD into your CD-ROM drive.
3. From the *Start* menu, click on *Run*, and then click on *Browse*.
4. Click on the down-arrow in the *Look In* box at the top of the window, and then click on the drive letter designated for the CD-ROM drive on your computer.
5. Double-click on the *TROY Port Monitor* folder.
6. Click on the file named *setup.exe*, click on *Open*, and then click on *OK* to start the installation process. Follow the screen prompts to complete the installation.

NOTE: The TROY Printer Utility or TROY Port Monitor can be removed using the uninstall procedures located in Section 5 of the TROY Security Printing Solutions User's Guide.

Create a TROY Port Monitor Port on Your Host Computer for Windows™ 2000/XP

1. From the *Start* menu, click on *Settings, Printers*, click on the desired printer, and then click on *Printer, Properties*.
2. Select the *Ports* tab, and then click on the *Add Port* button.
3. Select *TROY Port Monitor* in the *Printer Ports* window, and then click on the *New Port* button. The TROY Port Monitor screen will appear.
4. Specify a TROY Port Monitor port name in the *Port Name* textbox. At this point, the TROY Port Monitor port is configured with the following default settings: port type is LPT1, encryption OFF, no User or Password account specified, no MICR/Printer PIN specified, no Job Name and Job PIN specified, default paper tray mapping selected, MICR mode enabled, and wallpaper disabled. These default settings can be changed at any time.
5. If you choose not to configure the TROY Port Monitor port at this time, click on the *OK* button to close the TROY Port Monitor window, which will automatically create the new TROY Port Monitor port.
6. Click on the *Close* button to close the *Printer Ports* window.
7. Click on the *Apply* button from the *Port* tab to select the TROY Port Monitor port as the default printing port.
8. Click on the *OK* button to close *Printer Properties* window.

Create a TROY Port Monitor Port on Your Host Computer for Windows™ 98/ME

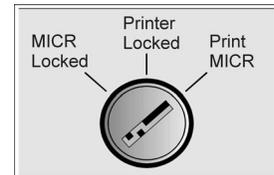
1. From the *Start* menu, click on *Settings, Printers*, click on the desired printer, and then click on *Printer, Properties*.
2. Select the *Details* tab, and then click on the *Add Port* button.
3. Select the *Other* radio button.
4. Select *TROY Port Monitor* from the list, and then click on the *OK* button. The TROY Port Monitor screen will appear.
5. Specify a TROY Port Monitor port name in the *Port Name* textbox. At this point, the TROY Port Monitor port is configured with the following default settings: port type is LPT1, encryption OFF, no User or Password account specified, no MICR/Printer PIN specified, no Job Name and Job PIN specified, default paper tray mapping selected, MICR mode enabled, and wallpaper disabled. These default settings can be changed at any time.
6. If you choose not to configure the TROY Port Monitor port at this time, click on the *OK* button to close the TROY Port Monitor window, which will automatically create the new TROY Port Monitor port.
7. Click on the *Apply* button from the *Details* tab to select the TROY Port Monitor port as the default printing port.
8. Click on the *OK* button to close the *Printer Properties* window.

STEP 5: Test the TROY Font Support for Microsoft® Windows™

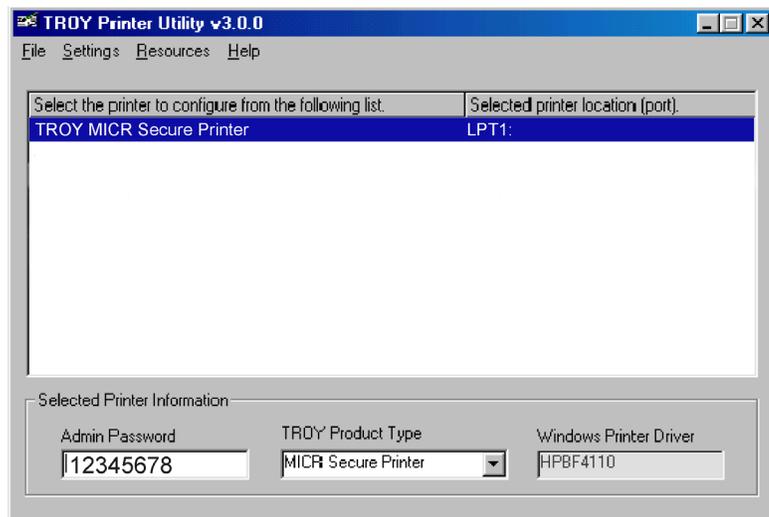
To verify that the TROY Windows font support files were properly installed on your system, demonstration documents are provided through the TROY Printer Utility in Windows that can be printed out to visually identify all security and/or barcode fonts downloaded to the TROY printer. Make sure your TROY printer is properly setup, powered ON, and is online before printing the Windows Security Font and/or Windows Barcode Font Demonstration page(s).

TO PRINT THE TROY SECURITY FONT / BARCODE FONT DEMONSTRATION PAGE(S):

NOTE: TROY Secure EX series printers must have the printer keylock switch set to “Print MICR” to enable printing of the Windows Security Font Demonstration page.



1. From the TROY Printer Utility *Main Window*, click on the printer you wish to manage.
2. If you have already set an administrator password, type the password into the password box at the bottom of the *Main Window*. If a password is not set, then leave the password box blank.
3. From the *Main Window*, click on **File**, **Print**, and then click on **Windows Security (MICR) Font Demo**. The printer will automatically print the Windows Security Font Demonstration page.



4. Compare the actual TROY security fonts (the actual fonts generated by your printing system) shown in the right-hand column with the facsimile image of these fonts printed in the center column (a digitized image designed to look exactly like the actual fonts correctly generated by your system – refer to the example shown on the next page).

If the support files were properly installed, the actual TROY security and/or barcode fonts displayed in the right-hand column should appear identical to the facsimile fonts displayed in the center column. If the actual fonts do not match the facsimile fonts printed on the demonstration document (fonts not printed correctly or fonts missing on the printout), review the installation steps in this document. If further assistance is required, contact TROY Technical Support.

Accessing TROY Fonts Using Non-Windows Applications

If you are using a non-Windows application to print MICR documents, the escape sequence for each font must be programmed into the application in order to “call” each of the selected fonts. The <Esc> character is ASCII character number 27 (hexadecimal number 1B). Refer to the *TROY Security Printing Solutions User’s Guide* for the specific escape sequence (displayed above each character map) used to call each of the TROY fonts.

TROY Security Font Demonstration Page (not to scale)

TROY Security Font Collection

Microsoft Windows Test Page



This document displays how the TROY Security Font Collection should appear when printed through Microsoft Windows (Facsimile Font Image) and how they actually print through your Microsoft Windows printer driver configuration (Actual Printed Font) to a TROY Security Printing Solution.

Compare the fonts printed in the Facsimile Font Image column of this page to the fonts printed in the Actual Printed Font column. If the Windows support files (.HPD) were properly installed into the Hewlett Packard PCL 5e printer driver, the fonts in the two columns should match. If the fonts in both columns do not match (fonts in the Actual Printed Fonts column not printed correctly or missing from this page), review the Windows Support File installation steps in the user documentation. If further assistance is needed, please contact TROY Group Technical Support Department at 1-800-332-6427 or 1-949-250-3280, or e-mail techsupport@troygroup.com.

<u>Font Name</u>	<u>Facsimile Font Image</u>	<u>Actual Printed Font</u>
TROY E-13B	1 2 3 4 5 6 7 8 9 0	1 2 3 4 5 6 7 8 9 0
TROY CMC7	1 2 3 4 5 6 7 8 9 0	1 2 3 4 5 6 7 8 9 0
TROY ECF	0 1 2 3 4 5 6 7 8 9 0 <small>ZERO ONE TWO THREE FOUR FIVE SIX SEVEN EIGHT NINE ZERO</small>	0 1 2 3 4 5 6 7 8 9 0 <small>ZERO ONE TWO THREE FOUR FIVE SIX SEVEN EIGHT NINE ZERO</small>
TROY LCF	1 2 3 4 5 6 7 8 9 0 <small>ONE TWO THREE FOUR FIVE SIX SEVEN EIGHT NINE ZERO</small>	1 2 3 4 5 6 7 8 9 0 <small>ONE TWO THREE FOUR FIVE SIX SEVEN EIGHT NINE ZERO</small>
TROY SCF	1 2 3 4 5 6 7 8 9 0 <small>ONE TWO THREE FOUR FIVE SIX SEVEN EIGHT NINE ZERO</small>	1 2 3 4 5 6 7 8 9 0 <small>ONE TWO THREE FOUR FIVE SIX SEVEN EIGHT NINE ZERO</small>
TROY HELV Rev	J534201800	J534201800
TROY MICRO	____MP____MP____MP	____MP____MP____MP
TROY OCRA	1234567890ABCD	1234567890ABCD
TROY OCRB	1234567890ABCD	1234567890ABCD
TROY Security	1234567890 <small>ONE TWO THREE FOUR FIVE SIX SEVEN EIGHT NINE ZERO</small>	1234567890 <small>ONE TWO THREE FOUR FIVE SIX SEVEN EIGHT NINE ZERO</small>

Obtaining Technical Assistance

The TROY Printer Utility provides several help screens to guide you through the available features and functions of your TROY Security Printing Solution. TROY technical support is available to assist you with any questions concerning the setup, operation and maintenance of your Security Printing Solution. Specific system information about your TROY product configuration is available through the TROY Printer Utility. You are also encouraged to visit the TROY web site for the latest FAQs (Frequently Asked Questions), information on the latest TROY products, or for ordering MICR toner and other printing supplies.

TO VIEW TECHNICAL SUPPORT INFORMATION:

From the *Main Window*, click on *Help*, and then click on *Technical Support* to view the TROY Technical Support HTML page for telephone numbers and hours of business.

TO VIEW INFORMATION ON THE TROY WEB SITE:

From the *Main Window*, click on *Help*, and then click on *TROY on the Web* to access the TROY web site. Click on the *Services and Support* button at the top of the web page to view the available topics. You can access the TROY web site directly from your web browser at <http://www.troygroup.com>.

Reference Material

- TROY MICR Basics Handbook (provided on the *TROY Security Printing Solutions* CD)
- TROY Security Printing Solutions User's Guide (provided on the *TROY Security Printing Solutions* CD)
- TROY Programmer's Reference Guide (provided on the *TROY Security Printing Solutions* CD)
- Hewlett-Packard Getting Started Guide (provided in *TROY Security Printing Solutions* Startup Package)
- Hewlett-Packard Printer User's Guide (provided on the *Hewlett-Packard* CD)