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High Speed Couponing Thermal Printer Firmware Downloading & Installation Instructions



# **NANOPTIX**



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### Federal Communications Commission (FCC) Radio Frequency Interference Statement

### Warning

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### Note

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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### Information to the User

This equipment must be installed and used in strict accordance with the manufacturer's instructions. However, there is no guarantee that interference to radio communications will not occur in a particular commercial installation. If this equipment does cause interference, which can be determined by turning the equipment off and on, the user is encouraged to contact Nanoptix Inc. immediately.

Nanoptix Inc. is not responsible for any radio or television interference caused by unauthorized modification of this equipment or the substitution or attachment of connecting cables and equipment other than those specified by Nanoptix Inc. The correction of interferences caused by such unauthorized modification, substitution or attachment will be the responsibility of the user.

In order to ensure compliance with the Product Safety, FCC and CE marking requirements, you must use the power supply, power cord, and interface cables, which were shipped with this product or which meet the following parameters:

### **Power Supply**

UL Listed power supply with standard 60Hz-50Hz, 100-240VAC input and 24VDC output equipped with AC line filtering, over-current and short-circuit protection.

Use of this product with a power supply other than the Nanoptix Inc. power supply will require you to test the power supply and Nanoptix Inc. printer for FCC and CE mark certification.

### **Communication Interface Cable**

An approved Nanoptix interface cable must be used with this product. Use of a cable other than Nanoptix approved product will require that you test the cable with the Nanoptix Inc. printer and your system for FCC and CE mark certification.

### **Power Cord**

A UL listed, detachable power cord must be used. A power cord with Type SVT marking must be used. For applications outside the North America, power cords that meet the particular country's certification and application requirements should be used.

Use of a power cord other than described here may result in a violation of safety certifications that is in force in the country of use.

### Industry Canada (IC) Radio Frequency Interference Statement

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.



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## **Firmware Upgrade Instruction**

### **Download Updated Firmware**

1. Go to Nanoptix's web site: <u>http://www.Nanoptix.com</u> and click on the **Support** section in the top right of the page.



Figure 1: Home Page Of http://www.Nanoptix.com - Support Section Shown



2. Scroll down the support page and click on the appropriate printer (PayCheck High Speed Couponing).



Figure 2: Support Page Showing PayCheck High Speed Couponing Printer



#### 3. Enter:

١

- 1. Username (If unknown, please contact Nanoptix for a unique Username)
- 2. Password (If unknown, please contact Nanoptix for a unique Password)
- 3. Click the *login* button to continue to the Technical Support section.

| Nanoptix<br>Technical<br>Support | Paycheck - High Speed Couponing |
|----------------------------------|---------------------------------|
| Username                         | 1                               |
| Password                         | 2                               |
| cancel                           | login - 3                       |

#### Figure 3: Login Page For Technical Support

4. After successfully logging in, click *Firmware* from the menu on the left side of the screen.



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5. On the right side of the screen, located the newest firmware under the heading *Current production Firmware*.



Figure 5: Firmware Download Section

- 6. Download and save the desired firmware to a known location on your hard drive. *(Example: c:\firmware\)*
- **Note:** If downloading multiple firmware files in the same folder on your hard drive, make note of the firmware filename for future steps.

| Save As  |         |                 |                 |                            |        | x      |
|--|---------|-----------------|-----------------|----------------------------|--------|--------|
| C:\fir   | mware   |                 | -               | <b>- - </b> ∳ <del>y</del> | Search | Q      |
| 🌗 Organize 👻 🏢   | Views   | 👻 📑 New         | Folder          |                            |        | 0      |
| Favorite Links   |         | Name            | Date modif      | Туре                       | Size   |        |
| Documents<br>More »  |         |                 |                 | This folder is             | empty. |        |
| Folders  | ~       |                 |                 |                            |        |        |
| S (C:)<br>C (C:) | *<br>== |                 |                 |                            |        |        |
| File name:   | Paye    | heck-HSC_3_58   | Z_Ithaca950_Bal | ly 🔶                       | _      | -      |
| Save as type:  | Com     | pressed (zipped | ) Folder        |                            |        | •      |
| Hide Folders   |         |                 | -               | -                          | Save   | Cancel |

Figure 6: Sample Save As Screen With Sample Directory



### **Extract Updated Firmware**

Extract the whole contents of the previously downloaded ZIP file to a known location on your hard drive using WinZip or the ZIP extractor of your preference.

**Note:** Do not run the file *FlashImage.exe* directly from the ZIP file without first extracting the complete file. Doing so will cause the firmware upgrade to fail.

| 🦳 V   | VinZip (Evaluation Version) - Paycheck-HSC_3_58Z_Ithaca95 | )_Bally.zip        |                    |          |       |          | x     |
|-------|---|--------------------|--------------------|----------|-------|----------|-------|
| File  | Actions View Jobs Options Help Buy Now!                   |                    |                    |          |       |          |       |
|       | New Open Favorites Add                                    | Mail               | Encrypt View       | CheckOut | Wiza  | rd View  | Style |
| 1     | Name  | Туре               | Modified           | Size     | Ratio | Packed I | -     |
|       | III FlashImage.exe  | Application        | 7/13/2007 9:04 AM  | 339,968  | 65%   | 117,464  |       |
|       | C2539_JournalCmdSet-Ithaca950.bix                         | BIX File           | 9/12/2006 10:32 AM | 1        | 0%    | 1        |       |
|       | C2544_Customer-Generic.bix                                | BIX File           | 11/24/2006 9:58 AM | 1        | 0%    | 1        |       |
|       | C2545_RealTimeCmd-Off.bix                                 | BIX File           | 5/10/2006 10:23 AM | 1        | 0%    | 1        |       |
|       | C2546_CashLED-Off.bix                                     | BIX File           | 1/10/2006 11:51 AM | 1        | 0%    | 1        | =     |
|       | C2547_Code128Type-Standard.bix                            | BIX File           | 1/10/2006 11:51 AM | 1        | 0%    | 1        | _     |
|       | C2550_BarCodeDoneBitType-AfterBarcodePrinted.bix          | BIX File           | 4/6/2006 1:45 PM   | 1        | 0%    | 1        |       |
|       | C2563_ActiveTemplatesSet-HSC.bix                          | BIX File           | 5/3/2007 4:05 PM   | 1        | 0%    | 1        |       |
|       | C2566_IthacaFwVersion-0.bix                               | BIX File           | 9/12/2006 4:46 PM  | 1        | 0%    | 1        |       |
|       | C2567_PaycheckBackUSB-FwControlled.bix                    | BIX File           | 8/23/2006 2:51 PM  | 1        | 0%    | 1        |       |
|       | C2579_ClearPaperAfterCutSteps-254.bix                     | BIX File           | 3/7/2007 4:36 PM   | 2        | 0%    | 2        |       |
|       | C201B_BlackMarkIndex-Right.bix                            | BIX File           | 11/7/2006 9:51 AM  | 1        | 0%    | 1        |       |
|       | C201F_NoParity.bix  | BIX File           | 9/30/2005 2:47 PM  | 1        | 0%    | 1        |       |
|       | C252E_MotorCurrent-FullCurrent.bix                        | BIX File           | 11/24/2006 11:01   | 1        | 0%    | 1        |       |
|       | C253A_TclCmdSet-TCL.bix                                   | BIX File           | 2/23/2006 12:26 PM | 1        | 0%    | 1        |       |
|       | C254D_PermitMultTclCopies-Off.bix                         | BIX File           | 4/5/2006 3:44 PM   | 1        | 0%    | 1        |       |
|       | C256C_TofCutSteps-422.bix                                 | BIX File           | 12/1/2006 4:45 PM  | 2        | 0%    | 2        |       |
|       | C2016_ResetAllToDefaults.bix                              | BIX File           | 11/8/2006 12:41 PM | 4,074    | 99%   | 20       | - 0   |
| Selec | ted 0 files, 0 bytes T                                    | otal 28 files, 1,6 | 581KB              |          |       | 😻 🔵      | 0     |

Figure 7: Example From WinZip Showing The Extract Button

| Extract - C:\firmware<br>Extract to: | \Paycheck-HSC_3_58Z_Ithaca950_Bally.zip  |   | ×                         |
|--------------------------------------|--|---|---------------------------|
| Desktop<br>Dell<br>Computer          | Desktop     Dell     Dell     Computer     Computer     ECOVERV (D:)     DUD RW Drive (E:)     Public     Vetwork     Adobe Acrobat 9 Std     Digi-Maxstream |   |                           |
| Network                              | Files Selected files/folders All files/folders in current folder all files/folders in archive Files in Archive   | Open Explorer window Overwrite existing files Skip older files Use folder names | Extract<br>Cancel<br>Help |

Figure 8: Example From WinZip Showing The Extract Dialog



### Flashing The PayCheck High Speed Couponing Printer

- 1. Make sure the PayCheck High Speed Couponing Printer is powered up with the included 24 VDC power supply and connected to the computer using one of the two communication options, **USB or RS-232**.
- **Note:** USB communications is strongly recommended as the firmware upgrade will be much faster.

| Port Identification | Connector Type       | Function             |
|---------------------|----------------------|----------------------|
| A                   | USB Type B           | USB Communication    |
| В                   | DB9 Receptacle       | RS-232 Communication |
| С                   | Molex 2 Pin Latching | 24 VDC               |

**Table 1: Interface Ports** 



**Figure 9: Interface Ports** 



2. Navigate to the folder where the ZIP file was extracted and double click on *FlashImage.exe*.

|                                      |                         |                    |             |          | 3 |
|--------------------------------------|-------------------------|--------------------|-------------|----------|---|
| C:\firmware\3.58z                    |                         | <b>▼ 47</b> Se     | arch        |          | م |
| 🌗 Organize 👻 🏢 Views 👻 🎨 Burn        |                         |                    |             | (        | 2 |
| Favorite Links                       | Name                    | Date modified      | Туре        | Size     | * |
| Documents                            | C2022_LeftMargin-24.bix | 11/22/2006 10:59   | BIX File    | 1 KB     |   |
| Distance                             | C2026_InterLineSpacin   | 5/10/2006 10:23 AM | BIX File    | 1 KB     |   |
|                                      | C2500_BurnTime275.bix   | 5/4/2006 7:13 PM   | BIX File    | 1 KB     |   |
| Music                                | C2508_Speed_75-200-7    | 11/27/2006 12:18   | BIX File    | 1 KB     |   |
| More »                               | C2532_TopMargin-24      | 7/27/2006 1:19 PM  | BIX File    | 1 KB     |   |
| Folders 🗸                            | C2539_JournalCmdSet     | 9/12/2006 10:32 AM | BIX File    | 1 KB     |   |
| Deskton A                            | C2544_Customer-Gene     | 11/24/2006 9:58 AM | BIX File    | 1 KB     |   |
|                                      | C2545_RealTimeCmd       | 5/10/2006 10:23 AM | BIX File    | 1 KB     |   |
| Dublic                               | C2546_CashLED-Off.bix   | 1/10/2006 11:51 AM | BIX File    | 1 KB     |   |
|                                      | C2547_Code128Type-S     | 1/10/2006 11:51 AM | BIX File    | 1 KB     |   |
|                                      | C2550_BarCodeDoneBi     | 4/6/2006 1:45 PM   | BIX File    | 1 KB     |   |
|                                      | C2563_ActiveTemplate    | 5/3/2007 4:05 PM   | BIX File    | 1 KB     | Ξ |
| doctemp                              | C2566_IthacaFwVersio    | 9/12/2006 4:46 PM  | BIX File    | 1 KB     |   |
|                                      | C2567_PaycheckBackU     | 8/23/2006 2:51 PM  | BIX File    | 1 KB     |   |
| FFI                                  | C2579 ClearPaperAfter   | 3/7/2007 4:36 PM   | BIX File    | 1 KB     |   |
| firmware                             | 🖼 FlashImage            | 7/13/2007 9:04 AM  | Application | 332 KB   |   |
| 3 587                                | loader.nbt              | 7/13/2007 11:26 AM | NBT File    | 256 KB   |   |
| Paycheck-HSC_3_58Z_Ithaca950_Bally 👻 | PaycheckHsc_V3_58Z      | 12/18/2007 3:26 PM | BIN File    | 1,088 KB | - |
| 28 items                             |                         |                    | _           |          | / |

Figure 10: Locate & Run FlashImage.exe



3. Once *FlashImage.exe* begins to run, make sure it is the correct *FlashImage.exe* from the folder that was just extracted (shown below by arrow 1). Also confirm the firmware version is the same as what was downloaded earlier (shown below by arrow 2).

| 🛱 C:\firmware\3.58z\FlashImage.exe 🚽 — 1   |
|--|
| Binary Image Flash Utility V12.03, using USB DLL/LIB V45   |
| 1. PaycheckHsc_V3_58Z.bin Tue Dec 18 15:26:10 2007 1114112   |
| <ul> <li>1. C2016_ResetAllToDefaults.bix Wed Nov 08 12:41:24 2006</li> <li>2. C2017_EmulationMode-Journal.bix Thu Feb 23 12:17:12 2006</li> <li>3. C2018_Baud9600.bix Fri Sep 30 10:44:56 2005</li> <li>4. C2019_PrtXonRTS.bix Fri Sep 30 14:23:32 2005</li> <li>5. C201B_BlackMarkIndex-Right.bix Tue Nov 07 09:51:42 2006</li> <li>6. C201F_NoParity.bix Fri Sep 30 14:47:52 2005</li> <li>7. C2022_LeftMargin-24.bix Wed Nov 22 10:59:00 2006</li> <li>8. C2026_InterLineSpacing24.bix Wed May 10 10:23:52 2006</li> <li>9. C2500_BurnTime275.bix Thu May 04 19:13:22 2006</li> <li>10. C2508_Speed_75-200-75.bix Mon Nov 27 12:18:56 2006</li> <li>11. C252E_MotorCurrent-FullCurrent.bix Fri Nov 24 11:01:38 2006</li> <li>12. C2532_TopMargin-24.bix Thu Jul 27 13:19:24 2006</li> <li>13. C2539_JournalCmdSet-Ithaca950.bix Tue Sep 12 10:32:22 2006</li> <li>14. C2545_RealTimeCmd-Off.bix Fri Nov 24 09:58:58 2006</li> <li>15. C2544_Customer-Generic.bix Fri Nov 24 09:58:58 2006</li> <li>16. C2545_RealTimeCmd-Off.bix Wed May 10 10:23:20 2006</li> <li>17. C2546_CashLED-Off.bix Tue Jan 10 11:51:18 2006</li> <li>18. C2547_Code128Type-Standard.bix Tue Jan 10 11:51:18 2006</li> <li>19. C2540_PermitMultTclCopies-Off.bix Wed Apr 05 15:44:22 2006</li> <li>10. C2550_BarCodeDoneBitType-AfterBarcodePrinted.bix Thu Apr 06 13:45:54 2006</li> <li>20. C2550_BarCodeDoneBitType-AfterBarcodePrinted.bix Thu Apr 06 13:45:54 2006</li> </ul> |
| 23. C2567_PaycheckBackUSB-FwControlled.bix Wed Aug 23 14:51:24 2006<br>24. C256C_TofCutSteps-422.bix Fri Dec 01 16:45:28 2006<br>25. C2579_ClearPaperAfterCutSteps-254.bix Wed Mar 07 16:36:58 2007  |
|  |

Figure 11: Confirm FlashImage.exe Folder And Firmware Version

4. FlashImage.exe will look for a known printer on the USB Port. If a printer is not found on the USB Port, the software will then begin to scan the available RS-232 Ports for a known printer.



Figure 12: Software Will Scan For Known Printers On USB & RS-232 Ports

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5. When a known printer has been found, the software will place the printer into **Download Mode** (Red LED Status Light will flash once per second while in Download Mode) and download the configuration BIX files to the printer.

| C:\firmware\3.58z\FlashImage.exe   |
|--|
| Opening PaycheckHsc_V3_58Z.bin<br>CRC of image with a seed of 0x0000 is D5E2 |
| CRC of image with a seed of 0x1234 is 624F                                   |
| Send Configuration file C2016 ResetAllToDefaults.bix                         |
| Send Configuration file C2017 EmulationMode-Journal.bix                      |
| Send Configuration file C2018_Baud9600.bix                                   |
| Send Configuration file C2019_PrtXonRTS.bix                                  |
| Send Configuration file C201B_BlackMarkIndex-Right.bix                       |
| Send Configuration file C201F_NoParity.bix                                   |
| Send Configuration file C2022_LeftMargin-24.bix                              |
| Send Configuration file C2026_InterLineSpacing24.bix                         |
| Send Configuration file C2500_BurnTime275.bix                                |
| Send Configuration file C2508_Speed_75-200-75.bix                            |
| Send Configuration file C252E_MotorCurrent-FullCurrent.bix                   |
| Send Configuration file C2532_lopMargin-24.bix                               |
| Send Configuration file C2537_JournalLmaset-Ithaca750.D1x                    |
| Send Configuration file C253H_ICICM05et-ICLD1X                               |
| Send Configuration file C2344_Gustomer-Generic.Jix                           |
| Send Configuration file C2343_AcallineChu-Off.D1X                            |
| Send Configuration file 02547 Code128Tume-Standard biy                       |
| Send Configuration file C254D PermitMultTclConies-Off_hix                    |
| Send Configuration file C2550 BarCodeDoneBitTune-AfterBarcodePrinted.        |
| Send Configuration file C2563 ActiveTemplatesSet-HSC.bix                     |
| Send Configuration file C2566_IthacaFwUersion-0.bix                          |
| Send Configuration file C2567_PaycheckBackUSB-FwControlled.bix               |
| Send Configuration file C256C_TofCutSteps-422.bix                            |
| Send Configuration file C2579_ClearPaperAfterCutSteps-254.bix                |

Figure 13: Downloading The Configuration Files To The Printer

6. Next, the firmware image BIN file will be downloaded to the printer in blocks of 64 KB.

| C:\firmware\3.58z\FlashImage.exe                           |
|--|
| Downloading Bank ØSUCCESS!<br>Downloading Bank 1SUCCESS!   |
| Downloading Bank 2SUCCESS!<br>Downloading Bank 3SUCCESS!   |
| Downloading Bank 4SUCCESS!<br>Downloading Bank 5SUCCESS!   |
| Downloading Bank 6SUCCESS!<br>Downloading Bank 7SUCCESS!   |
| Downloading Bank 8SUCCESS!<br>Downloading Bank 9SUCCESS!   |
| Downloading Bank 10SUCCESS!<br>Downloading Bank 11SUCCESS! |
| Downloading Bank 12SUCCESS!<br>Downloading Bank 13SUCCESS! |
| Downloading Bank 14SUCCESS!<br>Downloading Bank 15SUCCESS! |
| Downloading Bank 16SUCCESS!<br>Done Downloading!           |

Figure 14: Downloading The Firmware Image File To The Printer

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- 7. During the final 20 seconds of the firmware update, the printer transfers all of the information from RAM to the Flash.
- **Note:** Make sure the power and communications are not interrupted during this critical 20 seconds or else the firmware will become corrupt. If by chance this does happen, please see the section **Restoring Firmware to Factory Default**.

| C:\firmware\3.58z\FlashImage.exe   |  |  |
|--|--|--|
| Saving CRC in EEPROM 62AF<br>WILL NOW FLASH IMAGE FROM<br>THIS TASK WILL TAKE APPRO: | RAM, PLEASE DO NOT POWER OFF PRINTER<br>. 20 SECONDS |  |

Figure 15: Copying Firmware Update From RAM To Flash

8. The printer will reboot out of Download Mode and back into Run Mode when the firmware update is completed.

| C:\firmware\3.58z\FlashImage.exe     |               |
|--------------------------------------|---------------|
| Do you want to Start Over Again? (Y) | es or (N>o -> |

Figure 16: Firmware Update Completed Prompt

9. To exit the *FlashImage.exe* software, enter *N* at the above prompt or enter *Y* to run the firmware upgrade again.



### Verify Firmware Update

A **Power On Test Ticket** can be printed to verify the firmware update was successful. To print a test ticket, the printer must be powered on while holding down the **Paper Feed** button for approximately 5 seconds.

A status test ticket similar to the one shown on the next page will be printed. This ticket can be used to verify the firmware version. Pressing the Paper Feed button again will result in a blank ticket being advanced.



Figure 17: Paper Feed Button



High Speed Couponing Thermal Printer Firmware Downloading & Installation Instructions

| Model:   | PAYCHECK HSC                           |
|--|--|
| Firmware:  | HSC-3 587 (0xD5E7)*                    |
| Protocol:  | ITHACA 950                             |
| COMMUNICATION  |  |
| Interface:   | Serial                                 |
| Baud:  | 9600                                   |
| Data Bits:   | 8                                      |
| Parity:  |  |
| Print Mode:  |  |
| PRINT CONTROL  | Line                                   |
| Print Method:  | No HPQ                                 |
| Speed:   | 200 mm/sec                             |
| Black Bar Index:   | Right                                  |
| No HPQ Burn Time:  | 275 us                                 |
| Clear After Cut:   | 254 steps                              |
| Motor Current:   | 80 %                                   |
| Real Time Command  | 3<br>Disabled                          |
| Validation Bit:  | After Barcode                          |
| Cut Cal. (Auto):   | 161+258 steps                          |
| PRINTER ENVIRONMENT CONE                                   | DITIONS                                |
| Voltage:   | 24.4 Volts                             |
| l emperature:  | 20 Celsius                             |
| ELASH: Used=00000  | RAM: Used-00000                        |
| Free=65535   | Free=65535                             |
| LIBRARY INVENTORY (HSC)                                    | 1100-00000                             |
| Templates:   | 0,1,2,3,4,5,6,7,8,9,A,B,D,<br>E.F      |
| Regions:   | 1,2,3,4,5,6,7,8,h,9,A,B,C,             |
| -  | D,E,F,G,I,J,K,L,N,O,P,Q,R,             |
|  | S,T,U,Z,X,a,b,c,d,e,f,g,i,             |
|  | J,K,I,m,n,o,p,q,r,s,t,u,v,             |
| Fonts:   | W,X,Y,Z<br>0 1 2 3 4 5 7 8 9 4 8 F P   |
| Graphics:  | 0,1,2,0, <del>4</del> ,0,7,0,0,7,D,E,I |
| MANUFACTURING INFORMATIC                                   | DN .                                   |
| Printer ID:  | PC00014                                |
| Date Code:   | 20080623                               |
| A to D: 03cc,01e6,01f8,03ce<br>* S   0   HSC-3.58Z   @   @ | @ H @ P *                              |
| * Indicates the Firmware CRC *                             |  |

Figure 18: Power On Test Ticket

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### **Restoring Firmware to Factory Default**

If the printer's power or communications is interrupted before the final 20 seconds of *FlashImage.exe*, while copying the configuration files or the firmware image file to RAM, the printer will power up again already in *Download Mode* and the firmware update can be restarted by closing and starting *FlashImage.exe* again.

Otherwise, if the printer's power or communications is interrupted during the final 20 seconds of FlashImage.exe, while copying the firmware image from RAM to Flash, the software may not have been able to complete update. If the printer is unresponsive after the power has been restored (will not paper feed) then the printer will need to be restored to factory default. This can be done by following the following steps:

### **Download Anchor USB Drivers**

1. Go to Nanoptix's web site: <u>http://www.Nanoptix.com</u> and click on the Support section in the top right of the page.



Figure 19: Home Page Of http://www.Nanoptix.com - Support Section Shown



 Scroll down the support page and click on the *Anchor USB Drivers* link to download the drivers needed for Windows to detect the PayCheck High Speed Couponing printer in *Factory Boot Mode*.



Figure 20: Anchor USB Drivers Download Section



3. Download and save the Anchor USB Drivers ZIP file to a known location on your hard drive.

(Example: c:\anchor\)

| Save As                   |                 |               |                  |      | ×      |
|---------------------------|-----------------|---------------|------------------|------|--------|
| C:\anchor                 | •               | •             | ✓ ✓ Seal         | rch  | ٩      |
| 🖣 Organize 👻 🏢 Viev       | vs 🔻 📑 New      | Folder        |                  |      | •      |
| Favorite Links            | Name            | Date modified | Туре             | Size |        |
| Documents                 |                 | Thi           | s folder is empt | y.   |        |
| More »                    |                 |               |                  |      |        |
| Folders 🗸                 |                 |               |                  |      |        |
| 🔰 Public 🛛 🔺              |                 |               |                  |      |        |
| Computer                  | ]               |               |                  |      |        |
| SRecycle.Bin              |                 |               |                  |      |        |
| anchor                    |                 |               |                  |      |        |
| boot                      |                 |               |                  |      |        |
| File <u>n</u> ame: And    | :horUsbDriver ┥ | -             |                  |      | •      |
| Save as <u>t</u> ype: Win | Zip File        |               |                  |      | •      |
| Hide Folders              |                 | _             |                  | Save | Cancel |

Figure 21: Sample Save As Screen With Sample Directory



### **Extract Anchor USB Drivers**

Extract the whole contents of the previously downloaded ZIP file to a known location on your hard drive using WinZip or the ZIP extractor of your preference.

| 🔍 N   | 🖳 WinZip (Evaluation Version) - AnchorUsbDriver.zip |         |         |            |      |          |                   |         |             |         |       |         |         |
|-------|---|---------|---------|------------|------|----------|-------------------|---------|-------------|---------|-------|---------|---------|
| File  | Actions   | View    | Jobs C  | Options    | Help | Buy Now! |                   |         |             |         |       |         |         |
| 1     | New Vew   | Open    | Favor   | )<br>rites | Add  | Extract  | Mail              | Encrypt | View        | Install | Wiza  | ard Vie | w Style |
| 1     | Name  |         |         |            |      | $\smile$ | Туре              | Modifie | d           | Size    | Ratio | Packed  | 1       |
|       | ancho 🔍   | rUSBDri | ver.CAB |            |      |          | WinZip File       | 6/11/20 | 07 1:02 PM  | 194,016 | 3%    | 187,943 |         |
|       | 🍇 setup.  | exe     |         |            |      |          | Install Ap        | 2/23/20 | 04 12:00 AM | 139,776 | 52%   | 67,109  | ES      |
|       | 剷 SETUP   | LST.    |         |            |      |          | LST File          | 6/11/20 | 07 1:04 PM  | 3,176   | 85%   | 487     | ES      |
|       | 🚳 ezusb.  | sys     |         |            |      |          | System File       | 6/10/20 | 07 9:41 PM  | 27,507  | 52%   | 13,301  | 55      |
|       | i ezusbv  | v2k.inf |         |            |      |          | Setup Inf         | 9/11/20 | 07 8:29 AM  | 5,203   | 75%   | 1,321   |         |
|       |   |         |         |            |      |          |                   |         |             |         |       |         |         |
| Selec | ted 0 files,  | 0 bytes |         |            |      |          | Total 5 files, 36 | 52KB    |             |         |       | 1       |         |

Figure 22: Example From WinZip Showing The Extract Button



Figure 23: Example From WinZip Showing The Extract Dialog



### **Install Anchor USB Drivers**

1. Navigate to the folder where the Anchor USB Drivers ZIP was extracted.



Figure 24: Extracted Folder For Anchor USB Drivers

2. Run the setup.exe file to install the Anchor USB Drivers.



3. If a Security Warning dialog appears, click on the Run button.



Figure 25: Anchor USB Drivers Security Warning Dialog



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4. Click OK button to begin Anchor USB Drivers setup.

| Anchor USB Driver Setup |  |  |
|-------------------------|--|--|
|                         |  |  |
|                         |  |  |
| 1                       | Anchor USB Driver Setup  |  |
|                         | Welcome to the Anchor USB Driver installation program.<br>Setup cannot install system files or update shared files if they are in use.<br>Before proceeding, we recommend that you dose any applications you may<br>be running.<br>OK Egit Setup |  |
|                         |  |  |
|                         |  |  |
|                         |  |  |
|                         |  |  |
|                         |  |  |

Figure 26: Anchor USB Drivers Setup Screen 1



5. Click the button with the picture of the Computer to begin installing the drivers. *Optionally, the install directory can also be set to a custom location.* 

| Anchor USB Driver Set | ир  |  |  |
|-----------------------|---|--|--|
|                       | Anchor USB Driver Setup<br>Begin the installation by clicking the button below.<br>Use this button to install Anchor USB I<br>Directory:<br>C:\Program Files\Anchor USB Driver\<br>Egit Setup | Driver software to the specified  Change Directory |  |

Figure 27: Anchor USB Drivers Setup Screen 2



6. Click the OK button to complete the Anchor USB Drivers installation.



Figure 28: Anchor USB Drivers Setup Screen 3



#### **Access DIP Switches**



### ESD PROTECTION (SUCH AS A WRIST STRAP) MUST BE USED ANYTIME A PCB IS EXPOSED



- 1. Remove the power and communication connections from the printer.
- 2. Remove the paper stack from the *Ticket Tray* and remove the 4 screws holding the *Ticket Tray Base* to the frame.



Figure 29: 4 Screws Holding Ticket Tray Base To The Frame



 Carefully remove the *Ticket Tray* and *Ticket Tray Base* while leaving the *Paper Low Sensor* connected to the *Main Board*. The *Paper Low Sensor* cable is long enough to move the *Ticket Tray Base* to the side of the frame.



Figure 30: Main Board Shown With Ticket Tray Base Removed



4. Locate the *DIP Switches* and move both switches to the *ON* position. This will place the printer into *Boot Mode* on power up.



Figure 31: DIP Switches Shown To Place The Printer In Boot Mode

- 5. Apply power to the printer.
- 6. Once the green power LED has been on for at least 3 seconds, move the *DIP Switches* back to the *OFF* Position. Leave power applied to the printer.
- 7. Reverse the above steps to reassemble the printer.



### **Connecting The Printer To The Windows Host Computer**

 Connect the printer to the Windows host computer via the USB connection. The Windows host computer will open the *Found New Hardware* dialog for a new *Unknown Device*.



Figure 32: Found New Hardware Dialog For Unknown Device

2. Click Locate and install driver software (recommended).



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| Found New Hardware - Unknown Device | X |
|-------------------------------------|---|
| Installing driver software          |   |
|                                     |   |
|                                     |   |
|                                     |   |
|                                     |   |
|                                     |   |
|                                     |   |

Figure 33: Found New Hardware Installing Dialog



3. If a *Windows Security* dialog opens because *Windows can't verify the publisher of this driver software*, click on *Install this driver software anyway*. Once this option is selected, Windows will continue to install the driver.





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| Found New Hardware - Unknown Device | × |
|-------------------------------------|---|
| Installing driver software          |   |
|                                     |   |
|                                     |   |
|                                     |   |
|                                     |   |
|                                     |   |
|                                     |   |

Figure 35: Found New Hardware Installing Dialog



4. When driver and new hardware has finished installed, the Close button can be clicked to close the window.



Figure 36: Driver/New Hardware Installation Completed Dialog



5. To verify that the driver and hardware has been installed correctly, open the Device Manager in Windows. This can be done by clicking on Start → Control Panel → System (In Classic View) → Device Manager. Expand the Universal Serial Bus controllers and find TMS320VC5509 – USB Core boot loader. If TMS320VC5509 – USB Core boot loader is listed then the driver and hardware has been installed correctly.

| Bevice Manager  |   | Ţ   |
|---|---|-----|
| File Action View Help   |   | ٦   |
|   |   |     |
| 🗄 🖷 🖟 Universal Serial Bus controllers                        |   | •   |
| 🚽 🔤 🚽 Generic USB Hub   |   |     |
| 📖 🟺 Intel(R) ICH9 Family USB Universal Host Controller - 2934 |   |     |
| 📖 🟺 Intel(R) ICH9 Family USB Universal Host Controller - 2935 |   |     |
| 🟺 Intel(R) ICH9 Family USB Universal Host Controller - 2936   |   |     |
| 🔤 🖣 Intel(R) ICH9 Family USB Universal Host Controller - 2937 |   |     |
| 🔤 🚽 Intel(R) ICH9 Family USB Universal Host Controller - 2938 |   |     |
| 🔤 🚽 Intel(R) ICH9 Family USB Universal Host Controller - 2939 |   |     |
| Intel(R) ICH9 Family USB2 Enhanced Host Controller - 293A     |   |     |
| Intel(R) ICH9 Family USB2 Enhanced Host Controller - 293C     |   |     |
| TMS320VC5509 - USB Core boot loader                           |   | al. |
| USB Root Hub  |   |     |
| USB Root Hub  |   |     |
| USB Root Hub  |   |     |
| USB Root Hub  | - |     |
| USB Root Hub  |   |     |
| USB Root Hub  |   |     |
|   |   |     |
| USB KOOT HUD  |   | ۳.  |
|   |   |     |

Figure 37: Device Manager Showing Driver & Hardware Installed Correctly



### **Re-Flashing The PayCheck High Speed Couponing Printer**

The printer is now ready to run *FlashImage.exe*. Follow the instructions outlined above in *Firmware Upgrade Instruction*  $\rightarrow$  *Flashing The PayCheck High Speed Couponing Printer*. Because of the previous steps, if the printer ever needs to be reset to Factory Default, the drivers and hardware will already be installed.

**Note:** The above steps will need to be repeated to install the **Anchor USB Drivers** if the printer is plugged into a different USB Port when in **Factory Default Mode**.





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