Foil X*press* ™

On Demand Digital Flat Bed Printer
With Auto Positioning (AP) Option

Operator's Manual

No. 1.00

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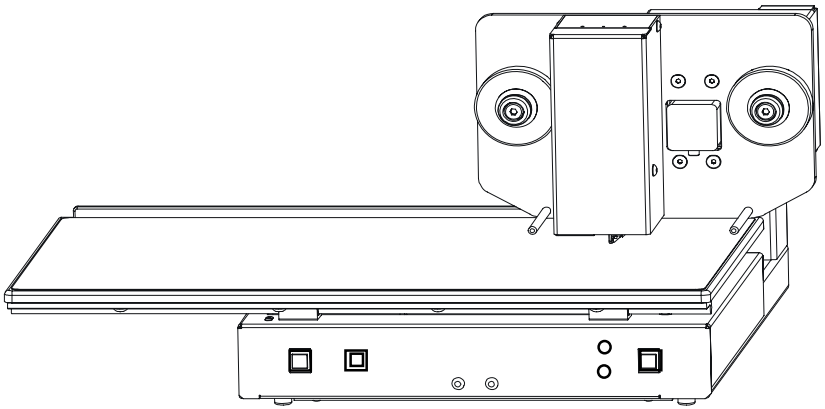

Disclaimer

ImPress Systems will not be responsible for the safety, reliability, or performance of the product if (1) the product has been altered in any way by non-authorized personnel, (2) the product has been subject to misuse, negligence, or neglect, or (3) has been used other than in accordance with the instructions herein.

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PREFACE

Manual Scope

This manual provides introductory and procedural information for operating Foil Xpress. Keep it in a location where it can be readily referenced. For safe and effective use of Foil Xpress, it is necessary that you read the entire manual. Before operating Foil Xpress, you should become familiar with the described operating instructions and understand the basic system, warnings, cautions, and notes.

Conventions

Observe all warnings and cautions, stated or implied, in the procedures to prevent both personal injury and equipment damage. Conventions are used in this manual when safety factors must be considered. These conventions indicate to the operator that extra safety precautions must be observed. A description of each follows:

Note: This is an example of how notes will appear in the manual. A note provides information of which you should be aware while performing an operation.

Caution: This is an example of how cautions will appear in the manual. A caution warns of potential damage to the system if operating procedures are not strictly followed.

WARNING: This is an example of how warnings will appear in the manual. A warning informs you that personal injury may result if operating procedures are not strictly followed.

General Safety

Start-up Safety

Operate the equipment within the levels of environmental tolerances specified in Appendix A -Specification listed in this manual.

Caution: Only qualified, trained service representatives should repair Foil Xpress.

WARNING: Voltages within the product present the danger of an electric shock.

Caution: Digital logic components are susceptible to electrostatic discharge and can be easily damaged.

Mechanical Safety

Position the power cord properly to avoid risk of tripping.

Keep hands and clothing safely away from moving parts.

Be careful not to contact the printhead immediately after or during operation.

Electrical Safety

When disconnecting the power cord, grasp the plug and not the wire. Replace electrical components with units of equal rating and capacity. Use only an AC line cord that matches the power rating for Foil Xpress. Always use a cord that has a ground.

Do not place or store materials on Foil Xpress. Keep fluids and contaminants safely away from the unit.

Symbols

These symbols appear on the rear panel of Foil Xpress. It is important that you recognize and understand these warnings and symbols.

ON (power: connection from main)
This symbol appears on the system power toggle switch on the lower left rear of Foil Xpress. When this side of the switch is pushed inward, the electrical power is connected.

OFF (power: disconnection from main)
This symbol appears on the system power toggle switch on the lower left rear of Foil Xpress. When this side of the switch is pushed inward, the electrical power is disconnected

Labelinbg

This label contains the manufacturer's name, product number, serial number, and date of manufacture. It is located in the lower left rear of Foil Xpress above the ON/OFF Switch.

Certification Label

These labels will indicate the regulatory approvals for Foil Xpress. The labels will be located on the lower right rear of Foil Xpress or on the bottom of the unit on the base plate.

FCC Label

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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 he 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.*

CE Mark

This device complies with EC Declaration of Conformity in accordance with the following directives

2006/95/ECT	he Low Voltage Directive
2004/108/EC	The Electromagnetic Compatibility Directive
98/37/EC	The Machinery Directive

Note: The EC Declaration of Conformity in its entirety is included in APPENDIX A. - Page 70.

Chapter 1 Getting Started

System Description

Foil Xpress is a compact, desktop printer that replaces traditional hot stamping, silk screening, and pad printing processes currently used to print and decorate day and pocket planners and diaries, book covers, ad specialty and novelty items.

Foil Xpress significantly reduces the direct and indirect costs of printing by eliminating costly set up time, as well as the dies, screens, inks, and solvents used in traditional printing methods. The system is cost effective for long, short, and personalized runs and applies any computer-generated text and graphics instantly. Foil Xpress is safe, easy-to-use, and produces sharp durable impressions on demand.

Foil Xpress uses a printhead to heat and press 0.digi Foil unique Digital Decorating Film™ onto items. As the film moves beneath the printhead, the applied heat and pressure causes the image to transfer from the film to the product.

WARNING: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

System Components

Figure 1-1.
Front View

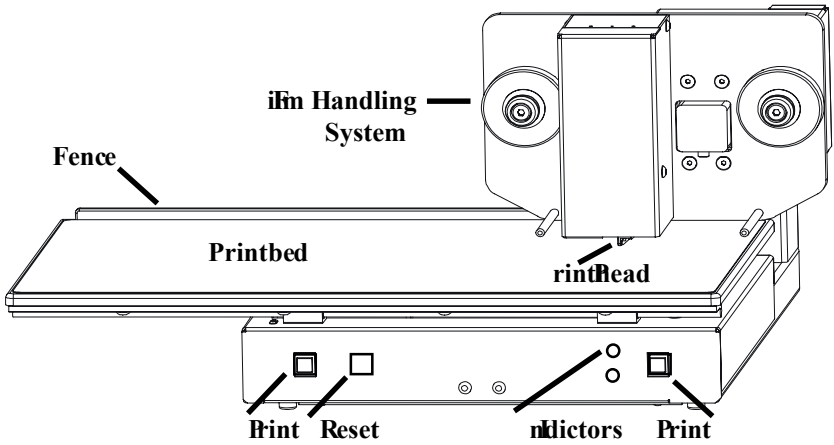
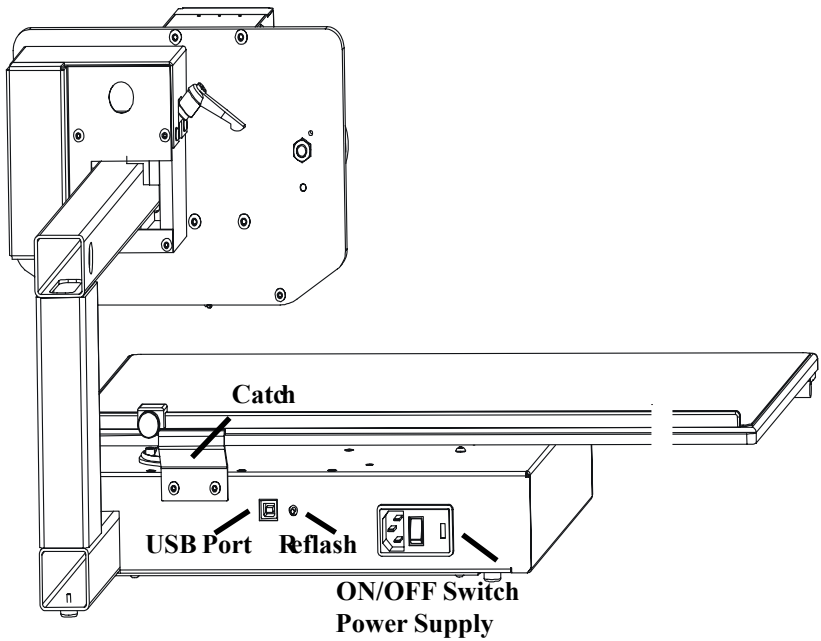


Figure 1-2.
Rear View



Unpacking

First review and then complete this procedure to unpack your Foil Xpress.
NOTE: It is necessary to attach the table to the main frame. Follow the instructions carefully to attach the table and remove transportation protection spacer and bracket before operating Foil Xpress. (Instructions are included in the Quick Printing Guide and in this Manual).

1) Use a utility knife to carefully cut the packaging tape on the shipping carton.
2) Remove the top piece of packing foam.
3) Inspect the contents for damage. Notify the carrier immediately if the shipment was mishandled or damaged in transit.
4) Foil Xpress weighs approximately 45 pounds (20 kg)

Lifting

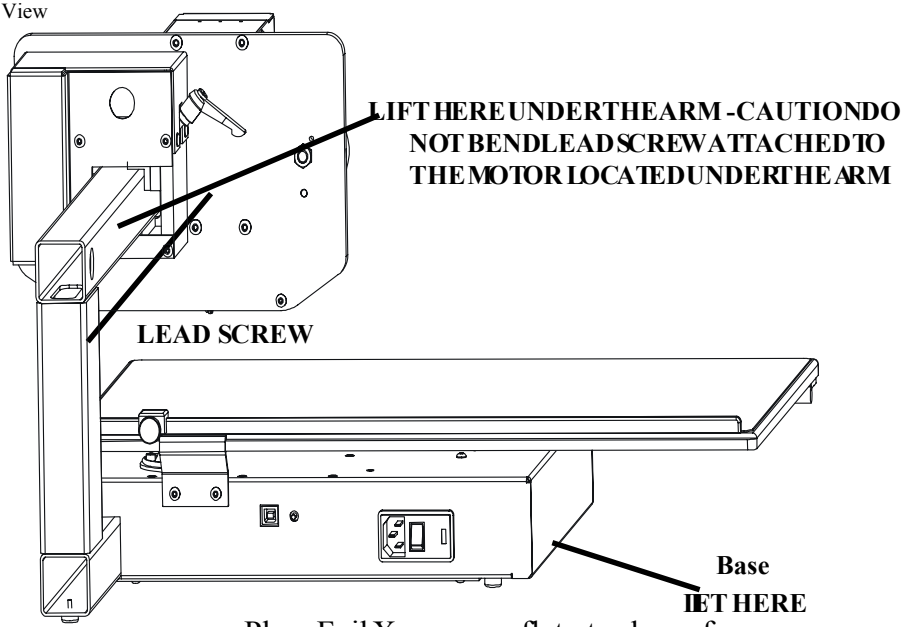
WARNING: Bodily injury and systems damage might result from improper lifting. Do not attempt to lift Foil Xpress by its casing or components at the top of the unit.

In order to avoid injury or damage to Foil Xpress, lift out of the box by placing one hand on the main frame in the space behind the Film Handling System (as indicated in Figure 1-3) and tilt Foil Xpress towards the back of the box. Place the other hand under the base and lift up and out. Use the same caution whenever moving the unit.

Caution: Do not lift by the Printhead Assembly or the table. Do not bend leadscrew attached to the motor located under the arm.

Unpacking (continued)

Figure 1-3.
Rear View



Place Foil Xpress on a flat, sturdy, surface. The unit is 20" wide x 22" deep x 13" high (51 cm x 56 cm x 33cm). Ideally, the workspace on which Foil Xpress is positioned should accommodate at least twice the weight of the printer.

Consider operator access when positioning Foil Xpress. Access is required to the front for film loading and product decorating. Also, consider the convenience to a power source when choosing a suitable location.

Attach the table to the main frame. Be careful NOT to damage the printhead when sliding the table into position.

Unpacking Foil Xpress

Foil Xpress is shipped with the main frame of the printer detached from the print bed table. The print bed table is contained in the box that is placed on top of the main frame of the printer. Power cord, UBS cable, cleaning paper & sample rolls of foil are shipped in a smaller box that has been packed below the table.

STEP (1): Remove boxes and packaging materials and set aside.

STEP (2): Turn box on its side (as shown in STEP (3) & place on floor.

STEP (3): Carefully slide the main frame of the printer (which is packed between two layers of foam) out of box.

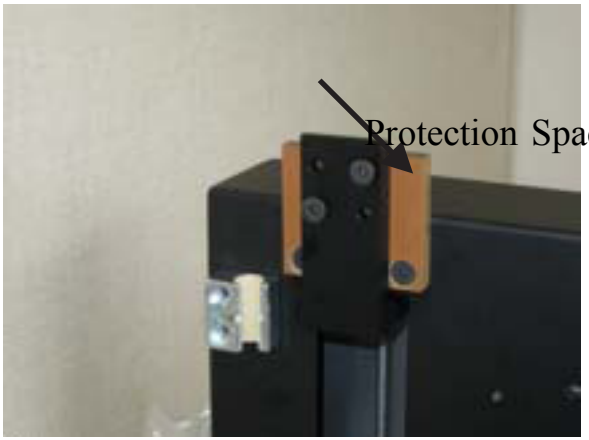
STEP (4): Place on workspace and remove top foam and plastic bag.

Removing Transportation Protection Spacer

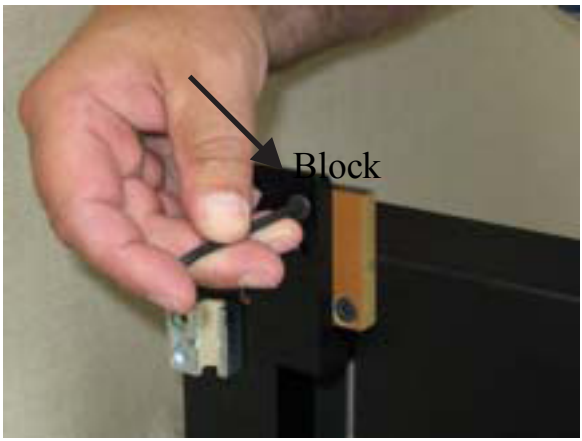
It is necessary to remove the protection transportation spacer before attaching the print bed table to the main frame of the printer. This spacer protects components contained in the base of the printer from damage during shipping

NOTE: It will be necesary to reattach this spacer & remove the table to ship the printer in the future. It will also be necessary to reattach the Transportation Protection Bracket.

STEP (1): Use the enclosed allen wrench to remove the spacer

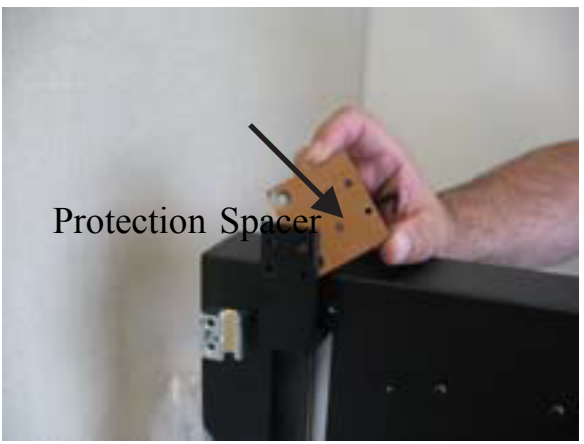


STEP (2): Remove two screws that attach the spacer to the block.



STEP (3): Remove the other two screws that attach the protection spacer to the main frame of the printer.

STEP (4): Remove the transportation spacer and store with other packaging materials. **NOTE: SAVE THE 4 SCREWS -- they are used to attach print bed table to main frame.**



<u>Shipping the printer without following these directions will result in damage to the printer.</u>

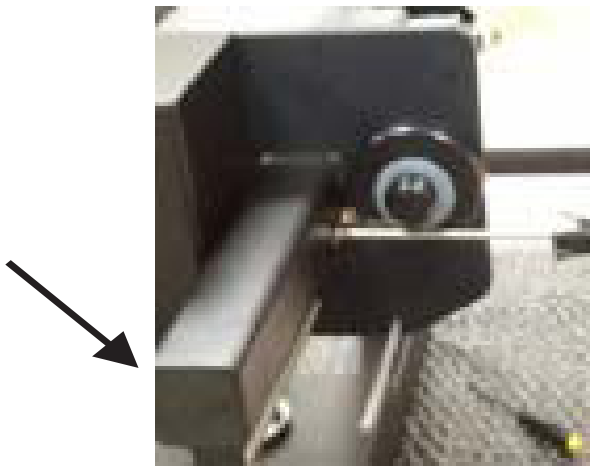
Removing Transportation Protection Bracket

It is necessary to remove the protection protection bracket before attaching the print bed table o the main frame of the printer. This bracket protects the Auto Positioning motor and lead screw from damage during shipping

NOTE: It will be necessary to reattach this bracket and transportation spacer and remove the table to ship the printer in the future. Therefore, it is extremely important to save all packaging materials.

STEP (1): A medium phillips screw driver is needed to remove the bracket.

STEP (2): Remove the screw holding the bracket to the arm. NOTE: There are magnets in the foil hub that will attract the screwdriver.

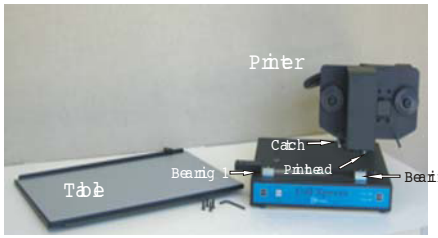


STEP (3): Remove the screw located to the left of the foil hub.

STEP (4): Make sure that you save the bracket and reattach before shipping the printer. This part and the transportation spacer should be saved along with all of the other packaging materials.

Instructions for Placing Table on Foil Xpress Printer

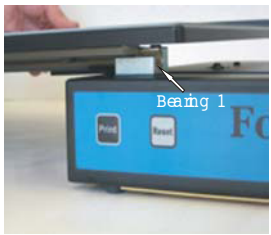
Foil Xpress is shipped without the table attached to the main frame. Attach the table (contained in this smaller box) to the main frame using the instructions below.
Save the shipping container in the event the unit must be returned.

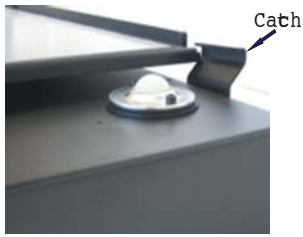


The table is attached to the printer by sliding it through Bearing 1. Continue sliding under the Catch (located at the rear of the printer) and Bearing 2 (located in the right front of the printer).

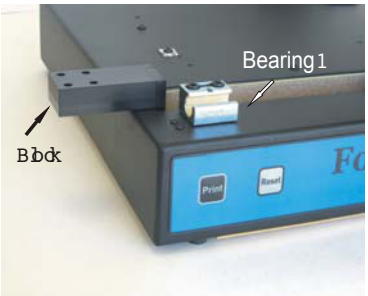
Cautions:

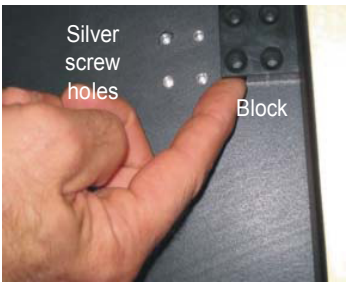
- Be careful not to damage the printhead when sliding the table
- Slide the table slowly - keeping it flat and level





The table needs to be attached to the block
(located to the left of Bearing 1).
It is attached to the 4 silver screw holes located under the table.





Once the table is on the printer, slide so that the right edge of the table is aligned with the right side of base of the printer
(side where Bearing 2 is located).

Place the printer base on the edge of the workstation so that the left edge of the table overhangs the workstation, and it is possible to access the underside of the table.

Line up the Block with the 4 screw holes on the table.

Tighten screws with the allen wrench provided.

Unpacking (continued)

5) Once the table has been attached and the unit is positioned, verify contents against Packing List.

VERY IMPORTANT NOTE: *Save the shipping container and packing materials in the event the unit must be shipped or returned at a later date.* ***DO NOT SHIP WITHOUT USING ORIGINAL CONTAINER AND PACKING MATERIALS.***

Figure 1-4.
Items Shipped

6) Verify the contents against the items listed in the enclosed Packaging List and in Figure 1-4. As part of your shipment, the following items were included:

1) Foil Xpress®
2) Power Cord
3) Digital Decorating Films® (2 rolls)
4) Printhead Cleaning Paper
5) User CD includes:
   - Operator's Manual
   - Printer Driver
6) USB Cable
7) Warranty
8) Instructional DVD

Connecting Power

Attach the power cord between Foil Xpress and the power source.

Caution: The power cord provided is rated for the power rating of Foil Xpress. If you are using a different power cord, verify that its rating is appropriate for use with Foil Xpress and that it includes a ground line.

Connecting Power (continued)

First review and then complete this procedure to connect power to your Foil Xpress:

1) Verify that the power switch of Foil Xpress (lower left back panel) is in the OFF position. When the side marked "O" is fully depressed, the unit will be OFF.

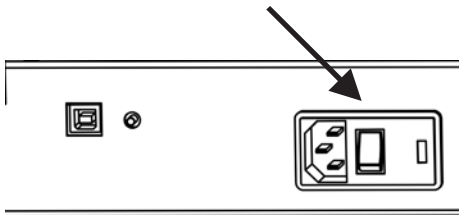


Figure 1-5.
Switching the Power OFF

2) Plug the power cord firmly into the receptacle on Foil Xpress.

3) Plug the other end of the power cord into a grounded wall outlet.

Caution: Before connecting to a power source, check Foil Xpress specification label to confirm the voltage and frequency rating match that of the power source.

4) Check to be sure that the unit is far enough from the wall to accommodate the connected cord.

5) Load film (as described in Chapter 3).

6) Press the power switch to the ON position.

Connecting to Computer

Foil Xpress is equipped a Universal Serial Bus (USB) connection. Figure 1-5 identifies printer USB port connection on the back panel of Foil Xpress.

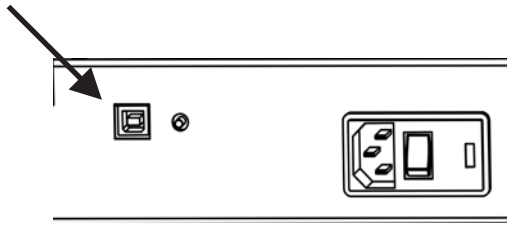


Figure 1-5.
Back Panel

For proper communication:

1) Locate your workstation within 6 feet (2 meters) from Foil Xpress.

2) Power OFF the workstation and Foil Xpress .

3) Connect the printer end of the interface cable to the USB Male B Connector.

4) Connect the USB Male A Connector computer end of the USB Cable A-B into your workstation.

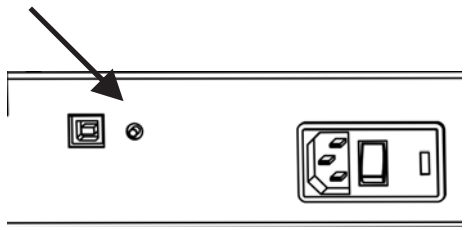
Note: Make sure that Foil Xpress is always connected to this same USB port. If the cable is moved the printer may not communicate with your workstation.

Note: Turn Foil Xpress on first and then turn on your workstation.

Reflash Button

This button is used to update the embedded firmware in Foil Xpress. You will be contacted by OPUS when this is necessary and be given instructions on how to complete this operation.

Note: Foil Xpress *will not operate if this switch is pushed in.*



Chapter 2 Reviewing Foil Xpress

This chapter describes the components of Foil Xpress.

Power
Indicators and Buttons
Digital Decorating Film Handling System
Printhead
Print Table

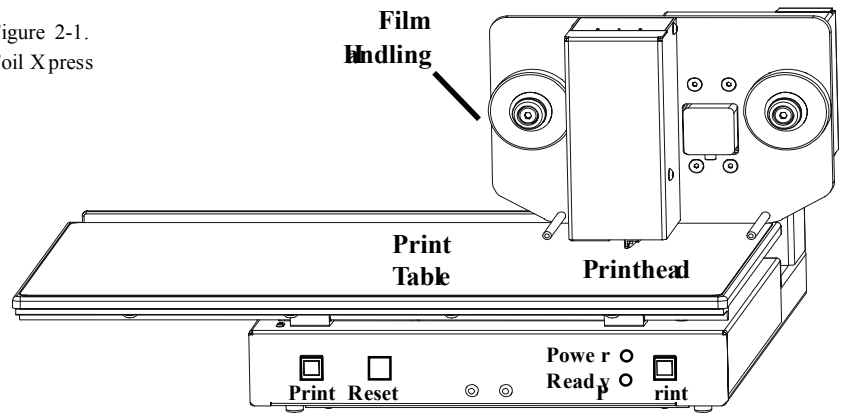


Figure 2-1.
Foil Xpress

Power

Instructions for connecting power are included in Chapter 1. The enclosure protects the operator from electric shock and shields the electronics from potentially destructive electrostatic discharge.

Caution: The electronics enclosure should not be opened except by qualified, trained personnel.

Chapter 2 Reviewing Foil Xpress

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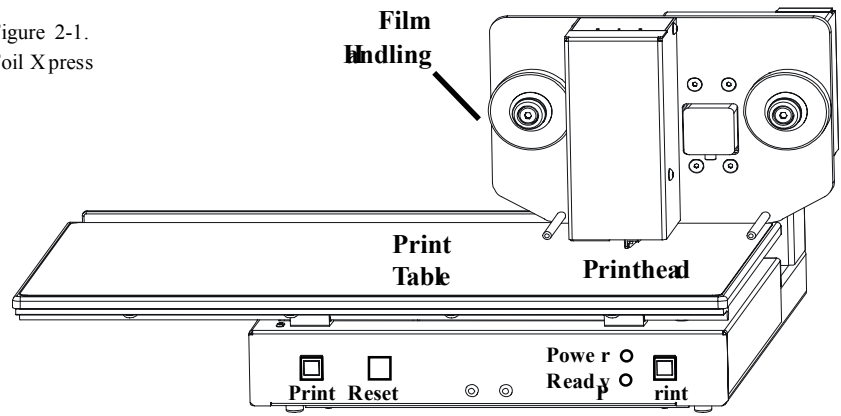
Figure 2-1.
Foil Xpress



Power

Instructions for connecting power are included in Chapter 1.
The enclosure protects the operator from electric shock and shields the electronics from potentially destructive electrostatic discharge.

Caution:
The electronics enclosure should not be opened except by qualified, trained personnel.

Indicators and Buttons
Figure 2-1 shows the location of the indicators and buttons necessary to operate Foil Xpress.

Power
This indicator illuminates a solid green when Foil Xpress is ON.

Ready
This indicator illuminates a solid amber when Foil Xpress is ready to print.

Print
These buttons (located on either side of the front panel) initiate the printing process. Printing can only be initiated after data has been successfully downloaded. Press either Print button to initiate the print.

Reset
This button is used to cancel a print.

Film Handling

Figure 2-3 shows the film handling system which consists of a Feed Spool, Take-Up Spool, and Guide Rods.

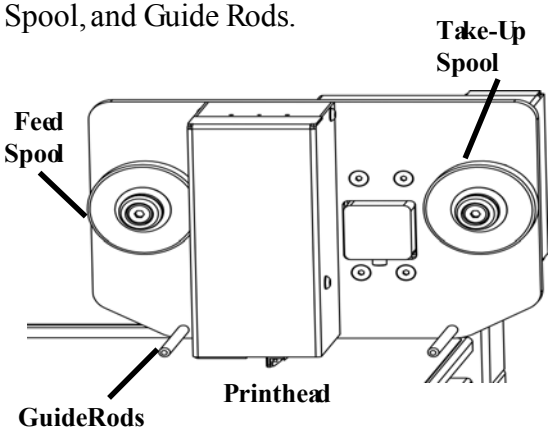


Figure 2-3.
Film Handling System

Feed Spool
Holds the roll of ImPress digital decorating film used to decorate.

Take-Up Spool
Accumulates the used film and helps regulate the proper tension on the film.

Guide Rods
Guides the film from the Feed Spool and under the printhead to the Take-Up Spool.

Caution: The quality of printing and the life of the printhead are affected by the films used with Foil Xpress. OPUS brand of digital decorating films are hot stamping foils that have been carefully formulated, tested, and matched to the needs of Foil Xpress. Repair for damage incurred due to the use of non-approved films, foils or ribbons is not covered by the warranty.

Printhead

Printhead

The printhead consists of an array of individually addressable heating elements. It provides energy to transfer the image from the film to the item being printed.

Caution: The Printhead can fail prematurely due to mechanical abuse or static discharge. Refer to Chapter 6 - Printhead Maintenance - for additional important information. Read before operating Foil Xpress.

Print Table

Print Table

Items to be printed are loaded and unloaded on the the print table. The print bed measures 13.5" (34 cm) x 21" (53 cm). This print bed will allow for printing an image 8" (20.3 cm) by 10" (25.4 cm) to be printed in multiple pass.

Chapter3 Loading Film

This chapter describes how to load and unload the film

Foil Xpress is shipped with a two sample rolls of digital decorating film.

Caution: To prevent printhead damage, do not operate Foil Xpress without film loaded.

1) Slide a roll of film onto the Feed Spool such that the film unwinds from the top of the roll in a clockwise direction. Verify that the underside of the film (the side wound to the inside of the roll) faces down as it passes beneath the printhead. (Figure 3-1)

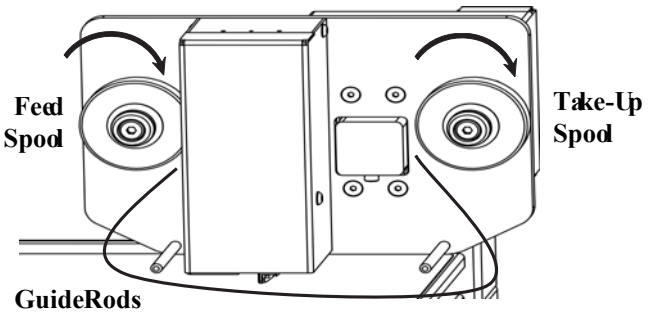


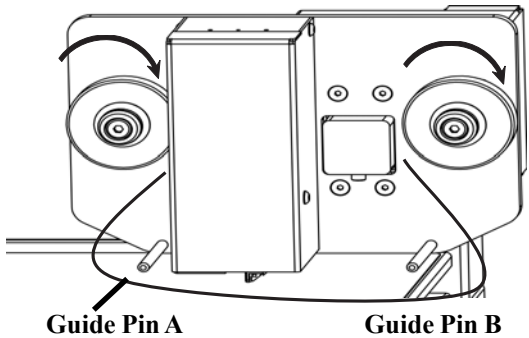
Figure 3-1.
Loading the film

2) Slide an empty take-up core on the Take-Up Spool to collect the used film. Make certain that the metal ring on the end of the tub is against the flange on the Take-Up Spool.

Loading Film (continued)

3) Thread the foil under Guide Pin A, the printhead, and Guide Pin B as shown in Figure 3-2.

Figure 3-2.
Threading the foil



Caution: It is very important for the film to travel correctly. Wrinkles in the film will cause defects in printing.

4) Attach the end of the film to the top of the take-up core on the Take-Up Spool. Affix with a piece of adhesive tape.

5) Turn the empty take-up core clockwise to remove any slack while checking that the film advances smoothly without kinking or wrinkling.

Caution: The quality of printing and the life of the printhead are affected by the films used with Foil Xpress. OPUS brand of digital decorating films are hot stamping foils that have been carefully formulated, tested, and matched to the needs of Foil Xpress. Repair for damage incurred due to the use of non-approved films, foils or ribbons is not covered by the warranty.

Chapter4 Installing Printer Driver

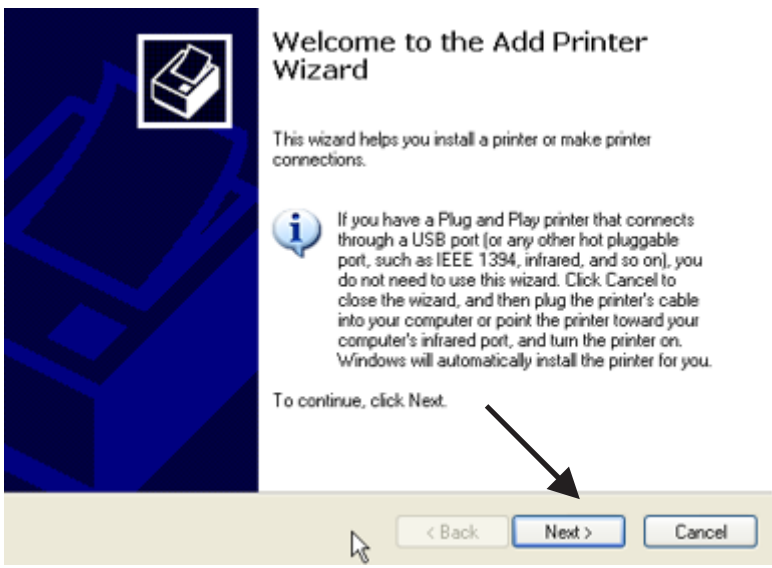
Installing Printer Driver

FoilXpress' Printer Driver must be installed before operating the printer. The Printer Driver is included in the User CD in the Windows Printer Driver Folder. The Printer Driver works with Windows XP, Windows Vista, and Windows 7 (32 and 64 BIT) operating systems.

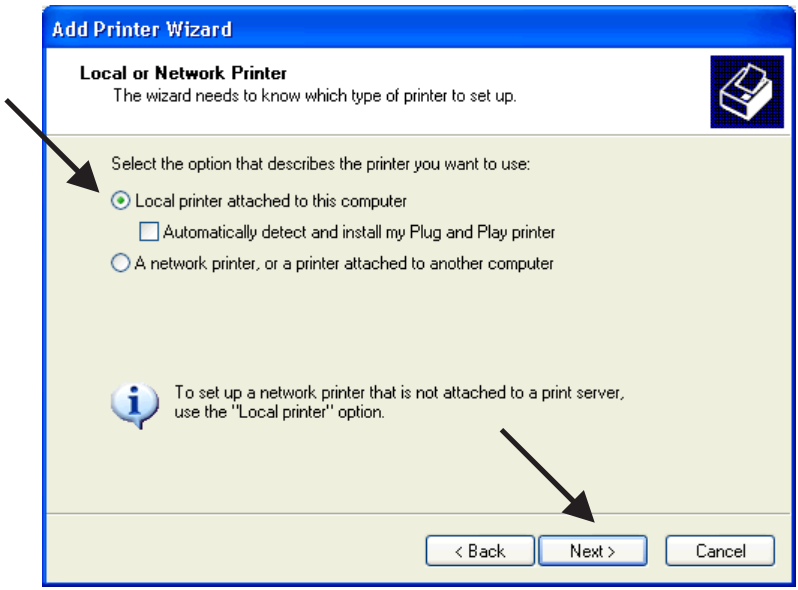
Install using Windows "Add Driver Wizard".

Go to Start Menu; Select "Settings"; Select "Printers".

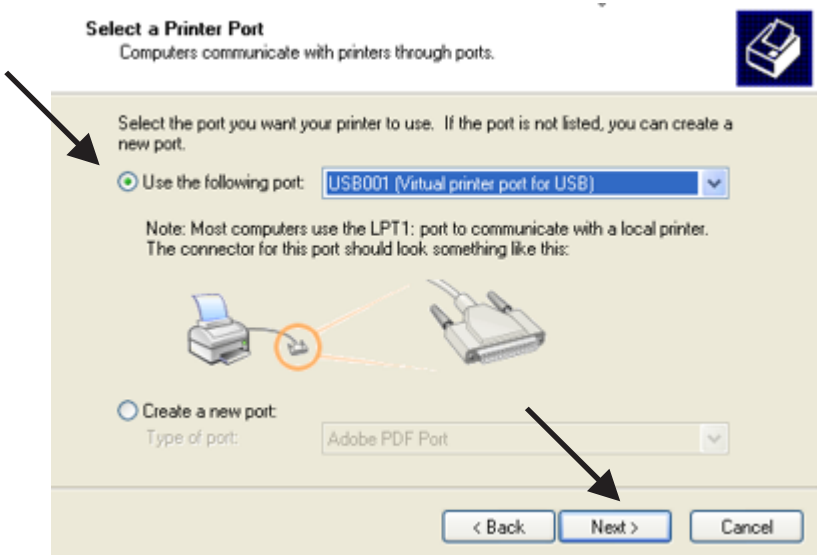
Click on "Add Printer" to activate Wizard. Select Next.



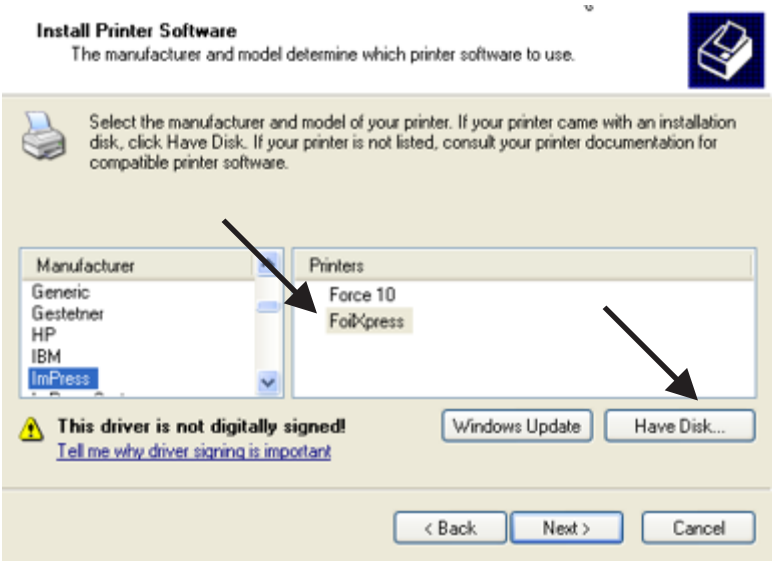
Select “Local Printer” and “Next”.



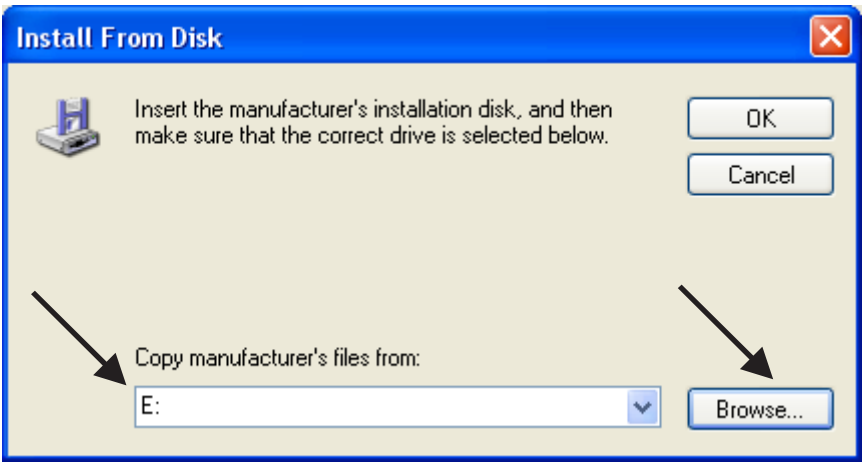
Select USB (Virtual printer port for USB) in the menu under “Use the following port” and “Next”.



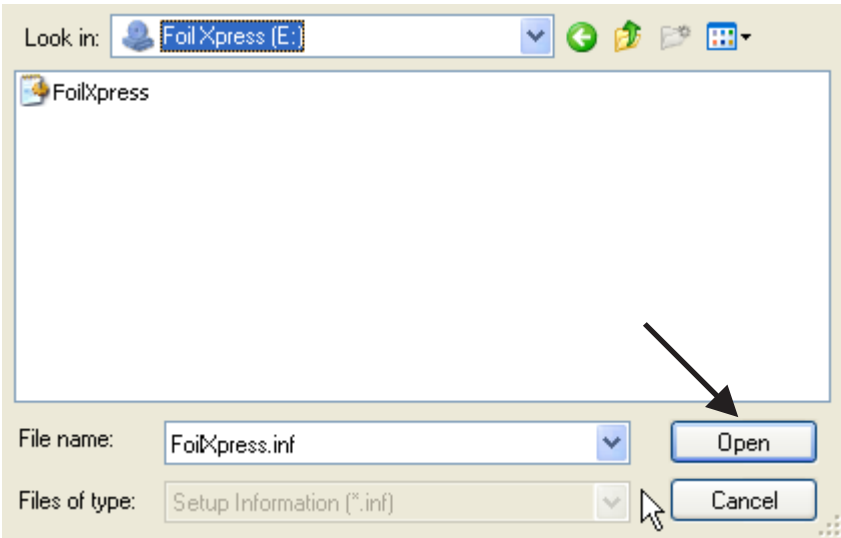
Select “Foil Xpress” and “Have Disk”.



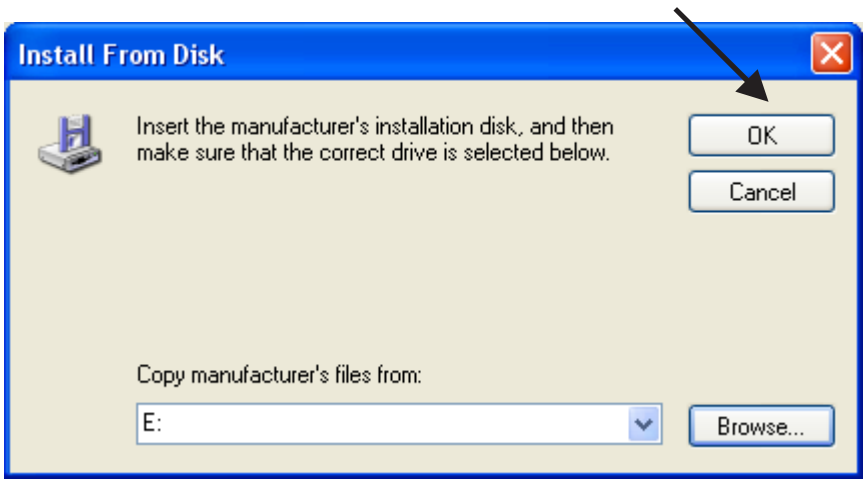
Select “Browse” and find which directory on your computer User CD is located.



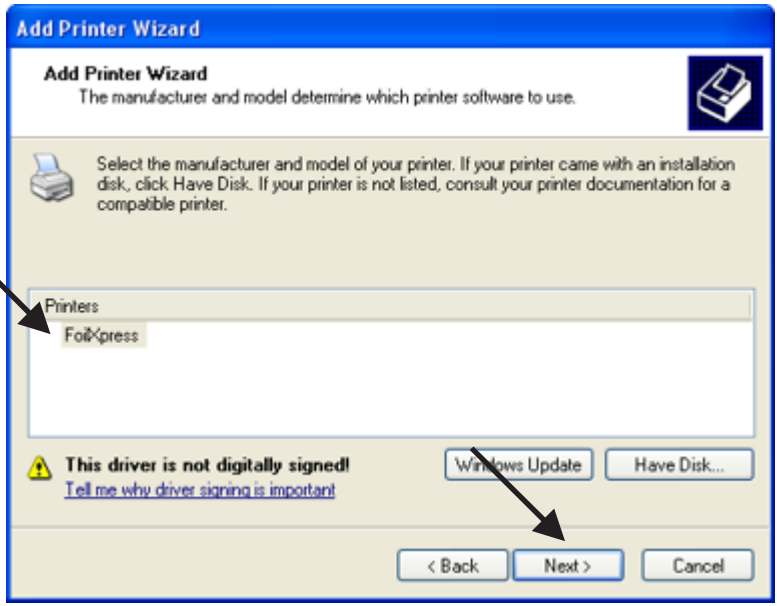
Highlightand Openfilename: “FoilXpress.inf”



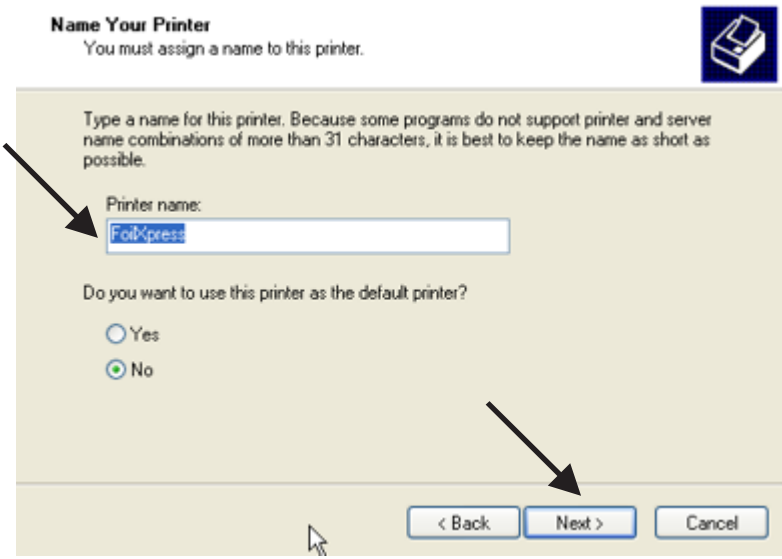
Select “OK”.



Select “Foil Xpress” and “Next”.

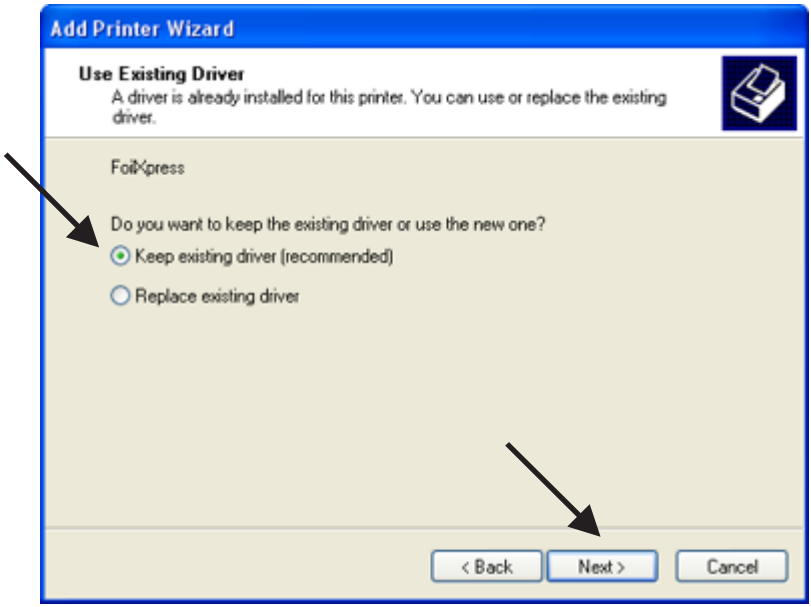


Select Printer Name “Foil Xpress”.

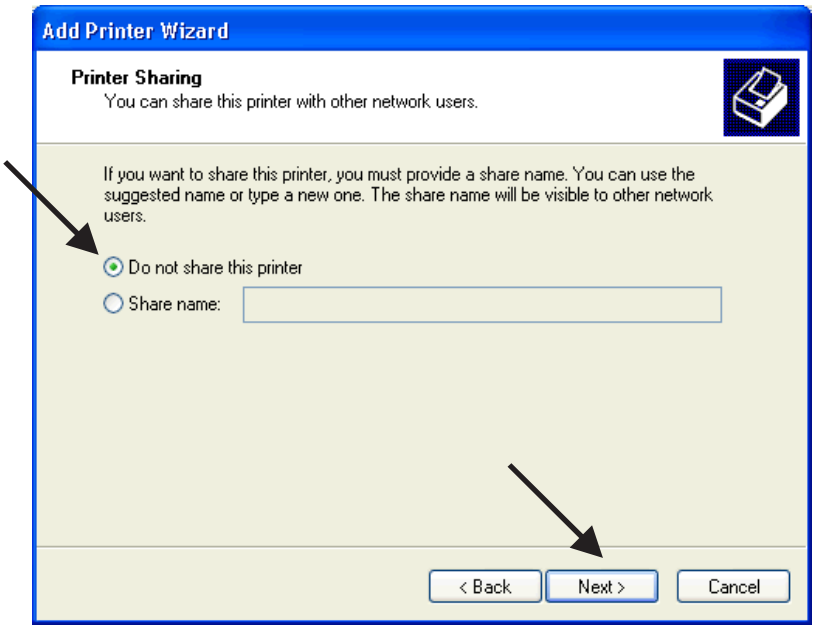


Note: It is not necessary to select Foil Xpress *as the Default Printer. However, if the Default Printer is not* Foil Xpress*, user must select* Foil Xpress *as the designated printer when printing. Printer Settings are selected under "Properties" once the* Foil Xpress *Printer is selected.* Select "Next".

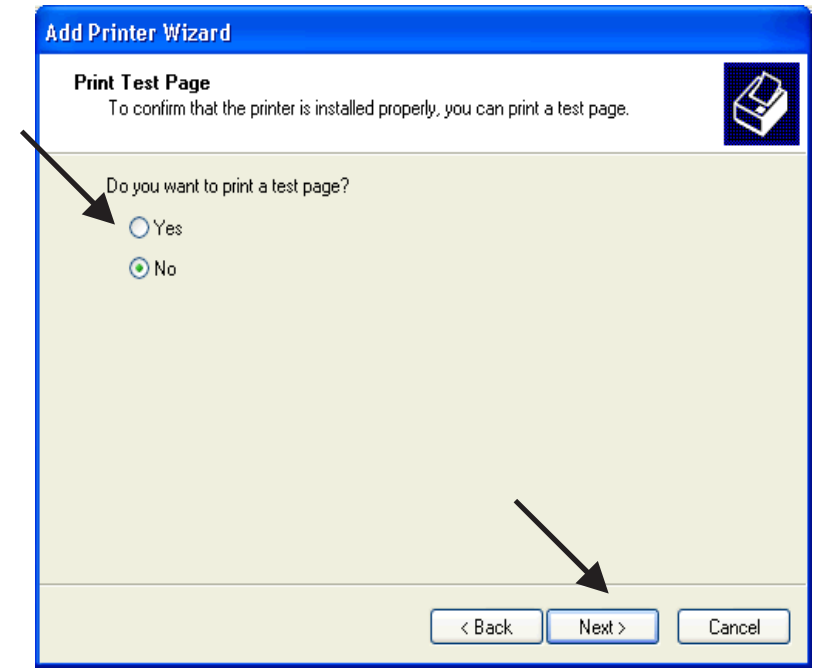
If this screen appears, Select "Keep existing driver" and "Next".



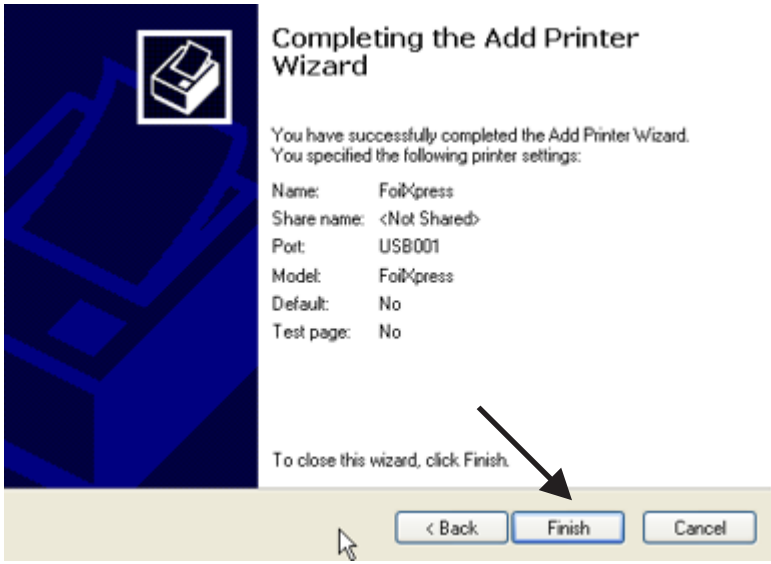
Select “Do not share this printer” and “Next”.



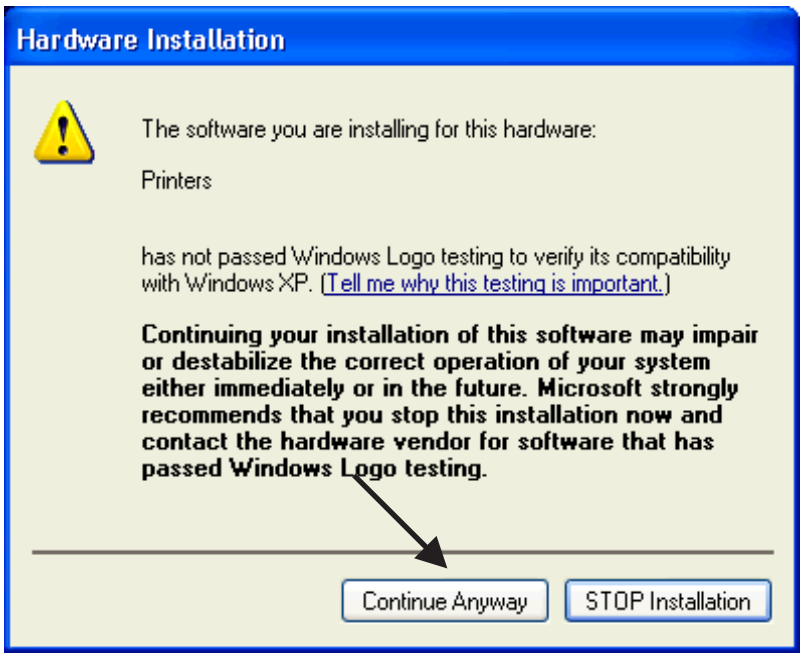
Select “No” and “Next”.



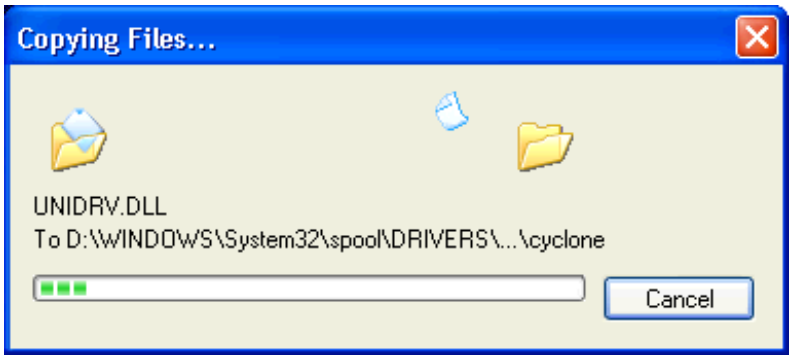
Select "Finish" to complete the process.



The following warning will appear. Select Continue - **Do not STOP Installation.**



The installationprocess will be now be completed.



Chapter 5 Operating Foil Xpress

Before Starting

Before operating Foil Xpress, check to make certain that the following operations have been completed:

1) Foil Xpress is connected to the computer.
2) Foil is loaded.
3) The computer and Foil Xpress are plugged in and turned ON.
4) The item to be printed is on the Print Table.

Setting up a Print Job

Setting up a print job requires the following steps:

1) Selecting a Windows compatible application, e.g., Corel Draw, Microsoft Word, for laying out the print job.
2) Determining the printable area.
3) Setting up the page size.
4) Placing graphics and text on the page.
5) Setting up Print Properties and Settings
6) Placing the item to be printed on the print table.
7) Sending the print job to the printer.

Selecting an Application

Foil Xpress has been designed to operate using Windows compatible software applications, e.g., Corel Draw and Microsoft Word. The optimum application is dependent on the requirements of a particular job.

In the next several sections, instructions will be given for each operation for both Microsoft Word and Corel Draw.

Note: *The following information is meant to summarize and guide the operator through the basic operational requirements for* Foil Xpress. *Refer to Help or the Manual for the application being used for more detailed instructions.*

Printable Area

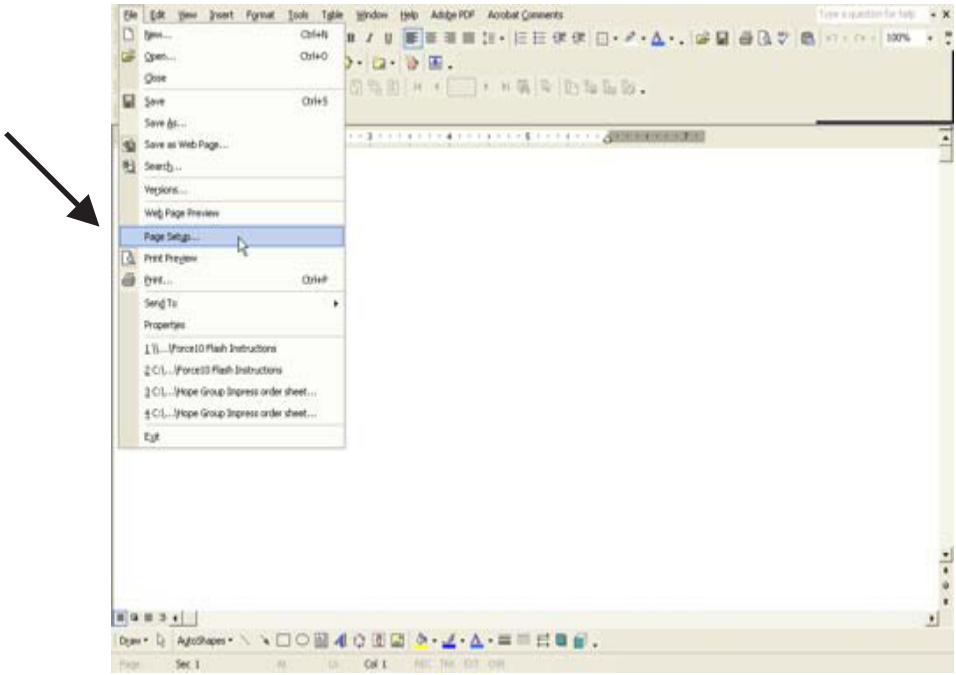
Foil Xpress will print a 8" (20.3 cm) by 10" (25.4 cm) image. Set up the page size in the application to the appropriate size for the job and position graphics and text.

Setting up Page Size

Setting up Page Size in Microsoft Word:

When using Foil Xpress, the page size is the printable area. It is also necessary to set up the page orientation. In this example, the page size will be 8" (20.3 cm) by 10" (25.4 cm). The orientation is landscape.

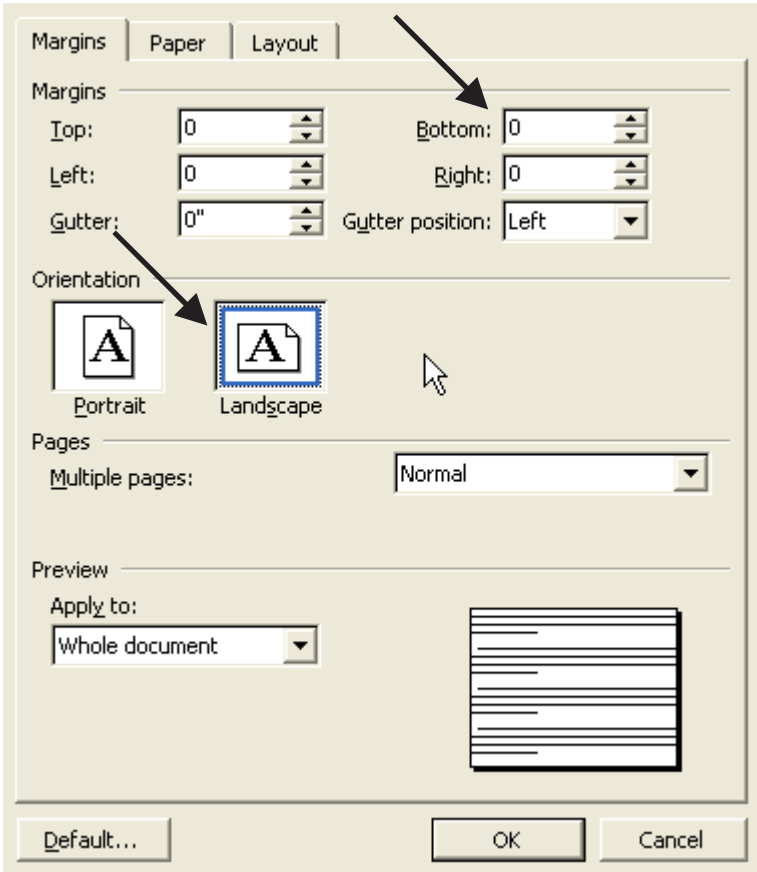
Go to File Menu - Page Setup



Under the Margin Tab, set all margins to "0"

Select "Landscape" as the orientation.

Note: *Under the Layout Tab in Foil Xpress Printing Preferences, select "Landscape" as the orientation before sending the file to the printer.*



Under the Paper Tab, set the width to 8” (20 cm) and the height to 10” (25 cm).

Caution: If you neglected to select Foil Xpress as your printer, you will get the following Microsoft Word warning message: "One or more margins are set outside the printable area of the page." Select Ignore - otherwise Word will add margins, and this will effect the placement of your image on the page.

Setting the Page Size in Corel Draw:

In the Property Bar, set horizontal page size to 8" (20.3 cm) and vertical page size 10" (25 cm). Page Size will change from "Letter" to "Custom".

Placing Text and Graphics on a Page

There are no special requirements for placing text or graphics in either Word or Corel Draw when using Foil Xpress. Make sure, however, that image print resolution is at least 600 x 600 dpi or higher.

Working with Mail Merge

Following are some basic guidelines when using Mail Merge. Refer to Help or the Manual for more detailed instructions

Working with Mail Merge in Word:

Creating any type of mail merge document involves merging the ***main document*** with a ***data source***. A data source contains the information that changes. ***Merge fields***, which are inserted into the main document, instruct Word where to print information from the data source. When you merge the documents, Word replaces merge fields with information from the data source. The data source can be set up in Word or other applications, including Microsoft Excel and Access, can be used to retrieve and store data. Refer to the user Manual for that particular application for additional Information.

Working with Mail Merge (continued)

Create the main document(templatefile) in Word. This file should be set up with the font, positioning and point size required for the job.
Note: *The page size set up in Word must be the same as Page Size in the Foil Xpress Printer Driver. Follow the instructions included in this Manual to set up the page size in the driver that matches this job. Once set up, this size will always be an available option.*

Once the main document(templatefile) is set up, use the Mail Merge Wizard to complete the mail merge process.

Step 1:
Under Tools, select "Letters and Mailings - Mail Merge Wizard"
Select "Letter" under type of document

Step 2:
Select "Use Current Document" (the document just created above)
At the bottom, select "Next: Select Recipients"

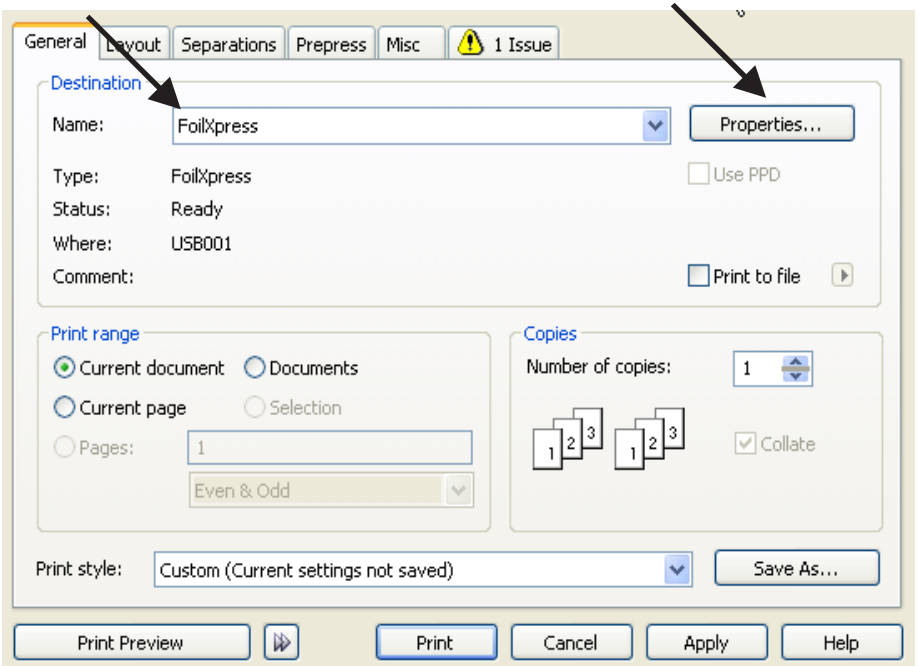
Step 3:
Select, "Use an existing list"
Select the file data file to be merged
Note: *When selecting a file in the directory that is not a Word document, make sure that "All files" is chosen under "Files of Type"*
Select Table Window will pop up - Select "OK"
Note: *Make sure that all of the recipients you want to merge are checked.*

Step 4:
Select "More Items"
Insert Field that you want to merge from the database source

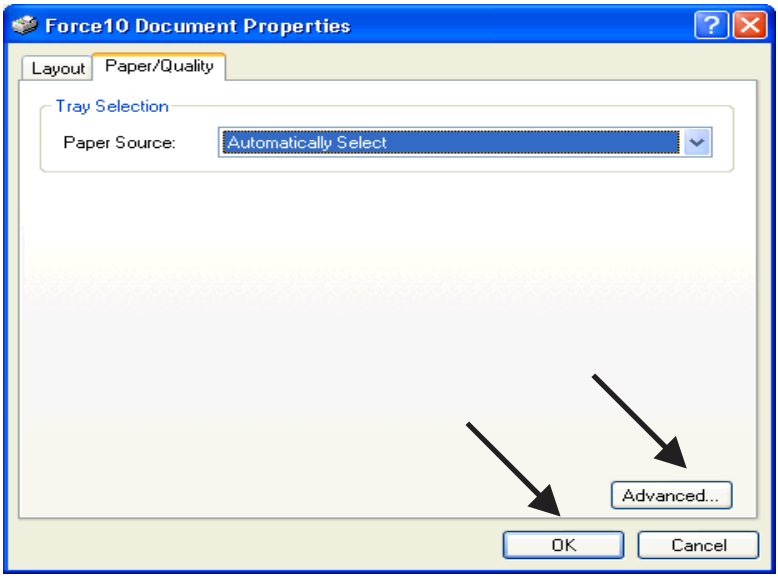
Step 5:
Preview your letters and complete the merge

Setting Up Printer Settings

Select "Print" from the File Menu and make sure that Foil Xpress is the selected printer. Select "Properties".



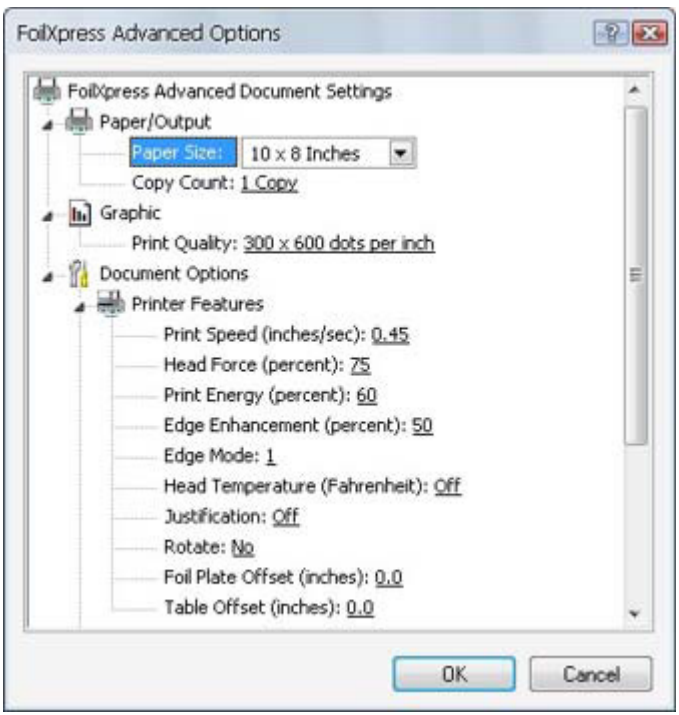
Select “Advanced” and “OK”.



Default Settings

This window contains FoilXpress default factory settings. Printer Settings for a particular application are selected in this window and are determined by that application and film with the correct transfer properties for the substrate being printed. Once optimal settings have been determined, they can be Saved and Loaded for printing similar jobs.

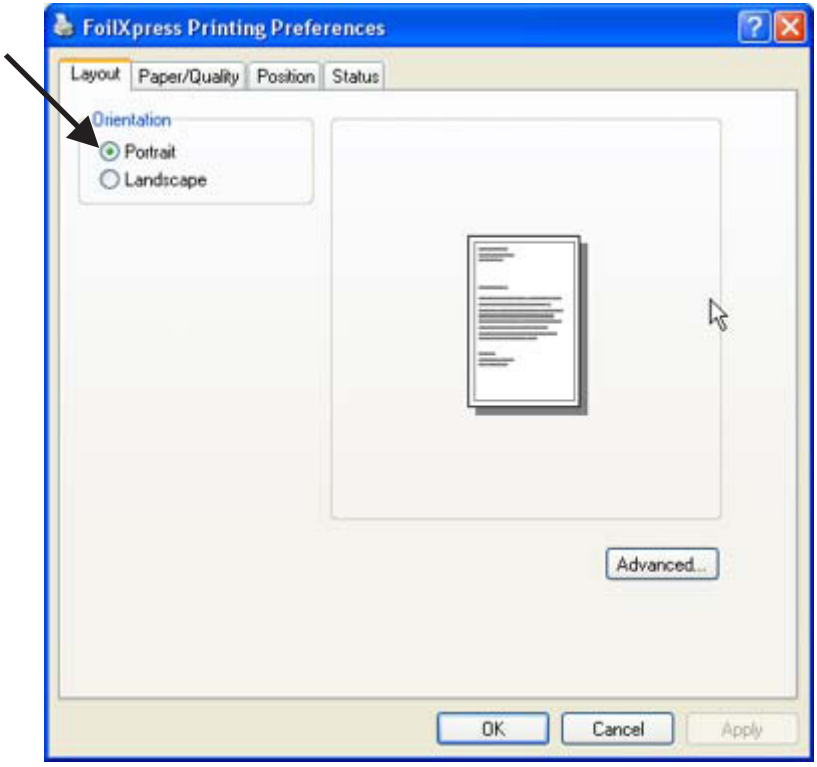
Note: Contact OPUS if there are any questions regarding settings for a particular job.



Note: These default settings will appear whenever a new file is opened. If other settings are desired, changing factory default settings is possible in the Control Panel.

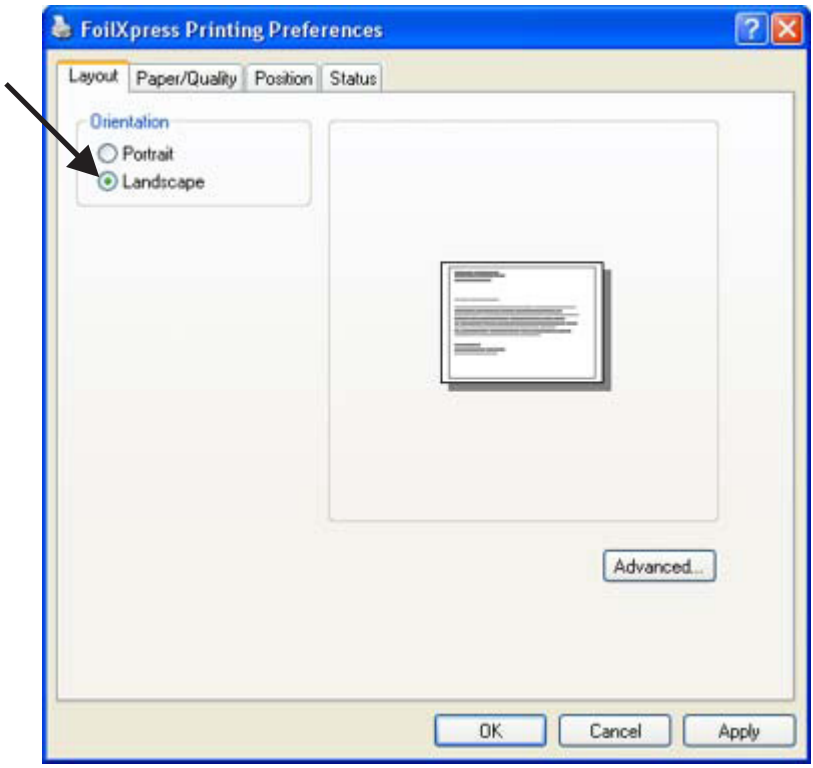
Portrait

In most case, Landscape will be used as the orientation. However, Portrait is the default in the Driver. Therefore, it is recommended that the default setting be changed in the Control Panel as part of the setup for Foil Xpress. Otherwise, it will be necessary to select "Landscape" every time a file is opened. Instructions on how to change the Default settings are on the next page (Page 52).



Landscape

Because the page size for Foil Xpress is 8”(20.3 cm) x up to 10” (25.4 cm) in length (height), it is easier to visualize how the print will look on the item being printed if Landscape is selected because the print will appear across the screen rather than down the screen.



Changing Factory Default Setting

Changing factory default settings is possible by selecting: Control Panel; Printers; and right clicking the Foil Xpress Icon. Select "Printing Preferences".

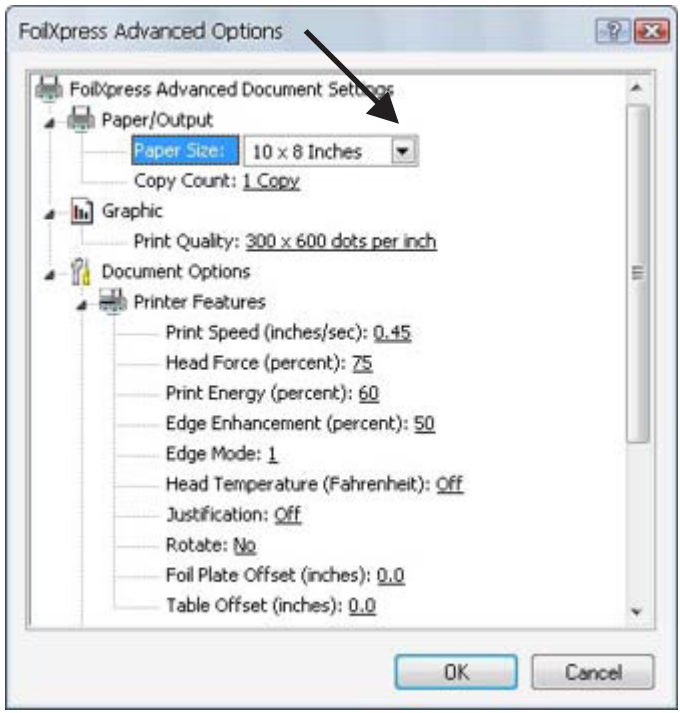
Select "Advanced".

Select new default settings in the "Foil Xpress Advanced Options" Window and Select "OK". These settings will now appear when a new file is opened.

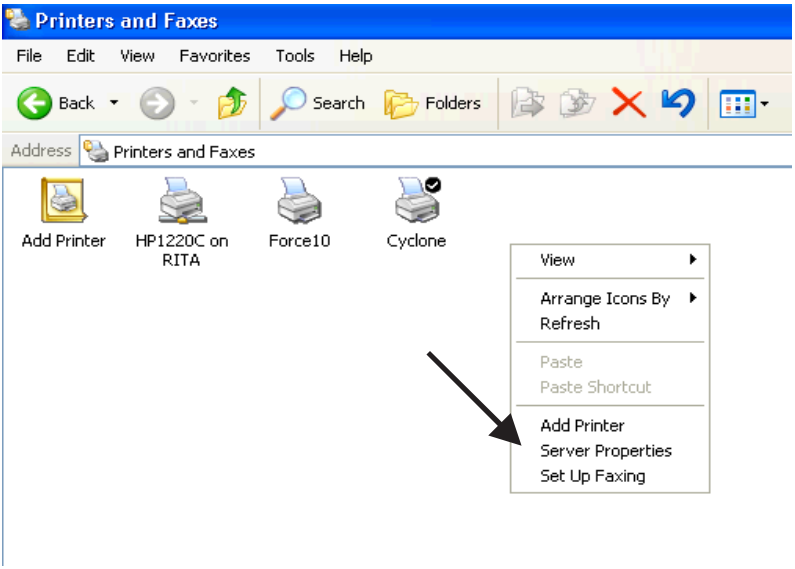
Note: The next several pages describe setting up Printer Settings in greater detail.

Setting Up Paper Size

Select Paper Size from the drop down Menu. The default is 10 x 8 inches.



Note: Creating Custom paper sizes is possible in Control Panel by right clicking in the Printer Window ***(not on Foil Xpress Icon)*** *and Selecting "Server Properties".*



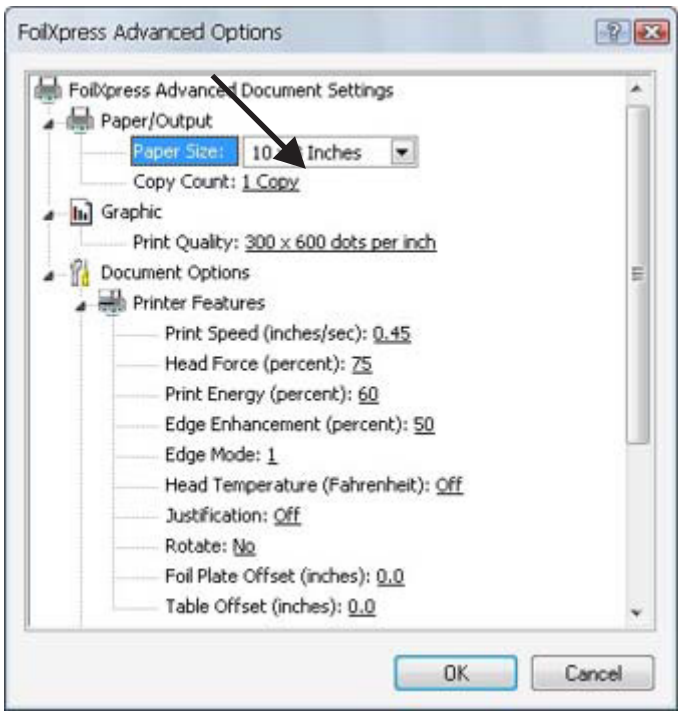
Set up Custom Size by selecting "Create a new form"; naming that Form in the "Form Name" Window.

Set the Custom Width and Height of the Paper Size. Select "Save Form" and "OK".

Note: This Custom Size will now appear in the Paper/Output -- Paper Size in Foil Xpress *Advanced Options Window.*

Paper Count

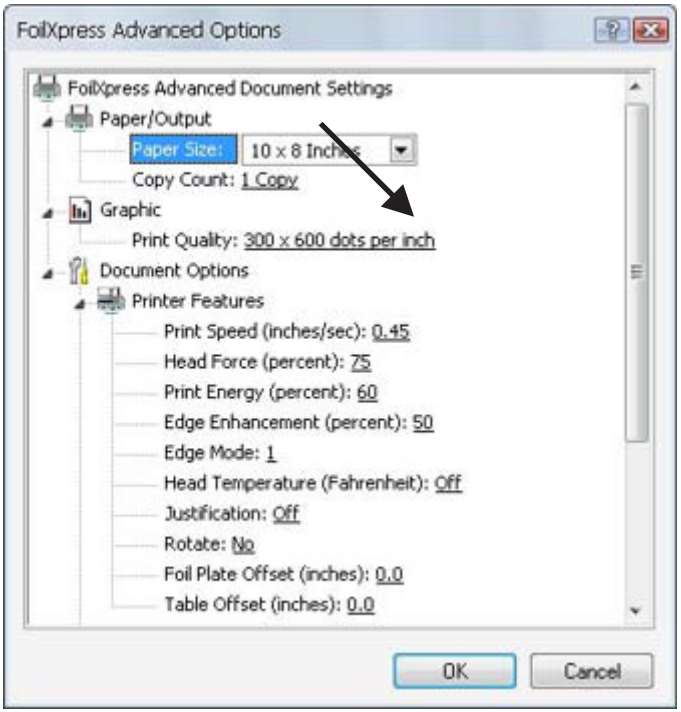
Selecting number of copies to be printed can be set either in Print Window or "Copy Count" in Paper/Output Tab.



Print Resolution

Print resolution can be set in Print Quality Tab at either 300 x 300 dpi or 300 x 600 dpi. It is recommended that print jobs be set to the higher resolution when possible.

Note: Foil Xpress *may not support 300 x 600 dpi printing in certain applications. In these instances, the print image may be distorted. Depending on the application, the image will be either compressed or only parts of the file will be transferred. The best way to test if the problem is the resolution is to print the image at 300 x 300 dpi and see if the problem goes away.*

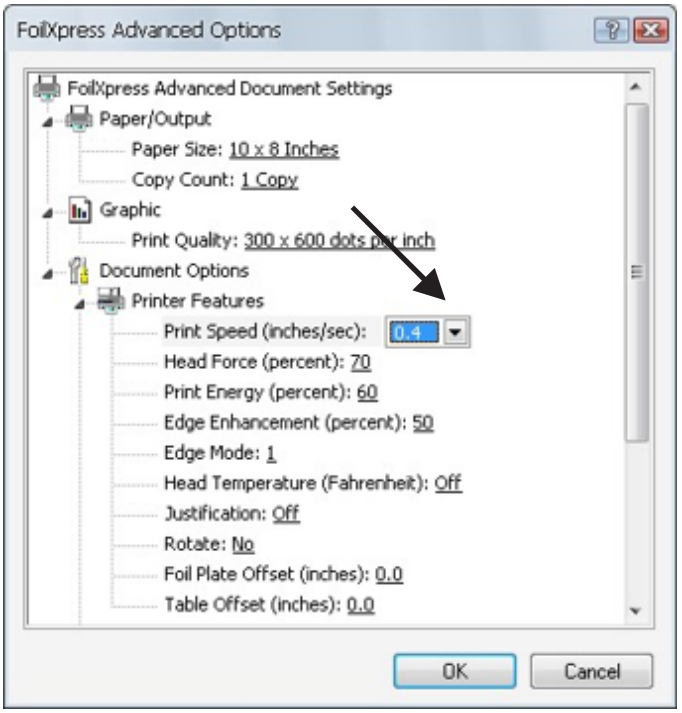


Description of Printer Settings

The amount of pressure and heat necessary to transfer an image is dependent upon the material to be printed and the film. It may take several attempts before finding ideal settings for a particular job. Following are suggested settings for printing on a smooth paper book cover.

Print Speed

The print speed is measured in inches/second. This determines the time the digital decorating film and substrate are exposed to heat and force. Some film/substrate combinations may demand slower print speeds, allowing more time for the transfer process to complete. Suggested range for Print Speed for a smooth paper book cover is between .35 and .55 inches per second.

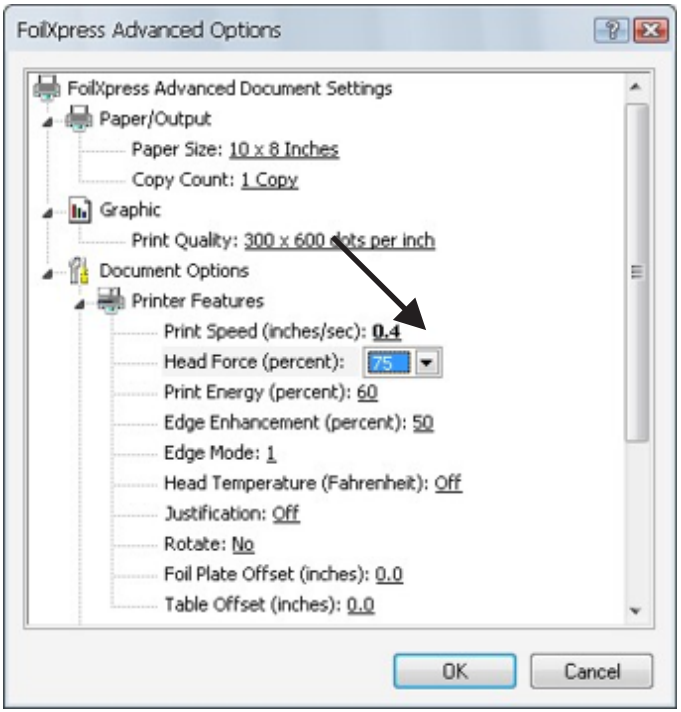


Head Force

The downward pressure the printhead exerts causing contact and adhesion of the film to the substrate. Printhead force is measured in lbs.

Increase force to improve adhesion of film to substrate. Decrease force if marring or excessive substrate compression results.

Suggested range for Head Force is between 50 and 75 percent. These numbers are relative to the maximum setting for the printer.

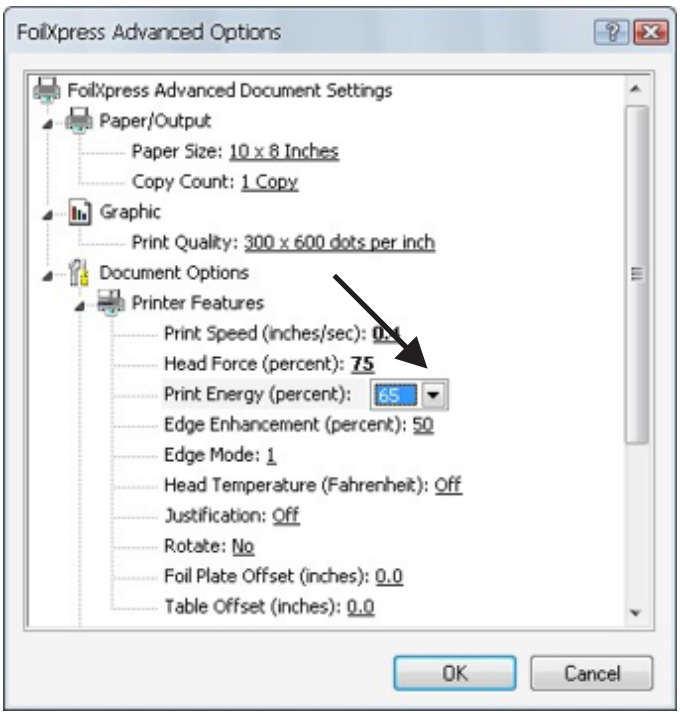


Print Energy

The relative energy delivered to each printhead element when the element is on. This determines the temperature of the printhead elements when printing.

Increase print energy to improve edge definition and fill. Decrease print energy to prevent film melting and sticking to the printhead or excessive bridging. An increase in speed will most likely require in increase in energy. In most cases, print energy should be set at 65.

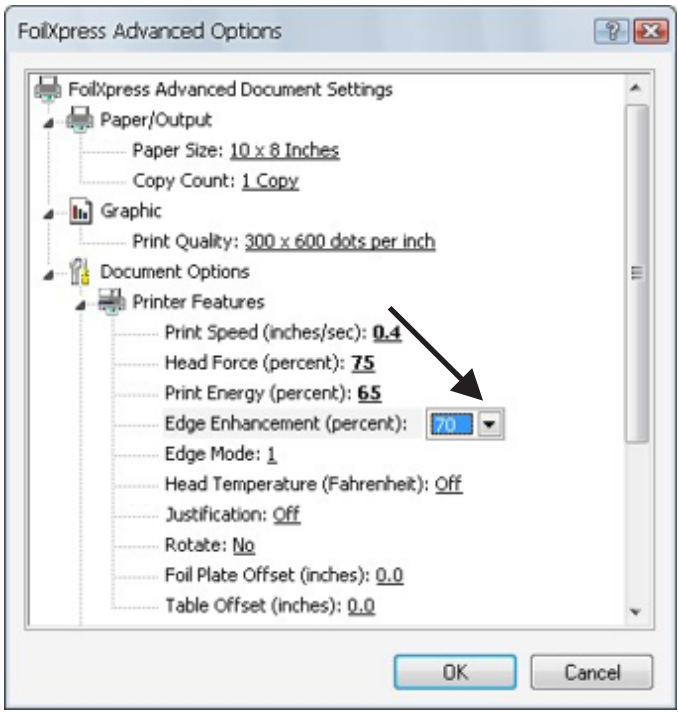
Note: Settings of over 65 - 70 will result in the film sticking to the printhead - so do not use settings higher than 70.



Edge Enhancement

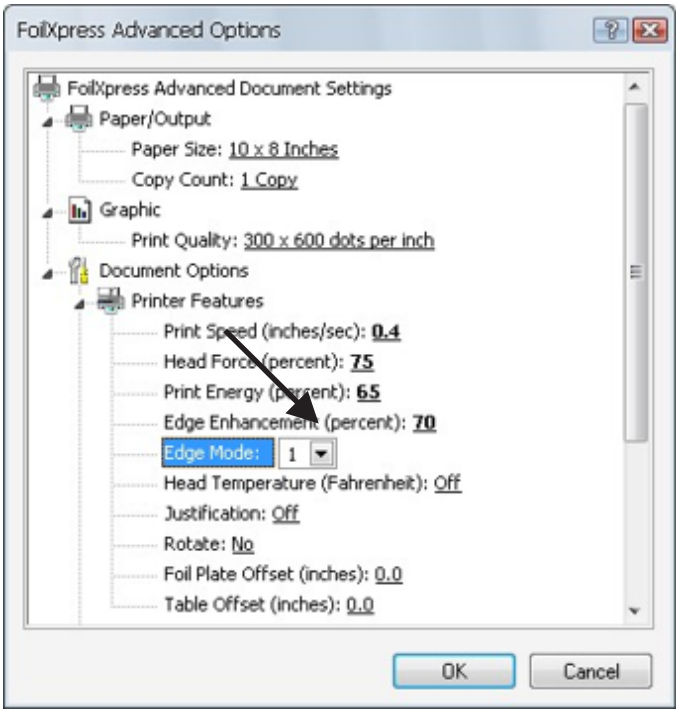
The relative supplemental energy applied to printhead elements when printing the edges of an image. This setting sharpens edges.

Note: When printing text, select a setting for Edge Enhancement that is 5% more than Print Energy (e.g., set Edge Enhancement to 70 when Print Energy is set at 65).
When printing a graphic image that contains a large block area, increase Edge Enhancement to help define the edges of the block area.



Edge Mode

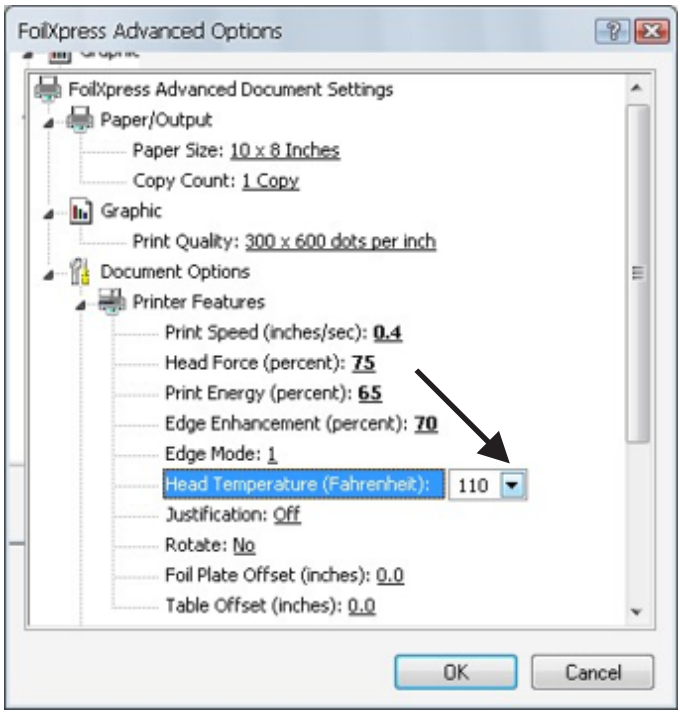
Should be used when printing very fine lines or smaller (thinner) point size fonts. May help increase definition. Default is set at 1 - maximum is 5.



Head Temperature

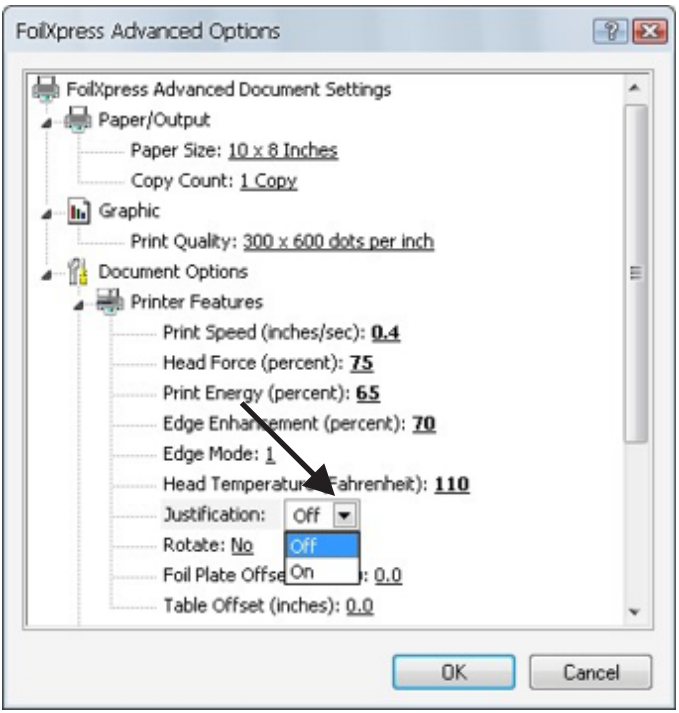
The background temperature of the printhead. Use this option when printing on difficult to print substrates and when Head Force, Print Energy and Edge Enhancement are set at more than 80% and desired print quality is still not achieved.

Note: The Ready light will blink intermittently until the heater heats up to temperature.



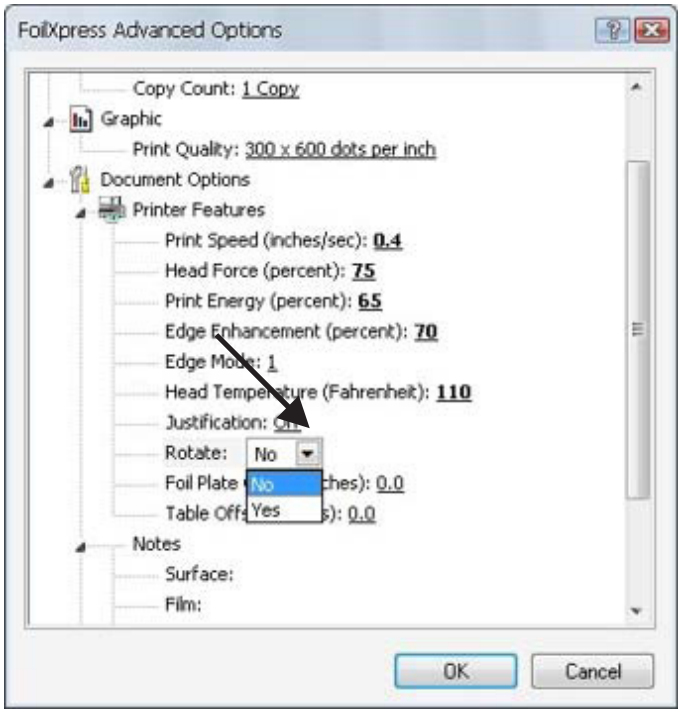
Justification

Default is "Off". Selecting "On" will justify the position of the image at the front side of the printhead. Using this setting may be necessary when printing in bottom corner of a book cover.



Rotating an Image

To rotate in image, select "Yes" in the Printer Features Rotate Tab. The image will appear the same on the screen, but the print will be rotated 180 degrees on the item .



Foil Plate Offset

The Foil Plate Offset will move the Auto Positioning motor a specific distance away from "0". The option may be necessary (for example) when printing on the spine of a larger book cover where the printing on the item is closer to the front of Foil Xpress.

The Offset options range between .025 inches and 1.75 inches.

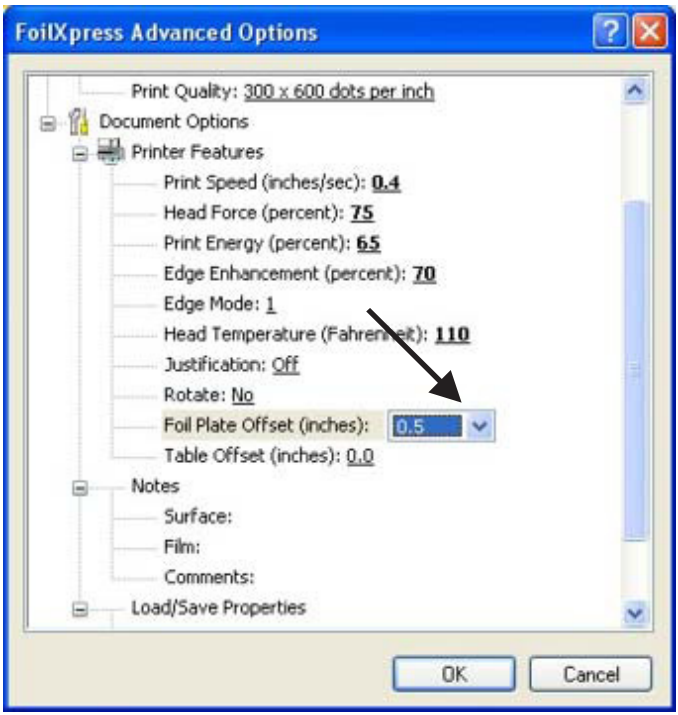
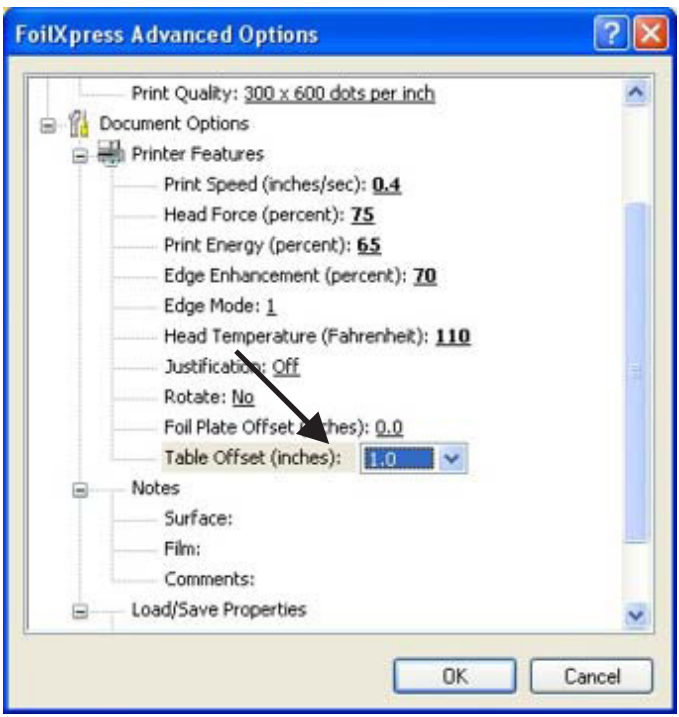


Table Offset

The Table Offset determines the position of the printhead on the print table. The default printhead position is "0".

If the position is set in the Printer Settings window, the printhead will return to home "0" between each print and then advance to the preset position chosen in the Printer Settings.

Note: The total table travel distance is 8". Therefore, the printhead movement plus the offset can not exceed 8". In this case, the printer will blink an error message of 6 blinks.



Suggestions for Determining Printer Settings

Determining printer settings for a particular application requires some experimentation. The goal is to transfer the image without defects (bridging, misses, marring surface, etc.) and without burning the film.

Note: Once the film sticks to the printhead (due to burning), it will be necessary to conduct the printhead cleaning procedure described in the Maintenance Guide.*

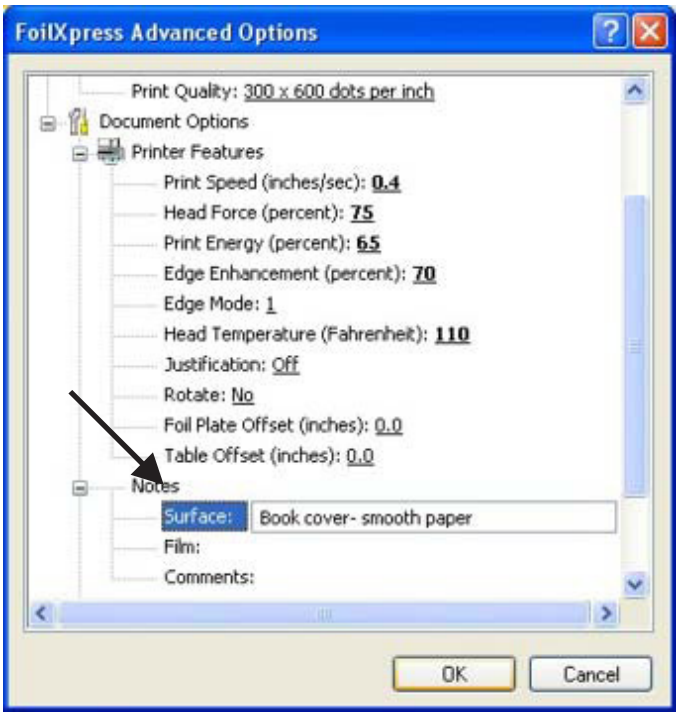
Here are several suggestions in determining Printer Settings

1) Select 300 x 600 dpi whenever possible.
2) Slowing down the Print Speed will give the film a longer dwell time.
3) Less Print Energy and Edge Enhancement will be required when the Head Temperature Option is ON.
4) Increasing force will improve adhesion of film but if set too high can drag and mar the surface of the item.
5) Increase Print Energy and Edge Enhancement in increments of 5% until the desired transfer is achieved.
6) If there are still misses in the print, decrease the Print Speed in increments of 5% until the desired transfer is achieved.
7) *Using Print Energy greater than 65 or 70 will burn the foil and cause the film to stick to the printhead.

Note: Films must be tested for print quality, durability, and adhesion on all materials. If you have any questions or need technical support regarding Printer Settings, call OPUS.

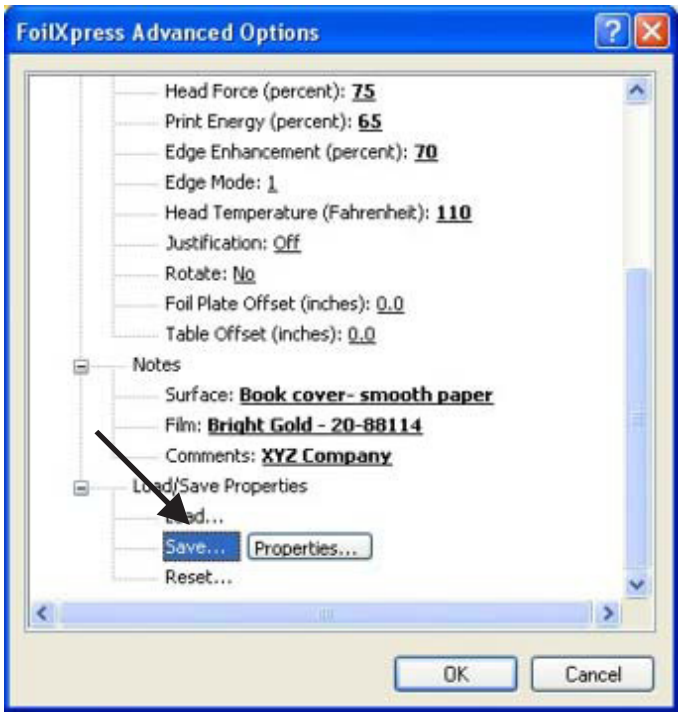
Notes

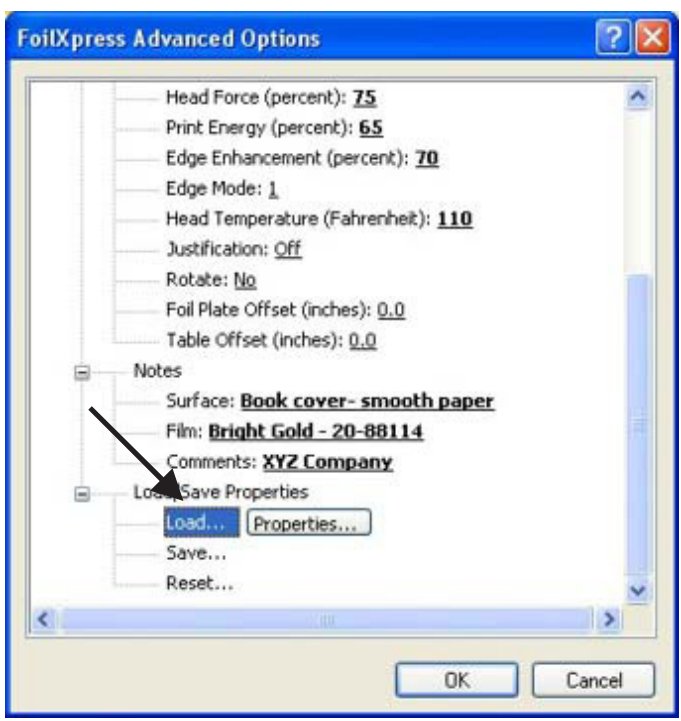
For easy reference, store information regarding print job (e.g., material or substrate under "Surface"; digital decorating film/foil number under ("Film"); and customer name and/or job number; film used; and style of item to be printed under "Comments"



Saving and Loading Properties

Settings for jobs can be saved and then reopened thereby creating a library of settings.

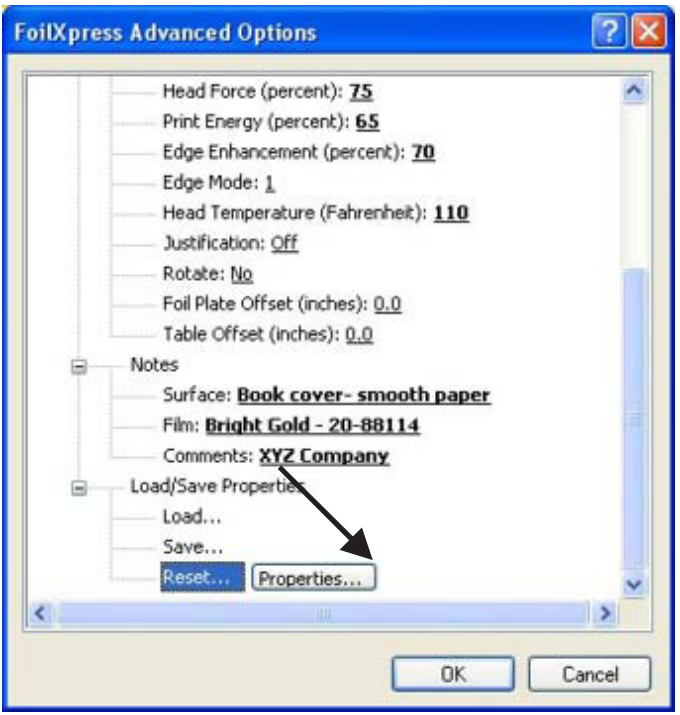

FoilXpress Advanced Options
Head Force (percent): 75
Print Energy (percent): 65
Edge Enhancement (percent): 70
Edge Mode: 1
Head Temperature (Fahrenheit): 110
Justification: Off
Rotate: No
Foil Plate Offset (inches): 0.0
Table Offset (inches): 0.0
Notes
Surface: Book cover- smooth paper
Film: Bright Gold - 20-88114
Comments: XYZ Company
Load/Save Properties
Load...
Save...
Properties...
Reset...
OK
Cancel


FoilXpress Advanced Options
Head Force (percent): 75
Print Energy (percent): 65
Edge Enhancement (percent): 70
Edge Mode: 1
Head Temperature (Fahrenheit): 110
Justification: Off
Rotate: No
Foil Plate Offset (inches): 0.0
Table Offset (inches): 0.0
Notes
Surface: Book cover- smooth paper
Film: Bright Gold - 20-88114
Comments: XYZ Company
Load/Save Properties
Load...
Properties...
Save...
Reset...
OK
Cancel

Resetting Default Settings

Default factory settings can be reset by selecting "Reset" Tab.

Note: If new default settings are created in Control Panel, these settings will appear when Reset is selected.

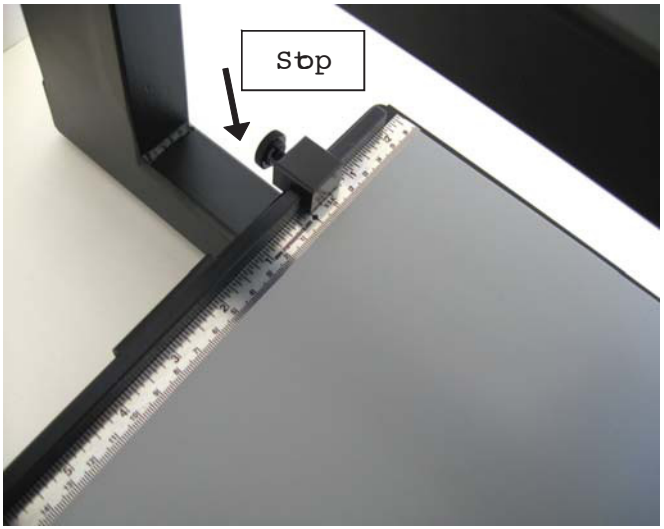


Positioning the item to be printed on the print table

It is nessary to position the item to be printed on the print table so that the area to be printed is directly under the prinhead mechanism. The mechanism moves from right to left covering a printable area of up to 8" (20.3 cm) x 10" (25 cm). When creating the file, consider where the print should appear (for example the corner, bottom center, etc.).

Adjusting Table Stop Position

Position the Table Stop (located on the fence at the back of the table) to the desired location and tighten the thumb screw. Determining the position of the Stop depends on the desired location of the print on the item. For example, position the Stop 1" to the right of "0" (-1") to center a 8" image on an 10" wide book cover. Position the cover square against the fence and the Stop. Note that, in this case , 1" of the book is to the right of the printhead mechanism.

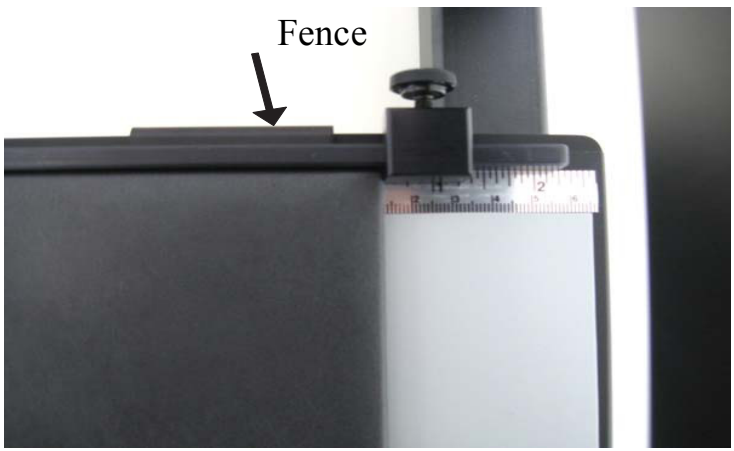


Auto Positioning

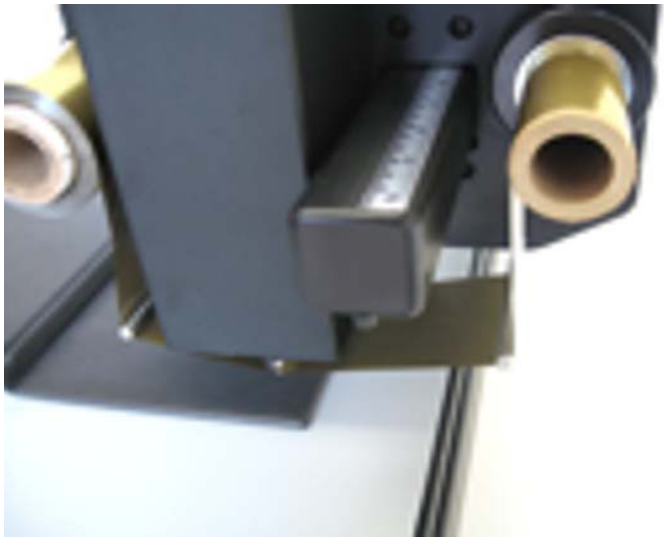
Information contained in the image (up to 8" (20.3 cm) x 10" (25.4 cm) will automatically be printed in multiple passes (swathes) starting at the top of the file and continuing until all of the information is printed

Note: The location of "0" is approximately 1" (2.54 cm) from the fence. It is necessary to take this into consideration when positioning the item for printing. It is possible to create a fixture can be placed against the fence so that the item will line up with "0", however, any fixture placed on the print table cannot interfer with the movement of the printhead.

If file needs to be printed closer to the front of Foil Xpress, use Foil Plate Offset to move up to 1.75 inches towards the operator. This might be necessary (for example) to print on the spine of an open book cover.



The mechanism will move and print the first character in the image when centering or start immediately if the image to be printed is in the corner.



Note: Some items (such as paper) will need something underneath for support while printing (such as a piece of dense cardboard or chipboard). Position under the item to be printed - also square against the fence and stop.

Sending a Print Job to the Printer

To Print Select "OK" in Foil Xpress Advanced Options; Foil Xpress Document Properties; and Windows Print Windows. The Ready Indicator will illuminate a solid amber once the job has been transferred to the printer.

Caution: Before printing, makes certain that:
1) The appropriate film is loaded.
2) The item to be printed is set-up on the table.

Press either Print Button to print.

Chapter 6 Printhead Maintenance

About the Printhead

The printhead is manufactured to the highest quality standards; however, it is a sensitive electronic device and can exhibit premature failure due to mechanical abuse or static discharge.

Static discharge (a shock when you touch a grounded metal object after walking across a carpet) is prevalent in a dry environment. To reduce the risk, maintain sufficient humidity levels in the area where Foil Xpress is being used. Never touch the printhead when cleaning or replacing or when making adjustments in the area of the printhead without first discharging yourself by touching a grounded metal object (e.g., the frame).

The surface of the printhead (which makes contact witht the film and protects the print array) is a thin layer of silica. This material is extremely hard but can be cracked or chipped by hard objects. Follow these guidelines to reduce the risk of damage:

1) Never allow the printhead to contact a metal object (e.g., all tooling and fixturings should be made of plastic).

2) Use the lowest Print Force required to achieve the desired print quality.

3) Make sure that the job set-up and product positioning are correct and that the printhead will come down in the appropriate print location.

4) Insure the surface of the item to be printed is clean and free from hard surface defects.

5) Insure that the work area is as clean as possible

Cleaning the Printhead

The printhead should be cleaned using the Cleaning Procedure detailed below after every 5,000 prints. Over time, residue from the film accumulates on the printhead. Foil Xpress will not print properly if there is any residue on the printhead. Also, if for any reason the film sticks to the printhead during any print, it is necessary to stop printing and clean immediately.
Caution: Do not clean printhead with Foil Xpress **ON.**

Cleaning Procedure

1) Turn Foil Xpress OFF.
2) Remove the film from the Feeder and Take-Up spools.
3) Load roll of Printhead Cleaning Paper on Feed spool.
4) Insert empty take-up core on Take-Up spool and attach with adhesive tape.
5) Press and hold the left Print Button while turning Foil Xpress ON.
6) Release the button after the Ready light starts. This will put Foil Xpress in the Printhead Cleaning Mode.
7) The Ready Light will illuminate a solid amber.
8) Press the Print Button. Foil Xpress will print a block pattern.
9) Repeat by pressing the Print Button ten times. This operation removes any residue on the printhead
10) Reload film and resume operation.

Troubleshooting Error Message s

If Head Temperature is selected under Printer Properties, the Ready light will blink repeatedly until the printhead heats up to temperature. This is normal & will continue as the printhead heats & cools. Set Head Temperature to OFF when testing & troubleshooting Errors. The Ready light will also blink to signal errors, but in this case, the blinks are in a pattern. For example, the Ready light will blink twice - then pause -- then twice again -- to reflect a Z-Axis Motion Error.

One blink - Table Home Error
This Error often indicates a mechanical problem with print bed/table or electrical problem with the Table Home Sensor.

Two blinks - Z-Axis Motion Error
This Error often indicates a mechanical problem with printhead (Z-Axis) mechanism or an electrical problem with the Z-Axis Home Sensor. This Error will also occur when sending a job to the printer in Cylinder Mode and the Cylinder Module is not attached to the printer.

Three blinks - Printhead Temperature Error
This Error often indicates an electrical problem with the printhead or printhead cable. Troubleshooting Error Messages

Four blinks - Head Calibration Error
This Error often indicates an electrical problem with the printhead or printhead cable. If this Error messages occurs, follow these instructions:
1) Perform the Cleaning Procedure (refer to manual for instructions)
2) Examine the print on the cleaning paper
3) If there are parts missing in the printed block, this indicates that parts of the printhead no longer work.
4) In this case, replace the printhead.

Five blinks - Head Dot(s) Failure
This Error often indicates that some of the dots have failed on the printhead test. In some cases, it is possible to clear this error by turning the printer OFF and ON. This also may happen when the printhead has been replaced.

Six blinks - Print Length/ Table/Bed Offset Error
This error indicates one of the following:
1) A file in flat mode with a print bed length longer than 8” was sent to the printer. Check to make sure that the print length is 8” or less.
2) A file in cylinder mode with a print length longer than 2.5” was sent to the printer. Check to make sure that the print length is 2.5” or less.

Eight blinks - Foil Plate Motion Error

Eight blinks - Foil Plate Motion Error
This Error indicates that a file in flat mode with a page length equal to more than 12” was sent to the printer. Check to make sure that the page length is less 12” or less.

Nine blinks - Out of Memory Error
This Error occurs when the Page Size: 8” x 12” Inches is selected and Print Quality is set to 600 x 300 dpi.
The solution is to either:
1) Change Print Quality to 300 x 300 dpi
2) Use a Page Size: 8” x 10” Inches

If any of these error messages are occur and information above does not help solve the problem, follow these instructions:
1) Turn the printer OFF and then ON to clear the job.
2) Send the job again.
3) If this does not solve the problem, report to
OPUS Sp. z o.o.

OPUS Sp. z o. o.
44-122 Gliwice, ul. Toruńska 8
telefon: 32 2307522; faks: 32 2311229
e-mail: opus@opus.pl

APPENDIXA
EC Declaration of Conformity

Declaration of conformity
Konformitätserklärun g
Déclaration d e conformité
Declaración de Confomidad
Verklaring de o vereenstemming
Dichiarazione di conformità

We/Wir/Nous/WIJ/Noi:	ImPress Systems, Inc.
of	101 Brick Kiln Road – Suite 6, Chelmsford, MA 01824

declare under our sole responsibility that the product,
erklären, in alleniniger Verantwortung, daß dieses Produkt,
déclarons sous notre seule responsabilité que le produit,
declaramos, bajo nuestra sola responsabilidad, que el producto,
verklaren onder onze verantwoordelijkheid, dat het product,
dichiariamo sotta nostra unica responsabilità, che it prodotto,

Equipment	FOIL XPRESS
Model number	10-00301
Serial Number	5014-5999

to which this declaration relates is in conformity with the following standard(s) or other normative documents.
auf das sich diese Erkl ärung bezieht, mit der/den folgenden Norm(en) oder Richtlinie(n) übereinstimmt .
auguel se réfère cette declaration est conforme à la (aux) document(s) normative(s) .
al que se refiere esta declaración es conforme a la(s) norma(s) u otro(s) documento(s) normative(s) .
waarnaar deze verklaring verwijst, aan de volende norm(en) of richtlijn(en) beantwordt .
acui si riferisce questa dichiarazione è conforme alla/e seguente/I norma/o documento/i .

2006/95/EC	The Low Voltage Equipment Directive and its amending directives
2004/108/EC	The Electromagnetic Compatibility Directive and its amending directives
98/37/EC	The Machinery Directive
BS EN 55022:1998	Information technology equipment. Radio disturbance characteristics.
BS EN 55024:1998	Information technology equipment. Immunity characteristics.

CE

Declaration of Conformity
Deklaracja Zgodności

OPUS Sp.z o.o. hereby declares that the machine specified below is in accordance with the following directives and standards:

Opus Sp.zo.o. deklaruje z pełną odpowiedzialnością, że urządzenie, którego dotyczy niniejsza deklaracja jest zgodne z postanowieniami następujących dyrektyw UE oraz powiązanymi z nimi normami zharmonizowanymi:

2006/95/WE; 2004/108/WE

PN-EN 60950-1:2007+A11:2009+A1:2011; PN- EN 55022: 2006+A1:2008; PN-CISPR 16-1:1997; PN-CISPR 16- 2 : 1999

Name/ Nazwa :	OPUS Sp. z o. o.
Address/ Adres :	ul. Toruńska 8 44-122 Gliwice
Type of the machine / typ :	drukarka złocąca/ foil printer
Model No / model :	Foil Xpress Automat

POLAND / Polska
(Place / Kraj)

.....
(Signature / podpis)

13.01.2014
(Date / Data)

Krystian Nawrat
(Full Name/ Imię i Nazwisko

Opus Sp. z o.o., 44-122 Gliwice, ul. Toruńska 8, tel.: 0048 32 230 75 22, fax: 0048 32 231 12 29, e-mail: opus@opus.pl, www.opus.pl
Nr KRS 0000157230, Sąd Rejonowy w Gliwicach, X Wydział Gospodarczy KRS
NIP: 631-00-14-755, kapitał zakładowy: 60.000,00 zł

CE

Declaration of Conformity
Deklaracja Zgodności

OPUS Sp.z o.o. hereby declares that the machine specified below is in accordance with the following directives and standards:

Opus Sp.zo.o. deklaruje z pełną odpowiedzialnością, że urządzenie, którego dotyczy niniejsza deklaracja jest zgodne z postanowieniami następujących dyrektyw UE oraz powiązanymi z nimi normami zharmonizowanymi:

2006/95/WE; 2004/108/WE

PN-EN 60950-1:2007+A11:2009+A1:2011; PN- EN 55022: 2006+A1:2008; PN-CISPR 16-1:1997; PN-CISPR 16- 2 : 1999

Name/ Nazwa :	OPUS Sp. z o. o.
Address/ Adres :	ul. Toruńska 8 44-122 Gliwice
Type of the machine / typ :	drukarka złocąca/ foil printer
Model No / model :	Foil Xpress

POLAND / Polska
(Place / Kraj)

13.01.2014
(Date / Data)

.....
(Signature / podpis)

Krystian Nawrat
(Full Name/ Imię i Nazwisko

OPUS Sp. z o. o.
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telefon: 32 2307522; faks: 32 2311229
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21.12.2016