QUALSOFT

WINDOWS PRINT DRIVER

USER GUIDE

PART NUMBER 880061-0100

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Introduction

The Qualsoft Windows print driver is intended to be used by applications that require a print driver instead of using the printers resident control language. This document provides a simple procedure to follow to install and use the windows print driver for Microcom Corporation Thermal Printers.

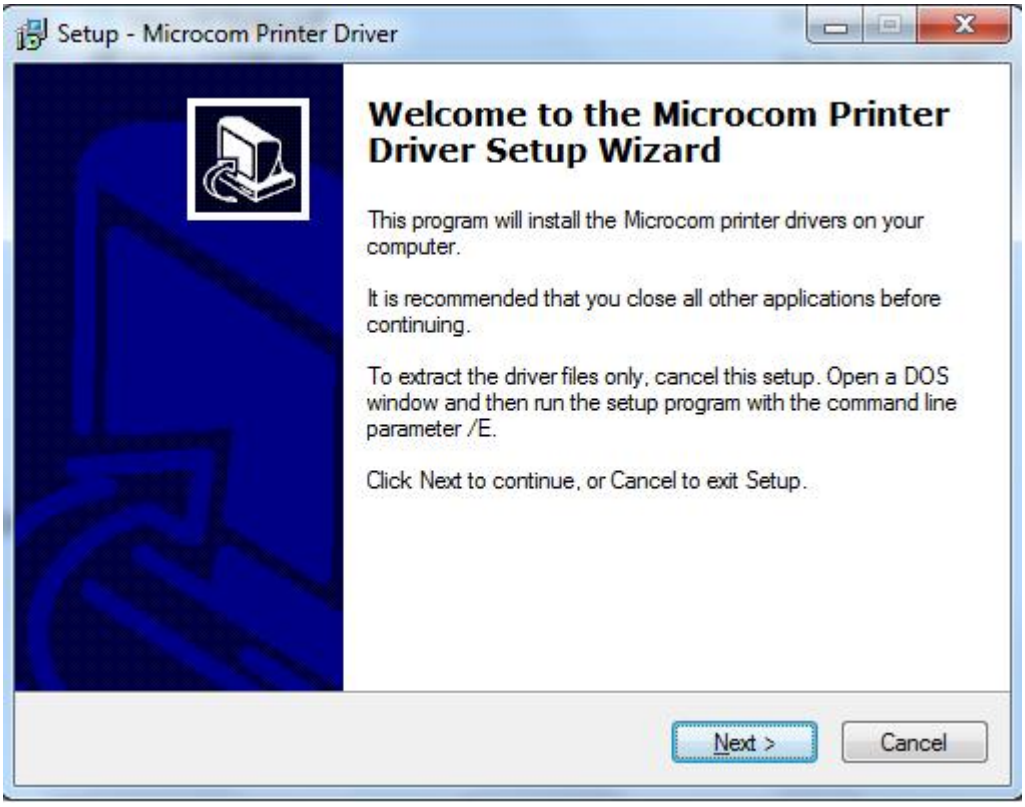
Chapter 1: Installing the Driver

This section explains the driver installation process. The Qualsoft Windows print driver may be used with Windows 7, 8.1, and 10 operating systems. If the printer is intended to be used on a USB connection, the appropriate USB driver must be installed before the printer is able to be used with the driver. The X38 based products use an FTDI based driver while the X85 based products use a Microcom Corporation based driver.

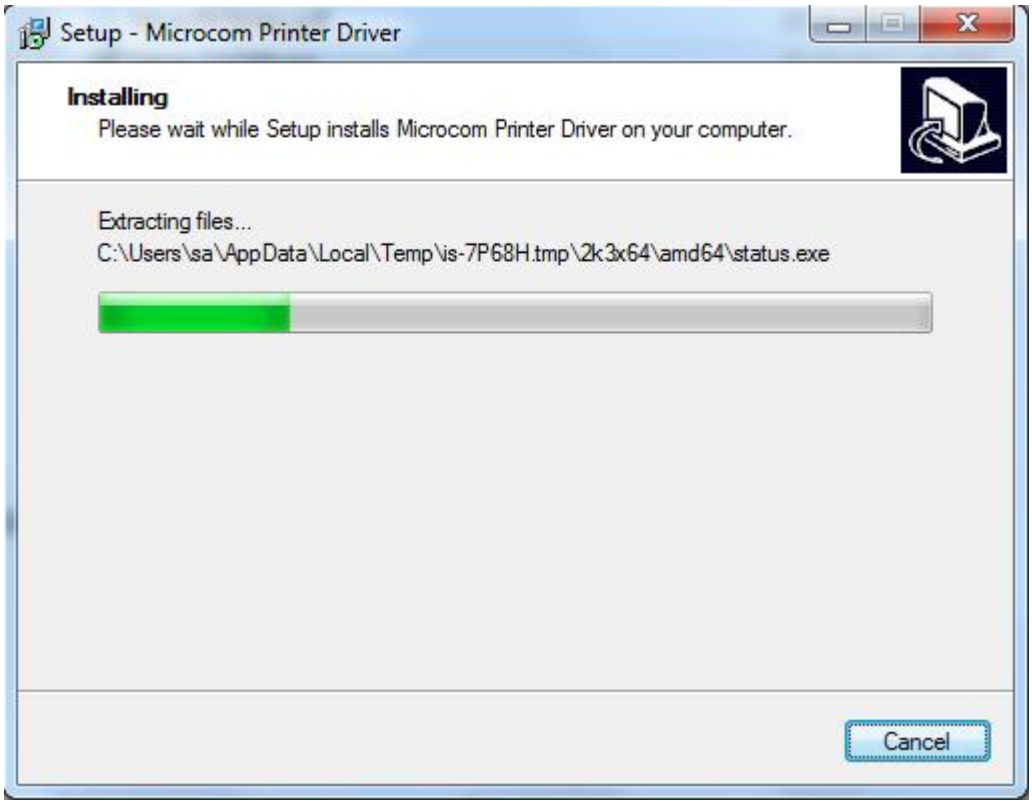
The driver requires that the User has ADMIN privileges in order to install the driver. The installation process sample shows the Windows 7 installation.

1. Right click on the installer, and select “Run as administrator”.

2. Click the “Next” to continue the installation.

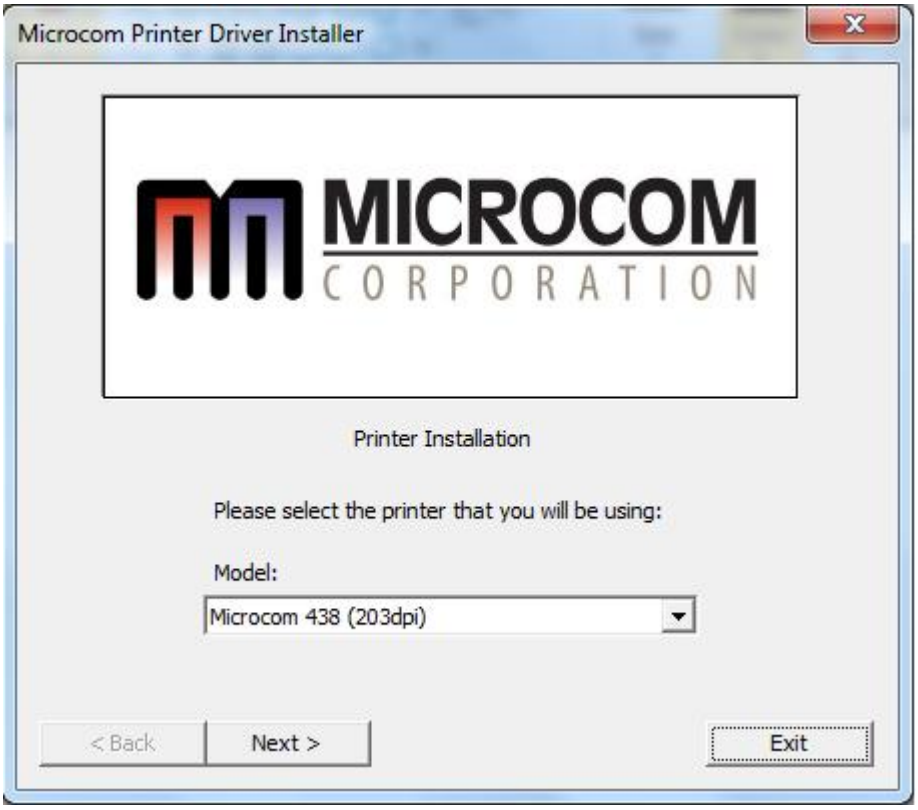


3. Wait for the installer to finish setting up the driver files.

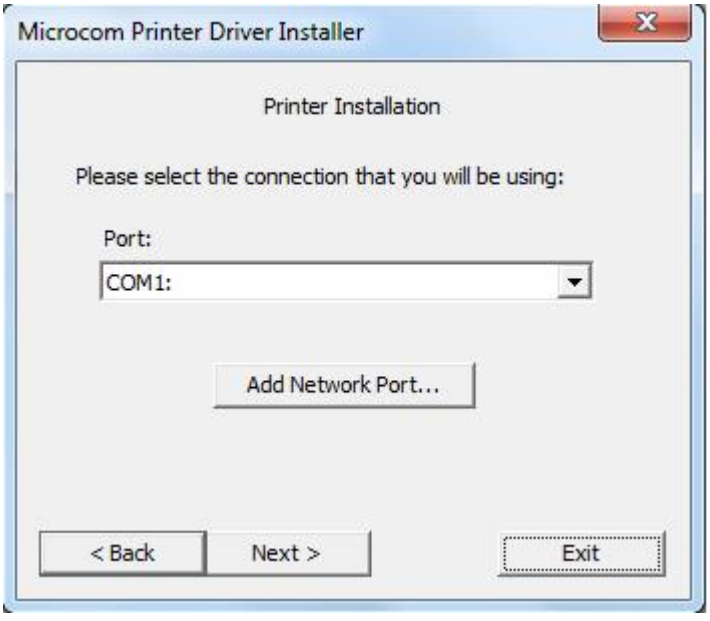


4. Select the New install or Uninstall existing driver if already running a Qualsoft version or if installing more than one printer, select the Install another printer model (Copy n).

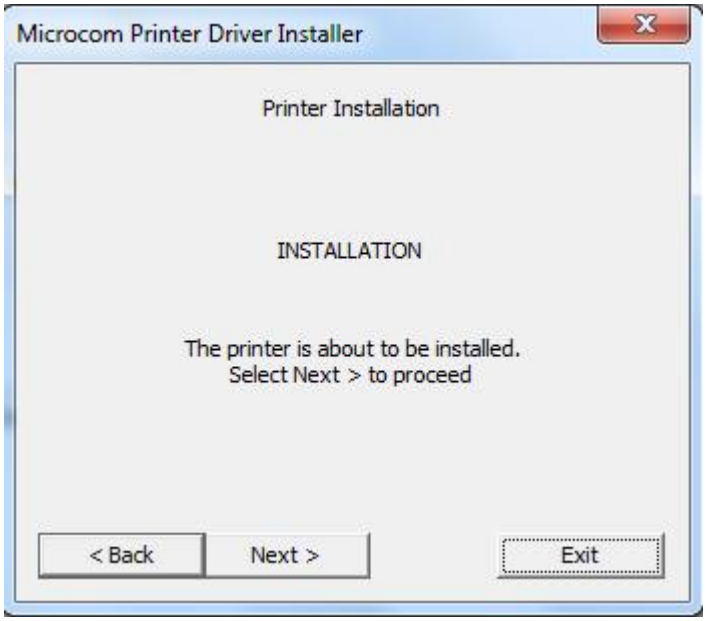
5. Select the Model number of the printer being installed.



6. Select the communication port that is going to be used with the printer.

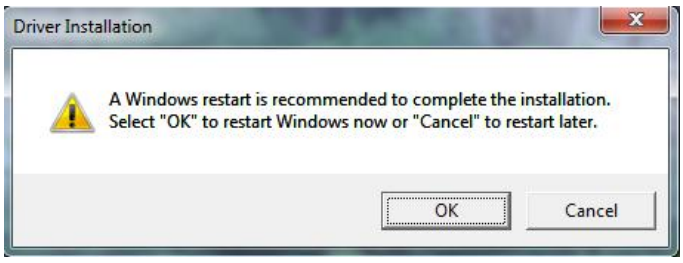


7. Select next to start the installation.



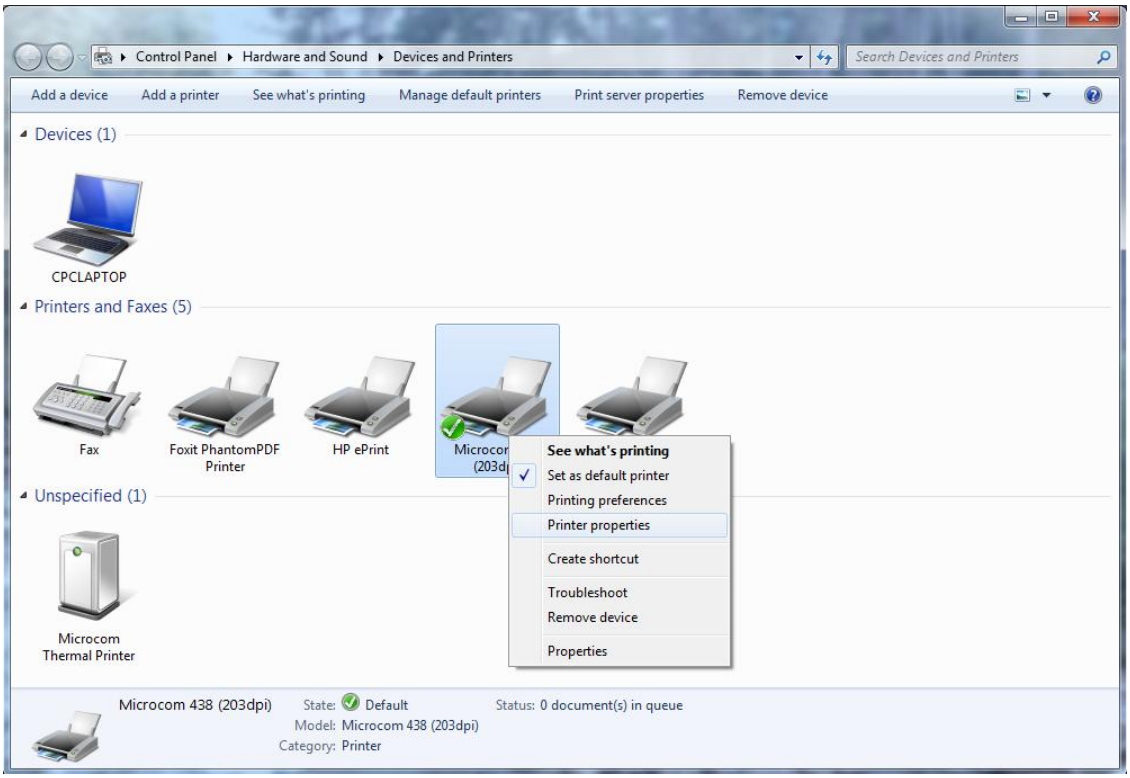
8. Once the installation is complete, select “Exit” to finish the installation.

9. Select “OK” if prompted to restart and complete the installation.



Chapter 2: Configuring the Driver

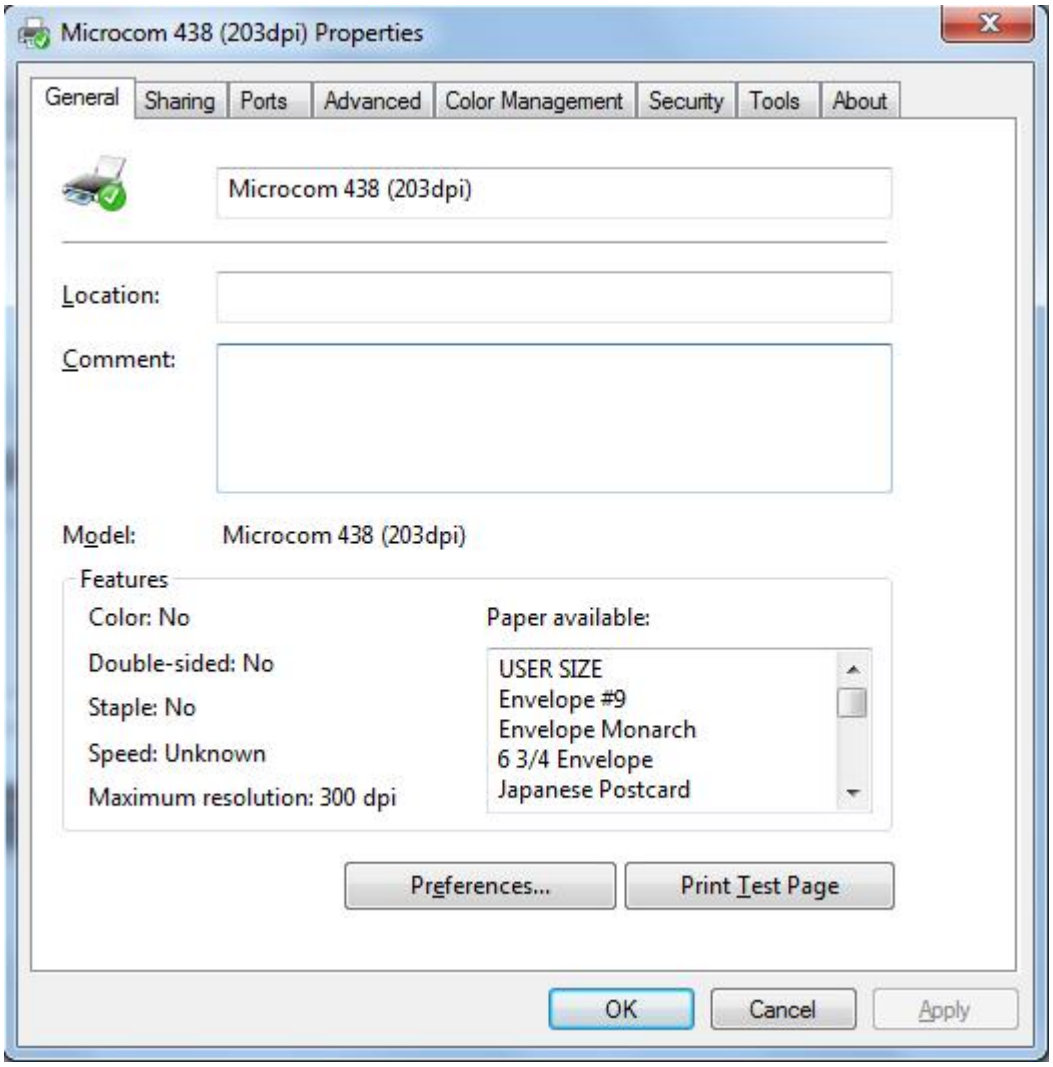
This section will explain how to configure the Windows Driver for proper operation. The example below also shows a Microcom Thermal Printer under Unspecified devices. This is the USB driver that is loaded when the printer is powered on and the printer USB port is connected to the printer.



Under Devices and Printers, you should see the printer model that was installed. Right click on the icon and select Printer properties to setup and to change the driver settings.

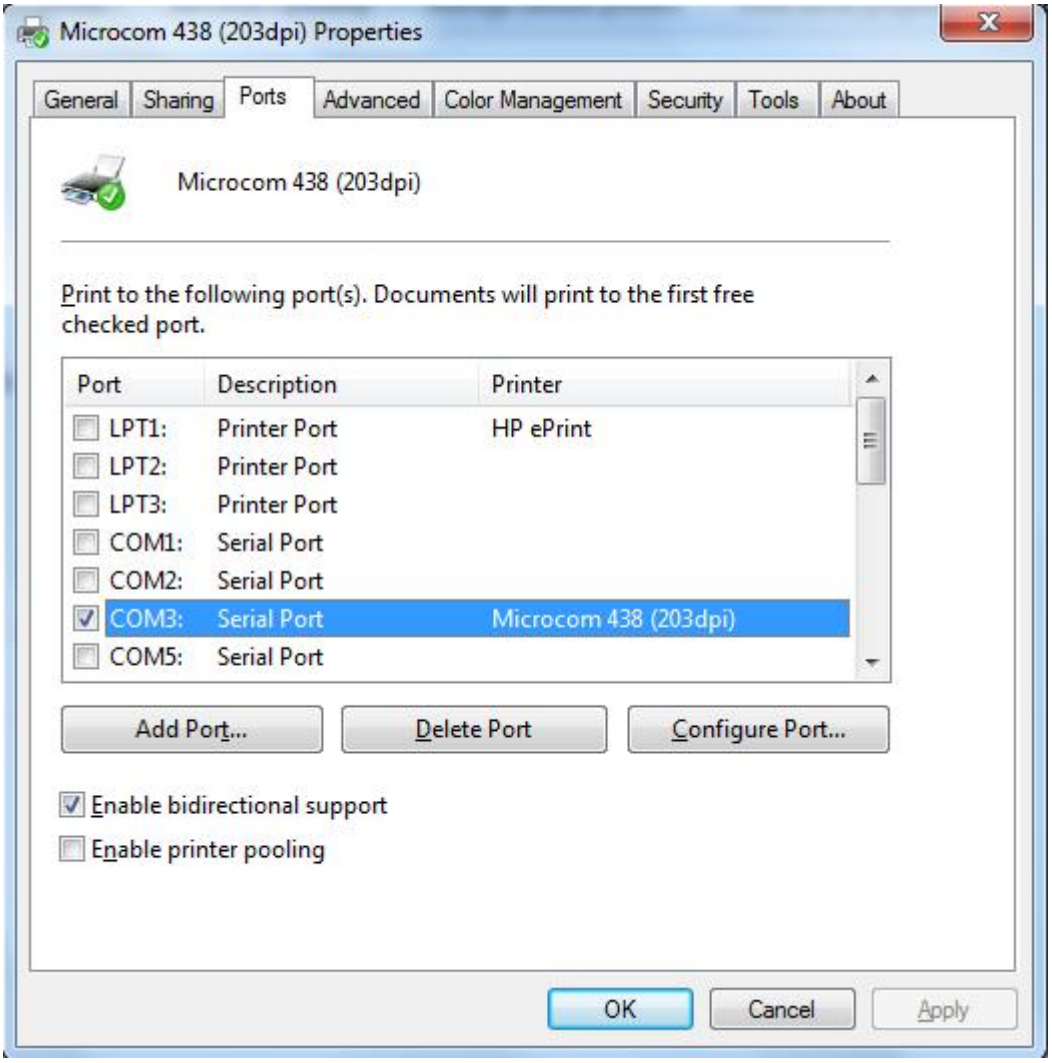
2.1 Printer Properties Page - General tab

This opens the printer properties page. From this screen, Print Test Page may be selected to generate a test page that is sent to the printer. The test page is printed on the media size and type that are specified in the driver preferences.



2.2 Printer Properties Page - Ports tab

Selecting the Ports tab at the top allows the printer port to be changed if connecting to a different printer communication port.

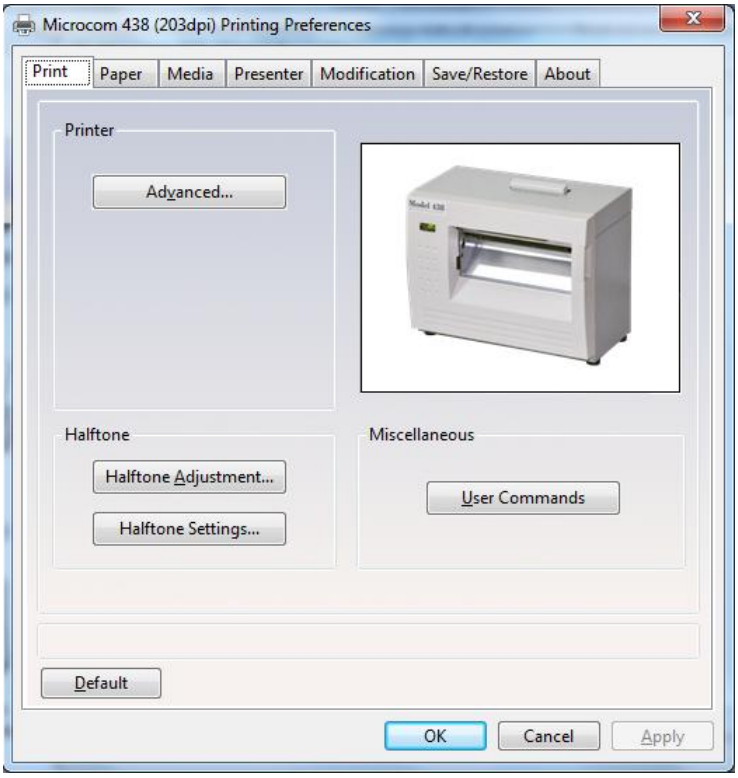


2.3 Printing Preferences - About tab

Selecting the Preferences icon at the bottom left of the Printing properties window opens the driver “About” tab. This shows the driver version number and release date.

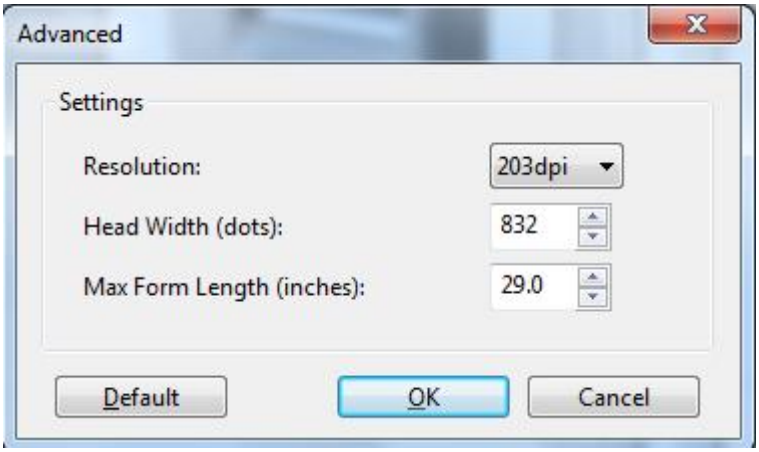
2.4 Printing Preferences - Print tab

The Print tab shows the available options that may be set. Typically, these are already set for proper operation and do not need to be adjusted.



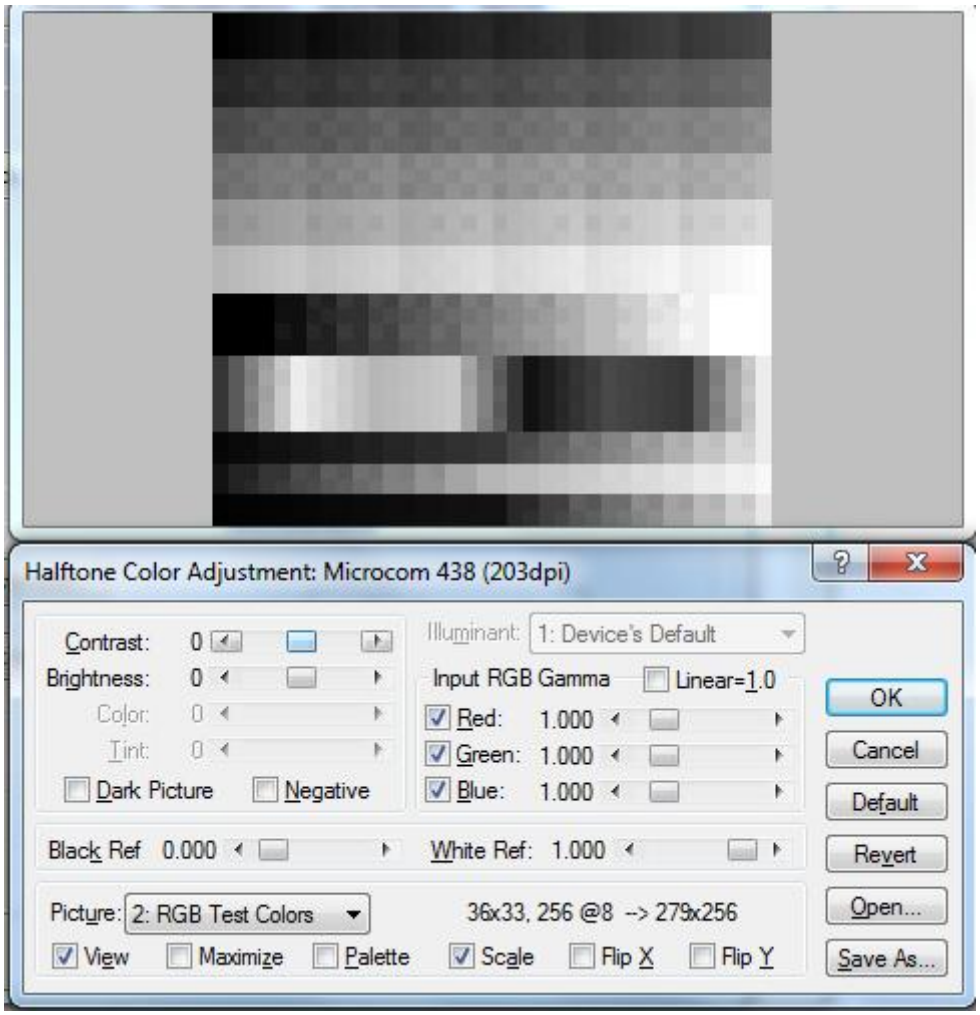
2.4 Print tab - Advanced

The Advanced tab is used to specify the print resolution and the printhead width. This tab is automatically set when selecting the printer model to install and should be ignored. This screen is typically used for development testing and custom solutions.



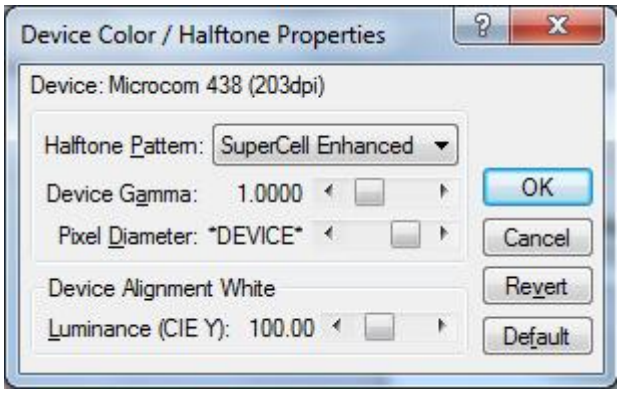
2.4 Print tab - Halftone Adjustment

The Halftone Adjustment icon opens the dialog windows below. This allows the user to manipulate the image settings that the driver uses to produce images.



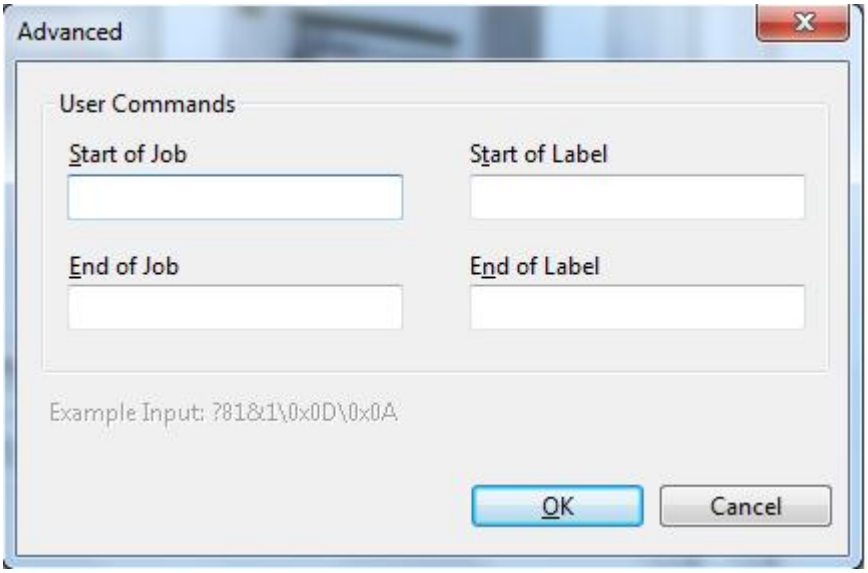
2.4 Print tab - Halftone Properties

The Halftone Properties page allows for dithering options and additional image manipulation to alter the image that is produced and printed.



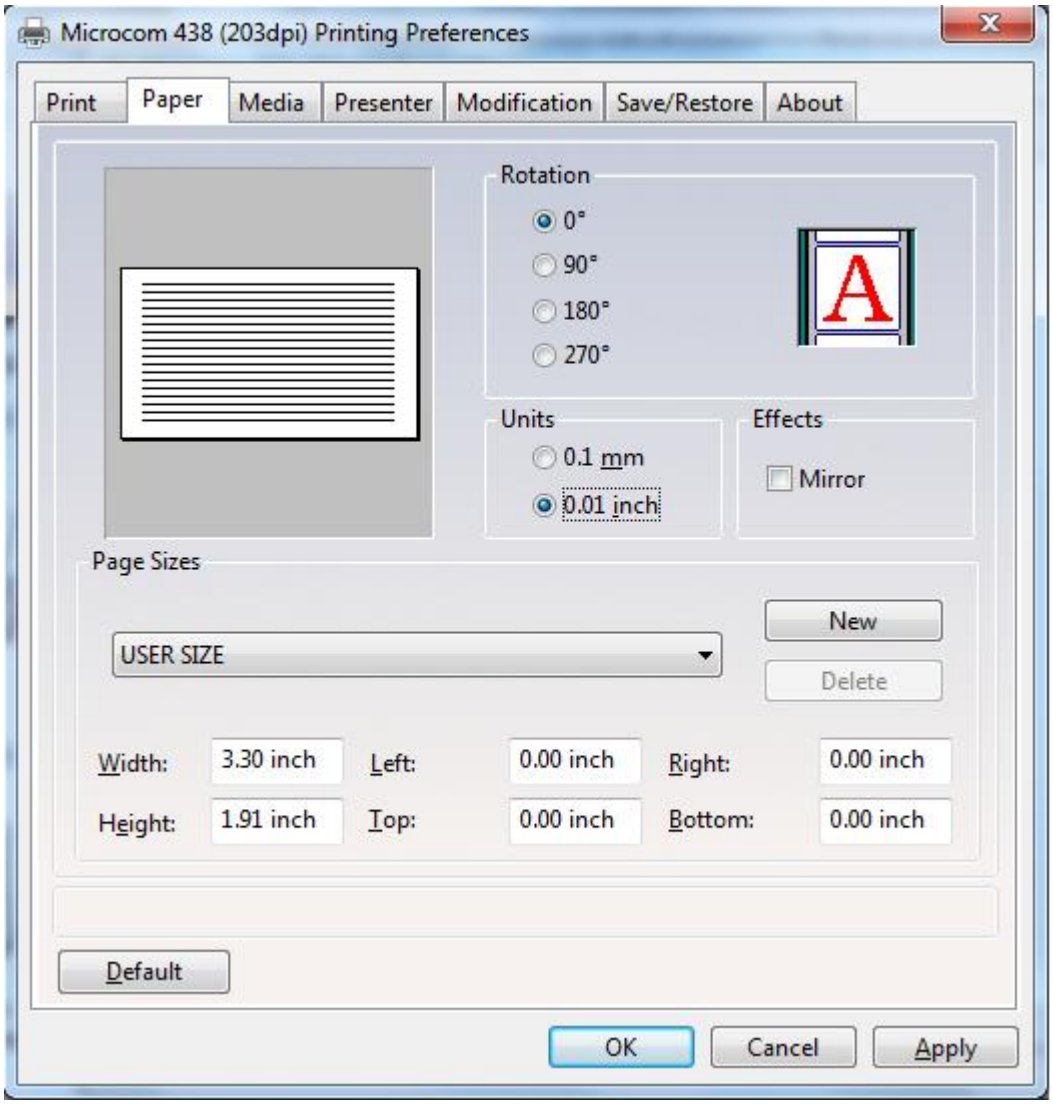
2.4 Print tab - User Commands

The User commands tab allows for the user to pass printer commands directly into the data stream. This is typically used for either troubleshooting or custom override commands.



2.5 Printing Preferences - Paper tab

The Paper tab is where the user adds custom form sizes and adjusts minor handling effects. The form sizes that are created here are added to the Windows Print Server Properties for the model installed.



2.5 Paper tab - Rotation

The rotation setting rotates the image being printed. This is used when Portrait or Landscape is used. The “A” image shows the rotation setting impact.

2.5 Paper tab - Units

This is used to select the units that the driver uses for most measurements. Some units are in dots or pixels and should be entered as such.

2.5 Paper tab - Page Sizes

This is where the user enters forms to the Print Server Properties of the driver. Select the drop down menu to select standard forms that have been installed with the driver or enter the size of your form and select the New icon to create a form size that matches your media.

2.5 Paper tab - Mirror

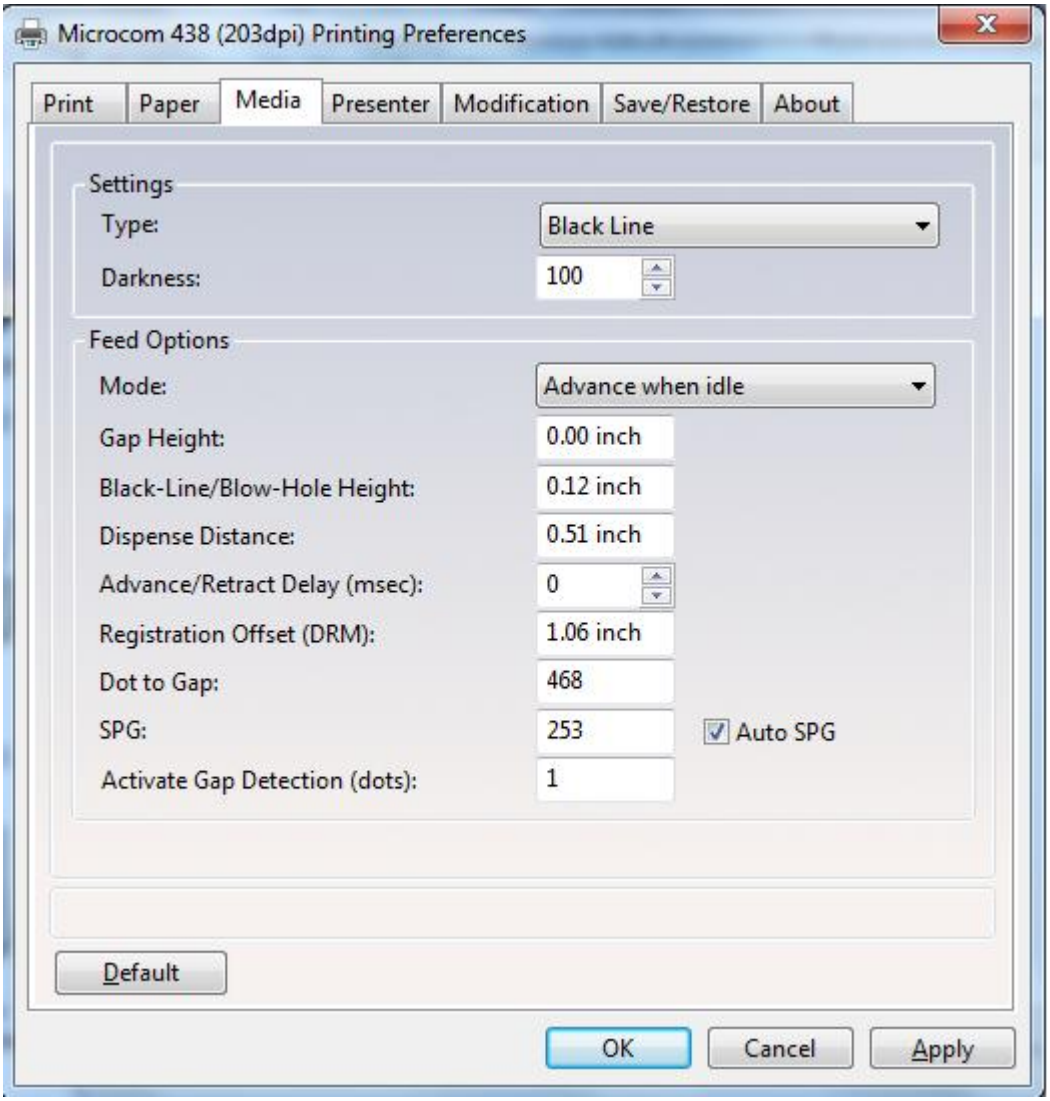
Selecting this option will cause the image to appear like it being observed in a mirror.

2.5 Paper tab - Default

This button will cause the driver to load in its default settings for the model driver installed. Please note that this default may not represent your media type or size.

2.6 Printing Preferences - Media tab

The Media tab is used to set specific setting of the media size and operations that in a form that the printer requires to maintain correct registration.



2.6 Media tab - Settings

The Settings control the Type of registration that the printer will use to align the media being used and the Darkness of the image being printed.

2.6.1.1 Settings - Type

This field sets the registration method that the printer will use to register job to job. This type should be set to the type of registration mark that is used to indicate the form size. The Continuous setting instructs the printer to ignore registration marks and will move media based on the form size settings. The Blackline setting cause the printer's reflective sensor to look for a blackline mark and register based on the other Feed options. The Diecut and Blowhole settings cause the printer to use its transmissive sensor to detect the backing material between labels or an actual hole in the media.

2.6.1.2 Settings - Darkness

This sets the darkness or contrast that the printer uses to image. As the value increases, the higher the thermal temperature setting is used for imaging. The lowest temperature that produces quality images should be used to extend the printhead life.

2.6 Media tab - Feed Options

The Feed options handle post printing dispensing and media options that are used by the printer to properly register the media from page to page.

2.6.2.1 Feed Options - Mode

The Mode is used to select the type of dispense option used after the printer has printed. The options include None, Advance when idle, Advance every label, Cut after label, and Cut with LPD.

Selecting the "None" option will disable the dispense modes. The printer will print the job and then stop without performing any dispense option.

The Advance when idle dispense option causes the printer to advance the Dispense Distance after the printer's communication port has gone idle. This mode does not require a label present sensor to function. For example: If printing 5 jobs, the printer would advance after printing the fifth job.

The Advance every label is a dispense mode that does use the printer's label present sensor. The printer will print a job and then advance the job by the Dispense Distance. A second job will not be processed until the printed/dispensed job has been taken (the LPD no longer detects the advanced job). Once the job has been taken, the printer will process the next print job. The Advance/Retract delay is also used in conjunction with this command. This delay starts after the label has been taken.

Cut after label causes the printer to advance the Dispense Distance after the job has been printed and then cycles the cutter. This mode does not use the Label Present Sensor.

The Cut with LPD is a mode that the printer will advance the Dispense Distance after printing and cut the label. The LPD is used to prevent the next job from printing until the current job has been taken by the user.

2.6.2.2 Feed Options - Gap Height

This field is used to specify the height of the backing material between labels typically found on die cut media types. As the media is moved through the printer, the height of the Gap would be what the printer's transmissive sensor would detect and use for page to page registration.

2.6.2.3 Feed Options - Blackline/Blowhole Height

This field is used to specify the height of the blackline or Blow hole that is used for registration on media types containing a blackline of blowhole. The printer uses its reflective sensor to detect the blackline as the media is passed through the printer and would use its transmissive sensor to detect the blowhole.

2.6.2.4 Feed Options - Dispense Distance

This is the distance that the printer uses to move the media forward to dispense and it used in conjunction with the Mode. The printer moves out this distance and then would retract the same distance so it does not impact registration.

2.6.2.5 Feed Options - Advance/Retract Delay

This field is used to specify how long the printer will wait in msec after the media has been taken when the Advance every label mode or Cut with LPD modes are used.

2.6.2.6 Feed Options - Registration Offset (DRM)

The registration offset is used by the printer to calculate the correct SPG (Steps Past Gap) value that the printer will use for registration. This distance is from the first printable area of the media to beginning of the registration mark as it would pass through the printer.

2.6.2.7 Feed Options - Dot2Gap

This field is the distance of the registration sensors to the dot row and is used to calculate the Steps past gap or SPG value used to align the print from page to page. This value is fixed value for each printer model. Some printer models have a different sensor location for the blackline reflective sensor and the Transmissive Gap sensor. Please review the printer manual for more information regarding the correct value for the Dot2Gap. The value entered is in dots or pixels.

2.6.2.8 Feed Options - SPG

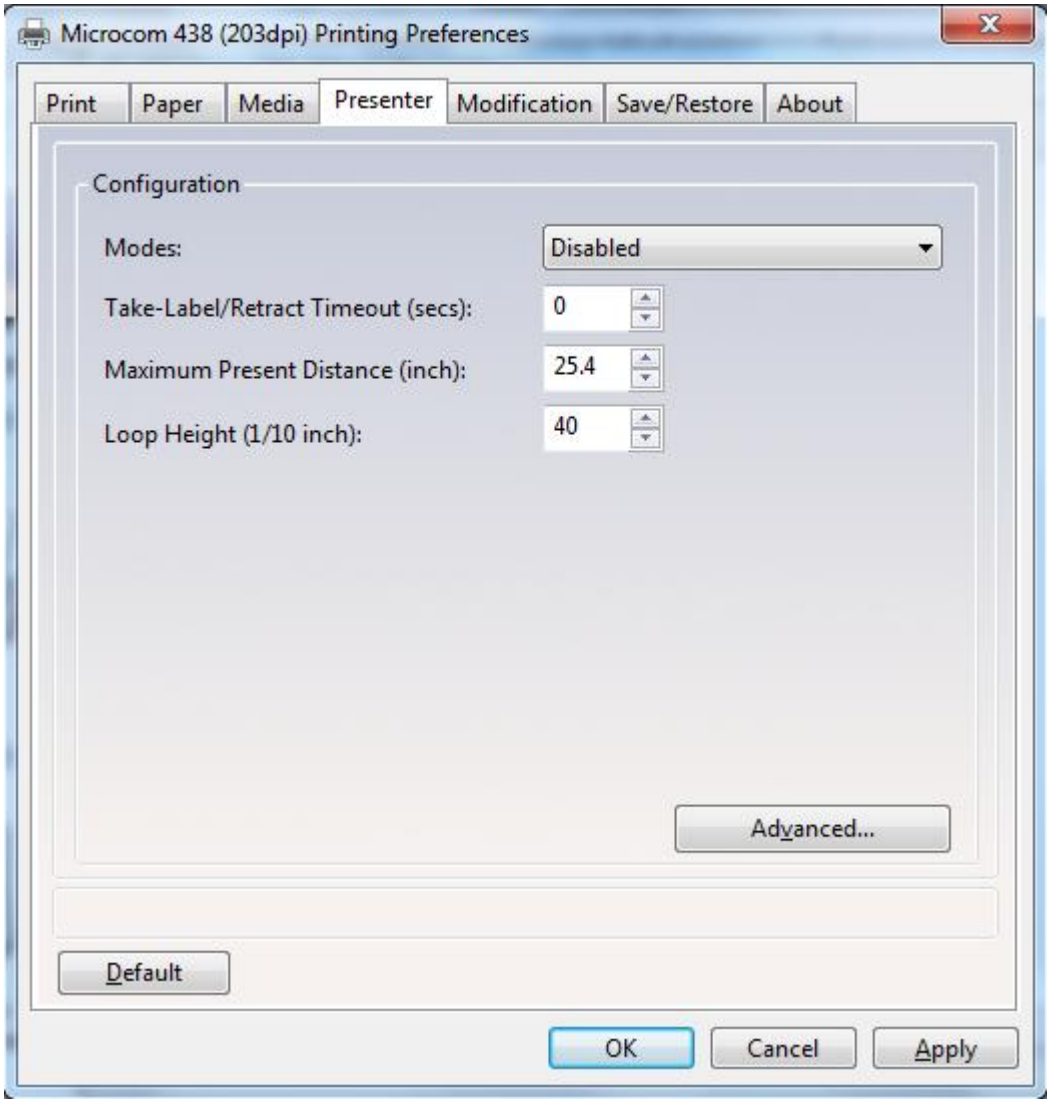
The Steps Past Gap (SPG) is a format header parameter that the printer uses to register the page properly. If the Auto SPG is checked, the driver will automatically calculate the proper SPG based on the other entered fields. If unchecked, the SPG is entered in manually. This value is entered in as dots.

2.6.2.9 Feed Options - Activate Gap Detection (dots)

The Activate Gap Detection is the distance in dots that the printer will move media before trying to detect a registration mark. The default of 1 typically works for most media types. If the media being used contains preprint in the sensor area, the AGD may need to be used to disable registration detection until passing over the preprinted areas.

2.7 Printing Preferences - Presenter tab

The Presenter tab controls the operation of the optional presenter available on some printer models. A presenter is a post printing device that typically takes a printed and cut form and presents it to the user only after is has printed completely. Not every printer model is capable of running a presenter. Check with your printer model operator's manual to see if a presenter is supported. This tab is ignored on models that do not support the use of a presenter.



2.7 Presenter tab - Configuration

The fields listed under the Configuration section control the Presenter operation on printer model that are compatible with the presenter.

2.7.1.1 Configuration - Modes

This is used to select the mode of the presenter. The valid modes are enabled, passthrough, and disabled. When selecting Enabled, the printer with presenter would present the media using the other fields for operation while selecting Passthrough mode will simply cause the presenter to run while the printer is printing.

2.7.1.2 Configuration - Take-Label/Retract Timeout (secs)

This field controls the time that the presenter will present the paper before retracting into the waste bin.

2.7.1.3 Configuration - Maximum Present Distance (inch)

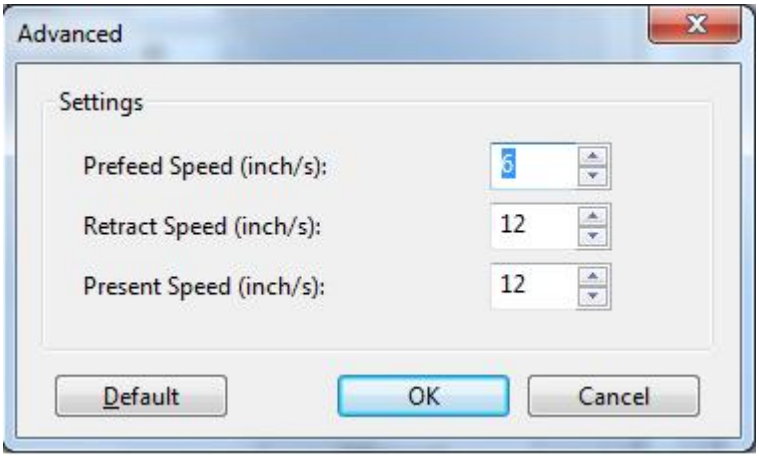
This is the maximum size that the printer will present when using the enabled mode. This value is in inches.

2.7.1.4 Configuration - Loop Height (1/10 inch)

The Loop Height is a value in 1/10 inch that the printer uses to delay the presentation of the media. The printer would print and form a loop at the presenter and once this value is reached, the presenter would present.

2.7.1.5 Configuration - Advanced

The Advanced button is included as a manual override of the recommended settings that the presenter will use for the various speeds. Typically, these values do not need to be adjusted for the presenter to function.



2.8 Printing Preferences - Modification tab

This tab is used to control the number of copies, print speed, and port monitor status enable.

2.8 Modification - No of Labels

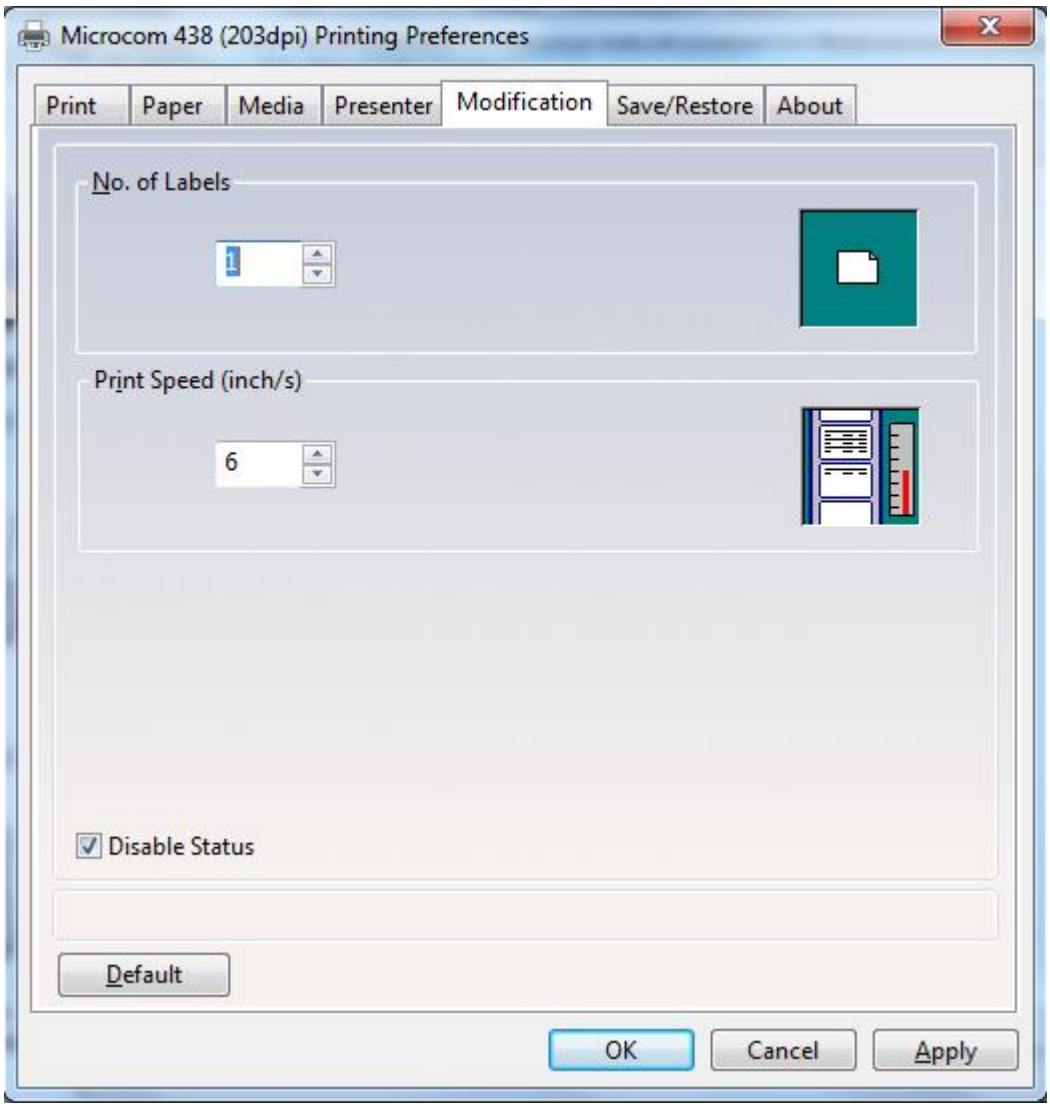
This field controls how many copies of the current page will be printed.

2.8 Modification - Print Speed (inch/s)

The Print Speed filed controls the print speed that the printer uses to print a page.

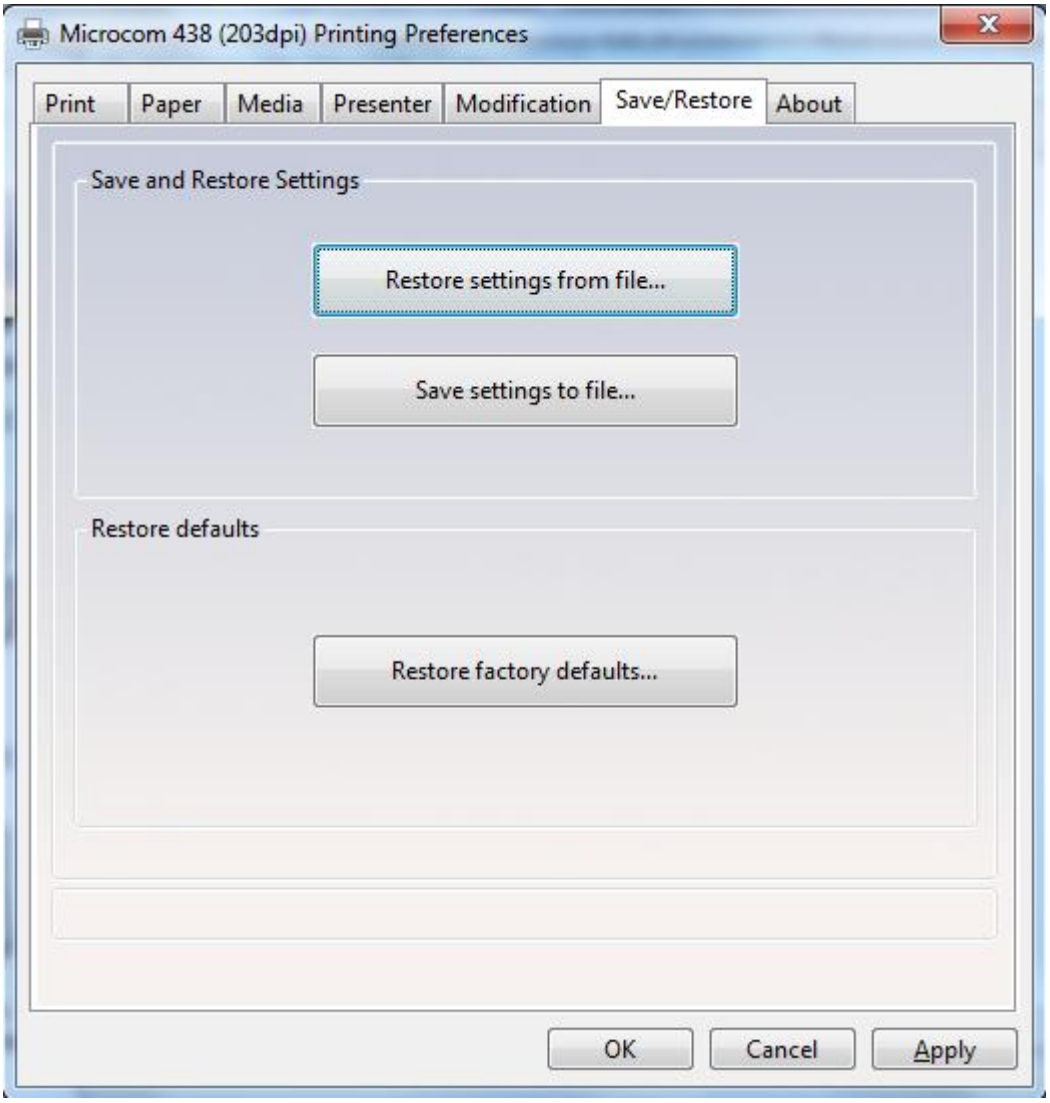
2.8 Modification - Disable Status

The Disable Status checkbox is used to control whether the Port Monitor Status popup window is displayed or not. This is used to get real time status from the printer while printing via the Windows driver.



2.9 Printing Preferences - Save/Restore tab

The Save/Restore tab is used to export or import driver settings and to force back to the factory defaults based on the printer model installed.



2.9 Save/Restore - Restore settings from file…

This is used to import or restore driver settings from a .MDS file. The driver settings are contained within a .MDS file and may be restored or configured if imported using the Restore feature.

2.9 Save/Restore - Save settings to file…

This is used to export or save the current settings in a .MDS file. This file contains the driver setup used to configure the driver.

2.9 Save/Restore - Restore factory defaults…

This will force the driver defaults of the printer model installed.

Chapter 3: Status Messages

This section describes the Windows compatible Status messages that are displayed in spooler and the Status Monitor feature found on the Modification tab. These messages may be extracted using the GetPrinterData MSDN API call. The standard message and the printer meaning are listed below.

3.1 PRINTER_STATUS_WAITING

This message indicates that the printer is okay and ready to print. LDS1 control language printer message would be the >READY<.

3.2 PRINTER_STATUS_BUSY

Message indicates that the printer is busy printing a job. No LDS1 equivalent control language printer message.

3.3 PRINTER_STATUS_PAPER_OUT

This message indicates that the printer does not detect media in the printer or has run out of media. The LDS1 equivalent control language printer message would be >STOCK NOT LOADED< or >LOW STOCK<.

3.4 PRINTER_STATUS_PAPER_JAM

Message is used to indicate that the printer has detected a media jam. The LDS1 control language printer message would be the >LPD STOCK JAM<.

3.5 PRINTER_STATUS_PAPER_PROBLEM

This message is used to indicate that the optional >INPUT 1< sensor is active. The >INPUT 1< message is the equivalent LDS1 control language printer message that is reported.

3.6 PRINTER_STATUS_USER_INTERVENTIO N

This message indicates that the printer is in an error condition that needs to be corrected before the printer may continue. The LDS1 messages that generate this error would be >CUTTER ERROR<, >DATA ERROR<, >FAIL TIMEOUT<, or >FAIL SIZE< LDS1 control messages.

3.7 PRINTER_STATUS_OFFLINE

Message indicates that the printer is powered down or the driver is unable to communicate with the printer. No LDS1 equivalent control language printer message.

3.8 PRINTER_STATUS_OUTPUT_BIN_FULL

This message is used to report that the printer is reporting that its catch tray is full or that the printer's media is advanced blocking the LPD sensor while in a dispense mode. The LDS1 control language messages that generate this message would be the >TRAY FULL< and >TAKE LABEL< messages.

3.9 PRINTER_STATUS_DOOR_OPEN

This message is generated when the printer detects that its printhead assembly is not fully closed. Not all printers support this feature. The LDS1 control language message equivalent would be the >HEAD UP< message.

3.10 PRINTER_STATUS_IO_ACTIVE

This message is used to indicate that the optional >INPUT 2< sensor is active. The >INPUT 2< message is the equivalent LDS1 control language printer message that is reported.