



MICROBOARDS[®]
Technology



MX Disc Publisher

For Microsoft Windows[®] Vista, XP, and 2000

Users Manual

TABLE OF CONTENTS

INTRODUCTION	5
WHAT'S INCLUDED	5
SYSTEM REQUIREMENTS	6
ASSEMBLY AND INSTALLATION	6
ASSEMBLY INSTRUCTIONS	6
<i>MX Disc Publisher Assembly</i>	6
INSTALLING INK CARTRIDGES AND PRINT HEADS	7
<i>Supported Ink Cartridges</i>	7
<i>Loading / Replacing Ink Cartridges</i>	7
<i>Installing / Replacing Printheads</i>	7
LOADING DISCS.....	8
FRONT PANEL INDICATORS AND BUTTONS.....	8
MX DISC PUBLISHER INSTALLATION	9
CONNECTING TO A PC	9
WINDOWS VISTA HARDWARE INSTALLATION	10
WINDOWS XP HARDWARE INSTALLATION.....	10
PRINTING PREFERENCES	12
PRINT QUALITY TAB	12
<i>Printing Recommendations</i>	12
COLOR TAB	13
<i>Advanced Color Settings</i>	13
DIAMETER SETTINGS TAB	14
UTILITY TAB	14
ABOUT TAB	14
THE MICROBOARDS PRINTER TOOLBOX	15
PRINT TEST PAGE	15
ALIGN THE PRINTHEADS.....	15
CLEAN THE PRINTHEADS	16
<i>Printhead Maintenance</i>	16
INK LEVEL	16
PEN HEALTH	17
USING SURETHING DISC LABELER	17
<i>Creating New Labels</i>	17
<i>Printing Labels</i>	17
THE MX DISC PUBLISHER AND ZULU2	18
ZULU2 AND PRINT ONLY MODE	19
ZULU2 AND PRINT ONLY MODE	20
ZULU2 ROBOTICS UTILITIES	20
<i>Enable Configure Dialog</i>	20
<i>Exercise Belts</i>	20
<i>Unload the Drive</i>	20
ZULU2 TEMPORARY FILES AND VISTA	20
SOFTWARE RE-INSTALLATION	21
PF PRO SERIES TOOLBOX RE-INSTALLATION	21
SURETHING LABELER SOFTWARE RE-INSTALLATION	22
ZULU2 SOFTWARE RE-INSTALLATION.....	23
TROUBLESHOOTING	24
PRINTER NOT PRINTING	24
DISC LOADING ERROR	24
LOW INK INDICATION	24
OUT OF INK	24
GAPS OR OVERLAP IN INK COVERAGE.....	25
"NO PRINTERS CONNECTED" MESSAGE	25
SUPPORTED FORMATS	25
SPECIFICATIONS	26
TECHNICAL SUPPORT	26

Introduction

The MX Disc Publisher is a robust automated inkjet CD and DVD disc publishing solution. The MX Disc Publisher Series includes the MX-1 and the MX-2. The MX-1 has a single recording drive, while the MX-2 has 2 recording drives for added throughput.

Both MX Disc Publisher models have a 100-disc capacity, making the task of burning and printing large numbers of discs fast, easy and hands-free.

Fully Integrated Automation

Microboards combined their patented auto-loading system with HP's new inkjet printer engine to give users the highest output possible, both in image resolution and print speed. Since the MX Disc Publisher is an autoloading system, no calibration of robotics or manual feeding of discs is required. The MX Disc Publisher connects by a single USB 2.0 interface to your computer, and comes with burning software and label design software.

Flexibility and Speed for Any Application

While the MX Disc Publisher was designed to fill a need in the high-volume arena, it also has the ability to print at 4800 x 1200 dpi on both DVD and CD media. With the included design software, users can enjoy its benefits whether making a few discs or a few hundred.

What's Included

When unpacking your MX Disc Publisher system, the following items should be included:

- MX Disc Publisher print system
- MX Disc Publisher Quick Start Guide
- MX Unpack Guide
- Users Manual (This document)
- Power Cord
- USB 2.0 Printer Cable
- Blank Printable CD's
- Input Bin rods
- 100 disc output assembly
- Microboards MX Disc Publisher Install CD (Includes Windows drivers, Printer Toolbox, Prassi Zulu2 Disc Burning Application, and SureThing Label software)
- 1 each: Microboards PFP-HC-CYAN, PFP-HC-MAGENTA, PFP-HC-YELLOW, and PFP-HC-BLACK Ink cartridges
- 1 each: CG316A (Yellow and Black) and C9382A (Cyan and Magenta) printheads

If any of these items are missing, please contact your distributor or Microboards Technology Technical Support department at 952-556-1639.

The MX Disc Publisher installation disc includes an Installer that will walk you through the process step by step. Please perform the installation in order as specified in the Installer before connecting to a computer.

System Requirements

The Microboards MX Disc Publisher has the following minimum requirements and compatibilities:

Supported Operating Systems

Microsoft Windows 2000 with SP4, Windows XP with SP2, or Windows Vista (32-bit only).

Processor

Pentium 4 (or equivalent) CPU, running at 2.0 GHz or faster.

System Memory

Minimum 512 MB of system memory (recommend 1GB for DVD Duplication).

Hard Drive Space

Less than 10MB of free space is required on the system hard drive for the applications and drivers.

A separate internal 7200 RPM hard drive is recommended for storing your data. Using the same hard drive as the operating system can cause the system to perform slowly.

USB Connection

USB 2.0 is required.

Assembly and Installation

Assembly Instructions

MX Disc Publisher Assembly

Remove the MX Disc Publisher system from the shipping box and confirm you received all of the items.

Place the MX Disc Publisher on a stable, flat surface. You will need room both in front and behind the system, as discs will be accessed from both locations.

Install the 2 long input bin posts above the input hopper, with the wide post to the right (shipped installed).

Install the output bin:

- Align the two holes in the output bin with the holes on the Front of the printer (numbers 1 and 2).
- Secure the output bin with the two thumb screws.
- The output bin should now be securely in place.
- Next, slide in the 100 disc output spindle into place.

The Output Bin is designed to hang over the front edge of your work surface.



Installing Ink Cartridges and Print Heads

Supported Ink Cartridges

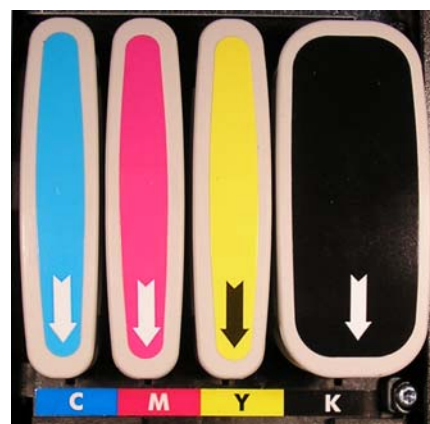
The MX Disc Publisher uses 3 color and 1 black ink cartridges. The part numbers for these cartridges are PFP-HC-CYAN, PFP-HC-MAGENTA, PFP-HC-YELLOW, and PFP-HC-BLACK. If other cartridges are installed, the MX Disc Publisher will not function. These cartridges are available from any Microboards reseller.

Refill kits or non-Microboards ink cartridges are not recommended for use in the MX Disc Publisher system. Use of non-Microboards cartridges will cause the printer to fail. Use of refilled cartridges may cause the MX Disc Publisher to fail.

Loading / Replacing Ink Cartridges

Cartridges can be changed while the MX Disc Publisher is on, but it should never be turned on without an ink cartridge in place. An LED will light above any cartridge that needs to be replaced.

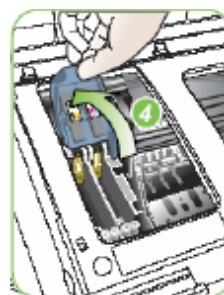
- Lower the ink door.
- If replacing an empty ink cartridge, remove the color that needs changing by pulling straight out.
- Remove each new print cartridge to be installed from its packaging.
- Slide the correct ink cartridge into the correct slot with the arrows pointing down, as shown to the right.
- Raise the ink door and latch it back into place. The printer will be ready after the ink cartridges pressurize and the Media Feed button LED goes out.



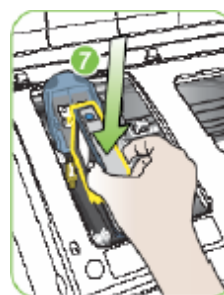
Installing / Replacing Printheads

The 2 Printheads are not installed when you receive the MX Disc Publisher, and must be installed prior to using the printer. The printhead models are CG316A (yellow and black) and C9382A (cyan and magenta).

1. Raise the top Printhead Access Door.
2. If you are setting up the MX Disc Publisher for the first time, remove any packaging materials from around the printhead carriage.
3. If you are replacing printheads and the printhead carriage is not parked all the way to the left, turn on the MX Disc Publisher. With the Printhead Access Door opened, press and hold the Media Feed button until the carriage moves to the left and locks into position.
4. Lift the cradle latch. If you are replacing the currently installed printheads, remove the printheads by lifting the blue handle of each and gently pulling up on each handle.
5. Remove the printheads from the packaging.
6. Gently shake each printhead 6 times prior to removing the orange protective caps. Save the caps! If you remove the printheads from the MX Disc Publisher, they should be recapped to avoid clogging the printheads and ink valves.
7. Gently press the printheads into the cradle, installing the correct printhead in the correct slot. **DO NOT FORCE THE PRINTHEADS INTO PLACE.**
8. Lower the cradle latch carefully.
9. Lower the top Printhead door. The printhead carriage will return to the right and will be primed by the printer if the power is on.



Step 4



Step 7

Loading Discs

The next step is to load your MX Disc Publisher with output discs. The system will accept CD or DVD 120 mm (12 cm) inkjet printable discs. If the disc does not have an inkjet printable surface, the ink will not adhere to the surface of the disc. The MX Disc Publisher will only accept 12 cm discs. Business card or 8 cm discs are not supported by this system.



Figure 1

Load the first 5 or 6 discs flat, as seen in figure 1.

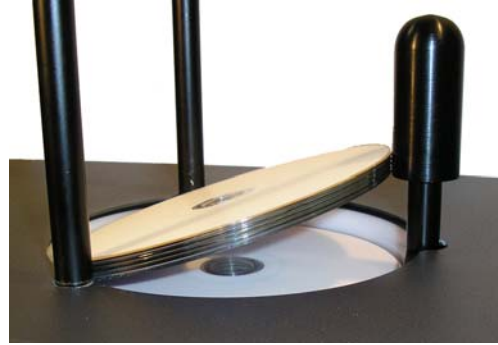
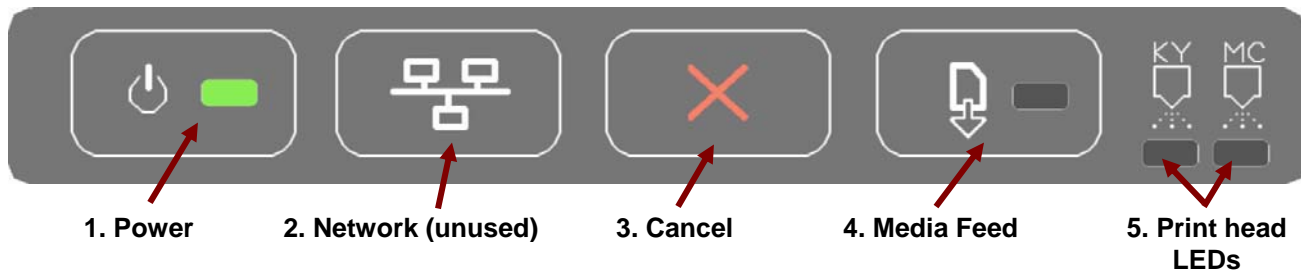


Figure 2

Load the rest of the discs at an angle, against the wide input rod, as seen in figure 2.

The MX Disc Publisher will hold a maximum of 100 discs. DO NOT load more than 100 discs in the system, as this may cause the discs to feed incorrectly.

Front Panel Indicators and Buttons



1. Power Button and LED – The Power button turns the MX Disc Publisher on and off. It may take a few seconds for the MX Disc Publisher to turn on after you press the Power button. The green LED on the Power button flashes when the printer is processing.

NOTE: The AC power switch located on the back of the MX Disc Publisher must be turned on first in order to supply power to the Front Panel.

2. Network Button - This button is unused.
3. Cancel Button – Pressing the Cancel button cancels the current print job.
4. Media Feed Button – Pressing this button will clear any media feed issues. This button has an LED that will flash amber when a media feed issue is occurring. It will also show a steady amber if either the ink or the upper doors are opened.
5. Print Head LEDs – These LEDs will be on if there is an issue with either of the print heads.

MX Disc Publisher Installation

The MX Disc Publisher installation disk includes an Installer that will walk you through the process step by step. Please use the Installer and follow the installation steps in order.

The following installation sections are intended only as a reference for the installation process, not as a guide to installing the MX Disc Publisher. Performing the installation out of order could result in an unsuccessful installation.

The MX Disc Publisher Installation Quick Reference Guide will show you the order in which the installation will occur.

Installation should always be done when logged in as a user with full Administrator rights.



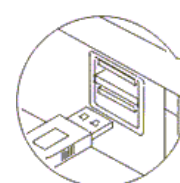
Connecting to a PC

DO NOT CONNECT YOUR MX PRINT FACTORY TO A COMPUTER BEFORE RUNNING THE INSTALLER LOCATED ON THE INSTALLATION DISK!!

The connection between the PC and the Microboards MX Disc Publisher is with one USB cable.

1. Confirm that the power is turned OFF on the MX Disc Publisher and on your PC.
2. Plug in the AC power cord to the back of the MX Disc Publisher. ***Do not turn on power to the MX Disc Publisher until all 4 ink cartridges and both printheads have been installed.***
3. Connect the square shaped end of the USB cable to the back of the MX Disc Publisher.
4. Connect the flat, rectangular end of the USB cable into a USB 2.0 port in your PC.

USB Cable length exceeding 6 feet between the PF-Pro Disc Printer and the PC is not supported!



Windows Vista Hardware Installation

The Microboards MX Disc Publisher Installer should always be run when logged in as user with full Administrator rights. This is required for the driver pre-installation to be successful. Once the MX is plugged into the PC via the USB connection, the hardware will automatically be found and installed on your PC.

During the driver pre-installation, you may need to verify that you would like to install the drivers.

If the Installer is run by a user without full Administrator rights, or you do not verify that the drivers should be installed, the hardware will need to be installed using the Hardware Wizard. Please follow the directions below.

Windows XP Hardware Installation

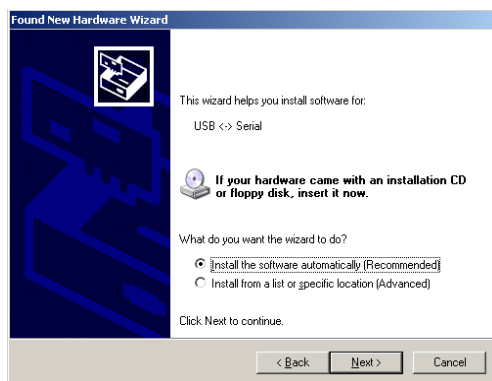
The Windows Found New Hardware Wizard will appear during any installation, including when using the Installer. Please follow all directions in the order in which they appear when using the Installer.

Insert the Microboards MX Disc Publisher CD into a drive in your computer. Follow the instructions provided by the installer. Connect the MX Disc Publisher to the PC only when you are prompted to.

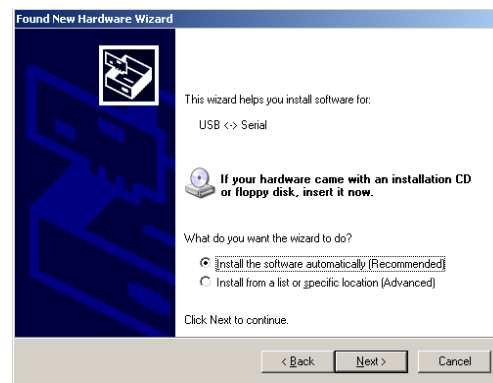
The operating system will next display the following windows:



1. Select **No, not this time** and click **Next**. The following screen will appear:



2. Click the **Next** button and the files will be copied from the CD.



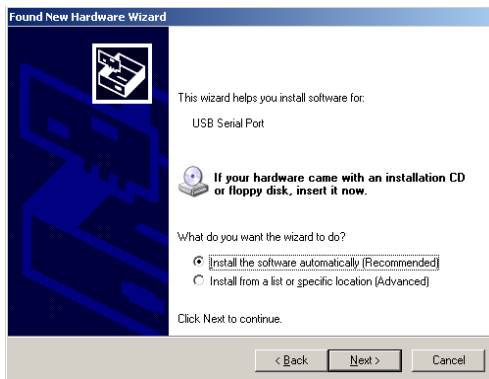
3. Click the **Next** button and the files will be copied from the CD.



4. Click **Finish**. The following screen will appear:



5. Select **No, not this time** and click **Next**.



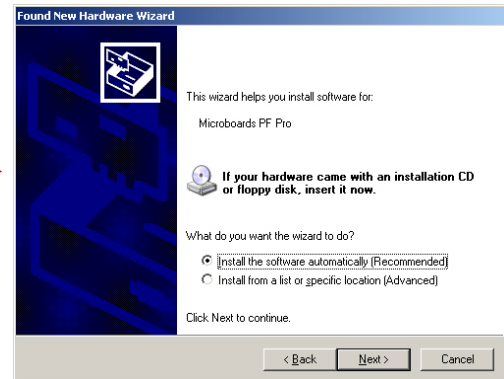
6. Click **Next**.



7. Click **Finish**. The next screen will appear:



8. Select **No, not this time** and click **Next**. The following screen will appear:



9. Click the **Next** button and the files will be copied from the CD.



10. If this screen appears, click **Continue Anyway**.



11. The Hardware installation is complete.

Printing Preferences

Access the Printing Preferences by clicking the **Start** Button on your Windows computer. Select **Settings** and then select **Printers**. Right click on the Microboards PF-Pro icon, then select **Printing Preferences**. There are 5 tabs across the top of the window. Click each tab to see the available settings.



Print Quality Tab

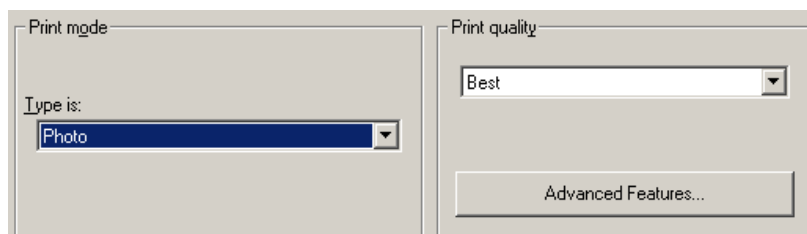
The Print Quality tab controls the print resolution.

Print Quality

- Max DPI (Photo Only)
- Best
- Normal

Print Modes

- Draft
- Text and Graphics
- Photo



Printing Recommendations

Draft mode is extremely fast, but should only be used for minimal text and no graphics. As this is draft quality, there may be some gaps or overlap in the output.

Text and Graphics mode is used for printing mainly text information and small, simple graphics.

Photo Mode should be used when printing complex graphics or on the entire disc; a quality setting of **Best** is always recommended for any Photo Mode printing.



Draft - Normal



Text & Graphics - Normal

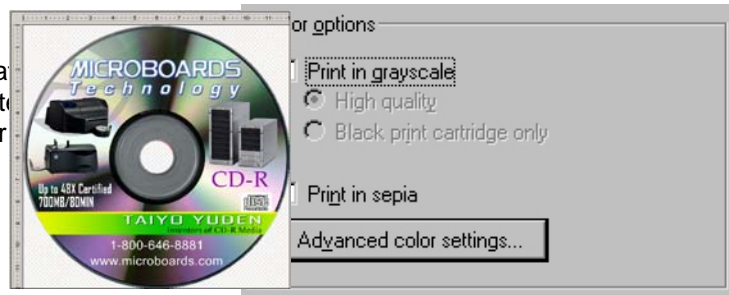


Text & Graphics - Best

Color Tab

The Color Tab allows you to specify that the image should be printed in grayscale, or print in color. You also have access to the Advanced color settings tab.

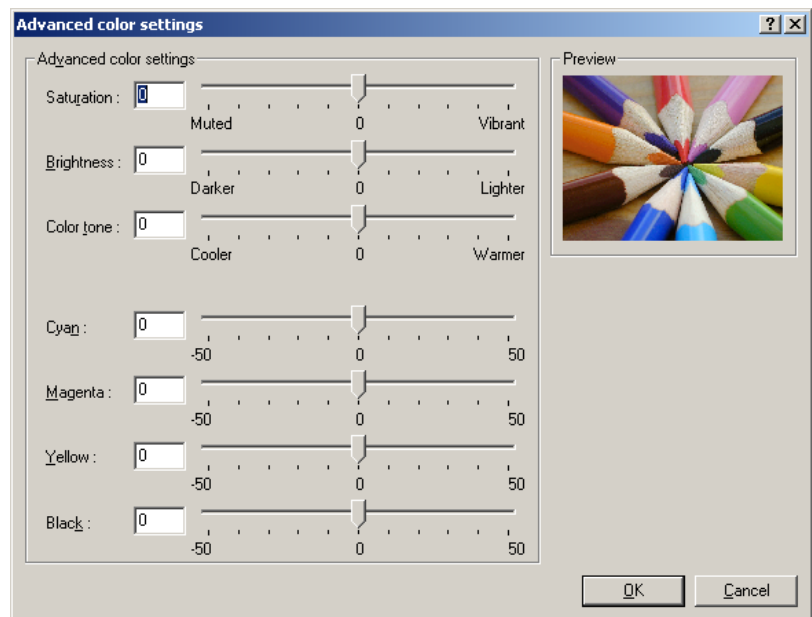
Photo - Best



Advanced Color Settings

Saturation, Brightness and **Color Tone** allow you to fine tune your print image.

The four ink settings allow you to change the volumes used of each specific ink cartridge.

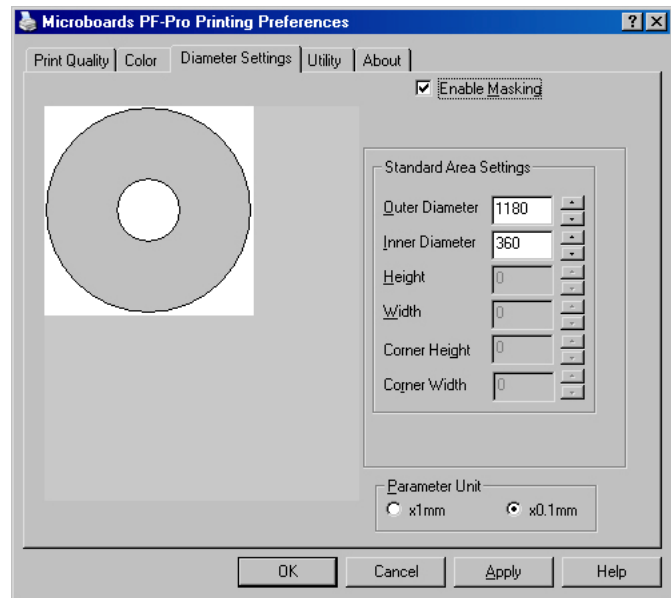


Diameter Settings Tab

The Diameter Settings tab allows you to change the size of the print image to accommodate the variety of printable surface area available on media.

The Outer and Inner **Diameters** will change the size of the area to be printed. To avoid excessive ink buildup, these values should never be set so that the MX Disc Publisher is printing off the media.

The Parameter Unit should remain on the **0.1mm** setting for maximum precision.



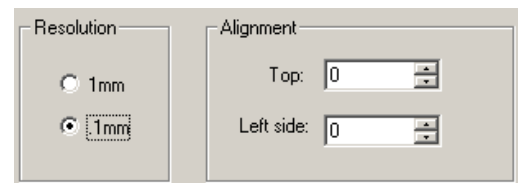
Utility Tab

The Utility tab allows you to change the printer alignment settings.

The **Resolution** setting should always be set at **.1mm** for best results.

Alignment values will move the print image on the disc.

Increasing the **Top** alignment value will move the print image down on the disc, while decreasing it will move the image up on the disc. Increasing the **Left** alignment value will move the print image to the right on the disc, while decreasing it will move the image left.



About Tab

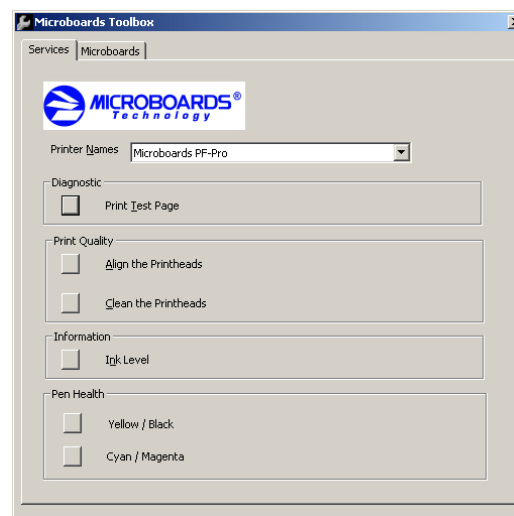
The About tab provides you with contact information for the worldwide Microboards offices.

The Microboards Printer Toolbox



Toolbox Icon in Tool Tray

To access the Microboards Toolbox, click the toolbox icon located in the tool tray on the lower right of your desktop. Select the Microboards PF-Pro and click the buttons to access a particular maintenance function of the Toolbox for the selected printer.



Print Test Page

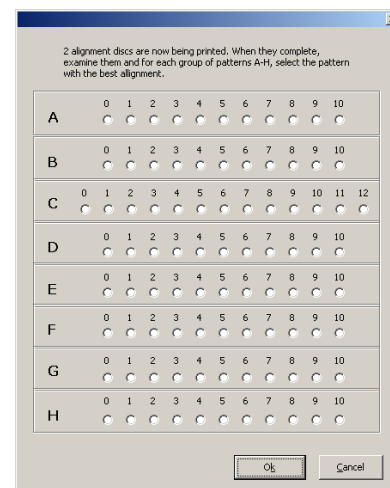
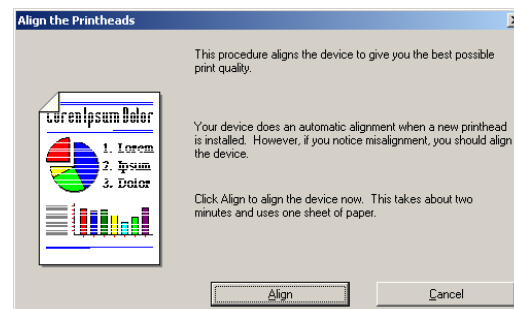
To confirm the computer is communicating with the MX Disc Publisher, print a Test Page. This can be done with one of the inkjet printable CD's included with your MX Disc Publisher, or an inkjet compatible disc you may already have. To print the Test Page:

- Click the **Print Test Page** button from the main Toolbox window.
- Place the inkjet printable media into the input hopper.
- Click **Print Test Disc**.
- A disc will be dropped onto the belts and then printed.
- Once printing is complete, the disc will be ejected into the output hopper.

Align the Printheads

Printhead alignment should be performed when a new printhead is installed. If you experience a decrease in print quality with an installed printhead, you may need to perform this service.

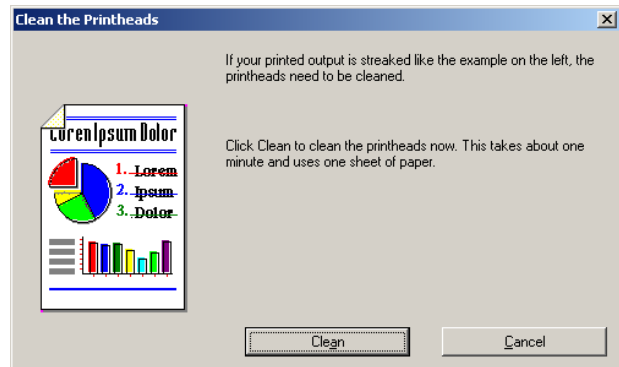
- Click the **Align the Printheads** button from the main Toolbox window to show the Align the Printheads window, as seen to the right.
- Load 4 pieces of blank, unprinted media into the input hopper.
- Click the **Align** button, and 2 discs will load to the belts and be printed.
- Use these discs to select the patterns that are best aligned in the next window, as shown to the right. All 8 entries must be made.
- After selecting the patterns with the best alignment, click **OK**.
- The printhead alignment discs will print again. The best aligned patterns should have moved closer to the center (they do not need to be in the center, only closer to the center than the original set of discs). If so, click **Cancel**. If not, enter the values from the second set of discs and click **OK**; you will need to load 2 more blank discs.



Clean the Printheads

The printheads may require cleaning if the printed images show streaks of color. This may occur if the MX has been idle for an extended period of time.

- Click the **Clean the Printheads** button on the main Toolbox window.
- Load a blank piece of media into the input hopper before clicking the **Clean** button. The media will load down to the belts and be printed with the cleaning image.



Running this process more than once may be required if the quality does not improve after cleaning one time.

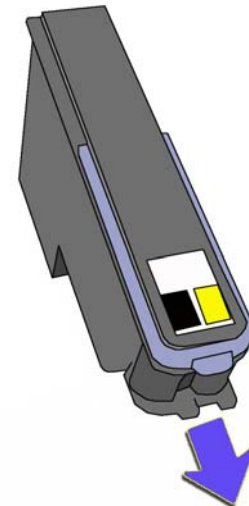
Printhead Maintenance

If, after several cleaning attempts, the printed images continue to show streaks of color, you may need to manually clean the printheads. Follow the procedure below exactly to clean the printheads. Not following these steps could result in damaged printheads.

1. Remove the printheads from the carriage (please see **Installing/Replacing Printheads**, page 7).
2. Use ionized water to lightly dampen a lint-free cloth
3. Place the cloth on a level surface
4. Holding the printhead with the bottom of the printhead resting lightly on the cloth, gently pull the printhead towards you along the direction of the long axis of the printhead, as shown to the right.

DO NOT MOVE THE PRINTHEAD FROM SIDE-TO-SIDE, AS THIS COULD MIX THE INK COLORS IN THE PRINTHEAD!

5. If the printhead does not leave two solid lines of color, one for each color in the printhead, move the printhead to a clean area on the cloth and repeat step 4.
6. Carefully replace the printhead into the MX Disc Publisher once the heads have been cleaned.



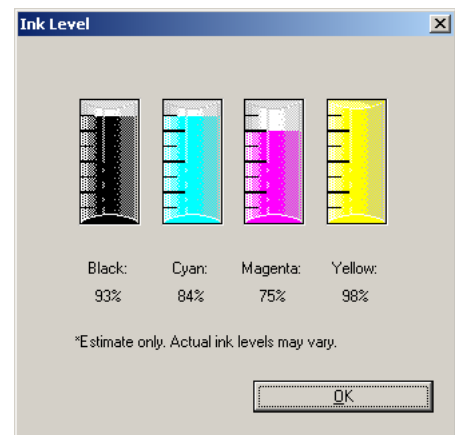
If you do not follow the above procedure exactly, you could damage your printheads!

Ink Level

Click the **Ink Level** button on the main Toolbox window.

The Ink Level of each cartridge can be checked using this button.

Please note that this is an estimate of the current ink levels only.



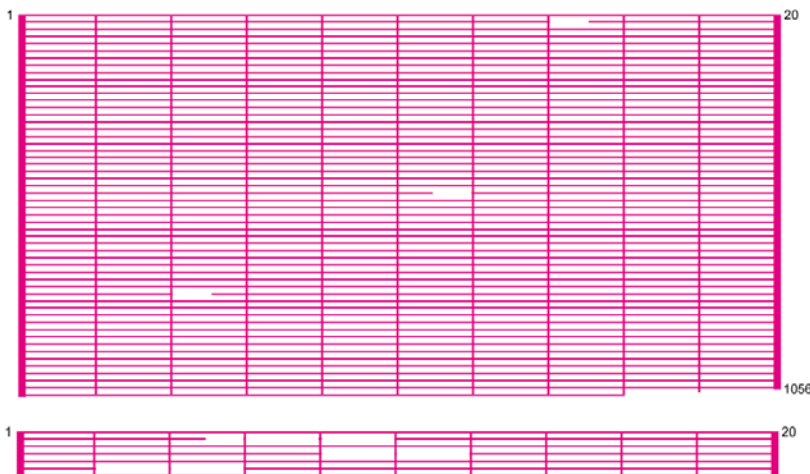
Pen Health

If you suspect that the printheads are not functioning correctly due to print quality issues, the Pen Health function can be used to determine the health of the 2 printheads. Each test will require one unprinted disk.

The pattern to the right will be printed out in both of the colors of the printhead being tested; magenta and cyan will be on one test, yellow and black on one disc. If the print results are similar to that shown, or with a few breaks in the print that are no wider than the space between the vertical lines, the pen health is still good.

If, however, any of the lines look as they do in the lower image, with multiple gaps in the horizontal lines that are wider than the distance between the vertical lines, the printheads may need to be cleaned (*see page 16*).

Run the Pen Health a second time; if the print quality has not improved, the printheads may need to be replaced.



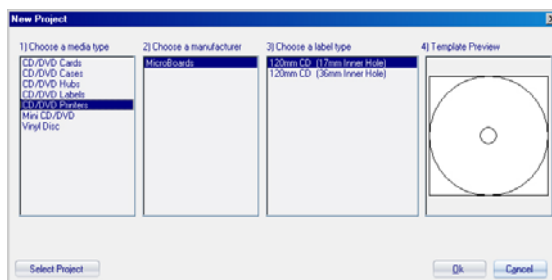
Using SureThing Disc Labeler

SureThing Disc Labeler is included with the MX Disc Publisher and will be installed during the PF-Pro Installation. For more information on using SureThing, please refer to the SureThing Help menu.

Creating New Labels

Any label you create in SureThing must use the Microboards template to print correctly.

1. To create a new label, either click **New Project** in the Action window on the left, or select **New** from the **File** menu.
2. Click the **Select Label** button on the lower left corner of the dialog to view the available label templates if the dialog does not appear as shown to the right.
3. Highlight **CD/DVD Printers** in the Media Type column.
4. Highlight **Microboards** in the center Manufacturer column.
5. Select from the options listed in the Label Type column.



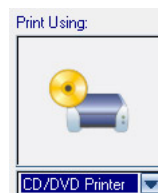
We recommend that you use the 17mm inner hole template to ensure that your image will fully cover the printable surface on both hub printable and non-hub printable media, adjusting the Diameter Settings when changing between media types (*see page 14*).

6. Click **OK** to begin designing the label.

Printing Labels

Select **Print** from the File menu while the label you want to print is open. Be sure that you have selected the Microboards PF-Pro and that **CD/DVD Printer** is selected in the Print Using field before clicking the **Print** button.

If you are printing more than one copy of a label, enter in the number you wish to print before clicking the **Print** button.



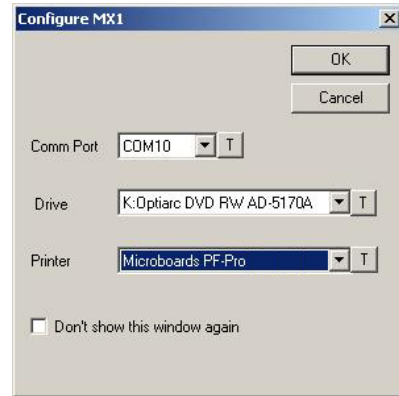
The MX Disc Publisher and Zulu2

All printing and burning is done using Zulu2. If you are only printing and not burning, you can print directly from SureThing. The Print Only feature under the Robotics menu will launch SureThing.

The first time the user launches Zulu2, the software will ask you to configure the MX Disc Publisher system. This only needs to be done the first time the software is used.

When launching Zulu2 for the first time, the following screen appears (the MX-2 will have 2 drive selections):

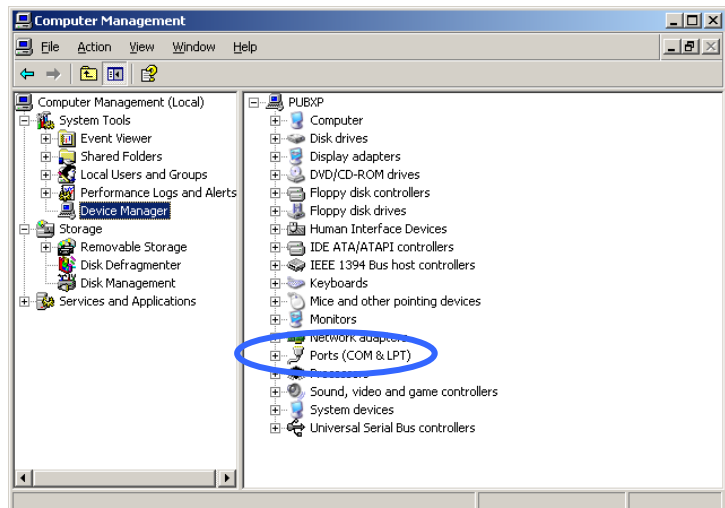
When the MX Disc Publisher is installed, Windows creates a new COM port. This new port is used by the MX Disc Publisher. The new port can be determined by looking at the device manager.



To view the device manager, right click on My Computer from the Windows Desktop or the Start button menu and select **Manage**:



The Computer Management screen will appear.

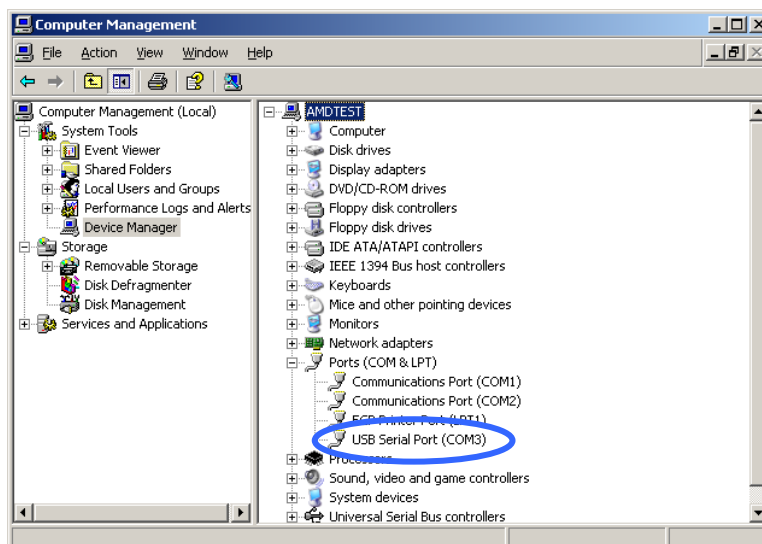


Open up the Ports (COM & LPT) selection.

You will see an entry labeled “USB Serial Port (COMx)” entry for each MX Disc Publisher you have installed. The COMx will be the COM port number to be entered into the Configure screen.

Select the COM port as found on the Computer Management screen.

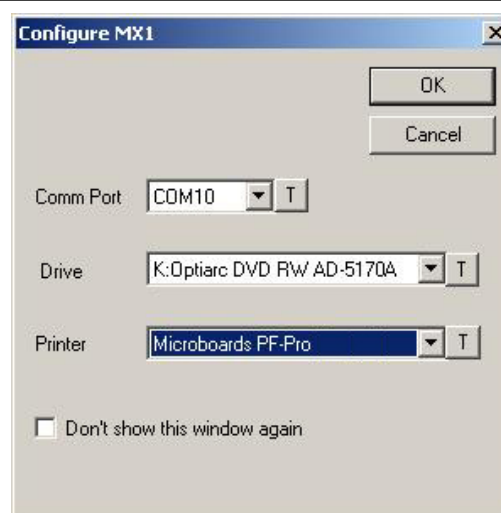
Next, select the recorder. For the MX-2, select recorders for both **Upper Drive** and **Lower Drive**.



Finally, select the Printer.

To confirm you have made the correct selection, you can click on the T box next to each item, as follows:

- When the **T** is pressed for the COM Port, the elevator will move up and down.
- When the **T** is pressed for the recorder, the tray will open and then close.
- When the **T** is pressed for the Printer, the belts will move in reverse.
- Checking the **Don't show this window again** box will bypass the configuration step when launching Zulu2 again. You will be able to reset this option should it be necessary to configure the system again.

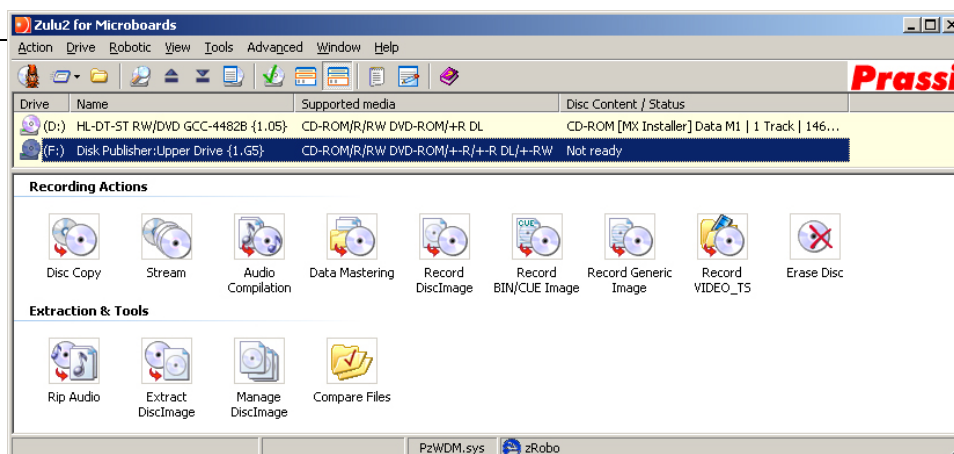


Click the **OK** button.

The system will now initialize the MX Disc Publisher. The belts will be cleared of any discs and any discs in the recorders will be removed and rejected.

Once initialization is complete, the system is ready for use.

Please see the Zulu2 for Microboards Disc Publishers manual for more information on using Zulu2.



Zulu2 and Print Only Mode

While the MX Disc Publisher was designed to be operated in Burn and Print mode, you can also use the MX as a disc printer. SureThing Disc Labeler software is included with the MX Disc Publisher, but you can print using many applications. The image being printed should always be 120mm by 120mm.

Selecting the **Print Only** option in the Robotics menu will launch SureThing. You will be able to print directly from SureThing.

While Zulu2 is actively running a Zulu2 action, the robotics will be controlled solely through Zulu2; any other application will not cause the printer to load a disc to be printed. Once that action completes, the robotics are automatically released.

If Zulu2 is not closed correctly for whatever reason, the robotics may not be released and discs may not be loaded onto the belt from the input hopper. If this should occur, simply re-launch Zulu2, go into the **Robotics** menu, and select **Utilities**.

Click the **Print Only Mode** button to force Zulu2 to release the robotics. Please note that if you start another Zulu2 action, the robotics will be controlled through Zulu2 again.

Click **OK** to close the Utilities.

Zulu2 Robotics Utilities

Aside from the Print Only Mode button described above, there are 3 other utilities available.

Enable Configure Dialog

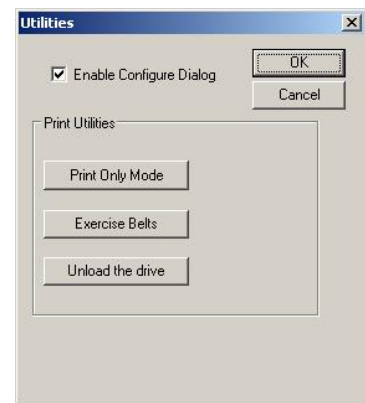
Checking this option will enable the Zulu2 configuration dialog.

Exercise Belts

This function will run a Belt Exerciser function, running the belts for approximately 10 seconds. No disc is needed for this function.

Unload the Drive

This function will unload the MX drive and reject any disc unloaded.

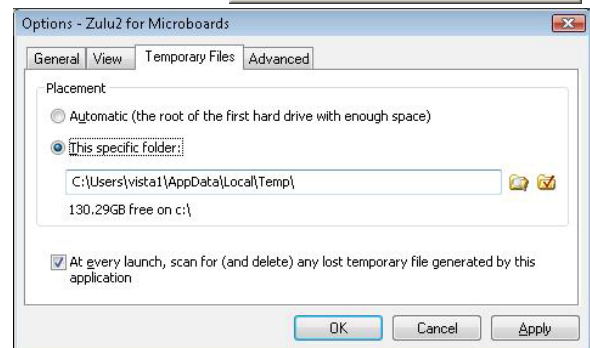


Zulu2 Temporary Files and Vista

Microsoft Vista includes a security feature called the User Account Control, which is by default on. Because of this security feature, the location of any temporary files must be specified or Vista will not allow the files to be stored.

Select **Options** under the Zulu2 **Tools** menu, then click the **Temporary Files** tab. Select the **This specific folder** option, browse to a location, then click **OK**.

Temporary files are used by Zulu2 during Streaming mode and Disc-to-Disc duplication.



Software Re-Installation

The information in this section will only apply to a manual re-installation of the individual software packages. If you have not yet installed the MX Disc Publisher using the Installer, it is recommended that you do so. Installing the MX Disc Publisher in an incorrect order could result in an unsuccessful installation.

PF Pro Series Toolbox Re-Installation

The Microboards PF Pro Series Toolbox will be installed automatically during the initial installation of the MX Disc Publisher from the Installation CD. The Toolbox installation is hidden at that time, but the successful installation of the Toolbox can be verified by the presence of the Toolbox icon in the tool tray in the lower right corner of your Windows desktop.



1. Load the MX Disc Publisher Installation CD.
2. Select the **Repair** option when the installer starts.

Note: If you have removed the MX Disc Publisher Installation by selecting the **Remove** option in the installer or by using the entry in the **Add or Remove Programs** window, the installation will run completely without the Repair option.





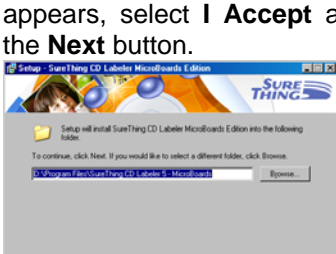
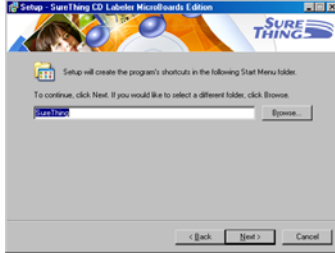
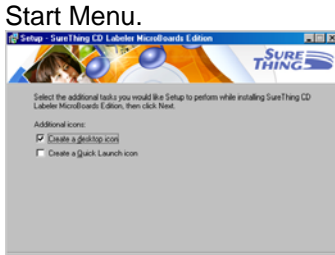

3. Click the **Microboards PF Pro Series Toolbox** button to re-install the Toolbox or the **Install Both Applications** button to reinstall both SureThing Disc Labeler and the Toolbox.
4. Once the re-installation is complete, the toolbox will be started automatically, minimizing into the tool tray.

SureThing Labeler Software Re-Installation

There are 3 methods of reinstalling SureThing should the need arise:

- A. **(Recommended)** Insert the Microboards MX Disc Publisher Installation CD into the CD/DVD ROM drive on your computer and select the **Repair** option when the installer starts. Click the **SureThing Disc Labeler** button to reinstall SureThing. Clicking the **Install All Applications** button will reinstall Zulu2, SureThing, and the Toolbox.

Follow these steps once the SureThing installer launches:

1. Click **Next** to continue.
 2. Once the User License screen appears, select **I Accept** and click the **Next** button.
 3. If you wish to change the default Install directory, it can be done here. Click **Next** when completed.
 4. Click **Next** to add a shortcut in the Start Menu.
 5. Choose to add an icon to your desktop and/or a folder in the Start Menu. Once selected, click **Next**.
 6. Click **Install** to begin copying the files.
 7. Remove the check to launch SureThing at this time, then click **Finish**.
- B. Alternately, you can open the **Applications** directory on the Installation CD and run **SureThing.exe** to install SureThing manually. Follow the on-screen instructions as shown in steps 1-7 above.
- C. The SureThing installer was also added to your hard drive in the event that you need to reinstall but do not have access to the Installation CD. Run **SureThing.exe** in the **C:\Program Files\Microboards\MX Installer\Applications** directory on your hard drive. Follow the on-screen instructions as shown in steps 1-7 above.

Zulu2 Software Re-Installation

There are 3 methods of reinstalling Zulu2 should the need arise:

- A. **(Recommended)** Insert the Microboards MX Disc Publisher Installation CD into the CD/DVD ROM drive on your computer and select the **Repair** option when the installer starts. Click the **Prassi Zulu2** button to reinstall Zulu2, then select the correct MX model. Clicking the **Install All Applications** button will reinstall Zulu2, SureThing, and the Toolbox.

Follow these steps once the Zulu2 installer launches:

Note in the upper right-hand corner that during an update of Zulu2, the version currently installed is listed under the version of Zulu2 to be installed.

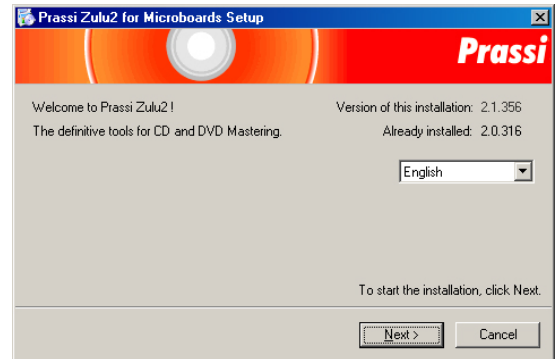
Select the language to install; the default is English.

Click **Next**.

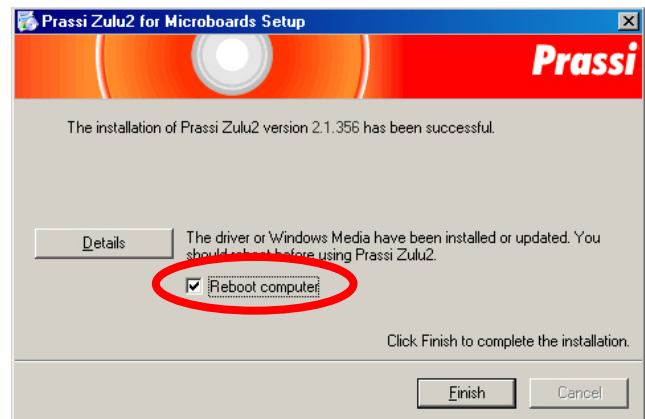
The files will now be copied from the CD to the operating system.

Once finished, this screen will appear:

When reinstalling over an existing installation of Zulu2, the Reboot Computer option may not appear. ***If the Reboot Computer option is available, you should reboot after the installation.***



- B. Alternately, verify the model you have and open the **Applications\MX1 Zulu2** or **MX2 Zulu2** directory on the Installation CD. Run **Prassi Zulu2 for Microboards Setup (EFIGS).exe** from the appropriate directory to reinstall Zulu2 manually.
- C. The Prassi Zulu2 installer was also added to your hard drive in the event that you need to reinstall but do not have access to the Installation CD. Run **Prassi Zulu2 for Microboards Setup (EFIGS).exe** in the **C:\Program Files\Microboards\MX Installer\Applications\MX1 Zulu2** or **MX2 Zulu2** directory on your hard drive, depending on which model you have.



Troubleshooting

Printer not printing

1. Confirm the MX Disc Publisher is plugged into a power source and is turned on. The ON/OFF switch is located at the back of the unit, above the power cable connector.
2. Confirm the green LED on the power button is lit on the front panel, as shown below. If AC power is on and the green LED is off, press the power button and wait for several seconds. If the LED still does not come on, contact Microboards Technical Support.



3. Confirm the MX Disc Publisher is connected to the computer, with a USB cable. This can be checked by clicking on Start, going to Settings and selecting Printers. Confirm the printer is listed and is active. If the icon is not active, make sure the Use Printer Offline is not selected or paused. Also check to make sure the correct printer port is selected.

Disc Loading error

1. If a disc is not loaded correctly, an error message will be displayed on your PC. Check to see if there are any discs on the belt. Remove any discs that are left on the belt.
2. Lift the cover and check for any discs on the front deck of the MX Disc Publisher. Remove any discs found on the belts. Close the cover.
3. Next, reload the input bin and click the OK button on the error message to continue. The system will load the next disc and continue printing the remaining discs for that job.

Low Ink indication

The Microboards Toolbox will provide you with a warning when any of the ink cartridges are running low. The warning will tell you which cartridge is running low.

It is strongly recommended that you replace the cartridge before the ink level reaches 0%. Continuing to run the MX Disc Publisher with an empty cartridge may damage the printer.

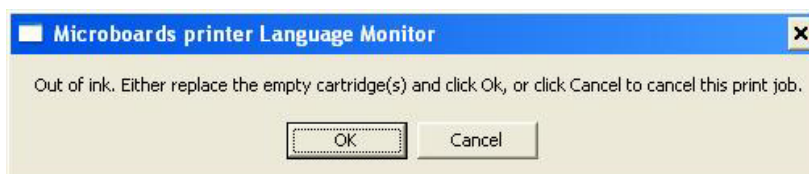
If you notice poor ink quality or a missing color in your prints at any time, replace the ink cartridge.

Out of Ink

If you do not change the cartridge when the Low Ink warnings first appear, you will become unable to print after the ink cartridge shows 0%. Printing will be halted to avoid damaging the printheads or printer.

The Out of Ink message will appear when the ink levels have been at 0% for a time. At that point, you have the option of changing the cartridge and continuing, or cancelling the job.

You will not be able to print if the empty cartridge is not replaced once the Out of Ink message appears.



Gaps or Overlap in Ink Coverage

There are 2 possible causes:

1. If the gaps or overlaps are widely spaced, you may be printing in Draft Mode. Change Mode to Text & Graphics or Photo. See page 12 for details.
2. The printheads need to be realigned. Please refer to page 15 for details.

“No Printers Connected” Message

The Microboards Printer Toolbox did not detect a connected printer when the PC was started. Verify that the MX Disc Publisher is connected and that the printer is powered on.

After verifying the connection and the printer power, you should restart the Toolbox, as it monitors the printer's ink levels and door status.

A shortcut to the **PF Pro Toolbox** was placed in the Microboards directory of the Start Menu during installation. The Toolbox will start, but will automatically minimize to the tooltray. Double-click the Toolbox icon in the tooltray to access the Toolbox.



Supported Formats

Recording format	CD	CD-ROM Mode 1, CD-ROM XA Mode 2 (form 1, form 2), Photo CD, CD-DA (Audio CD), CD-Extra, CD-R, CD-RW
	DVD	DVD-ROM, DVD+R/RW/DL, DVD-VIDEO
Recording capacity (nominal)	CD	700MB
	DVD	4.7GB for General DVD 8.3GB for Dual Layer
Applicable media	CD	CD-R, CD-RW
	DVD	DVD+R, DVD+RW, DVD+R DL

Specifications

DVD Recorder Drive:	DVD+R/RW/DL CD-R/RW Recorder
Power Supply:	Auto Detect AC Power: 90VAC – 240VAC, 47Hz – 63Hz
Weight:	MX-1: 58 lbs; MX-2: 63 lbs.
Connectivity:	USB 2.0 required
Warranty:	One Year Limited Warranty
Media Types:	Printable-surface 120mm CD-R/RW or DVD+R/RW/DL

Printer:

Print Technology: HP Inkjet

Print Quality, Black: 600 x 600 dpi

Print Quality, Color: up to 4800 x 1200 optimized dpi

Print Speed: Depends upon percentage of coverage and print mode selected

- Approx. 45 seconds for 100% full-color coverage, Photo Normal Mode
- Approx. 20 seconds for 100% full-color coverage, Text & Graphics Best Mode
- Approx. 12 seconds for 20% coverage Text & Graphics Normal Mode
- Approx. 6 seconds for 100% full coverage Draft Normal Mode

Maximum Print Width: 4.72" (120mm)

Ink Cartridges: Microboards PFP-HC-CYAN, PFP-HC-MAGENTA, PFP-HC-YELLOW, and PFP-HC-BLACK

Label Editing Software: SureThing™ First Edition Software for Windows included

Technical Support

For technical questions or support issues, contact Microboards Technology technical support:

United States

PH: 952-556-1639

FAX: 952-556-1628

support@microboards.com

www.microboards.com

Europe

PH: +44 (0) 845 230 7800

www.microboards.co.uk

Japan

PH: 03-3561-2266

www.microboards.co.jp

Please have the Model and Serial Number of your PF-3 Print Factory available when contacting Technical Support.



Any unauthorized modification to this equipment may result in the revocation by the FCC of the user's authority to operate this equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and antenna
- Connect the equipment into an outlet on a circuit different than that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help



This product is in conformity with the EMC Directive (89/336/EEC) through compliance with the following European standards: EN 55022, EN 55024. The CE mark has been affixed in accordance with the CE Marking Directive 93/68/EEC.