GX Auto Printer

For Microsoft Windows® Vista, XP, and 2000

Users Manual

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Introduction

The Microboards GX Auto Printer is a CD, DVD, and BD auto-loading disc printer with a 50 disc capacity. Microboards and HP co-developed the printer technology, allowing up to 4800 x 1200 dpi printing.

SureThing Disc Labeler is packaged with the GX Auto Printer, providing you with an easy tool for designing and printing your labels.

What's Included

When unpacking your GX Auto Printer system, the following items should be included:

- GX Auto Printer print system
- GX Auto Printer Quick Start Guide
- Print Sample
- Power Cord
- Alignment CD's
- Blank Printable CD's
- Users Manual (This document)
- Microboards GX Auto Printer Install CD (Includes Windows 2000/XP/Vista drivers and SureThing Label software)
- Microboards GX-300HC Color Ink cartridge (14ml)
- USB Printer Cable
- Disc output assembly

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

The GX Auto Printer 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 GX Auto Printer has the following minimum requirements and compatibilities:

Operating System

Microsoft Windows 2000 with SP4, Windows XP with SP2, or Windows Vista.

Processor

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

System Memory

Minimum 512 MB of system memory.

Hard Drive Space

Only 10MB of free space is required on the system hard drive for the applications and drivers. Additional drive space will be required for saved disc labels.

USB Connection

USB 2.0 is recommended. USB 1.1 may be used but is not recommended, as using USB 1.1 may result in more time being necessary for print images to be passed to the printer.

Assembly and Ink Installation

Assembly Instructions

GX Auto Printer Assembly

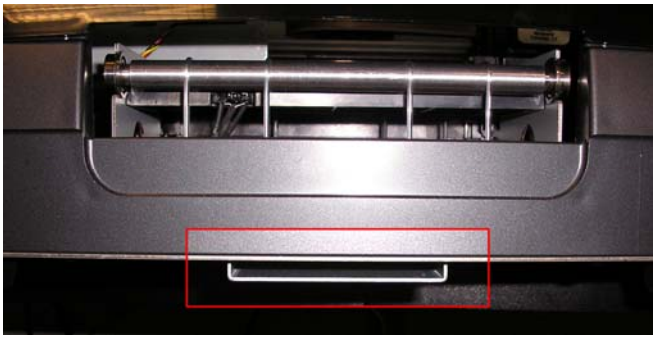
Remove the GX Auto Printer system from the shipping box and confirm you received all of the items.

Place the GX Auto Printer on a stable, flat surface. You will need room in front and to the left of the system, as discs will be accessed from both locations.

The input bin posts are pre-installed, with the wide post to the front.

The Reject Bin is pre-installed on the left side of the GX Auto Printer. This bin, which slides out, should be emptied when you know discs have been rejected.

Slide the 50-disc Output Bin into the channel between the feet at the front of the GX Auto Printer, shown below.



Installing Ink Cartridges

Supported Ink Cartridges

The GX Auto Printer uses a single color ink cartridge. The part number for this cartridge is GX-300HC. If other cartridges are installed, the GX Auto Printer will not function. These cartridges are available from any Microboards reseller.

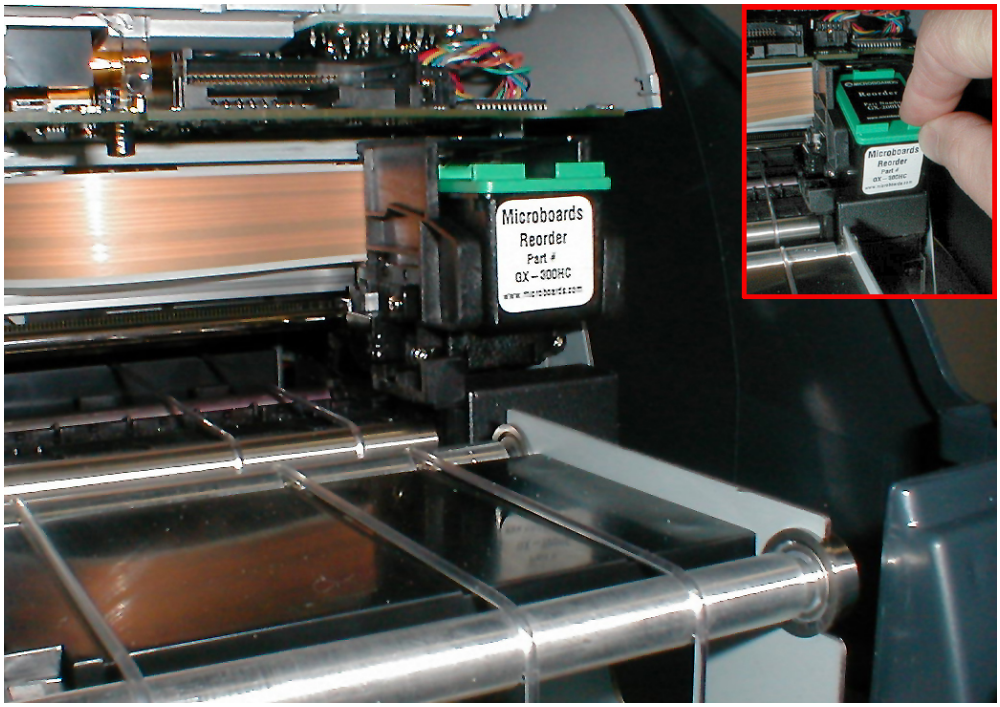
Refill kits or non-Microboards ink cartridges are not recommended for use in the GX Auto Printer system. Use of these types of cartridges will cause the printer to fail. Use of these types of cartridges will void the warranty.

Loading / Replacing Ink Cartridges

Cartridges can be changed while the GX Auto Printer is on, but it should never be turned on without an ink cartridge in place.

The GX Auto Printer system ships with one GX-300HC color ink cartridge.

- Remove the front cover. The print cartridge cradle will be on the right side of the GX Auto Printer, as shown below.
- Tilt the old cartridge forward to release the cartridge from the cradle, as shown in the inset below.
- Lift the old cartridge out of the cradle.
- Remove the new print cartridge from its packaging and carefully remove the plastic tape. Hold the print cartridge so that the copper strip is at the bottom.
- With the front of the new ink cartridge tilted down, slide the cartridge into the cradle.
- Tilt the front of the cartridge back up to lock the ink cartridge in place.
- Replace the front cover.



GX Auto Printer Installation

The GX Auto Printer 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 GX Auto Printer. Performing the installation out of order could result in an unsuccessful installation.

The GX Auto Printer Installation Quick Reference Guide will show you the order in which the installation will occur.

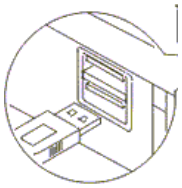
Installation should always be done when logged in as a user with full Administrator rights.

Connecting to a PC

DO NOT CONNECT YOUR GX AUTO PRINTER TO A COMPUTER BEFORE RUNNING THE INSTALLER LOCATED ON THE INSTALLATION DISK!!

The connection between the PC and the Microboards GX Auto Printer is done with one USB cable.

1. Confirm that the power is turned OFF on the GX Auto Printer and on your PC.
2. Plug in the AC power cord to the back of the GX Auto Printer. ***Do not turn on power to the GX Auto Printer until an ink cartridge has been installed.***
3. Connect the square shaped end of the USB cable to the back of the GX Auto Printer.
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 GX Auto Printer and the PC is not supported!

Windows Vista Hardware Installation

The Microboards GX Auto Printer 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 GX Auto Printer 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

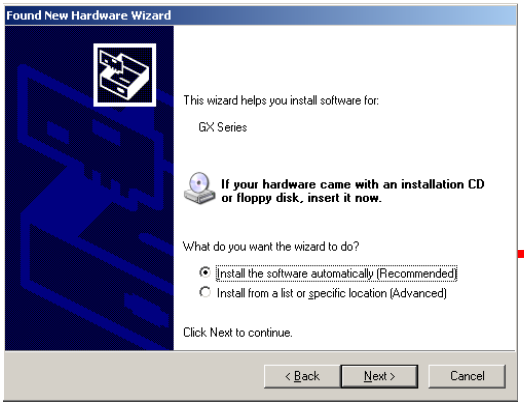
The Windows Found New Hardware Wizard will appear during any installation, including when using the Installer. Please follow all directions in the order in which they appear when using the Installer.

Install the GX-300HC cartridge and turn on power to the GX Auto Printer.

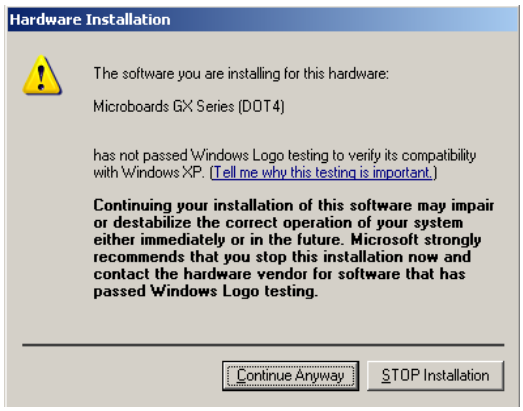
Insert the Microboards GX Auto Printer CD into a drive in your computer. Follow the instructions provided by the Installer. Connect the GX Auto Printer to the PC only when you are prompted to.

Once the GX Auto Printer is connected, the operating system will next display the following screen:

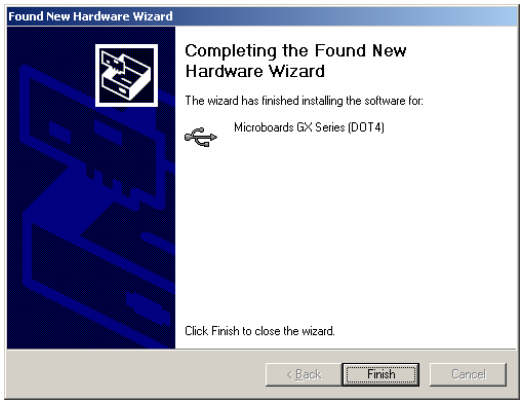
1. Select **No, not this time** and click **Next**.



2. Click **Next**.

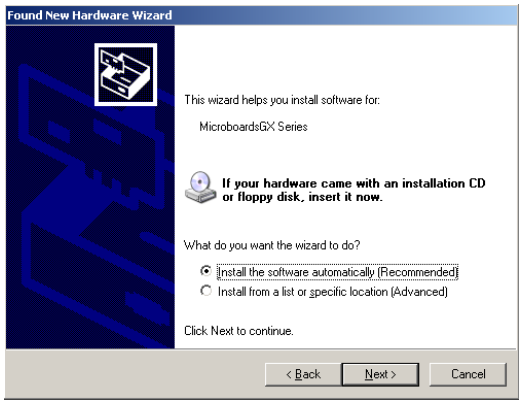


3. Click **Continue Anyway**.

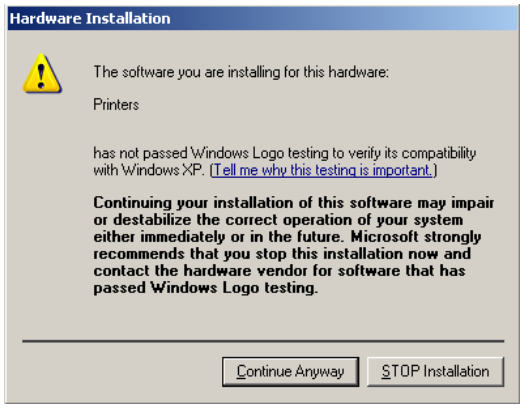


4. Click **Finish** for the next screen.

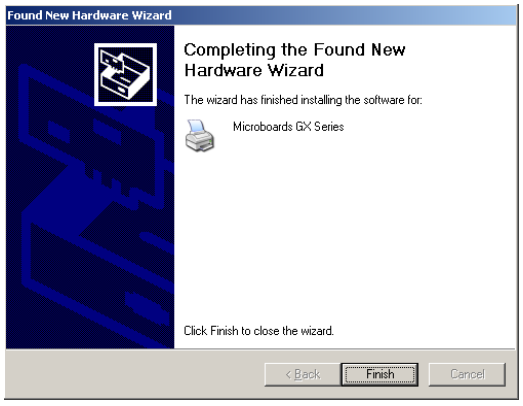
5. Select **No, not this time** and click **Next**.



6. Click **Next**.

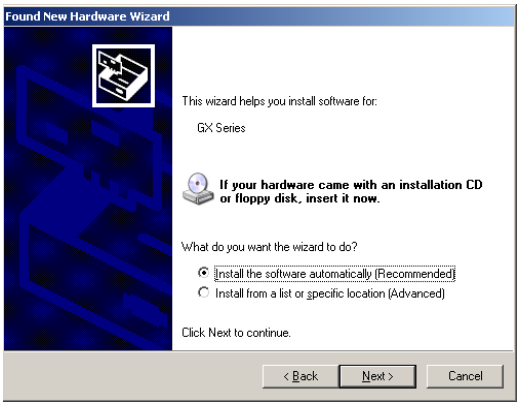


7. Click **Continue Anyway**.

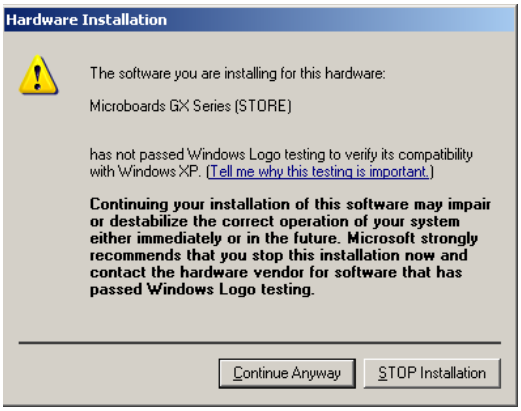


8. Click **Finish** for the next screen.

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



10. Click **Next**.



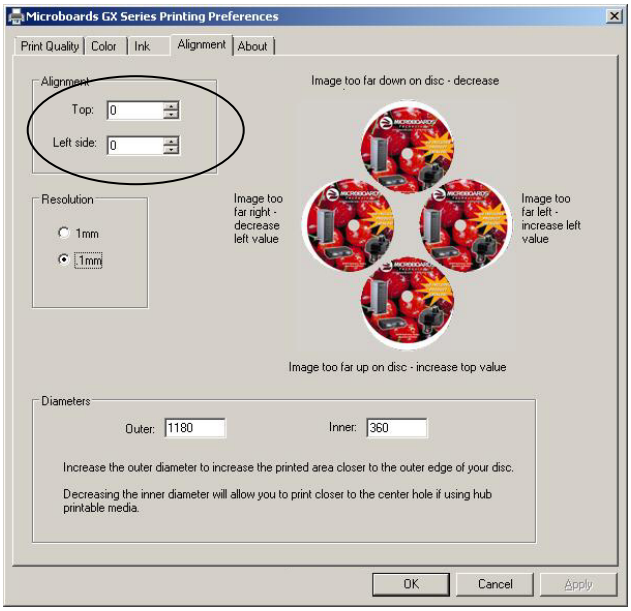
11. Click **Continue Anyway**.

12. Click **Finish**.

Setting Printer Alignment

Alignment

The GX Auto Printer system has been aligned at the factory. The factory alignment values are on a label on the back of the GX Auto Printer. Follow these steps to enter the factory values:



- Click on the **Start** Button on your Windows computer.
- Select **Settings** and then **Printers**.
- Right click the Microboards GX Series icon.
- Select **Printing Preferences**.
- Select the **Alignment** Tab.
- Click on the **.1mm** selection in the Resolution box.
- Enter the values listed with the GX Auto Printer into the **Top** and **Left Side** boxes.
- Click the **Apply** button.
- Click the **OK** button.
- Verify the alignment by printing full coverage image created in SureThing. The image should print centered on the disc. If not, adjust the **Top** and **Left Side** alignment values according to the graphic on the Alignment tab and repeat.

GX Toolbox

A shortcut to the GX Toolbox was added to your desktop during the printer installation. Double-click the icon to open the toolbox. For each of the functions, a blank disc will need to be loaded.

Print Test Disc

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

- Place the inkjet printable media into the input hopper.
- Click **Print Test Disc**.
- Once printing is complete, the disc will be ejected into the output hopper.

Clean

Load a blank disc and click the **Clean** button to print a design intended to clean the print nozzles of the ink cartridge. This should be done if you notice a drop in print quality.

Using the GX Auto Printer

Loading Discs

The next step is to load your GX Auto Printer 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 GX Auto Printer will only accept 12 cm discs. Business card or 8 cm discs are not supported by this system.

Load the first 5 or 6 discs flat, as seen in the top image to the right.

Load the rest of the discs at an angle, against the wide input rod, as seen in the bottom image to the right.

The GX Auto Printer will hold a maximum of 50 discs. DO NOT load more than 50 discs in the system, as this may cause the discs to feed incorrectly.

SureThing Disc Labeler

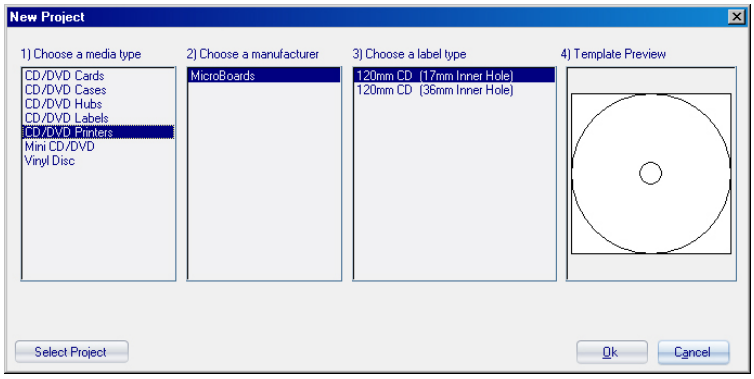
SureThing Disc Labeler is included with the GX Auto Printer and will be installed during the GX Installation. For more information on using SureThing, please refer to the SureThing Help menu.

Creating New Labels

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

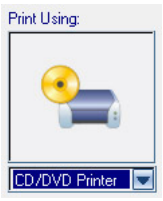
1. To create a new label, either click **New Project** in the Action window on the left, or select **New** from the **File** menu.
2. Click the **Select Label** button on the lower left corner of the dialog that opens to view the available label templates if the dialog that opens does not appear as shown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



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 GX Series 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.

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 GX Series icon, then select **Printing Preferences**.

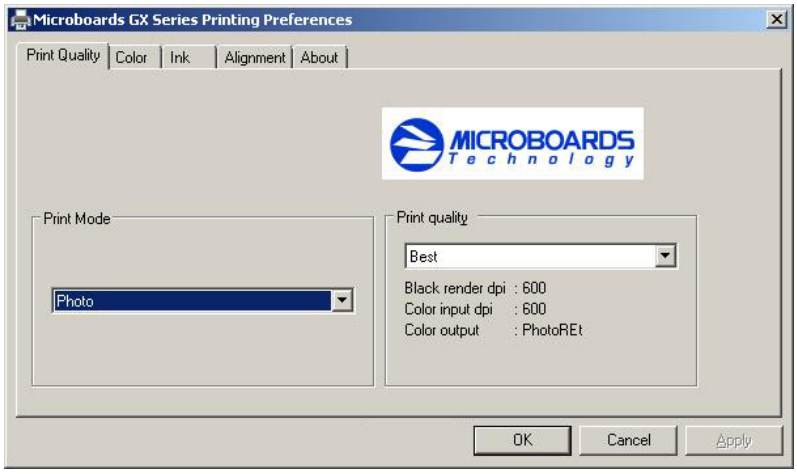
Print Quality Tab

Print Quality

- Best
- Normal
- Fast

Print Modes

- Text and Graphics
- Photo



Printing Recommendations

Text and Graphics mode is used for printing mainly text information and small, simple graphics. Below are some examples for images in Fast, Normal and Best Modes:

Text and Graphics – Fast

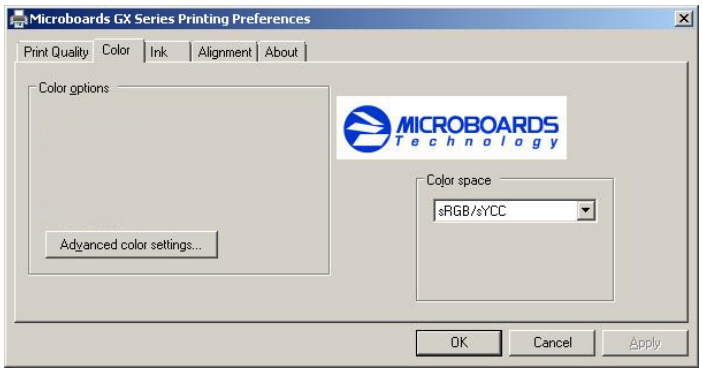
Text and Graphics – Normal

Text and Graphics – Best

Photo Mode should be used when printing on the entire disc or when using detailed graphics. Here is an example:

Photo – Normal, Best, and 4800x1200 Modes

Color Tab



Color Space defines the range of colors that can be printed. **sRGB/sYCC** will be the setting selected unless your image specifically was created using the **AdobeRGB** standard.

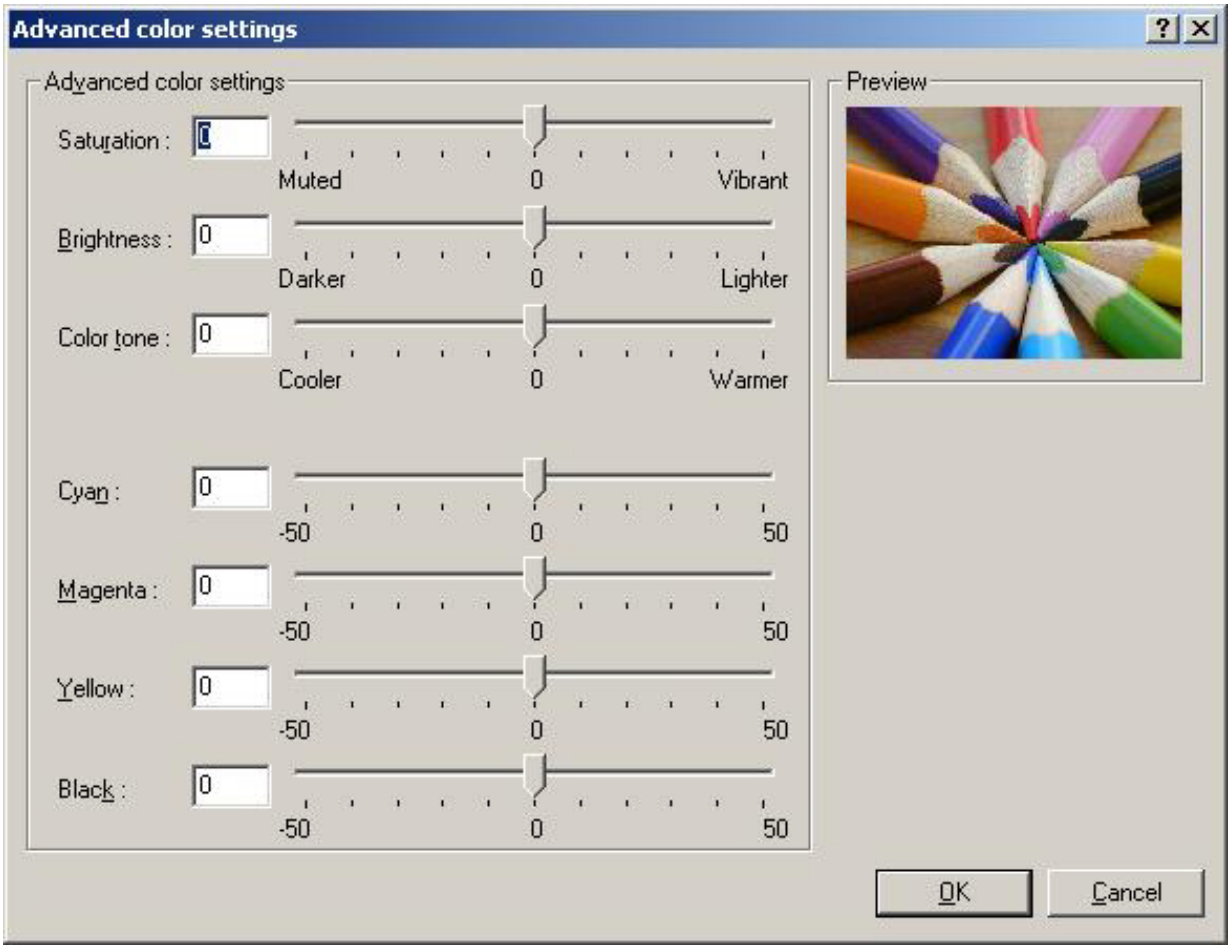
Click the **Advanced color settings** button on the Color tab to access the controls.

Advanced Color Settings

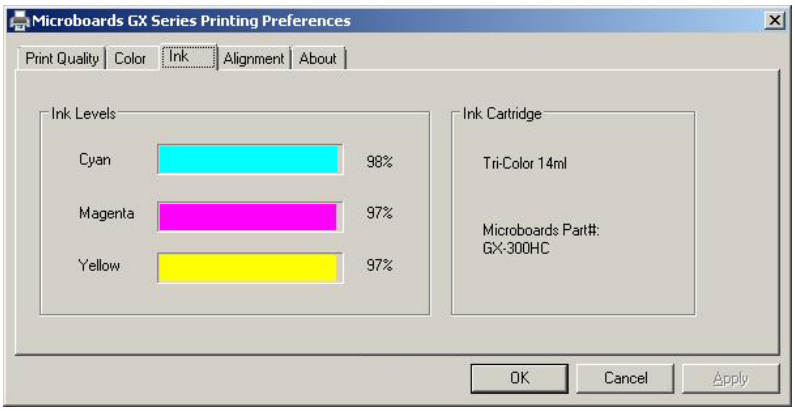
Saturation, **Brightness** and **Color Tone** allow you to fine tune your print image.

The individual colors levels can be manipulated using the **Cyan**, **Magenta**, **Yellow**, and **Black** slide bars. Moving the slide bar pointers to the left decreases the color level, while moving the slide bar pointers to the right increases the levels. You can also enter a specific value between **-50** and **50** in the number field to the left of the slide bars. Click the **OK** button when your changes are complete.

The default levels for all Advanced Color settings is **0**.



Ink Tab



The **Ink Levels** show how much remains of all 3 colors, Cyan, Magenta and Yellow.

NOTE: If you place a used cartridge in the GX Auto Printer, the ink level may not be reported correctly. If the GX Auto Printer can identify the cartridge, it may report the correct ink levels; if not, it will assume that the ink cartridge is new and will show ink levels of 100%.

Before each disc is printed, the ink levels are checked. If the level of any one color is has reached 10%, a warning message will be displayed on your PC and printing will be temporarily suspended. You can either change the cartridge at this point and click OK, or click OK to continue printing using the same cartridge.

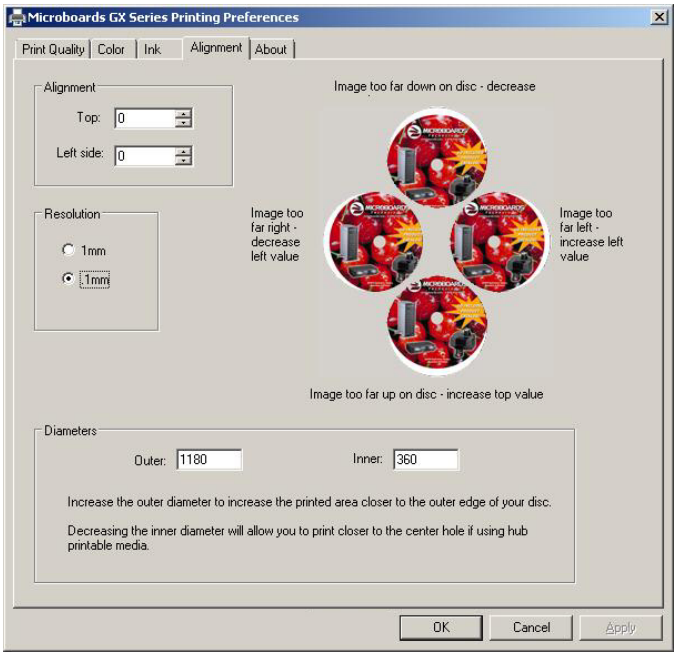
If you continue with the same cartridge, printing will continue uninterrupted until the ink level reaches 5%. The low ink level warning will be displayed once more. Again, either change the cartridge or continue.

Once the ink level reaches 3% or less, the warning will be displayed before each print.

It is strongly recommended that you replace the cartridge at this point.

The **Ink Cartridge** information includes the re-order part number for the cartridge.

Alignment Tab



Alignment values will move the print image on the disc. Use the graphic on the right side of the tab as a guideline in how alignment values should be adjusted.

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

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 GX Auto Printer is printing off the media.

The default diameter settings are **1180** for the **Outer** and **360** for the Inner when the resolution is at **.1mm**. For hub-printable media, the Inner diameter should be reduced.

About Tab

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

Manual Software Re-Installation

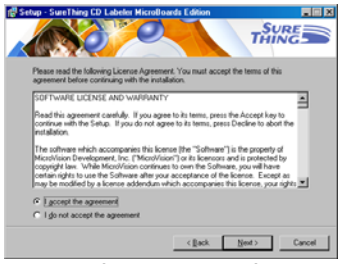
This section will only apply to a manual re-installation of the SureThing software package. If you have not yet installed the GX Auto Printer using the Installer, it is recommended that you do so.

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

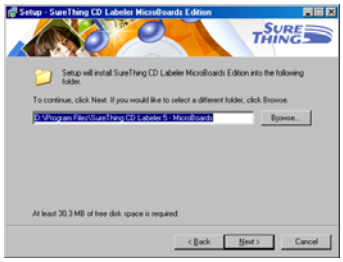
A. ***(Recommended)*** Insert the Microboards GX Auto Printer Installation CD into the CD/DVD ROM drive on your computer and select the **Repair** option when the installer starts. Click the **SureThing Disc Labeler** button to reinstall SureThing.

Follow these steps once the SureThing installer launches:

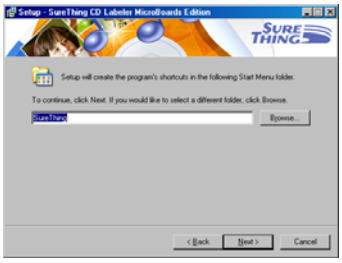
1. Click **Next** to continue.



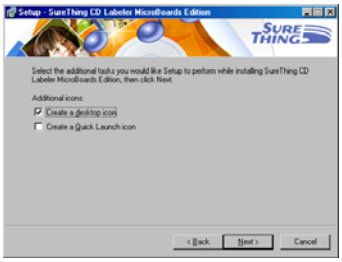
2. Once the User License screen appears, select **I Accept** and click the **Next** button.



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\GX Installer\Applications** directory on your hard drive. Follow the on-screen instructions as shown in steps 1-7 above.

Troubleshooting

Printer not printing

1. Confirm the GX Auto Printer 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 light on the power button is lit on the front panel. If AC power is on and the green light is off, press the power button firmly and wait for several seconds. If the light still does not come on, contact Microboards Technical Support.

3. Confirm the GX Auto Printer 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. Also check to make sure the correct printer port is selected.

Red LED Flashing

This indicates an out of media state. Load media and press the OK button on the GX Auto Printer to clear the error state.

If a dialog appears on the PC stating that the printer did not recognize any media, you will need to press the OK button on the printer and click the OK button in the dialog to clear the error state.

Disk Feed 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 GX Auto Printer. Remove any discs found on the belts. Close the cover.

Low Ink indication

Before each disc is printed, the ink levels are checked. If the level of any one color is has reached 10%, a warning message will be displayed on your PC and printing will be temporarily suspended. You can either change the cartridge at this point and click OK, or click OK to continue printing using the same cartridge.

If you continue with the same cartridge, printing will continue uninterrupted until the ink level reaches 5%. The low ink level warning will be displayed once more. Again, either change the cartridge or continue.

Once the ink level reaches 3% or less, the warning will be displayed before each print.

It is strongly recommended that you replace the cartridge at this point.

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

Printing Specifications

Print Speed:
Depends upon percentage of coverage and print mode selected:
Photo Normal Mode: Approx. 45 seconds for 100% full-color coverage
Text & Graphics Best Mode: Approx. 20 seconds for 100% full-color coverage
Text & Graphics Normal Mode: Approx. 12 seconds for 20% coverage

Ink Cartridge Types:
Microboards GX-300HC

Media Types:
Printable-surface 120mm CD-R or DVD-R

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

Maximum Print Width:
4.72" (120mm)

Power Supply:
Auto Detect AC Power:
90VAC – 240VAC, 47Hz – 63Hz

Warranty:
One Year Limited Warranty

Print Technology:
HP Thermal Inkjet
Print Quality, Black: 600 x 600 dpi, with HP PhotoREt
Print Quality, Color: up to 4800 x 1200 optimized dpi, with HP PhotoREt
Color Technology: HP PhotoREt

Memory:
64MB

Connectivity:
USB. USB 2.0 recommended

Technical Support

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

United States	Europe	Japan
PH: 952-556-1639	PH: +44 (0) 845 230 7800	PH: 03-3561-2266
FAX: 952-556-1628	www.microboards.co.uk	www.microboards.co.jp
support@microboards.com		
www.microboards.com		

Please have the Model and Serial Number of your GX Auto Printer 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.

Canadian Department of Communications (DOC) Statement

This Class B digital apparatus complies with the Canadian ICES-003 Issue 4:2004. Cet appareil numerique de la classe B est conforme a la norme NMB-003 du Canade.