GX Auto Printer

For Mac OS X

Users Manual

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Introduction

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

What's Included

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

- GX Auto Printer print and record 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 Microboards
- GX-300HC Color Ink cartridge (14ml)
- USB Printer Cable
- Input Bin rods (already installed)
- 50 disc output assembly

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

System Requirements

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

Operating System

Mac OS 10.3.9 or above.

Processors

G 4 Power PC Processor, running at 1.2 GHz or faster; ***-or-*** Intel Processor.

System Memory

Minimum 512 MB of system memory. 1GB is recommended for DVD recording operation.

Hard Drive

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 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 Installation

Assembly Instructions

GX Auto Printer Assembly

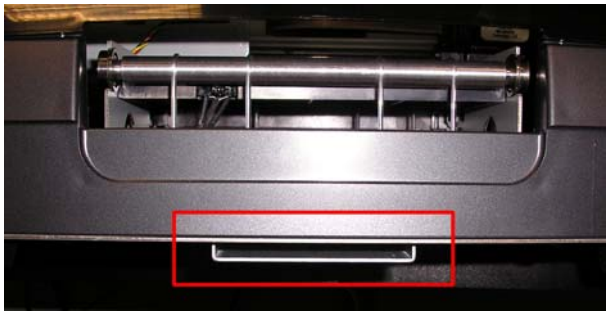
Remove the GX Auto Printer system from the shipping box and confirm you received all of the items.

Place the GX Auto Printer on a stable, flat surface. You will need room both 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.

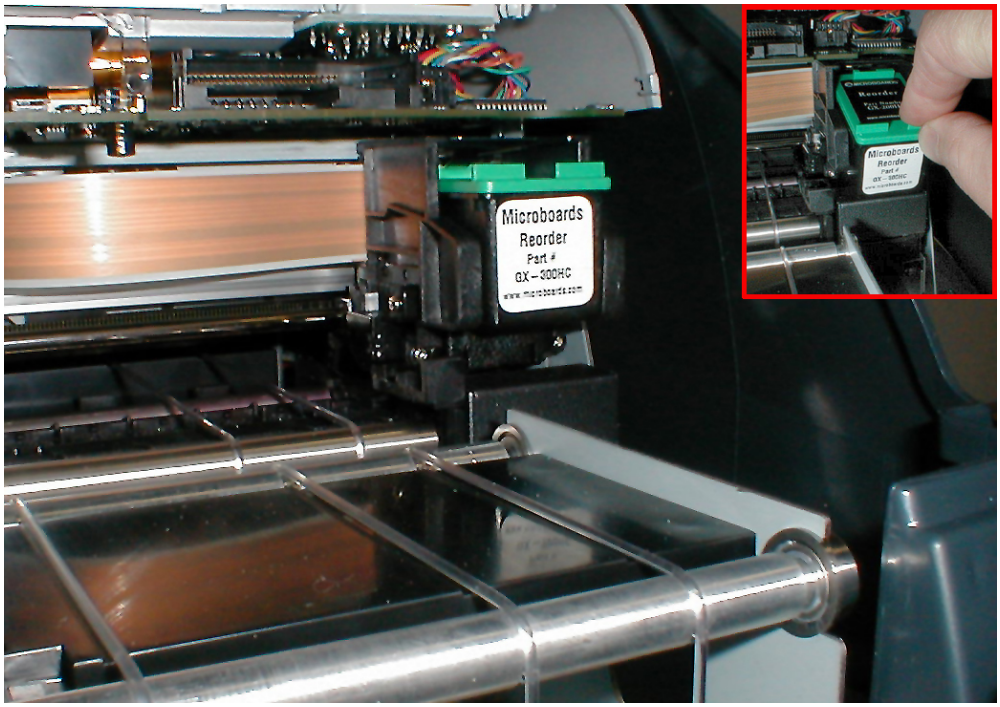
Refill kits or non-Microboards ink cartridges are not recommended for use in the GX Auto Printer system. Use of these types of cartridges will cause the printer to fail. Use of these types of cartridges will void the warranty.

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 **Microboards 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.



The Microboards GX-300HC Ink Cartridge must be used or the printer will not function.

Installation of Drivers and Software

Driver Installation

Drivers must be installed on a hard disk. Once you have installed the software, store the original installer disc in a safe place.

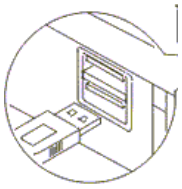
1. Insert the Installation CD in your system's disc drive. Open the disc icon when it appears on the desktop.
2. Double-click on the **Microboards Installer.pkg** icon. Follow the on-screen instructions, read and agree to the end user license agreement.
3. When prompted, enter your administrator password.
4. When prompted, click **Install**.
5. Once the installation has completed, click **Restart**.

Connecting to a Mac

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

The connection between the Mac and the Microboards GX Auto Printer is done with one USB 2.0 cable.

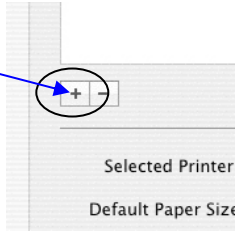
1. Confirm that the power is turned OFF on the GX Auto Printer and on your Mac.
2. Install a GX-300HC Ink Cartridge (see page 7).
3. Plug in the AC power cord to the back of the GX Auto Printer. ***Do not turn on power to the GX Auto Printer until an ink cartridge has been installed.***
4. Connect the square shaped end of the USB cable to the back of the GX Auto Printer.
5. Connect the flat, rectangular end of the USB cable into a USB 2.0 port in your Mac.
6. Turn on the GX Auto Printer.

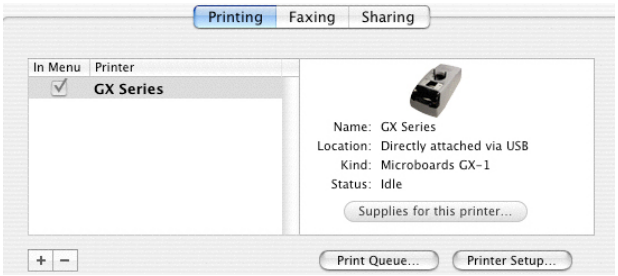


Adding the GX Auto Printer

Once the drivers and software have been installed and the GX Auto Printer connected, the GX Series Printer needs to be added.

1. Click **System Preferences** in the Dock.
2. Select **Print & Fax**, then click the **Add** or **+** button to add a printer.
3. Select **GX Series** from the list and click the **Add** button.
4. Once the GX Auto Printer Series Printer has been added, it will appear in the available printers list, as shown below.

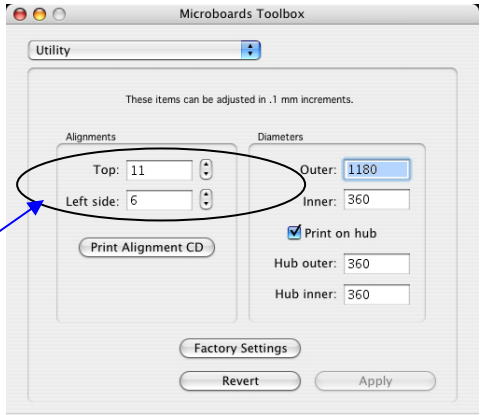




Setting Printer Alignment

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 **System Preferences** in the Dock.
- Select **Print & Fax**.
- Click the **Set Up Printers…** button.
- Highlight the Microboards GX Series icon.
- Click the **Utility** button to open the Microboards Toolbox.
- Select **Utility** from the Toolbox list.
- Enter the values listed with the GX Auto Printer into the Top and Left Side boxes.
- Click the **OK** button.
- Verify the alignment by printing full coverage image. 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.

Using the GX Auto Printer

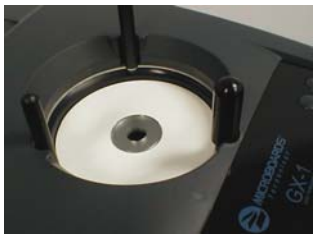
Creating Disc Labels

The first step is to create a disc label of the correct size, 12cm x 12cm. You may use any application you prefer to create your labels.

Included on the Installation disc are 2 eps-format templates for you to use. These are essentially blank files of the correct size that show where the outer edge of the disc and the inner hub will the image when your disc label designs are printed. One is for use with non-hub printable media (36mm hub), while the other is to be used with hub printable media. Simply copy your artwork into these files to create an easy disc label.

These files do not need to be used, but are provided for an easy reference when creating labels.

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.

Printing Discs

While the Microboards GX Auto Printer will print from any application, you should always choose the **GX Series** printer and **120mm disc** in the **Format For** and **Paper Size** Page Setup selections, respectively.

It is highly recommended that the image you are printing is 120mm by 120mm. Having a different size image may result in the improper placement of the image on the disc.

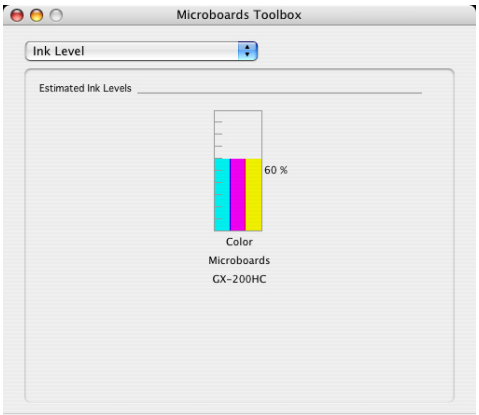
Printing prior to burning any media is not recommended!!

Microboards Toolbox

Access the Toolbox by selecting the **System Preferences** from the Dock. Select **Print & Fax**. Highlight the Microboards GX Series icon and click the **Utility** icon. The Toolbox pages will appear in the following order.

Ink Level

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 Mac and printing will be temporarily suspended. You can either change the cartridge at this point, or 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.

Test

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 directly onto the belts below the input hopper. The robotics will not load the disc for you.
- From the Microboards Toolbox, select **Test**.
- Click the **Test** button.
- Once printing is complete, the disc will be ejected into the output hopper.

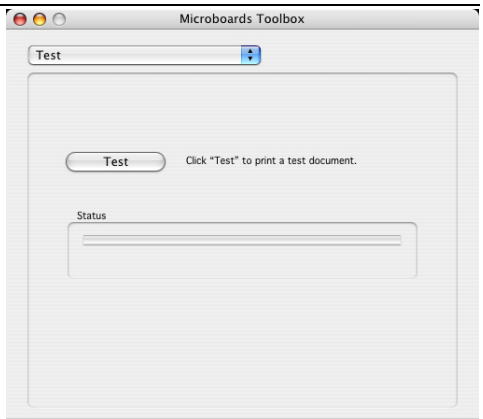
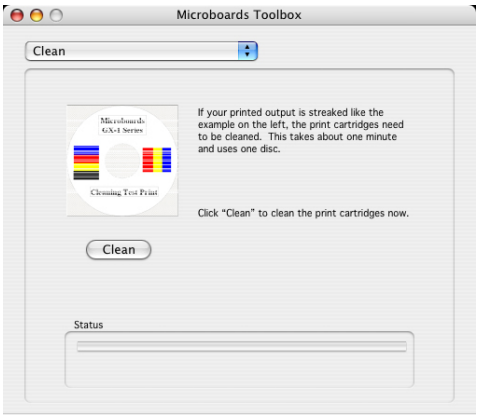


Figure 3

Clean

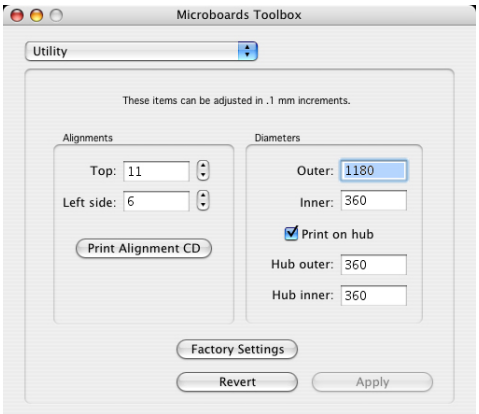


The Clean page allows you to run a cleaning cycle on the ink cartridge.

Like the Test disc, a disc must be placed directly on the belts below the input hopper for the utility to function.

Click the **Clean** button once a disc has been loaded to the belts. If the resulting disc shows streaks similar to those shown in the image on this page, you may need to run the Clean utility again.

Utility



The **Alignment** values will move the print image on the disc in 0.1 mm increments.

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.

If you have media with a printable inner hub separated from the rest of the disc by an unprintable ring, you can set the inner and outer hub diameters appropriately. If you are using media with a continuous print surface, the Print on Hub setting should not be checked.

Print Alignment CD will print out the alignment pattern. This should only be done using a pre-printed alignment CD.

Factory Settings will restore the values to the default values. The Top and Left Side values will be changed to 0.

Revert will discard any changes you have made since the **Apply** button was clicked.

Support

Clicking the **Support** button will open the Microboards Technology Support website in your default internet browser. This function requires an internet connection.

Register

Clicking the **Register** button will open your default internet browser to the Microboards Product Registration webpage. When registering your GX Auto Printer, please be sure you are including the correct serial number, which will be on the back of the GX Auto Printer and on the box product label. This function requires an internet connection.

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.
4. Confirm that the **Microboards GX-300HC Ink Cartridge** is being used. The GX Auto Printer will not function with any other cartridge!

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.

Disk Loading error

1. If a disc is not loaded correctly, an error message will be displayed on your Mac. 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.
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

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 Mac and printing will be temporarily suspended. You can either change the cartridge at this point or 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.