



**MICROBOARDS<sup>®</sup>**  
*Technology*

# G3 Disc Publisher

*For Mac OS X*



## Users Manual



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 numérique de la classe B est conforme à la norme NMB-003 du Canada

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# Introduction

The Microboards G3 Disc Publisher is a single drive, 50 disc, print and record system. The G3 combines professional quality printing and recording into a single, easy to use duplicator. The system includes one 24x DVD recorder. Microboards and HP co-developed the printer technology, allowing up to 4800 x 1200 dpi printing. The Microboards PrintWrite software is a dynamic interface for both beginners and power users. Easily record DVD Video, DVD data, Audio CD's, Data CD's, Video CD's and much more.

Other features include:

- Asynchronous print and record function
- Creation of audio CD's from MP3 or wave files
- Batch mode, allowing multiple different masters to be used at a time.
- Integrated print function.
- A cover flow of your recently-used images used for printing.
- Multi-job queueing.

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## What's Included

When unpacking your G3 Disc Publisher system, the following items should be included:

- G3 Disc Publisher print and record system
- G3 Disc Publisher Quick Start Guide
- Power Cord
- Blank Printable CDs
- Users Manual (This document)
- Microboards G3 Disc Publisher Install CD (Includes drivers and Microboards PrintWrite software)
- 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.

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## System Requirements

The Microboards G3 Disc Publisher has the following minimum requirements and compatibilities:

### Operating System

Mac OS 10.5

### Processors

Intel Processor is required

### System Memory

Minimum 1 GB of system memory

### 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 required. USB 1.1 is not supported, as using USB 1.1 will result in significantly longer recording times and the potential for recording failures.

## Assembly and Installation

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### Assembly Instructions

#### G3 Disc Publisher Assembly

Remove the G3 Disc Publisher system from the shipping box and confirm you received all of the items.

Place the G3 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.

The Input Bin posts are pre-installed, with the wide post to the right.

The 50-disc Output Bin is shipped in place under the front cover. Lift the cover to remove the packaging tape from the Output Bin.



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# Installing Ink Cartridges

## Supported Ink Cartridges

The G3 Disc Publisher uses a single color ink cartridge. The part number for this cartridge is GX-300HC. If other cartridges are installed, the G3 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 G3 Disc Publisher system. Use of these types of cartridges will cause the printer to fail and will void the warranty.***

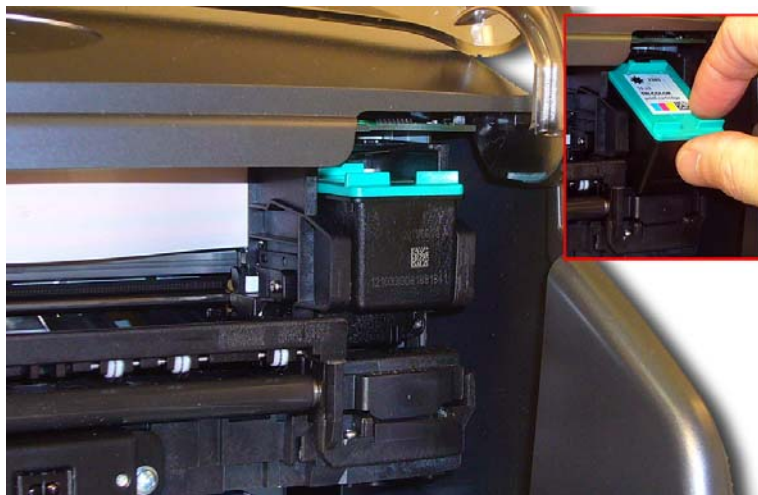
## Loading / Replacing Ink Cartridges

Cartridges should be changed while the G3 Disc Publisher is on. The cartridge can be replaced during printing.

The G3 Disc Publisher system ships with one **Microboards GX-300HC** color ink cartridge.

- Lift the front cover with the power on. The ink cartridge cradle will move to the right side of the G3 Disc Publisher, 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 **GX-300HC** ink cartridge from its packaging and carefully remove the plastic tape. Hold the ink cartridge so that the copper strip is at the bottom.
- With the front of the new **GX-300HC** ink cartridge tilted down, slide the cartridge into the cradle.
- Tilt the front of the **GX-300HC** ink cartridge back up to lock the ink cartridge in place.
- Lower the front cover.
- The new **GX-300HC** ink cartridge will be initialized by the printer.

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



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## Loading Discs

The next step is to load your G3 Disc Publisher with 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 G3 Disc Publisher will only accept 12 cm discs. Business card or 8 cm discs are not supported by this system.



Figure 1



Figure 2

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

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

The G3 Disc Publisher 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.

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## Front Control Panel

The AC power switch located on the back of the G3 Disc Publisher must be turned on first in order to supply power to the Front Control Panel.

The **Power Button** on the front panel of the G3 Disc Publisher turns the G3 Disc Publisher Printer on and off. It may take a few seconds for the G3 Disc Publisher Printer to turn on after you press the Power Button. This does not affect power to the drive within the G3 Disc Publisher.

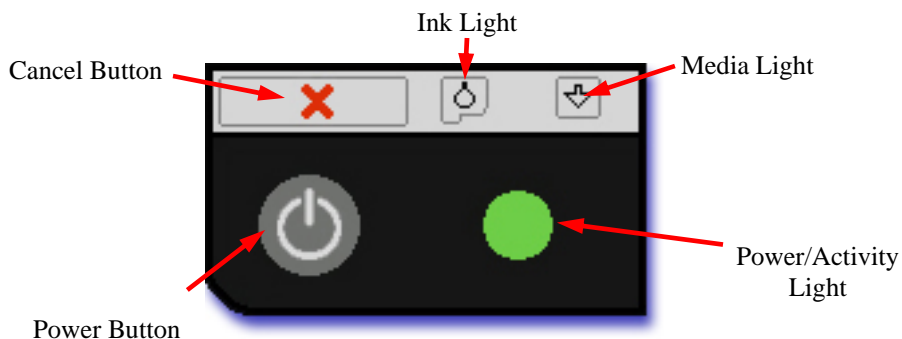
To turn off the power to the printer using the Control Panel, you will need to press and hold the Power Button for 3 seconds. Once the Ink Light, Media Light, and Power Light begin flashing, you can release the Power Button.

The green Power/Activity light flashes when the printer is active, either while printing or initializing.

The **Cancel Button** can be used to discontinue printing. When using PrintWrite, this will only affect the current disc being printed. If printing through other applications, this will either cancel the entire print job or just the current disc depending on the label being printed and the application being used. Any disc being printed when the Cancel button is pressed will be ejected into the Output bin.

If a disc is not detected during printing, the **Media Light** will flash. Verify that you have discs in the input hopper and press the Media Light to load and print the next disc.

The **Ink Light** will come on if the ink cartridge is low or empty.





# Installation of Drivers and Software

## Driver and Microboards PrintWrite Installation

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

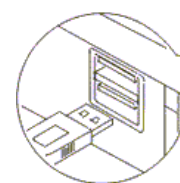
1. Insert the Installation CD in your system's disc drive. Open the disc icon when it appears on the desktop.
2. Double-click on the **Microboards Publisher.mpkg** icon. Follow the on-screen instructions, read and agree to the end user license agreement.
3. When prompted, enter your administrator password.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

## Connecting to a Mac

***DO NOT CONNECT YOUR G3 DISC PUBLISHER BEFORE RUNNING THE INSTALLER LOCATED ON THE INSTALLATION DISK!!***

The connection between the Mac and the Microboards G3 Disc Publisher is done with one USB 2.0 cable.

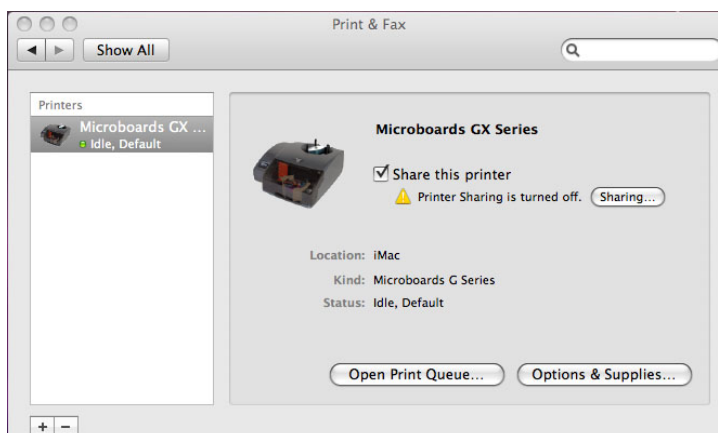
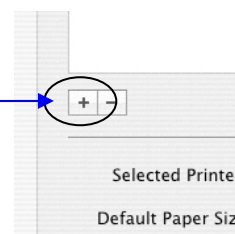
1. Plug in the AC power cord to the back of the G3 Disc Publisher.
2. Confirm that the power is turned ON to both the G3 Disc Publisher and on your Mac.
3. Connect the square shaped end of the USB cable to the back of the G3 Disc Publisher.
4. Connect the flat, rectangular end of the USB cable into a USB 2.0 port in your Mac.



## Adding the GX Series Printer

Once the drivers and software have been installed and the G3 connected, the GX Series Printer needs to be added.

1. Click **System Preferences** in the Dock.
2. Select **Print & Fax**. If the **GX Series** printer has not been added automatically, 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 Series Printer has been added, it will appear in the available printers list, as shown below.



# Printer Alignment

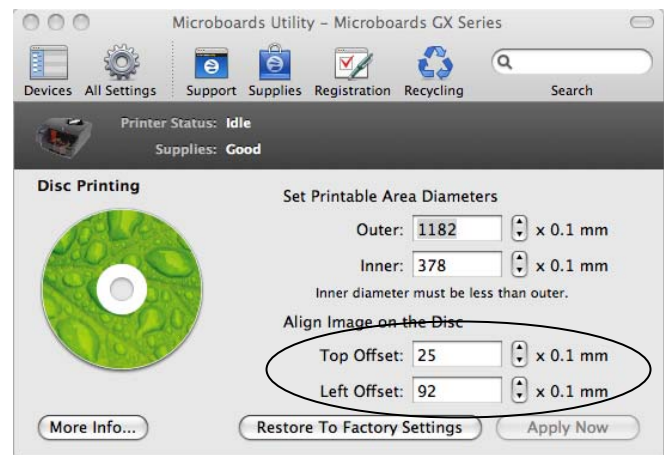
*Verify the printer alignment the first time you use the Publisher. You may need to align your printer before the printed images will be centered on your media. Changing the brand or type of media you are using may also require small alignment adjustments.*

## Alignment

- Click **System Preferences** in the Dock.
- Select **Print & Fax**.
- Select **Print & Fax**.
- Double-click the **Microboards GX Series** icon.



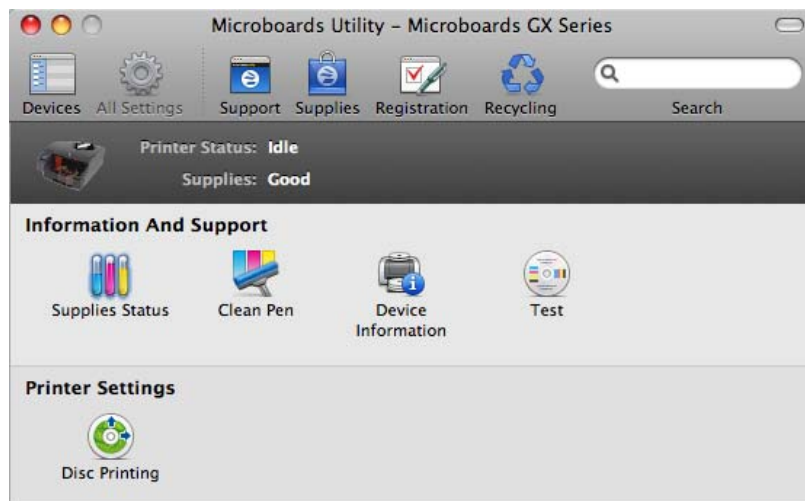
- Click the **Printer Setup** button.
- Click the **Utility** button to open the Microboards Toolbox.
- Click the **Open Printer Utility** button.
- Click the **Disc Printing** icon.



- Enter the alignment changes into the **Top** and **Left Side** boxes. These settings will change the size of the top and left margins, respectively. Decreasing the values will move the image up or to the left, increasing will adjust down or to the right.
- Click the **Apply Now** button.
- Verify the alignment by printing a 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.

## Microboards Utility

Access the Microboards Utility by selecting the **System Preferences** from the Dock. Select **Print & Fax**. Highlight the Microboards GX Series icon and click the **Utility** icon. You can also select **Open Printer Utility** from the **Utilities** menu in PrintWrite. The Utility will allow you to access the Printer information as shown below.



*Docked  
Utility Icon*

## Supply Status

The **Supply Status** page shows how much remains of all 3 colors, Cyan, Magenta and Yellow.

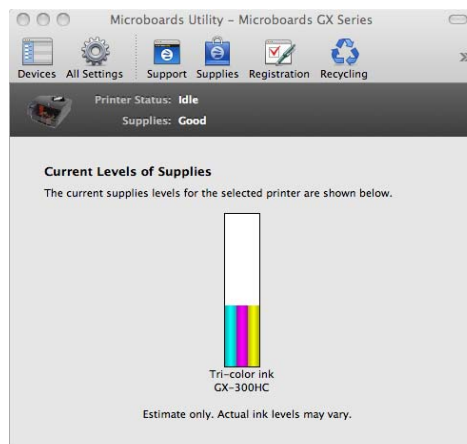
NOTE: If you place a used cartridge in the G3, the ink level may not be reported correctly. If the G3 can identify the cartridge, it may report the correct ink levels; if not, it will assume that the ink cartridge is new and will show ink levels of 100%.

Before each disc is printed, the ink levels are checked. If the level of any one color 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.**



## Clean Pen

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

At least one disc must be in 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.



## Device Information

Click the **Device Information** icon to view Model and Firmware Version of your GX Series printer.

## Test

To confirm the computer is communicating with the G3 Disc Publisher, print a Test Disc. This can be done with one of the inkjet printable CD's included with your G3 Disc Publisher, or an inkjet compatible disc you may already have. To print the Test Disc:

- Load at least one piece of printable media in the Input hopper.
- From the Microboards Toolbox, select **Test**.
- Click the **Test** button.
- Once printing is complete, the disc will be ejected into the output hopper.

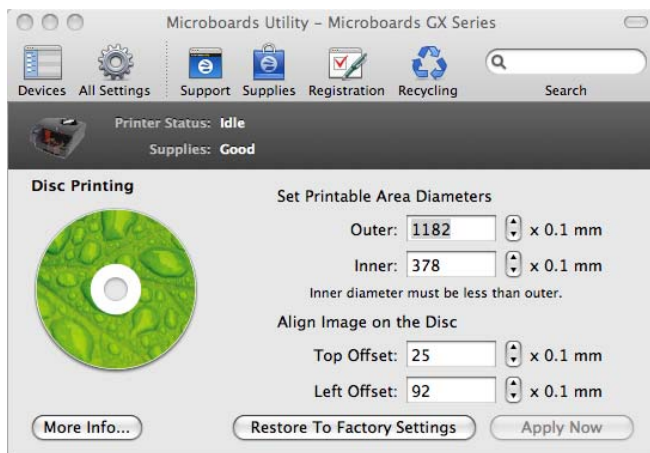
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## Disc Printing

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 G3 Disc Publisher is printing off the media.

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

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



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## Support

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

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## Supplies

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

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## Registration

Clicking the **Registration** button will open your default internet browser to the Microboards Product Registration webpage. When registering your G3 Disc Publisher, please be sure you are including the correct serial number, which will be on the back of the G3 and on the box product label. This function requires an internet connection.

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## Recycling

Clicking the **Recycling** button will open the Microboards Technology website in your default internet browser to provide you with information on recycling used ink cartridges. This function requires an internet connection.

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## The G3 Disc Publisher and PrintWrite

Microboards PrintWrite is required to control the Burn and Print functionality of the Microboards G3 Disc Publisher. It is able to set up publishing jobs, load the GX, burn to the loaded disc, unload the disc, and then print the image you have selected.

PrintWrite will automatically find your G3 Disc Publisher the robotics and printer when the application is opened. Having more than one robotic system connected to the Mac is not supported.

Please see the Microboards PrintWrite manual for more information on using PrintWrite.

# Print Only without PrintWrite

While PrintWrite does include a Print Only project type, you can print from any application to the G3 Disc Publisher. When printing using the G3 Disc Publisher from any application, you should always choose **GX Series** 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!!***

## Troubleshooting

### Printer not printing:

1. Confirm the G3 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 light on the power button is lit on the Control Panel. If AC power is on and the green light is off, press the power button on the Control Panel and wait for several seconds. If the light still does not come on, contact Microboards Technical Support.
3. Confirm the G3 Disc Publisher is connected to the computer. This can be checked by clicking on Start, going to Settings and selecting Printers. Confirm the printer is listed and is active.
4. Confirm that the **Microboards GX-300HC Ink Cartridge** is being used. The G3 Disc Publisher will not function with any other cartridge!



### Disc 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 G3 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

Before each disc is printed, the ink levels are checked. If the level of any one color 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 0%, the warning will be displayed before each print.

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

*Please note that the percentage indicates the lowest of the three ink color levels, not the overall ink level. Because of this, cartridges containing multiple ink colors may not feel empty when the ink level is reporting 0% as one color may be empty while the others are not.*

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:**

Inkjet Printable-surface 120mm CD, DVD, and BD optical media (BD publishing support requires a BluRay Publisher)

**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 2.0 required

# 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](mailto:support@microboards.com)

[www.microboards.com](http://www.microboards.com)

**Europe**

PH: +44 (0) 845 230 7800

[www.microboards.co.uk](http://www.microboards.co.uk)

**Japan**

PH: 03-3561-2266

[www.microboards.co.jp](http://www.microboards.co.jp)

Please have the Model and Serial Number of your G3 Disc Publisher available when contacting Technical Support.

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