Introduction

Congratulations on your purchase of the M-Audio iControl for GarageBand, a control interface designed for use with Apple's GarageBand music software. With iControl, you will be able to control all the various aspects of GarageBand from an intuitive control surface, maximizing your working speed. While the operation of the iControl is very simple, we recommend that you read once through this manual to familiarize yourself with all of the controls and functions available to you.

What's In the Box

Inside your iControl package, you will find:

- The iControl controller
- Printed Quick Start Guide
- Six foot USB cable

Product Features

- Eight endless rotary encoders
- Master Volume slider
- Six Transport buttons
- Select, Mute, Solo, and Record Enable buttons
- Jog wheel
- Powered from USB bus
- Fully configured—no additional setup is necessary

Minimum System Requirements

NOTE: The below requirements are necessary to obtain MIDI communication between iControl and the computer. These requirements do not reflect the additional or higher requirements of GarageBand software.

- GarageBand 2.0.1 or later
- Mac OS X 10.3.4 or higher
- Available USB port

About This Manual

This manual is broken down into sections to cover the various aspects of iControl. Installation is covered first, followed by an overview of the controls. Last is an in-depth look at the operation of iControl.

Installation Procedure

Basic Installation

Because it is a class-compliant device, installing iControl on your Mac OS X computer is simple and straightforward:

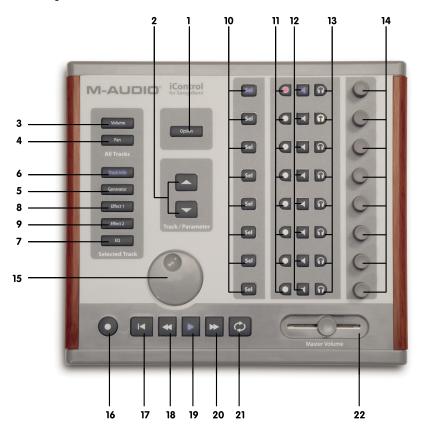
Use the supplied USB cable to connect iControl to a USB port on your computer and you'll be ready to go. You can do this while the computer is on or off, and no driver installation is necessary.

Using iControl With GarageBand

iControl was designed to work exclusively with Apple's GarageBand software version 2.0.1 or higher. Once you connect iControl to your computer, GarageBand will identify it and make it active. There are no additional preferences to change.

Hardware Controls and Indicators

This section will familiarize you with the interface of iControl. Please reference the image below when reading about each control.



- Option Button: This button changes the functionality of other iControl buttons. All modified iControl commands are covered in each function's description.
- 2. Track/Parameter Buttons: When working on All Tracks (either Volume or Pan is selected), these buttons will move up or down through the tracks in GarageBand eight at a time, allowing you to control other tracks from iControl. When working on a single track (i.e. to edit an effect), these buttons will move the rotary encoder assignments by eight parameters. Lastly, with the Track Info Button pressed, the Track/Parameter Buttons will be inactive.
- Volume Button: Pressing this button will make the rotary encoders adjust the volumes of the selected tracks.
- Pan Button: When active, the eight rotary encoders will control the pan position of the selected tracks.
- Generator Button: Pressing this button allows for parameter editing of the selected Track's Generator, via the iControl's rotary encoders.
- Track Info: Pressing this button allows for parameter editing of the selected Track's instrument via the iControl's rotary encoders.
- EQ Button: Pressing this button allows for parameter editing of the selected Track's Equalizer, via the iControl's rotary encoders. Pressing the EQ button while holding down the Option button will enable or disable the EQ for this track
- 8. **Effect 1 Button**: Pressing this button allows for parameter editing of the selected Track's first insert effect, via the iControl's rotary encoders. Pressing the Effect 1 button while holding down the Option button will enable or disable the Effect 1 for this track.
- Effect 2 Button: Pressing this button allows for parameter editing of the selected Track's second insert effect, via the iControl's rotary encoders. Pressing the Effect 2 button while holding down the Option button will enable or disable the Effect 2 for this track.
- 10. Select Buttons: These buttons are used to select the track you wish to edit. When in Track Info mode, the select buttons are used to turn specific functions of the selected track on and off. These are from top to bottom:
 - SEL 1—enables or disables the Noise Gate (if it is a Real Instrument track)
 - SEL 2—enables or disables the Compressor
 - SEL 3—enables or disables the first effect
 - SFL 4—enables or disables the second effect
 - SEL 5—enables or disables the EQ
 - SFL 6—enables or disables Echo
 - SEL 7—enables or disables Reverb
 - SEL 8—not assigned
- Record Enable Buttons: Pressing this button will enable the corresponding track for recording. Pressing any Record Enable button while holding down the Option button will disable recording for all tracks.
- 12. **Mute Buttons**: Use this button to turn the output of the corresponding track on and off. Pressing any Mute button while holding down the Option button will unmute all tracks.
- Solo Buttons: When pressed, you will listen to the track (and other soloed tracks) exclusively.
 Pressing any Solo button while holding down the Option button will disable Solo for all tracks.

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- 14. Rotary Encoders: These endless knobs are used to adjust parameters of GarageBand depending on the current mode selected (i.e. Volume, Pan, EQ, Channel Strip, etc.). When holding down the Option button while turning an encoder, the according parameter's value is set to the minimum or maximum, depending on whether you increase/decrease it. When in Track Info mode, the encoders are used to control specific functions of the selected track. These are from top to bottom:
 - ENCODER 1—controls the Noise Gate (if it is a Real Instrument track)
 - ENCODER 2—controls the Compressor
 - ENCODER 3,4—not assigned
 - ENCODER 5—edits Pan
 - ENCODER 6—edits Echo level
 - ENCODER 7—edits Reverb level
 - ENCODER 8—edits Volume
- 15. Jog Wheel: Use this knob to move the playhead forward and backward. Turning the Jog Wheel clockwise while holding down the Cycle button will enable the cycle, set the left edge of the cycle region to the current playhead position and then move the playhead as well as the right edge of the cycle region.
- Record Button: Mirrors the Record Button in GarageBand and engages a new recording session
- 17. **Rewind to Start Button**: Moves the playhead to the beginning of the song.
- 18. Rewind Button: Moves the playhead backwards in the timeline. Pressing the Rewind button while holding down the Cycle button will enable the cycle and set the left edge of the cycle region to the current playhead position.
- 19. Play Button: Press this button to start playback in GarageBand.
- 20. Fast Forward Button: Moves the playhead forwards in the timeline. Pressing the Fast Forward button while holding down the Cycle button will enable the cycle and set the right edge of the cycle region to the current playhead position.
- Cycle Button: When on, GarageBand will cycle playback of the currently selected area of the song.
- 22. Master Volume Slider: This slider adjusts the output volume of GarageBand.

Operational Overview

iControl is used to control various aspects of GarageBand including transport and track parameters. iControl is designed to control eight tracks simultaneously, but can be used with songs over eight tracks in size. When controlling a song with more than eight tracks, you'll need to use the Track/Parameter buttons to select the tracks you wish to control. Furthermore, when editing specific parameters, such as certain generators and effects, you may have more than eight parameters to control, and in this situation, you will use the Track/Parameter buttons to select the parameters you want to change. Below is a simple walk-through of how to use iControl:

Working with All Tracks

When pressing the Volume or Pan button, iControl will be in All Tracks mode. In this mode, each horizontal row of controls on iControl corresponds to a horizontal track in GarageBand. You will be able to use the rotary encoders to change the Volume or Pan of the tracks, depending on whether you've pressed the Volume or Pan buttons.

If you have more than eight tracks in your song, you can move up and down through the tracks using the Track/Parameter buttons. You will see the selector graphic in GarageBand move to the appropriate tracks as you press these buttons. Once you've changed your selection, the horizontal rows of iControl will control these new tracks.

Working with Selected Tracks

Thankfully, GarageBand gives you more control over your music besides volume and pan. You also have access to, e.g., EQ and effects. These additional functions are accessed through iControl one track at a time. The five buttons—Generator, Track Info, EQ, Effect 1, and Effect 2—compose the Selected Track's functions. That is, you will use the eight rotary encoders to control multiple parameters of the currently selected track.

In this mode, you will use Track/Parameter buttons to select a group of eight parameters to work on, and you will use the Select Buttons to select the specific track you want to edit. For example, press the Select Button on track 2, then press the Effect 1 button. The Effect 1 for track 2 will be shown on screen. Now, the rotary encoders will be used to adjust the various effect parameters. You can also use the Track/Parameter buttons to select additional parameters, if the effect has more than eight parameters.

Please note: in the Track Info mode the Track/Parameter buttons are not assigned. The Select buttons are used to turn specific functionalities of the selected track on or off.

Master Controls

The Transport buttons, Jog wheel, and Master Volume control all work regardless of what track(s) are selected. The Transport buttons and Master Volume behave exactly like those in GarageBand. The Jog Wheel can be used to move through your song.

Troubleshooting

While iControl is a simple device with few connections, you may run across problems from time to time. If your iControl is not behaving as expected, please try the procedure detailed below. It may save you from having to contact Technical Support.

Problem: My iControl is not turning on. **Reason**: iControl is not receiving power.

Solution: iControl is powered from the USB bus. If you are using a hub, make sure it is a powered hub. A non-powered hub will not provide enough power to iControl. If you are not using a hub, try replacing the USB cable.

Technical Support

If you are having trouble with your iControl and the procedures in the Troubleshooting section do not solve your problem, you may call M-Audio Tech Support for further assistance. Before you call, be sure to be in front of your computer with it turned on, and be ready to tell the Support Representative what type of computer you're using (i.e. Mac G5 1GHz), the operating system installed (i.e. Mac OS X 10.3.5), and the version number of GarageBand.

M-Audio Tech Support is open from 7am to 7pm PST, Monday through Friday, and can be reached at (626) 633-9055. You can also submit an e-mail request through the M-Audio website.

Contacting M-Audio

If you have any questions, comments or suggestions about this or any M-Audio product, we invite you to contact us by using the following information:

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Technical Info

Caution: Electro Static Discharge, Electrical Fast Transient and Conducted RF interference may cause the unit malfunctioning. In such case, unplug the unit and plug it in again to restore normal operation.

Note: Your M-Audio product has been tested to comply with FCC Standards FOR HOME OR OFFICE USE. Modifications not authorized by the manufacturer may void users authority to operate this device.

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:

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



Warranty Terms and Registration

Warranty Terms - M-Audio warrants products to be free from defects in materials and workmanship, under normal use and provided that the product is owned by the original, registered user. Visit www.m-audio.com/warranty for terms and limitations applying to your specific product.

Warranty Registration - Thank you for registering your new M-Audio product. Doing so immediately both entitles you to full warranty coverage and helps M-Audio develop and manufacture the finest quality products available. Register online at www.m-audio.com/register to receive FREE product updates and for the chance to win FREE M-Audio gear.