

It is absolutely amazing to me how quickly the home studio market has moved in the last several years in terms of quality and useability. While nothing can replace the experience and knowledge of good producers and technicians, it is certainly possible to rival the multitracking and mixdown capabilities of top-end studios using equipment with a much smaller footprint.

Theoretically, all you need these days is a decent laptop, a USB or Firewire recording interface, headphones, and software with good virtual mixing capabilities to produce a product reasonable enough for distribution. However, the quest for most savvy computer based musicians is finding the "sweet spot" that balances simplicity with efficiency.

I think for guitar players, music creation is a tactile experience. There is a certain level of physical connection you need to have with your music. For me, actually grabbing a fader and notching it up so slightly or tweaking a knob with my fingers is as important as the time spent holding my guitar recording rhythms, solos, and fills.

Thanks to Mackie and their Control Universal Pro and C4 Pro controllers, I have found a level of interaction that I didn't know I was missing in my home setup! These units have received rave reviews from everyone from "weekend warriors" to digital sound studios - ([Click here to see how these controllers were used to produce Spider-Man 3 - this guy has a sweet setup!](#)) - and now GuitarGearHeads.com brings you our take on these devices. Read on for the details!

MACKIE.

Introduction

My journey into computer based recording developed quickly after I picked up guitar and began to try to make music. I soon realized that there were a number of levels that we all tend to evolve through as we explore the huge range of possibilities in "home studio" recording.

The first level was the most rudimentary. I used an adapter and a mini-plug cable and jacked my guitar directly into the computer using the "microphone in" port on the computer and made some recordings using **Audacity**. It worked, but this setup didn't offer much flexibility. It was fine for the moment though, since all I wanted at that time was to record what I was playing as a practice tool.

My changing needs led me to a second level that manifested itself as a stand alone 4-track TASCAM recorder. This was a pretty cool device since it allowed the use of MIDI instrument tracks and MP3s, and had a bunch of built-in guitar and EQ effects. Frankly, it is still a pretty neat tool for portable recording, but the interface and sound quality makes it cumbersome to work on anything more than basic recording projects.

The third level was a move back to computer based recording with more sophisticated tools. On one computer I connected a Mackie ONYX 1220 mixer with a Firewire interface and on another computer I used a TAPCO Link.USB device. Using software like Ableton Live and Mackie Tracktion, my ability to produce fairly sophisticated multi-tracked material has improved dramatically.

The trouble you will begin to notice at this point is that as you add more layers, and thus more tracks, you also begin to add all kinds of filters, effects, and plugins. You can easily begin to lose track of all the elements of your masterpiece. Furthermore, you also begin to spend more time "pointing-and-clicking" to tweak minor settings than you do in the actual creative process.

Since I already had a top-notch, studio quality mixer in the OXYX board, I was able to expand my recording productivity by connecting the Mackie Universal Pro control surface and the C4 Pro virtual instrument controller. After getting used to the jog wheel and all the extra faders and knobs, I can tell you that this setup has quickly become indispensable, and what I now consider to be the 4th level!

Universal Pro

The Mackie Control Universal Pro is a state-of-the-art digital control surface that allows a friendly analog interface between you and your DAW software that merges Mackie Control, Logic Control and HUI technologies into one unified surface. If you are familiar with the Mackie Control Universal, you should note that the Mackie Control Universal Pro is the next generation of this device and offers many significant upgrades. One of the most important is that you no longer need a separate MIDI interface since it includes a "plug-and-play" onboard USB MIDI interface which allows ports for all kinds of MIDI devices as well as the C4 Pro extension unit.



Like all Mackie gear, the Universal Pro has a definite "pro-studio" feel. I have always liked the faders and knobs on Mackie gear for their smooth and accurate response. The Universal Pro has nine 100mm motorized, touch-sensitive, optical faders from Penny + Giles, one for each channel and a master fader. The faders move easily and are actually almost *too* slippery. In addition, each channel has a rotary V-Pot which is unique in that it serves as both a push-button (hence the V for virtual) and a rotary control mechanism. The V-Pot illuminates its current value using a bright LED collar, and provides dedicated buttons for record ready, solo, mute, channel select, and signal present LED. Keep in mind that you are not limited to eight channels - the Universal Pro can handle as many as your DAW will allow. To support channel navigation you'll find navigation buttons for bank selection on the master section as well as a

variety of software specific controls. The default labels are specific to Apple Logic Pro; however, there are lexan overlays for other DAWs. Included in the box I received were overlays for Pro Tools, Tracktion, Cubase, Digital Performer, and Sonar - others are available from the Mackie website.

I found the quick-start manual to be very well written and easy to follow during setup. Included with the documentation is an DVD-ROM that contains a full copy of Mackie's excellent Tracktion 2.1 software (NOTE: Version 3 has recently been introduced) and full user manuals.

Depending on your needs, you can start off with the Mackie Control Universal Pro and add "extenders" such as the Extender Pro and C4 Pro modules. This is a great feature since allows you to gradually add capability as your projects get bigger, or as funds are available.

Features at a Glance:

- Proprietary Mackie communication protocol for seamless music production software integration
- 100mm touch-sensitive optical Penny + Giles motorized faders
- V-Pot control over software, plug-in effects and virtual instruments
- More than 50 dedicated push-buttons for fine control of software parameters
- Tape-style transport controls
- Full meter display with track names and parameters
- Quick cursor-style buttons for Up, Down, Left, Right and Zoom
- Onboard USB MIDI interface for direct connection to Mac or PC and up to 3 additional pieces of external MIDI gear
- Software-specific Lexan overlays included
- Expandable via optional Mackie Control Extender Pro and C4 Pro modules

Supported Software

- ACID Pro 6
- Audition
- Cubase
- Digital Performer
- Final Cut Pro 5
- Logic
- Live 5
- Nuendo
- Pro Tools
- Reason 3
- Samplitude
- SAWStudio
- Sequoia
- Sonar
- Soundscape
- Soundtrack Pro
- Tracktion
- Vegas

Grade: A+

Pro's: Great feel, intuitive layout, powerful, compact design

Con's: May take some re-training if you are used to other controllers

Street Price:\$1,199

C4 Pro

The Mackie Control C4 Pro can be used as a standalone unit; however, I hooked this one up as an extension module to the Mackie Control Universal Pro. The C4 Pro is a 32 channel controller designed provide unprecedented control for plug-ins and virtual instruments in an intuitive, compact design. Using the included C4 Commander software, the C4 Pro can also be used to provide easy operation of external MIDI devices, such as synths, effects, and guitar processors. The C4 Pro is nicely designed to sit alongside the Universal Pro. If you choose to a standalone implementation you will also need a separate USB MIDI interface; otherwise you can hook it up directly to the Universal Pro and take advantage of the its onboard MIDI controller. Directions for setup and operation are clearly described in the quick-start manual.



Like the Universal Pro, the C4 Pro uses V-Pots. However, on this device they are the primary control mechanism and there are 32 of them arranged in 4 rows of 8, each labeled by a virtual "scribble strip" display. Three groups of buttons underneath the knobs allow you customize exactly how your software and devices display on the C4. Again, the default labeling is for Logic (and Sonar); however, you'll find lexan overlay options for Traktion and Reason as well. The C4 unfortunately does not work with all DAW devices - so check with your software manufacturer prior to purchase to see if they have integrated support. Another word of note, you will need to also purchase MIDI cables to connect the C4 Pro to the Universal Pro or your MIDI device since they are not included.

I really like the idea of the C4 and I can really see how this kind of device would be indispensable if you need exacting control across a large set of plug-ins, instruments, and devices. I will admit that it may be a bit of overkill for smaller applications, but it sure does look cool sitting next to the Universal Pro!

Features at a Glance:

- Proprietary Mackie communication protocol for seamless music production software integration
- Perfectly integrates with Logic, Reason, Sonar, Traktion and more
- Provides real-time, hands-on control of plug-in effects and virtual instruments
- Intuitive control of multiple plug-ins at once — up to 32 parameters simultaneously
- 32 V-Pot rotary encoders with integrated push-buttons
- 4 huge backlit LCDs for immediate visual feedback of plug-in parameters / settings
- LED rings around every V-Pot display exact knob positions
- Provides the most detailed visual feedback of any rotary control surface available
- Standalone use or integrated with Mackie Control Universal Pro / Extender Pro system
- Includes C4 Commander Pro software for control of external MIDI-enabled hardware effects, instruments and other devices

When should you add a C4?

- If you are a professional needing sophisticated interface equipment for recording and mixing.
- If you are doing post-production for film and video.
- If you are involved in television or radio broadcast production.
- If you are building high-end home studio DAW capabilities.
- If you need to simplify MIDI Sequencing / Scoring projects.
- If you direct sound design for live productions.

Grade:A

Pro's: Plenty of controllers, Backlit Scribble Script Display

Con's: May not work with all devices - may be overkill for smaller home studios

Street Price:\$999

System and Setup

Setting up the Control Universal Pro is just about as easy as it comes. Unpack the unit, plug it in, turn it on, connect the USB cable and plug it into your computer. The computer immediately recognizes the Universal as a "USB Audio Device" and makes it available for use in your DAW. That's about it. The C4 is nearly as easy - just hook it up and run your MIDI in and out to the Universal (or other MIDI connector). I didn't really even need to look at the quick start guide to figure it out. The tricky bits do come when you have to select the Controller and MIDI options in your DAWs setup screen - which involved me spending a few minutes hunting down the appropriate selections.

My computer in this case was a Dell Laptop with Dual Intel Processors and 1 GB of RAM. I am using a Mackie ONYX 1220 mixer with a Firewire interface card as my audio interface. I tested the Universal and the C4 largely with Mackie Tracktion 2.1, which may have biased this review towards ease of use. Nevertheless integration was an absolute snap. As an aside, other reviews I have read on this device indicate that integration is equally as easy in other DAWs such as Logic. I will say that this particular computer setup is really not as beefy as I would like it for heavy applications since it had a tendency to stutter a bit when CPU load is high and all tracks were active (as opposed to frozen). I intend on moving this entire setup over to a dedicated Sweetwater Creation Station at some point in the near future.

My initial tests certainly had the biggest "cool" factor. I went to the Mackie Tracktion project menu and selected an existing project. As soon as it loaded, all of the channels automatically labeled themselves on the LCD panels, and the automated faders moved into place with current settings illuminated. From this point I was in complete control of the action from the Universal. The most useful tool, in my opinion, was the Jog Wheel, since I could shuttle back and forth over mix segments with ease - but I also enjoyed the ability to quickly focus on individual tracks using the channel options.

I'm being conservative when I say that it took me no more than 30 minutes before I had already settled into a little groove. Though, over a few days, I checked out the manual in fair depth to make sure I was making use of all the features. Over time, it seemed to me that certain things worked better using the mouse and other things worked better using a combination of the Universal and the C4. So I found myself often times with one hand on the mouse and one hand shifting among the faders, V-Pots, and jog wheel. I'm sure you'll quickly develop your own preferences. The real message here is that these control devices quickly work themselves into your work flow. After playing with them for several weeks, I'm not sure I could go back to just the mouse for complicated projects.

Conclusion

After working with the Control Universal Pro and C4 Pro for awhile, I have come to appreciate the real advantages of having professional level studio equipment. My workflow has become more efficient, but more than that, I've gained the feeling that I'm in greater control of each of the parameters of the mix. In many ways, the computer has become more like an instrument and less like a tool.

The two units work seamlessly together, and software support is pretty good overall - with Logic, Sonar, Trackton and Reason having the tightest integration across both units. You should note that these devices are not going to replace your mouse. Rather, it will complement your existing setup and give you greater flexibility in how you control the mix. As I mentioned earlier, I quickly grew accustomed to having a mouse under one hand and the control surfaces under the other hand. In addition to the Mackie Control units, you will need a USB or Firewire recording interface for your microphones and instruments if you don't have one already.

What I love most is the expandability. Since you can sometimes lose your place when bank switching, I can already see how another extension unit would add value on mixes with more than 8 tracks. I'm not going to say that price won't be an obstacle for some folks, but if you are focused on acquiring high-end, quality studio gear - then I think you'll find the Mackie Control series pretty tough to beat at this level. For these reasons, it's my pleasure to give the Mackie Control series the 2007 GuitarGearHeads "Studio Ready" award!



Dan Halberg

Copyright © 2007 Allen & Halberg Publishing, Inc.

All Rights Reserved

GuitarGearHeads.com® is a Division of Allen & Halberg Publishing, Inc.