

Search

Search

Gearwire Forums

Site Help

Gear Type

- ▼ [Bass Guitar](#)
 - [Bass Amps](#)
 - [Bass Effects](#)
 - [Bass Guitars](#)
- ▼ [Computer Music](#)
 - [Interfaces/Hardware Controllers](#)
 - [Non-Keyboard](#)
 - [Sample Libraries](#)
 - [Software/DAW](#)
 - [Software Effects](#)
 - [Software Instruments](#)
- [DJ](#)
- [Drums and Percussion](#)
- ▼ [Effects and Processors](#)
 - [Bass Effects](#)
 - [Guitar Effects](#)
 - [Signal Processors](#)
- ▼ [Guitar](#)
 - [Acoustic Guitars](#)
 - [Electric Guitars](#)
 - [Guitar Amps](#)
 - [Guitar Effects](#)
 - [Other Guitar](#)
- ▼ [Keyboard](#)
 - [Controllers](#)
 - [Other Keyboard](#)
 - [Samplers](#)
 - [Synths](#)
- ▼ [Live Sound](#)
 - [Live Signal Processors](#)
 - [Other Live](#)
 - [PA Speakers](#)
 - [Power Amps](#)
 - [Stage Microphones](#)
 - [Stage Mixers](#)
 - [Wireless](#)
- [Location Sound](#)
- ▼ [Other](#)
 - [Books](#)
 - [Brass](#)
 - [Room Acoustics](#)
 - [VJ Software](#)
 - [Woodwind](#)
- ▼ [Recording](#)
 - [Headphones](#)
 - [Multitracks](#)
 - [Reference Monitors](#)
 - [Signal Processors](#)
 - [Stereo Recorders](#)
 - [Studio Microphones](#)
 - [Studio Mixers](#)

Gearwire

Pro Reviews PreSonus Stage Mixers Studio Mixers

digg it del.icio.us more

print

PreSonus StudioLive 16.4.2 Digital Mixer Review By Rick Weldon: Got Live (And Studio) If You Want It

July 29, 2011



PreSonus has released a trio of portable digital mixers with FireWire connectivity that are equally suited to both live mixing and studio recording. Aptly named StudioLive, these mixers come in three formats: the 16.0.2 (\$1,299.95 street), the 16.4.2 (\$1,999.95 street), and the 24.4.2 (\$3,299.95 street). In this review, I'll examine the StudioLive 16.4.2, which packs a wealth of features into a reasonable amount of space.

On the Surface

It is immediately apparent that the PreSonus StudioLive 16.4.2 offers greater functionality than you expect from a 16-channel digital mixer (see **Fig. 1**). For example, it can be configured as a 32-input, 18-output digital-audio interface in a multichannel recording environment, whether you're in a studio or in a club. With 16 PreSonus XMAX, Class A preamps, the StudioLive 16.4.2 is more than adequate to accommodate sound reinforcement for a typical 4-piece rock band. It also includes six aux buses, four subgroups, digital effects, and the company's Fat Channel setup (which I will describe in a moment).

The analog I/O on the rear panel is designed to cover a variety of needs (see **Fig. 2**). All 16 input channels have XLR and 1/4-inch TRS (balanced) jacks, as well as an unbalanced insert point. Each mic input can be individually phantom-powered, including the talkback input, which also has a dedicated level control. (Phantom power to the talkback mic isn't switchable; it's always on.)



Fig. 1: The StudioLive 16.4.2 is a full-featured digital mixer that offers direct control over nearly every important feature.



REVERB PLUG-IN
for VST, AU and RTAS



"It immediately became
my go-to reverb."
Bo Boddie
SonicScoop.com
(Santana, Everlast,
Korn, Reni Lane)



Interested in advertising on Gearwire? [Contact us](#) for more information.

Keyword search

Search More options

Guided search

Click a term to initiate a search.

Gear Type

- [Computer Music](#) (4648)
- [Guitar](#) (2937)
- [Recording](#) (1645)
- [Effects and Processors](#) (1286)
- [Keyboard](#) (850)
- [Live Sound](#) (791)
- [Other](#) (475)
- [Drums and Percussion](#) (440)
- [Bass Guitar](#) (415)
- [DJ](#) (411)
- [Location Sound](#) (98)

Gearwire Content

- [Product News](#) (5829)
- [Trade Show Coverage](#) (2911)
- [Artist Features](#) (1273)
- [Gearwire Labs](#) (964)
- [Expert Features](#) (907)

- ▼ Products
 - [Product News](#)
 - [Pro Reviews](#)
 - ▼ [Demonstrations](#)
 - [Amp Lab](#)
 - [Bass Walkthrus](#)
 - [Guitar Walkthrus](#)
 - [Stompbox Walkthrus](#)
 - [Synth Lab](#)
- ▼ Series
 - [Gearwire Crosstalk](#)
 - [Gearwire Graveyard](#)
- ▼ People
 - [Artist Features](#)
 - [Expert Features](#)
- ▼ How To / Reference
 - [Gearwire Gallery](#)
 - [Gearwire Q&A](#)
- ▼ Blogs
 - [Staff Blogs](#)
 - [Guest Blogs](#)
- ▼ Trade Show Coverage
 - [17th Rebeats Chicago Drum Show 2007](#)
 - [119th AES 2005](#)
 - [121st AES 2006](#)
 - [122nd AES 2007](#)
 - [123rd AES 2007](#)
 - [125th AES 2008](#)
 - [127th AES 2009](#)
 - [2007 Chicago Guitar Show](#)
 - [Movement 2007: DEMF](#)
 - [MusikMesse 2007](#)
 - [MusikMesse 2009](#)
 - [MusikMesse 2010](#)
 - [Summer NAMM 2005](#)
 - [Summer NAMM 2006](#)
 - [Summer NAMM 2007](#)
 - [Summer NAMM 2008](#)
 - [Summer NAMM 2009](#)
 - [Summer NAMM 2010](#)
 - [Winter NAMM 2006](#)
 - [Winter NAMM 2007](#)
 - [Winter NAMM 2008](#)
 - [Winter NAMM 2009](#)
 - [Winter NAMM 2010](#)
 - [Winter NAMM 2011](#)
- ▼ Site News
 - [Announcements](#)
 - [Contests](#)

Gear Brands

- [Browse Top Brands](#)
- [Browse All Brands](#)
- [Ableton](#)
- [Alesis](#)
- [Apple Computer](#)
- [Boss](#)
- [Cakewalk](#)
- [Digidesign](#)
- [DigiTech](#)
- [Electro-Harmonix](#)
- [Epiphone](#)
- [Fender](#)

The main stereo output is available on XLR and ¼-inch TRS jacks, while an additional mono XLR output carries the summed signal from the stereo bus. Both XLR output sections have level controls.

The jack field also includes six aux sends, two stereo aux returns, four balanced subgroup outputs, and a stereo pair of control-room outs on balanced ¼-inch jacks. Stereo pairs of RCA input and output jacks are provided for unbalanced line signals to and from a tape machine or other device.

PreSonus put the 16 pre-insert balanced outputs on a pair of 25-pin connectors, referred to as DB25 in the industry, which makes it very convenient when you want to patch directly into a tape machine or digital hardware device. You'll have to provide your own breakout cables, which can be configured as 8 XLR male connectors or 8 ¼-inch TRS plugs on the opposite side of each DB25 connector.

The digital connections include a pair of FireWire 400 ports and a single coaxial S/PDIF output. The FireWire sends are prefader, allowing you to set the record levels to your computer independently from your main and monitor mixes. And if you need to double the channel count, you can daisy chain a pair of StudioLive16.4.2's together.



Fig. 2: The board offers 16 individually phantom-powered mic inputs. The analog outs are on space-saving DB25 connectors.

The mixing surface has 21 100mm faders—one for each channel, four for the subgroups, and one master—and 8 15-segment LED meters that display level and gain reduction for the subgroups, the stereo mains, and the selected Fat Channel. The easily readable LCD can show the parameters for the mixer's two internal stereo DSP engines (each of which offers 50 effects), information for creating and recalling custom or preset channel settings, system and firmware settings, and parameters for a 31-band graphic EQ. Dedicated buttons for setting parameters and storing custom patches are provided.

Additionally, the Fat Channel LED ladders function as a meter bridge for all 16 channels and for the 6 aux buses and 2 aux FX buses. You can also use the Fat Channel knobs and meters to create aux mixes.

The controls on the mixing surface are intuitively laid out, whether you're working on a channel, a subgroup, an aux send, or the master. This includes per-channel gain controls and buttons for solo, mute, post, and select.

Get Fat

The blue section in the middle of the board is the secret weapon of the StudioLive 16.2.4, the Fat Channel, which can be selected and set individually for any channel, aux, subgroup, effects bus, and the master bus. Fat Channel gives you instantaneous control over a highpass filter, a compressor, a limiter, an expander/gate, a 4-band quasi-parametric EQ, panning, polarity, and simple edit commands (copy/paste/load/save). Remarkably, every channel can employ individual, customized Fat Channel processing simultaneously. You can easily copy and paste all or selected Fat Channel settings across one or multiple channels and can save/load sets of all or selected Fat Channel settings, as well as entire mixer Scenes. The FireWire channel outputs can be used either with or without Fat Channel EQ and dynamics processing using the Post button in the Fat Channel's digital output section.

The EQ's low-mid and high-mid bands have a Q button that switches between a wide and narrow bandwidth. The gate has controls for threshold and release time, and the compressor offers threshold, ratio, attack, release, and makeup gain parameters. Each channel has an Auto button that, when pressed, sets the compressor's attack and release times to 10ms and 150ms, respectively. Hard and soft-knee compression can be toggled using another button in the compressor section.

In addition to Fat Channel processing, there is a stereo 31-band graphic equalizer on the main bus and six mono 31-band graphic EQs on the aux outputs. You can use these to compensate for room acoustics or speaker response, or to reduce feedback in a live setting.

There are plenty of reverb and other time-based effects provided by the two internal effects engines. In a live setting, you might use one effects processor for the monitor mix and the other on the main mix.

While playing around with three or four tracks of vocals and percussion, I went a little crazy with the effects just to see what would happen. I was able to get a wide variety of sounds by going back and forth between pre- and post-Fat Channel settings, or by combining different subgroups with their own effects. The processing was always graceful and musical sounding, no matter how far-flung my experiments were. And there was never any extraneous noise or harshness in the audio quality.

[Blogs](#) (229)
[Series/Events](#) (205)
[Pro Reviews](#) (162)
[How To/Reference](#) (71)
[Site Info](#) (35)
[People](#) (2)

Brands

[Fender](#) (303)
[Roland](#) (282)
[Gibson](#) (234)
[Korg](#) (223)
[Native Instruments](#) (209)
[Yamaha](#) (145)
[Ableton](#) (141)
[Loopmasters](#) (141)
[Line 6](#) (131)
[Cakewalk](#) (125)
[more...](#)

- [Focusrite](#)
- [Gibson](#)
- [Ibanez](#)
- [IK Multimedia](#)
- [Korg](#)
- [Line 6](#)
- [M-Audio](#)
- [Mackie](#)
- [Marshall](#)
- [Martin](#)
- [Moog Music](#)
- [Native Instruments](#)
- [Numark](#)
- [PreSonus](#)
- [Propellerhead](#)
- [Roland](#)
- [Sennheiser](#)
- [Shure](#)
- [Sony](#)
- [Steinberg](#)
- [Tascam](#)
- [TC Electronic](#)
- [Vox](#)
- [Waves](#)
- [Yamaha](#)

Monthly Archives

- [Browse by Month](#)

Site Information

- [About Us](#)
- [Contact Us](#)
- [Privacy Policy](#)

Capturing The Music

The StudioLive 16.2.4 ships with Capture and Studio One Artist (Mac/Win), multitrack recording and editing applications that, together, make up a complete recording package right out of the box. Although you can use StudioLive with Apple Logic, Avid Pro Tools 9, or any other DAW, Capture is designed to work exclusively with the StudioLive mixer and is mainly intended for simple tracking and editing chores, whether live or in the studio. Although it has standard non-linear editing capabilities (such as splice, cut, copy, paste, and move), it is not intended for mixing. Rather, PreSonus designed it to be a rock-solid recording environment.

In Capture, each channel on the StudioLive is automatically sent via FireWire to a corresponding track. You engage Fat Channel processing on each track using the Post button. In addition to the 16 tracks that correspond to the mixer channels, Capture's Mix track acts as a separate stereo destination (tracks 17 and 18). The default output that feeds this track is the main stereo outputs. However, you can send the Mix track an input from the subgroups, the aux sends, the effects sends, the aux returns, and several other sources. And your choice of digital routing to the Mix track has no effect on the analog output of the mixer itself. This gives you a wide range of input choices to the computer without affecting your hardware setup.

Capture has a straightforward interface that displays all of its information in a single window. You can insert and navigate among markers, and drag to resize audio files as easily as with other major software products. Although Capture only records 24-bit, 44.1 and 48kHz Broadcast WAV Format (.bwf) files, it can import standard .wav files and .aiff files.

Your only mixing option with Capture is to do so in real time through the board while recording the main output to the stereo Mix track. There are no automation or plug-ins available, only the per-channel effects on your StudioLive. To do a proper mix later, you have to export the files and work in Studio One Artist or another DAW.

Capture allows you to export files in two ways. First, you can save your session as an Open TL file; if you use Open TL-compatible software, all of your edits, placements, and markers will transfer. If you don't use Open TL-capable software, then your best bet is to export the audio from each track as a single file. Although this takes a bit more time, it can be set up using the Option button in the Export dialog box. The developer also suggests dropping markers between songs and then exporting all songs at once, as multitrack folders, which you can do with a single command.

One For The Studio

The other included software app, Studio One Artist, is a full-featured DAW that has plug-in effects and soft synths, as well as a collection of loops. I kept both programs running loops for long periods of time on my Mac during the review, and neither of them crashed.

Studio One Artist is probably what you'll gravitate towards for tracking and mixing in the studio. As with Capture, Studio One Artist couldn't be easier to use. There are several StudioLive templates included, and after opening one, I was recording a track within seconds.

Because this is a full-featured application, describing Studio One Artist at length is beyond the scope of this review. However, I was shocked at how much horsepower was immediately available, and the quality of the plug-ins was exceptional. It is an intuitive application to use, and if you have any experience with multitrack software, you can get going pretty easily by just poking around a bit. If you get stuck, there is plenty of info in the StudioLive manual, as well as a comprehensive instructional DVD to help you out.

Of course, if you prefer using another DAW, you can set up a template within it for the StudioLive 16.4.2. My preferred application is Logic, and PreSonus just happens to have a Logic Studio template available for download. A mere 20 seconds after downloading and installing the template from the Web, I was happily tracking. (If you're used to the workflow of another DAW, note that Studio One Artist offers alternative sets of key commands borrowed from Logic, Pro Tools, and Cubase, to make it easier for you. You can even create your own commands. Neat!)

Both Capture and Studio One Artist were rock solid on my 4-year-old Mac Pro, which is what I used for the majority of testing. When I used them on my 2-year-old laptop running Vista, which barely met the system requirements, Capture was sluggish and audio playback hiccupped with just one track looping. I tried several buffer settings with no success. If you plan to use StudioLive or Capture on a PC, it's a good idea to have a system that exceeds the minimum processor and memory requirements.

Freeware, Too

There is a pair of free apps available for the StudioLive 16.4.2. With Virtual StudioLive (Mac/Win), which ships with the mixer, all mixer functions can be controlled from your computer, and you can also use it to update the firmware on the board. The coolest thing about this software is that it allows you to view all Fat Channel settings at once, adjust Fat Channel settings, and drag-and-drop presets or custom settings to the channels. This application becomes indispensable quickly.

There's also a free StudioLive Remote app for the iPad, which gives you the same functionality, allowing you, for example, to create a main mix and monitor mixes, and EQ the room during soundcheck from any seat in the house. Pretty cool.



"True to its name, the StudioLive 16.4.2 is as useful for sound reinforcement and recording as it is in the studio."

Great for Studio, Great for Live

True to its name, the StudioLive 16.4.2 is as useful for sound reinforcement and recording as it is in the studio. As to its sturdiness, the mixer has some plastic surfaces, but they're reinforced by a steel frame, giving this board a satisfying heft. Consequently, I'd feel comfortable taking it to a performance. It has full-size, long-throw faders that are comfortably spaced and military-spec buttons that are durable.

I prefer dedicated knobs and buttons to menu surfing. Fortunately, the StudioLive 16.4.2 doesn't have multiple-menu layers. And once you get used to the Fat Channel and the few menus it does have, you'll be controlling the mixer with ease. (This is especially true if you download and use Virtual StudioLive.)

Last, but not least, it's easy to love the sound of the StudioLive 16.4.2. The XMAX preamps sound great and have a ton of gain. The outputs are extremely quiet, and the onboard digital effects sound good, even when multiple effects are stacked up. Studio One Artist's plug-in effects are equally musical.

If you're in the market for a complete digital mixer package—particularly if you want something suitable for both stage and studio—the StudioLive 16.4.2 is a great way to go.

PROS: Intuitive interface. Versatile connectivity. Excellent bundled software. Great sound. Fat Channel. DSP effects.

CONS: None

Rich Wells is a writer/recordingist/guitar player that can usually be found in a windowless box beneath his home, earning his keep in front of many aging computers. Once in a while he'll do some nutty thing like build an all-tube theremin or modify a junker electric organ into a guitar amp.

[captions] Fig. 1: The StudioLive 16.4.2 is a full-featured digital mixer that offers direct control over nearly every important feature. Fig. 2: The board offers 16 individually phantom-powered mic inputs. The analog outs are on space-saving DB25 connectors.

Visit the official PreSonus website for more information

Related Content:

Pro Reviews:

[Akai MPK Mini Review By Len Sasso: Keys And Pads In A Small Footprint For Laptop And Tablet \(iPad\) Musicians](#)

[TC Electronic Flashback Delay and Looper Review By Michael Ross: Now, No One Will Mind If You Repeat Yourself](#)

[Spectrasonics Trilian Review by Marty Cutler: More Basses Than You Can Shake A Stick At. \(Chapman Stick, Included!\)](#)

[Boss RC-30 Loop Station Review By Marty Cutler: Is It Still A Loop When It's Nearly 3 Hours Long?](#)

PreSonus:

[PreSonus Studio One, FireWire Interfaces Add Lion Compatibility: Lions, Tigers, Cats, Oh My](#)

[PreSonus AudioBox 22VSL, PreSonus AudioBox 44VSL, PreSonus AudioBox 1818VSL Audio Interfaces Announced](#)

[PreSonus StudioLive 16.0.2: Digital Recording And Performance Mixer Ships](#)

[PreSonus Universal Control 1.5 Adds Free Signal Processors To StudioLive 16.4.2](#)

Stage Mixers:

[Alto Professional Zephyr Series: Audio Mixers With FX, USB Audio Interfaces, And More](#)

[Alto Professional Empire Powered Mixers: Tabletop And Cabinet Designs Available](#)

[Soundcraft Si Compact Live Digital Mixer: More Than A Pretty Light Show \(Video\)](#)

[Allen And Heath iDR-16 And Allen And Heath iLive-R72 Digital Live Mixing System: You](#)

Studio Mixers:

[Mackie ProFX16 And Mackie ProFX22 Mixers: More Channels, Dedicated Inline Compression](#)
[Solid State Logic X-Panda: New 24-Channel SuperAnalogue Mixer Intro'd](#)
[Alesis MultiMix 8 USB 2.0 FX Audio Mixer Announced](#)
[DiGiCo Special Edition SD8: Titanium-Finished SD8 Digital Console](#)

[printer friendly version](#)

Post new comment

Your name:

E-mail:

The content of this field is kept private and will not be shown publicly.

Homepage:

Subject:

Comment: *

- No HTML tags allowed
- Lines and paragraphs break automatically.

[More information about formatting options](#)

CAPTCHA

This question is for testing whether you are a human visitor and to prevent automated spam submissions.



Captcha Validation: *

Please type in the lowercase letters that are shown in the image above.

[Preview comment](#)

[Post comment](#)