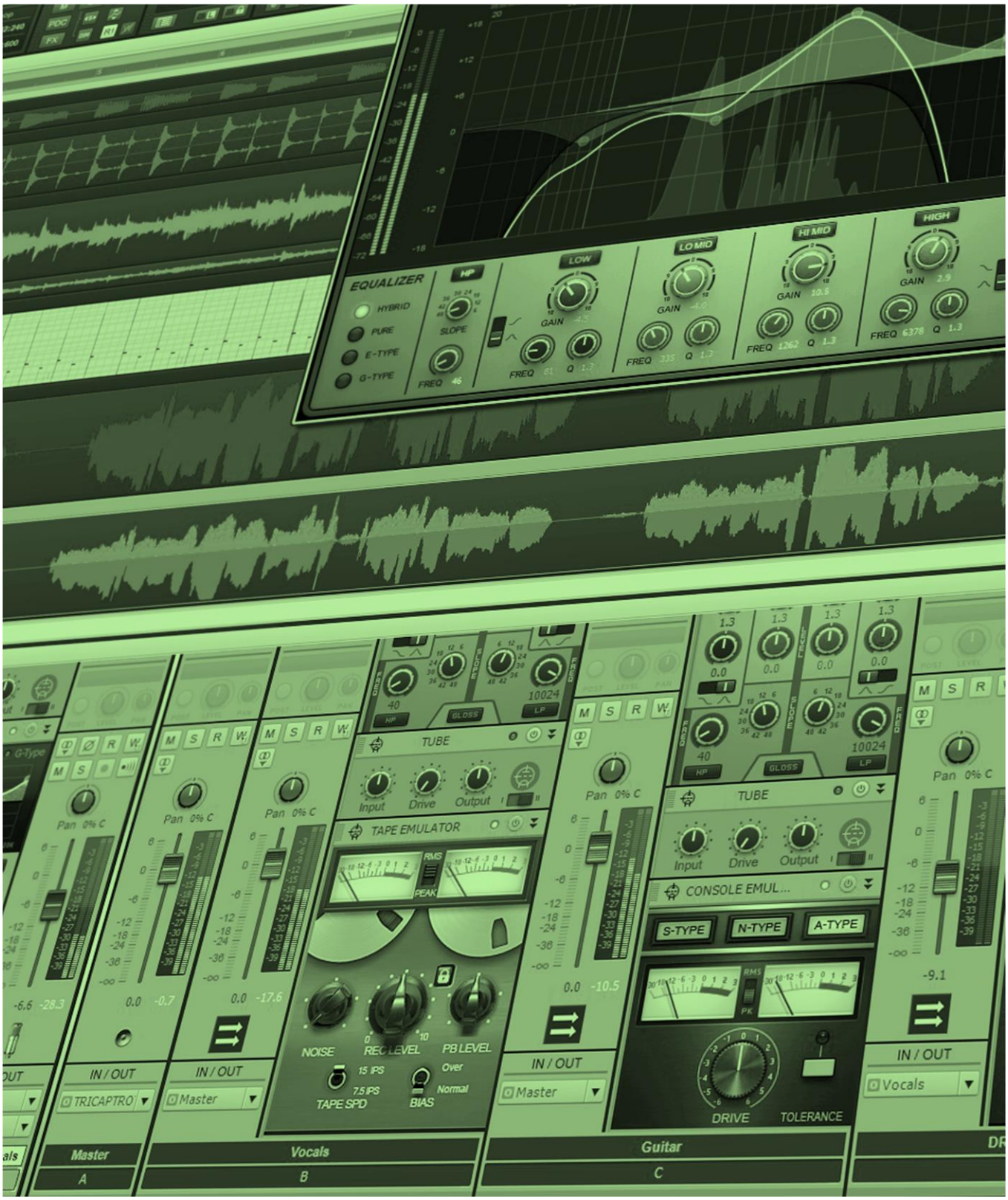
SONAR 2016.06 Update



SONAR 2016.06 Update

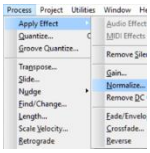
The Tungsten theme matures further in this month's update, thanks to several tweaks that improve various visual elements—but that's just one of the cool features in 2016.06. Smart Swipe is an innovative workflow enhancer where you can quickly enable/disable buttons on multiple tracks by clicking a button in *one* track, then dragging across adjacent tracks without releasing the mouse button. There are also several improvements to TH3 Cakewalk Edition, including the much-requested ability to load Impulse Responses for cabinets. If you haven't tried TH3 Cakewalk Edition yet, it's a giant step forward from the TH2 version in terms of sounds and programmability.

What's more, "Process Audio" functions have been optimized for blazing fast response, and while fixing a regression bug with Nudge, we went ahead and improved it a bit as well. Other enhancements include Russian localization as well as fixes for some long-standing issues, and you'll also find our semi-regular features: this month's review (the AMPLIFi 30 high-tech guitar amp), the "Charting Now in SONAR" Top 10, and BlogBeat. We hope you're having a great summer, and as always, thanks for your continued support of SONAR. – *The Cakewalk Team*

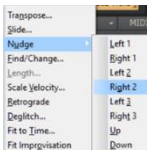
Smart Swipe: This is a fantastic complement to Quick Grouping, because it lets you enable or disable buttons on multiple tracks in both Track View and Console View by clicking on a button in a single track, then dragging across additional tracks. If you like faster workflows, you'll love this new feature.

"Tungsten" Theme Enhancements: Last month we thought you'd probably like a new, darker theme—now the verdict is in, and Tungsten has become a huge favorite in the SONAR community. But you had some suggestions on ways to improve it, so we listened and implemented the most-requested tweaks.

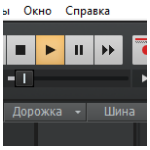
TH3 Cakewalk Edition Updates: Hot on the heels of adding TH3, Overloud's latest version loads four times faster than previous versions, includes the ability to load IR impulses for cabinets, adds the Overview that was formerly available in TH2, and MIDI Learn now works as expected.



"Process Audio" Editing Optimizations: Applying Process Audio functions like Gain and Normalize to large numbers of Clips now takes about *1%* of the time it took previously. This enhances productivity with any type of editing-intensive audio that's been sliced into multiple pieces, like complex drum parts and narration.



Nudge Improvements: After a recent update, Nudge would slow down progressively as you added more tracks. That's the bad news. But the good news is that while addressing this issue, Cakewalk optimized the code so now Nudge is faster than it was before—no matter how many tracks are in a project.



Davajtye poznakomimsya: Or as they say in Russia, "let's get acquainted!" Now SONAR is being localized in Russian—joining English, French, German, Spanish, Italian, Japanese, and Chinese—to allow even more people around the world to use SONAR comfortably, in their native language.

Charting Now in SONAR | The Top 10 Rersolution Settings: SONAR analytics is all about finding out how people use the program, and one of those aspects is what gets chosen as the project resolution. Does 44.1 kHz still rule? How many people prefer 96 kHz or even higher sample rates? Let's find out.

Fixes and Enhancements: SONAR no longer crashes when you add an instrument track to a highly edited project, delete an empty Take Lane, insert the Waldorf Nave, or in rare cases, delete an envelope. But there are plenty of other fixes, like maintaining signal flow with certain Patch Point routings.

Review | Line 6 AMPLIFi 30 Multi-Purpose Guitar Amp: Yes, it's a compact and surprisingly loud guitar amp. But it's also a USB audio interface, includes processing equal to a POD 2 that you can edit with your tablet or smartphone, downloads presets from the cloud, and even streams audio sent to it over Bluetooth.

BlogBeat: Take a trip back into time with this special "retro" edition of some of the Cakewalk blog's greatest hits of the past. From acoustical treatment to console emulation to Sun Studio and various artist profiles, there's plenty of entertaining SONAR-related reading.

How to Download the SONAR 2016.06 Update

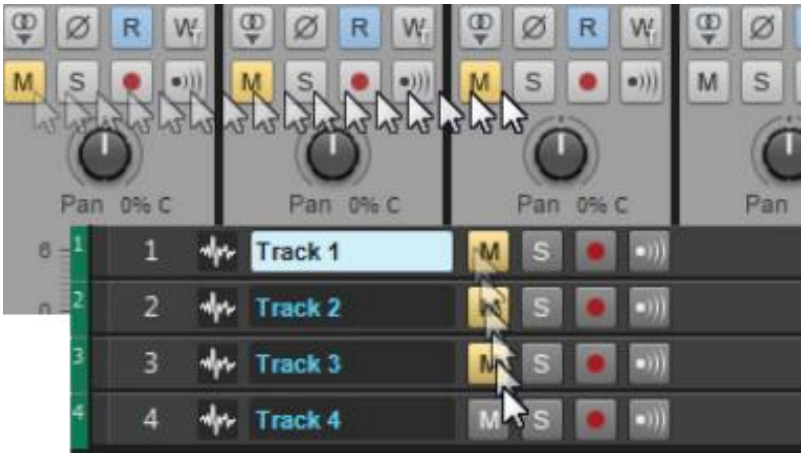
Open the **Cakewalk Command Center**. If you don't have the latest version (CakewalkCommandCenterSetup_1.1.5.0.exe), please download it from the Cakewalk Command Center home page.

To download the **SONAR 2016.06** core update, download from the core SONAR Artist, Professional, or Platinum category.

Platinum users should also download the **Boutique Suite** to install TH3 Cakewalk Edition (for Artist and Professional, TH3 Cakewalk Edition is included in the core program installer).

Smart Swipe Track Controls

Artist, Professional, Platinum



Here's another workflow enhancement that becomes downright addictive once you start using it. With Smart Swipe Track Controls, you can quickly enable/disable buttons on multiple tracks by clicking a button in *one* track, then dragging across adjacent tracks without releasing the mouse button. Smart Swipe is also an extremely effective complement to Quick Grouping.

Smart Swipe works in the Track and Console Views with mouse gestures. The following controls support Smart Swipe:

- Mute
- Solo
- Record
- Input Echo
- Send knobs within individual track strip (Console View only)
- Phase (Console View only)
- Interleave
- Archive (Track View only)
- Automation Read
- Automation Write
- FX Bin Enable
- ProChannel Enable (Console View only)
- ProChannel Pre/Post (Console View only)
- Waveform Preview (Track View only)

Tungsten Theme Enhancements

Artist, Professional, Platinum

You've made it clear: You really like the new Tungsten theme. We've been using it a lot and apparently you have too, because there have been several suggestions for tweaks that would improve the interface even further. So, we've made several tweaks to create a more unified "Tungsten" experience. The following are now more "Tungstenated" (or is that "Tungstenified"?):

- Track View and Console View/Inspector text colors are consistent and more visible
- The Pro Channel FX Chain user interface is now themed properly
- The Track Strip and Console View channel drop indicator (indicates drop location when doing a drag and drop with tracks or channels) is an easier-to-see orange color
- The video pane user interface has been updated
- "X" buttons to close view tabs in multi-dock are now plainly visible
- Mute/Solo/Arm buttons are now handled consistently in the Track View, Inspector, and Console View when Archived
- Navigator Track scroll buttons convert properly to the new theme, and the background has been tweaked
- The Step Sequencer reflects the new Tungsten color scheme
- Track View meter label and tick mark colors have been improved
- Piano Roll View Track Pane Text/Focus now reflect the theme correctly
- No more drawing of artifacts at the bottom of the ProChannel
- Console View splitter bars are easier to distinguish
- QuadCurve EQ flyout is now themed properly
- Corners of default track icons are no longer black
- Track View and Console View menu borders are more visible
- And there are other polishes, such as improved contrast where appropriate

TH3 Cakewalk Edition Updates

Artist, Professional, Platinum

With physical amps, you change tubes. With virtual amps, you get updates! This month Overloud has updated TH3 with some major improvements.

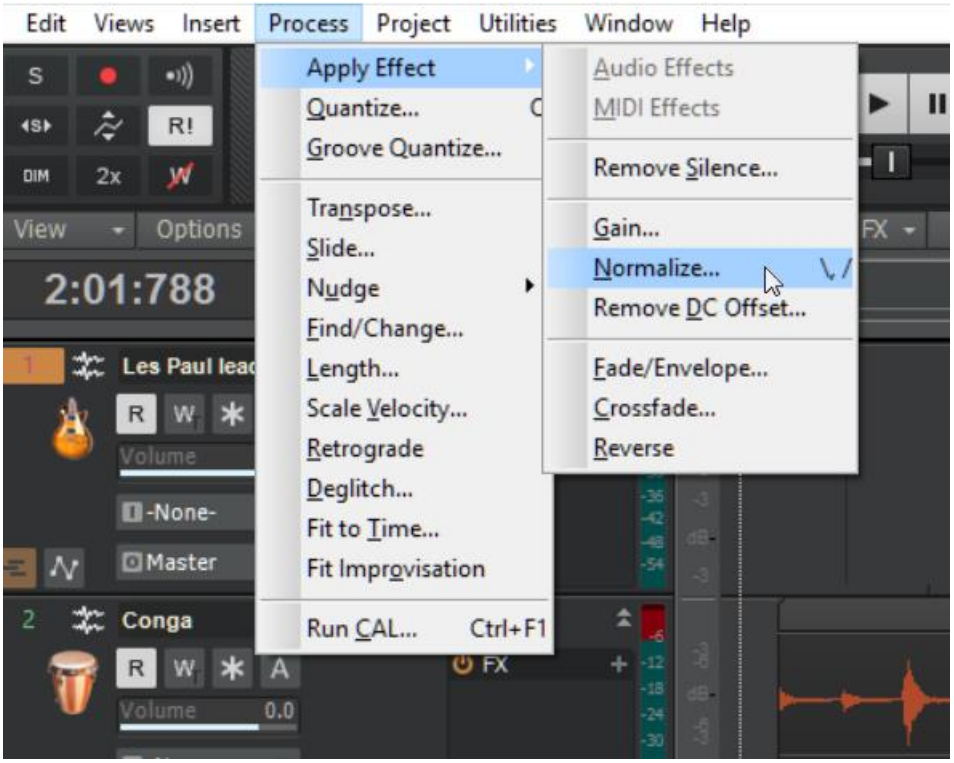
The plug-in now loads four times faster than before, the Overview panel from TH2 is back for faster navigation, and MIDI Learn has been overhauled so that it now works as expected.

Furthermore, TH3 now displays the correct VST3 category "Guitar" (this may require a reset and re-scan in *Edit > Preferences > File > VST Settings*), and the full version re-introduces the Cabinet IR functionality included in previous SONAR versions of TH2. It's all part of Overloud's ongoing goal to provide you with a musical, flexible amp/pedal emulation that fits your projects like a glove.

“Process Audio” Editing Optimizations

Artist, Professional, Platinum

Applying Process Audio functions like Gain and Normalize to large numbers of clips now takes about *1%* of the time it took previously. One scenario where this is important is with parts that have been sliced into multiple sections, like complex drum parts, but which can also occur when working with loops, narration, and other editing-intensive projects.



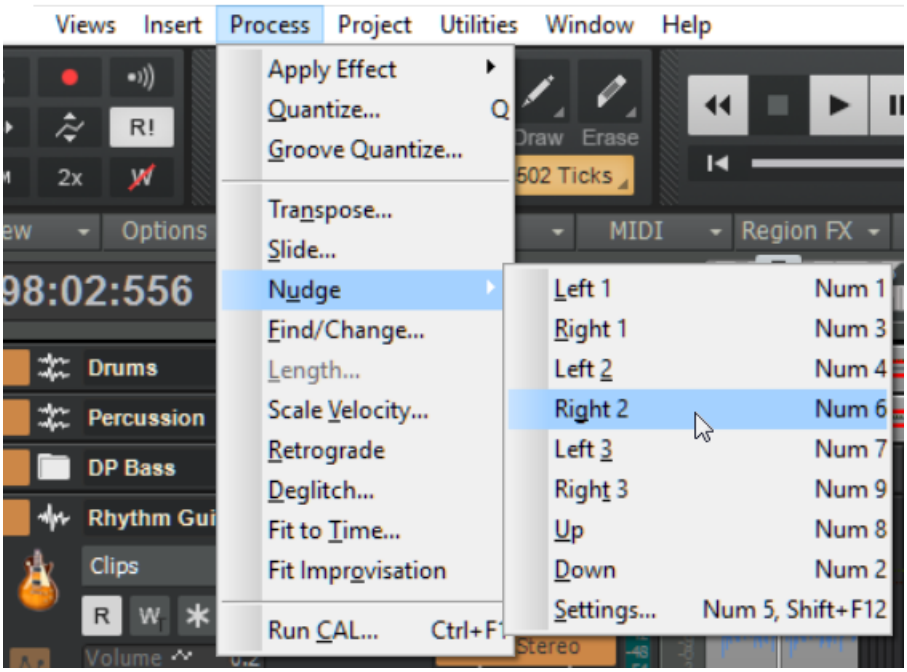
Here’s a benchmark comparison between SONAR 2016.04 and 2016.06 involving gain changes for 2,251 events on five tracks.

2016.04
163,204 MB memory before, 244,136 MB memory after
01:21:00 minutes to process
04:43:00 minutes to display waves
06:04:00 total minutes

2016.06
165,344 MB memory before, 205,288 MB memory after
00:01.57 seconds time to process
00:01.75 seconds to display waves
00:03.32 total seconds

Nudge Improvements

Artist, Professional, Platinum

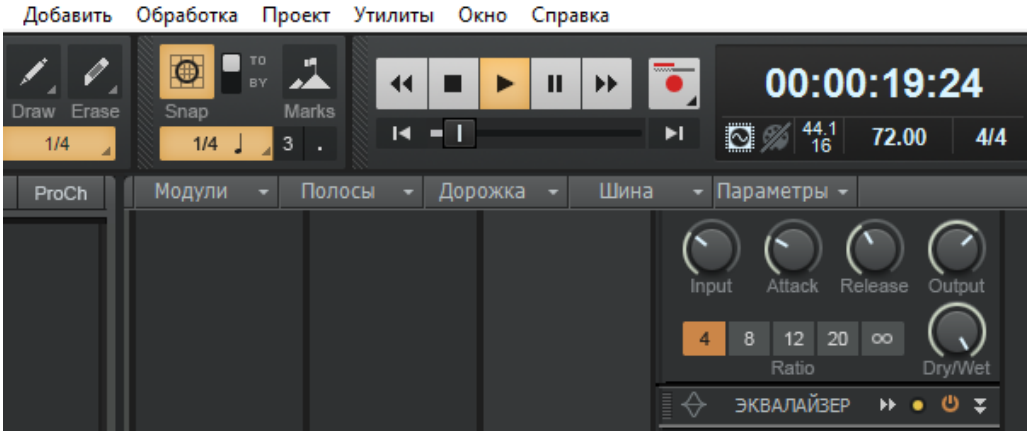


After a recent update, Nudge would slow down progressively as you added more tracks. In the process of addressing this issue, Cakewalk optimized the code so now Nudge is faster than it was before, no matter how many tracks are in a project.

If you haven't spent much time with Nudge, it's worth re-visiting because it can be a real time-saver. You can assign number pad keys to common moving operations, like moving a clip (or multiple clips) one measure earlier or later, or nudge by small increments (like a few milliseconds or samples) to add "feel" to drum parts and the like.

Davajtye Poznakomimsya!

Artist, Professional, Platinum



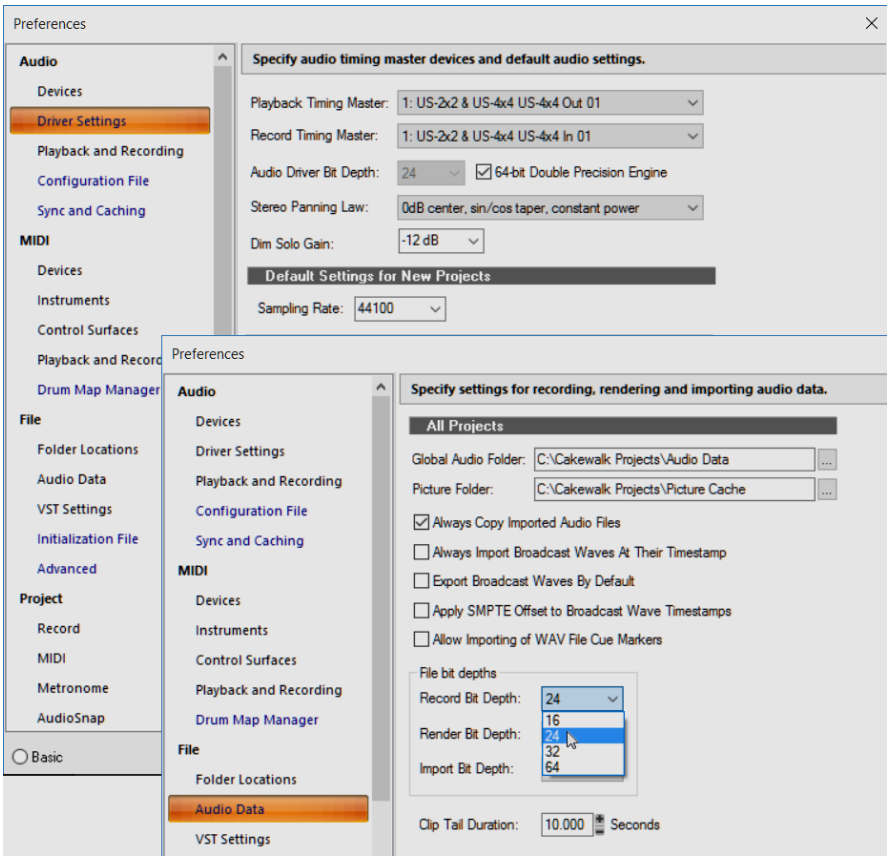
Or as they say in Russia, “let’s get acquainted!” Now SONAR is being localized in Russian—joining English, French, German, Spanish, Italian, Japanese, and Chinese—to allow even more people around the world to use SONAR comfortably, in their native language. Currently, only the Steam version is available in Russian, but localization for other versions is coming soon. We welcome our Russian friends to the community of musicians using SONAR.

Charting Now in SONAR:
The Top 10 Resolution Settings

So did 96 kHz take over the world? Is 44.1 kHz still "good enough"? What about bit depth—anyone using 32 bits, and is anyone still using 16 bits? We asked Cakewalk Analytics to tell us about the most popular sample rate and bit depth combinations, and here are the results. *Spoiler alert:* 11.025 kHz is *not* the most popular sample rate.

#1: 44.1 kHz, 24-bit

The old standby CD sample rate still rules the roost by almost three to one over the next most popular option—but with the improvement of 24-bit resolution instead of the CD's 16-bit resolution. For many people, 44.1/24 remains at the sweet spot of sound quality, storage space, ability to stream lots of audio channels, and project size.



#2: 44.1, 16-bit

It was good enough for "perfect sound forever," and it's good enough for many projects these days. Also, if you're cutting CD tracks you don't need format conversion.

#3: 48 kHz, 24-bit

Clocking in at a solid third place, either lots of people are doing audio-for-video and delivering projects at 48 kHz, or they prefer the sound quality… or maybe even have some hardware device that runs only at 48 kHz, so they need to record at that sample rate.

#4: 96 kHz, 24-bit
Moving up the charts into fourth place, 96/24 has only a little over one-third as many devotees as 48/24, but it's clear there's a trend toward going for the gusto of high-resolution sample rates and resolutions.

#5: 44.1 kHz, 32-bit
This certainly came as a surprise, because you might think those who want the extra resolution of 32 bits would also want higher sample rates…but no, once again 44.1 remains a popular choice.

#6: 48 kHz, 16-bit
This seems to be the option for those who want a little better high-frequency response, but without taking up a lot of storage space.

#7: 48 kHz, 32-bit
…and this seems to be the choice for those who want a little better high-frequency response, and aren't afraid to take up a lot of storage space.

#8: 88.2 kHz, 24-bit
Try as the 88.2 kHz crowd might, they just don't have the numbers of the 96 kHz devotees. Not surprisingly, though, they've opted for 24-bit resolution.

#9: 96 kHz, 32-bit
We suspect these are the folks who plan to archive their projects in a high-resolution format to future-proof them.

#10: 96 kHz, 16-bit
It was a tight race between the #9 and #10 positions, but ultimately, 16-bit resolution was no match for 32-bit resolution with those who favor 96 kHz operation.

And while the high-res audio options above 96 kHz didn't chart, 192 kHz/24-bit was the winner over 176.4 kHz/24-bit, and there are also a few hardy souls who use 384 kHz.

Fixes and Enhancements

Fixed SONAR issues where:

- Adding an Instrument Track in highly edited projects caused SONAR to crash
- SONAR could crash when deleting an empty Take Lane
- Global Solo/Unsolo would break signal flow with certain Patch Point routings
- Now time placement didn't follow snap settings (or Aim Assist) in automation lanes
- Bounce-to-track settings didn't persist
- Moving the Console View separator could draw artifacts
- Waldorf Nave crashed when inserted into SONAR
- Some menu items were unreadable on some systems customized in X3
- The WAI couldn't be moved in console view
- Mute/Solo Buttons were slow or inconsistent when responding to quick mouse clicks
- There was a broken documentation link for the MIDI Device Failure dialog box Help button
- The Softube FET compressor passed only the left channel when side-chaining
- In the Mercury theme, Track View and Console View tabs needed visual improvements
- Crash could happen, albeit rarely, on envelope delete
- Potential runaway memory use on project open
- Drag Selection could cause Timeline to change position

Review: Line 6 AMPLIFi 30 Multi-Purpose Guitar Amp

By Craig Anderton

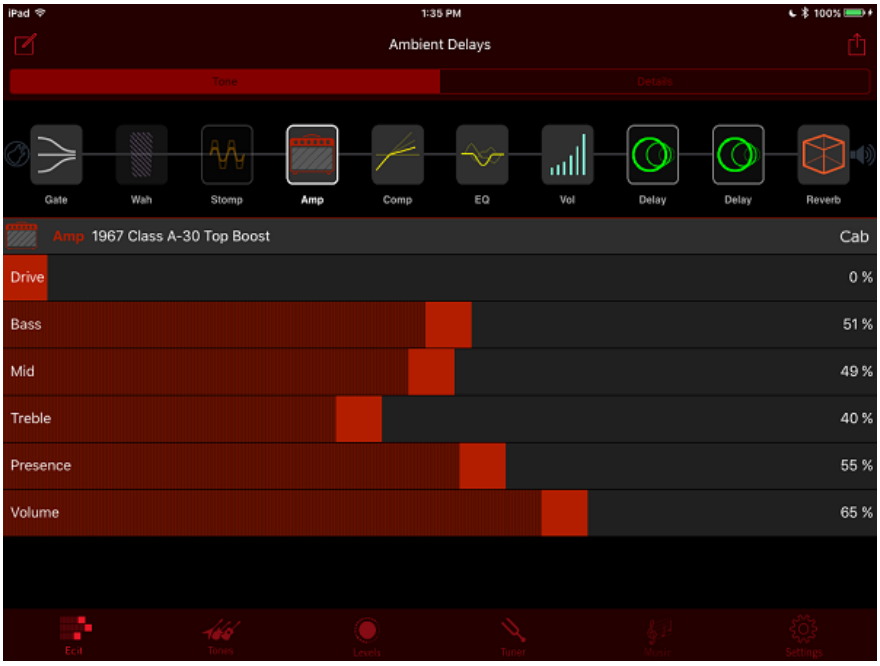
Given how many guitarists use SONAR, it seemed like a good idea to check out Line 6's AMPLIFi 30 (around $299). It has the heritage of Line 6 amps, but in some ways it also has the heritage of something like the Scholz Rockman or Pignose amp, because it's a convenient practice amp to give the "sound" you want. However this is the 21st century, so it's more than "just" a practice amp.

The main control panel has what you'd expect: controls for Drive, Bass, Mid, Treble, Reverb, and Output level (the latter is ringed with red LEDs so it looks cool). There's a guitar input and headphone output. Note the "Tone" button: it might seem you get only four tones, and that's all you can select from manually. However, one of the main AMPLIFi 30 attributes is being able to edit tones using an app, as well as download new tones from the cloud.

Going from left to right on the rear panel, there's a minijack Aux In, USB jack, input for the FBV pedal, and the DC input for the AC adapter. Incidentally, the AC adapter is one of those "sideways" types that takes up only one slot on

a barrier strip. I wish there was a rechargeable battery like the IK Multimedia iLoud so you could just carry the amp around with impunity, but I presume that would have added quite a bit to the price…and it *is* a guitar amp, so I suspect it would drain a battery relatively quickly.

EDITING TIME

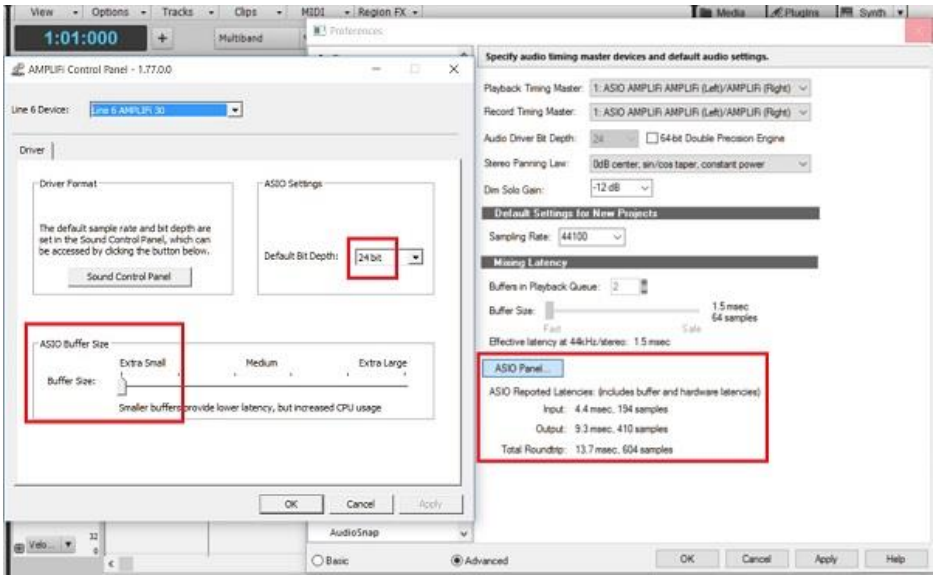


Like quite a few devices these days, AMPLIFi 30 depends on an app to do the editing/downloading, and on Bluetooth to communicate with your tablet or smart phone. AMPLIFi works with iOS or Android; apparently there's also an app for the Apple Watch, although I don't have one so I can't comment. Although I've seen various comments on the web about the Bluetooth connection being unreliable, to be fair I've seen that said about lots of Bluetooth devices. Maybe I'm just lucky (or there's not a lot of interference in my environment), but I didn't have any problems getting the AMPLIFi 30 to talk to my iPhone or iPad. Then again it could be that I downloaded the most recent firmware updates, and made sure no other Bluetooth devices were on that would try to pair with AMPLIFi 30.

(Also note that if AMPLIFi 30 pairs with something, it kinda gets stuck in that groove. For example I tried going from iPhone to iPad, and the iPad didn't want to connect. To switch devices, you first need to "un-pair" the existing device by holding the Bluetooth button for several seconds.)

The app itself has the "look and feel" of the Line 6 Helix Editor, which is pretty wonderful and works very well with touch control. There's also a Tone Match function; the basic idea is you can load a song from your music library, and the app will suggest settings that deliver the guitar sound from that song. It's not a perfect science, but it usually gets you close.

USB INTERFACING, TOO



Because AMPLIFi 30 is a USB interface, it's designed so you can plug it into your computer, dial up the tone you want, tell SONAR to see it as an audio input, and then record that sound. So while it's a practice amp, if you have a laptop around it's also a quick way to record. Line 6 uses the tag line "Practice – Play – Record," and that's a reasonable summary.

The interface works with sample rates of 44.1 or 48 kHz, and a bit depth of 16 or 24 bits. When testing with Windows I tried ASIO, which worked fine; MME and WDM also worked, although latency isn't really much of an issue because you're hearing what AMPLIFi 30 does in real-time—just like traditional zero-latency monitoring. In fact I had to remember when recording to turn *off* SONAR's input Echo because I didn't want to hear the sound from the AMPLIFi 30 and the sound going through SONAR at the same time. What you hear from AMPLIFi 30 is what gets recorded.

As to the actual latency, the "Extra Large" ASIO Buffer Size gave a reported round-trip latency of 208 ms. However, unless you're running a really, really slow steam-powered computer, I highly doubt you'll need to go to that extreme. I went for the Extra Small setting, which SONAR showed as 64 samples at 44.1 kHz, for a total round-trip latency of 13.7 ms. The next larger setting of 128 samples had a round-trip latency of 22.5 ms. But again, remember that you hear no latency when you're playing, regardless of the computer's latency setting.

I did note that if I started SONAR with the buffer set to 64 samples, all was well. However if I tried to change the sample buffer setting, SONAR would freeze. This didn't happen with 128 samples, so maybe CPU power was on the edge with my laptop, given that I was testing with a project that had multiple virtual instruments.

RECORDING WITH AMPLIFI 30

There are two cautions when recording. First, the headphone level is LOUD. As a result, the resolution at the low end of the volume control—which is stepped—led to a major volume

jump between the 3rd and 4th steps, where the 3rd step was too soft for me and the 4th step was louder than what I wanted. Fortunately the solution was easy: I use KRK KNS-8400 headphones, which have a volume control built into the cable.

Second, as expected the output control doesn't influence the level going into your DAW because it's a monitor level control. Although the level was close to what I wanted anyway, you can always use the AMPLIFi app to change the amp's output level.

The bottom line on the USB interface is that it does its intended job, which is to let you plug 'n' play into a computer and start recording whatever sound you've dialed in. However, the best part to me is that you're monitoring the sound without any latency (other than A/D and D/A conversion, which is around 1 ms). No, you can't split off a dry signal for later processing, but that's not the point: it's about catching inspirations, practicing, and recording into a computer whenever you feel like it. In that respect, the USB interface adds credence to the "Swiss Army Knife" vibe that appears to be at least one of AMPLIFi 30's design goals.

LET'S STREAM SOME AUDIO

I listen to a lot of internet radio on my iPad, which is okay for voice but not exactly a high-fidelity experience for music. Fortunately in addition to its other talents, AMPLIFi 30 can also stream audio over Bluetooth. Because most people who pick up the AMPLIFi 30 presumably do so for the guitar amp capabilities, this apparently isn't a big selling point. However, it's a welcome addition that makes AMPLIFi 30 just that much more of an overachiever.

As to the sound quality, I'd say IK Multimedia's iLoud (reviewed in the Kingston update eZine) does better on the high frequencies, but then again, it's voiced more like monitors whereas AMPLIFi is a guitar amp at heart. That said, AMPLIFi sounds better by orders of magnitude compared to typical consumer Bluetooth speakers. So while streaming Bluetooth audio may not be a priority for those interested in the AMPLIFi 30, I think that over time, AMPLIFi owners will find it a convenient way to have "music anywhere" in the house.

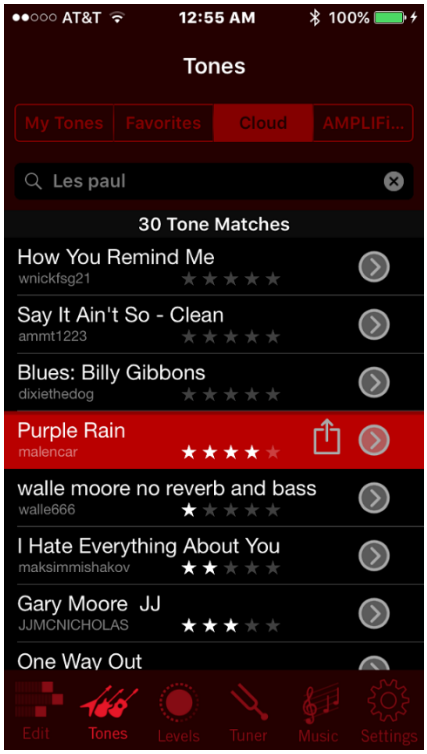
TONE TIME

A big part of AMPLIFi 30 is the emphasis on Tones, the next item on the Nav bar after Edit. Tapping on it brings up four tabs:

My Tones: Save edited tones, or tones you've downloaded from the cloud, into the My Tones list. This forms your collection of presets that you can shuttle into the AMPLIFi 30's four onboard presets. Note that when the app is controlling AMPLIFi 30, you can't select one of the four presets manually.

Favorites: Wait a second…aren't "My Tones" your favorites? Well yes, but this is a different kind of feature. If you play a song from your device's music library and like playing along with it using a particular guitar tone, you can "Favorite" that tone so it always shows up whenever you play that song.

AMPLIFi: This tab displays 25 Banks of four presets, and it's easy to organize via copy and paste (no drag and drop, like the presets in the Helix editor). However, a limitation is that you can't transfer an entire bank—you have to transfer presets one at a time. I'm hoping bank transfers will become possible in a future update. Regardless, Banks provide yet another level of organization that's useful as you get more and more into AMPLIFi 30.



AMPLIFi 30's app not only edits amp parameters, but also communicates with the Line 6 cloud to access thousands of presets. There's no "master list," but the search function is pretty robust. Within a couple minutes, after searching on "Les Paul" I found a "Billy Gibbons" patch that I really liked. So, using the app, I transferred it over to the AMPLIFi 30 to replace one of the four presets.

Even with my relatively slow 6 MBPS download speed, patches download in about 2 seconds so your patience isn't tested as you audition different presets, nor have you invested much time if you don't like one. Of course all of this is free, and you can also upload your own presets to share with the Line 6 community.

Patches are minimally curated, in the sense that the community gives star ratings. However, note that they can also include details like musical groups associated with the particular tone, whether it's meant for single-coil or humbucker pickups, which pickup position is recommended, etc. In a way, the minimal curation is part of the fun—you never know quite what to expect when you audition a Tone.

CONCLUSIONS

AMPLIFi 30 is a box with many talents. Although its main talent is a practice amp with the potential for a whole lot of sounds (the engine is basically a POD 2), the Bluetooth audio streaming, computer interfacing, playing along with your music library, and downloading new sounds from the cloud expand the possibilities considerably. The main limitation is you need to be near an AC outlet, and also, the adapter plug juts out of the box in such a way that you want to be careful not to give it a forceful, glancing blow.

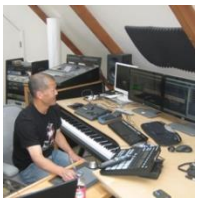
The app is outstanding, although it could use some comprehensive documentation to get you up and running faster. Editing is simple, as is navigating the cloud and presets. And despite the small size, this baby can get loud enough to annoy neighbors if you're so inclined. It's also sufficiently cute that it won't dominate your home's décor.

If AMPLIFi 30 was $199 I suspect it would fly off store shelves; the $299 price is going to be a deterrent to those who need only one or two aspects of the AMPLIFi 30's total functionality. However if you need a cute, small, light Swiss Army Knife amplifier with a lot of additional—and useful—features, AMPLIFi 30 is a unique product that fulfills a unique set of needs….pretty cool.

BlogBeat

This month's BlogBeat switches things up a bit by borrowing a bit of energy from the Flux Capacitor, and revisiting some timeless articles that graced the cakewalk.com blog. Analytically speaking, these blogs were fan-favs that keep on giving the gift of blog.

Cakewalk Pro User Spotlight | Hollywood Undead: Sometimes a band combines a massive fan base with underground success that surpasses most commercial artists, and Hollywood Undead's total record sales combined reach well into the millions: you can hear their songs in today's hottest video games, as well as sold-out stadiums all over the world.



Cakewalk's Session Stories | 2008-2009: This blog post was eight years ago, yet most of these artists are still making music with SONAR. Jon Lee is creating great music for film and some of today's hottest reality shows (including *Jail, Street Patrol,* and *Urban Justice*), while Norman Matthew just got invited to sing on Tommy Lee's solo record. We love SONAR success stories…

Mixing with the Console Emulator: While Console Emulation can have a big impact on your final mixes, it remains a subtle and gradual type of effect. For those new to the concept, **Craig Anderton's** blog on using the Console Emulation gives an overall perspective of what Console Emulation does and how to use it; also check out **Dan Gonzalez's blog on Console Emulation.**

Studio Spotlight | Sun Studio: Elvis recorded his first two songs at Sun Studio in 1953 for $3.25. In more recent times, James Lott and house engineer Matt Ross-Spang used SONAR to track, edit, and mix projects for Liz Phair, Matchbox 20, Maroon 5 and Bowling for Soup. This blog reaches beyond the history to give an overview about one of the USA's most iconic studios.

How Building Cost-Effective Acoustic Treatment for the Music Studio Will Help Your Music Production: One of the biggest reasons why mixes fail is the "unintended filtering" some listening environments overlay on your sound. Sound panels aren't cheap, but this in-depth blog tells how to build cost-effective room treatment panels that are great on the ears—and the eyes.

SONAR 2016.06 Release eZine

Publisher
Noel Borthwick

Editorial/Design Director
Craig Anderton

SONAR Product Managers
Lance Riley, Morten Saether

Contributors
Andrew Rossa, Bill Jackson, Lance Riley, Jimmy Landry, Joey Adams, Noel Borthwick, Dan Gonzalez, Morten Saether, Jon Sasor, Christopher Brown, Jim Lima, Keith Albright

Advisory Board
The Cakewalk community

Gibson Pro Audio General Manager
Ingrid Calvo

Executive Director
Henry Juszkiewicz