



Tech Notes

Challenge

- ▶ Staying focused and following changes by pastors and leaders on stage without being distracted by essential mixing tasks.

Solution

- ▶ Simplify, streamline, and reduce errors in common audio mixing workflows by using VENUE Event List features to do the work.

Products used

- Avid VENUE Live Sound Systems

Using VENUE Events to Streamline Workflows



Automating and simplifying common mixing tasks keeps full control at your fingertips

Audio engineers continually strive for production excellence in today's House of Worship (HOW) services, whether managing duties at front of house (FOH) or monitors. The drive for quality can be challenged by the complexity of each service, requiring engineers to remain focused and alert throughout multiple services.

Chant Peck, director of audio at Mission Community Church in Gilbert, AZ, as well as market development manager at Avid, leverages the Events List feature of VENUE live sound systems to simplify common mixing tasks. "By configuring a set of automated Events," he explains, "I have streamlined the control of typical 'housekeeping' duties that could potentially distract me from the stage and important cues in the service program."

In this tech note, Peck shares some of his most useful VENUE Events, ranging from basic tap tempo triggers to more complex vocal processing changes.

Basic Events	Advanced Events
<ul style="list-style-type: none">▪ Tap Tempo▪ Talkback Mic On/Off (for SC48)▪ Input Safe Switch	<ul style="list-style-type: none">▪ Input Channel Encoders & Flip-to-Faders▪ Pro Tools Confidence Monitor On/Off and Solo Cancel▪ Mains / Fills / Sub On/Off▪ Vocal Processing Control via VCA

Example 1: Tap Tempo

"Configuring a Tap Tempo Event enables you to assign any plug-in that has a tempo lock feature to the master tempo map," says Peck. "With VENUE 3 software, the User button on the console is now available in the Events list and works great for tapping out tempos. Alternatively, if you prefer, you may choose to use an external foot switch."

You can set up your own Tap Tempo Event using the following parameters:

Triggers:

User Switch, Pressed

Actions:

Tap Tempo

Important: Be sure to turn on Tap Tempo in the software's **Options > Misc** page.

Example 2: Talkback Mic On/Off (for VENUE SC48)

Peck has mixed on all of the VENUE systems and has used the Events List to optimize the control surfaces for his mixing tasks. "If you're using an SC48 console, you may have noticed that there isn't a dedicated Talkback On/Off switch on the surface," he notes. "Using the Event List, you can assign a Function switch to serve as the mute/unmute button for your talkback microphone. In this way, you can place the talkback mic on a lower bank, yet still have instant access to speak to the band or monitor engineer."

To configure the Function switch to control the mic mute, do the following:

Triggers:

Function Switch *, Pressed

Actions:

Mute "Talk Back" (Ch *), Off, While Active



Example 3: Input Safe Switch

All VENUE systems have three "safe" modes that are useful for various audio mixing workflows:

- Automation Safe enables you to make a selected channel "safe" from any automation that may be recalled
- Solo Safe enables you to always hear the associated inputs while soloing any channel
- Bank Safe enables you to keep critical faders on the top layer of the console at all times

"In the standard system configuration, I was only able to monitor any one of the three modes at a time," says Peck. "I created an Event to assign a Function switch to toggle through the three Safe modes,

giving me instant access to each of the three modes by pushing a single button."

Configure your own safe mode toggle using the following parameters:

Triggers:

Function Switch *, Pressed

Actions:

Input Safe Switch Mode

Example 4: Input Channel Encoders and Flip-to-Faders

Working with VENUE, Peck discovered an essential advantage over traditional analog consoles—you can quickly reassign rotary knob settings to the faders. "I can get around the VENUE system very quickly by using the Flip-to-Faders function," he says. "Though often thought of primarily as a monitor console workflow, I find it invaluable at FOH as well."

"Working in this mode enables you to get a more intuitive visual representation of the input channel parameters so that you can make adjustments using the faders instead of knobs, while keeping the VCA faders under your fingertips. The Event is configured so that whenever you press an input channel auxiliary encoder assignment or output solo button, the console faders will automatically flip, and you can make the necessary adjustments using the faders. While in this mode, you can also access any of the other input parameters, including gain, pan, compressor threshold, gate threshold, HPF, and input delay."

To configure this mode, select "AFL Follows Auxes" on the VENUE software's **Options > Busses** page. Then use the following parameters in the Event List setup:

Triggers:

Output Solo, On

Actions:

Bottom Row Flip to Faders, On, While Active

To exit this mode, simply deselect the Flip-to-Faders button and the channel faders will return to the house mix.

Example 5: Pro Tools Confidence Monitor On/Off and Solo Cancel

"At Mission Church, the services are recorded in multitrack to Pro Tools, and the recordings are used for Virtual Soundcheck, as well as posted to the web," Peck explains. "In addition to recording the individual channels, I create stem mixes for the band to play back and review."

To simplify the process of monitoring the recording, Peck configured an Event that assigns a return path from Pro Tools® to an FX Return fader using assignable patches in the VENUE software Patchbay. "By soloing the assigned FX return channel in this configuration, the VENUE system becomes the monitor path, and I can verify that inputs are being properly recorded, and edits or clean-up can be made to 2-track mixes before exporting to the web."

The Event works as follows: when the Pro Tools fader is raised from the -inf position, the channel is unmuted so that it can be monitored in headphones. When the fader is brought back to the -inf position, the channel is automatically muted and the solo mode is cancelled.



Configure these two Events (“Fader Mute” and “Solo Cancel”) as shown below:

Fader Mute

Triggers:

Pro Tools Return (FX *), Fader Above, -inf dB

Actions:

Mute “Pro Tools Return” (FX *), Off, While Active

Solo Cancel

Triggers:

Pro Tools Return (FX *), Fader Below, -inf dB

Actions:

Clear Solos

Example 6: Main / Fills / Sub On/Off

In many installations, the PA is driven from multiple busses or matrix outputs. As Peck observes, “If you drive your subs off of an auxiliary or separate bus rather than the master Left/Right fader, you probably have noticed that once the master fader drops below a certain threshold, the sub energy can be quite distracting and will most likely need to be turned down as well.

“I do not recommend riding the L/R more than a few dB during a service, but when I do need to turn down the entire PA level all at once, I’ve set up an event that automatically mutes my subs once the master L/R fader breaks a specific threshold. I have also created an Event that automatically mutes my fills, as well as the subs, any time I mute the master L/R.”

To configure these automated mutes, Peck configured both Events to toggle on and off from their current state. (Note that in this example, the subs are driven from a Matrix output, although you can configure any output bus.)

L/R Threshold Mutes Subs

Triggers:

Mono, Fader Below, -15.0 dB

Actions:

Mute “Sub Drive” (Mtx *), On, While Active

You may also want to create a similar Event that will automatically mute any additional PA elements (such as front or side fill speakers), as well as the subs, any time the master L/R bus is muted. Configure this Event as shown below (note that in this example, all PA elements are driven from the Matrix outputs).

Subs, Fills and Mains Mute with Master L/R

Triggers:

Mono, Mute Channel, On

Actions:

Mute “Sub Drive” (Mtx *), On, While Active

Mute “Front Fills” (Mtx *), On, While Active

Mute “Main PA” (Mtx *), On, While Active

Example 7: Vocal Processing Control via VCA

It’s also possible to configure multiple Events to simplify more complex mix control tasks. For example, one of Peck’s favorite Event configurations helps him automatically control the on/off mute state for vocal reverbs and delays.

“Have you ever listened to the lead vocalist speak during a song or between songs, and the vocal is smothered in reverb or delay?,” he asks. “This is very distracting and typically makes it difficult at best to understand what is being said.”

Rather than using a mute group to control the effects returns, Peck created an Event configuration to control the mutes using a VCA. “At Mission Church, I use a reverb, short delay, and a long delay for vocal effects, but I only assign the long delay to a VCA. This fader now controls the on/off for my vocal processing, and since the long delay return is the only thing assigned, I now have control over the amount that is heard by simply pushing up the fader. This is an incredibly useful tool for managing vocal processing between and during songs.”

In order to configure this Event sequence, assign the long delay effect return to a VCA. Then, use the Event List to set the reverb and short delay thresholds at different levels than that of the long delay so they kick in at different intervals.

Mute Vocal FX

Triggers:

Long Delay (VCA *), Fader Below, -65.0 dB

Actions:

Mute “Reverb” (FX *), On, While Active



Mute “Short Delay” (FX *), On, While Active

Long Delay Mute

Triggers:

Long Delay (VCA *), Fader Below, -40.0 dB

Actions:

Mute “Long Delay” (FX *), On While Active

With this Event configuration, Peck streamlined his workflow so that he can remain focused on the stage, with just a single finger riding the VCA fader, instead of needing to move around the console to mute and unmute the vocal processing effects.

The Events list is an extremely powerful part of every VENUE system and with a little imagination, you can customize a set of Events to help you control the tedious but necessary actions that take place while mixing an event.

