ROADTEST

TASCAM Sonicview 24XP Digital Console

By SteveSavanyu

Tascam Sonicview

The rear panel reveals the 24 input channels, 16 balanced outputs, onboard Dante interfacing, GPIO, two expansion slots and more

The SB-16D stagebox, with its 16 mic inputs, 16 line outputs and onboard Dante

Back in my early sound engineering days, TASCAM mixers were my choice for live events and recording. As technology evolved from analog to digital, TASCAM was there with quality digital mixers, including the legendary DM-4800. With the new Sonicview series, TASCAM created an entirely new digital console incorporating the latest technology, while providing an easy-to-use, intuitive mixing experience. Fully customizable touch screens, user-definable controls and extensive connectivity options make the Sonicview mixers a next generation choice for a wide range of live sound, recording and broadcast applications.

Available in two versions, the Sonicview 24XP offers three 7" touch screens and three banks of eight motorized faders while the compact, rack-mountable Sonicview 16XP has two touch screens and two fader banks. For this review, TASCAM sent me a Sonicview 24XP along with the new SB-16D Dante Stagebox.

The heart of TASCAM's Sonicview is a powerful mix engine built around a 96 kHz, 54-bit FPGA with 32-bit ADC. The FPGA mix engine's ultra-low two samples (20.8 µS) latency enables the system to achieve a low 0.51 ms latency (mic input to line output) making it ideal for use with IEM monitoring systems.

Well Connected

The Sonicview 24XP offers 24 rear-panel XLR mic/line inputs and eight of them have separate balanced TRS line input connectors. To accommodate external analog outboard gear, two inputs include TRS analog insert points. Additionally, two stereo pairs of RCA aux inputs and an XLR talkback mic input are located on the rear panel.

Along with 16 XLR-M line level outputs are a dedicated L/R XLR-M monitor output and the EtherCON connectors for the Dante Network (Primary and Secondary). A separate USB-B (2.0) connector interfaces to a computer for 32-channel record/playback. BNC word clock connections enable digital audio synchronization, and a dedicated RJ-45 network port connects to a Wi-Fi router for remote mixer control. A user-configurable footswitch jack can recall snapshots, set effect tap tempo or other control functions.

GPIO terminals (8-in/8-out) appear on a DB-25 connector allowing external mixer control, making Sonicview ideal for broadcast, theater and corporate AV applications. Finally, a dedicated 4-pin XLR-F connector is provided for an optional gooseneck console lamp, a nice touch.

Each of Sonicview's onboard XLR inputs incorporates a high-performance Class 1 HDIA (High Definition Instrumentation Architecture) preamp. Developed from 50 years of TASCAM instrumentation engineering experience, these ultra-low noise preamps exhibit excellent EIN, S/N ratio and distortion ratio, with a wide frequency response. Capable

Top surface detail of the console's three 7" touch screens; illuminated select, mute and solo buttons; and LCD name strip displays on each channel. The color LEDs below the rotary encoders change to indicate their function for each selected screen. Photo by author.

custom combination of channels and output buses are controlled by the motorized faders.

I'm in Control

Sonicview's bright 7" touch screens are located above a set of rotary encoders with status LEDs. Below the encoders are dedicated channel mute, solo and select buttons. I like that the mute buttons are recessed with guard edges so they can't accidentally be pressed. A separate LCD channel name strip displays specific channel data including channel num-

that TASCAM provides both 1/8" and ¼" headphone jacks.

With the newly released firmware V1.5.0, TASCAM adds a second monitor bus system. Each monitor section has six selectable monitor source presets along with user-configurable mute/dimmer. A location setting allows monitor speakers in the same area as a live microphone to automatically mute when the mic is active. You can easily choose talkback input sources and assign outputs directly to each bus, monitor or output routers. Monitor and OSC on/off settings can be controlled by USER keys for quick control, making the Sonicview ideal for broadcast, house of worship and corporate event streaming.

Room with a VIEW

TASCAM's powerful Visual Interactive Ergonomic Workflow (VIEW) system manages the Sonicview 24XP's touch screens providing three different ways to view settings. Each touch screen can be configured independently, so you can monitor and control any desired combination of settings, on whichever screens you want, whenever you want. Taking advantage of this functionality enabled me to monitor my vocals on one screen, while tweaking the lead singers EQ on another and verifying monitor sends on the third. And for those with large fingers, TASCAM includes a convenient magnetic pen.

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vocal changes, they easily handle up to +32 dB signals with plenty of headroom for sudden level increases.

Additional Sonicview mixer connectivity options include built-in Dante networking and a 32-bit/96k Hz multichannel USB audio interface. Two rear panel expansion slots can be populated with optional TASCAM expansion cards including: 64-in/64-out MADI; 16-in/16-out AES/EBU; 16-channel Analog Output; and an additional 64-in/64-out Dante Interface Card. When the Dante expansion card is installed, Sonicview can accommodate up to 128 Dante inputs and outputs for use in a large Dante system. (Note: When using a Dante 96 kHz configuration 64 total Dante I/O's can be used.)

Internally, Sonicview offers 40 mono channels, two stereo channels and four stereo FX return channels. You can easily manage sources from every part of a venue via the Dante network and bring in playback tracks from a DAW via USB. Eight mute groups and eight DCAs manage groups of channels, while seven programmable layer keys select which custom combination of channels and output buses are controlled by the motorized faders.

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I'm in Control

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On the right side of the console are the master fader, seven illuminated layer select buttons, sends on fader button and 12 programmable user buttons. Above them are six more user buttons, talkback controls, monitor output volume, main output level meters, an SD card slot for two-track record/playback and a USB C connector for connecting an external keyboard, media playback or data transfer. TASCAM has thoughtfully configured the user buttons for common functions, but these can be easily changed to suit user preferences.

Headphone connections and level control are recessed on the mixer's front edge, out of the way but easy to get to. I like that TASCAM provides both 1/8" and ¼" headphone jacks.

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The SB-16D stagebox, with its 16 mic inputs, 16 line outputs and onboard Dante

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In **Channel Strip View**, the screens mimic an analog mixer layout view, showing eight channels on a screen. Gain, channel processing thumbnails (Gate, EQ, Compressor Limiter), channel pan, channel number, color and name along with the first four Aux sends appear. Touching the small double arrow opens a selection window to choose Aux and FX sends in groups of four. Pressing the Home button returns all three screens to Channel Strip View.

As with other digital consoles, pressing a channel's select button opens a channel editing screen. In **Individual View**, simply select the processor to edit by touching its tab at the top of the screen. Here you

can have one channel in each bank open for editing, each with their dedicated screen. But TASCAM took this function one step further, allowing any channel — regardless of bank — to appear on any screen. Simply open a channel and use the "left/right" scroll arrows by the channel name to locate and open any channel that screen. In this mode, channel select buttons illuminate as they follow the screen selection.

Touching the "Full Screen" button activates **Module View**, dedicating all three screens to the selected channel. Configure EQ in one, Compressor in the second and routing in the third — the choice is up to you.

Intelligent interactivity guides you to specific functions. For example, in Channel Strip View, touching any of the aux send rows places a white box around the row and assigns send gain settings to all the rotary encoders, making it easy to build an aux mix across all channels. In this mode, press and rotate an encoder for coarse adjustment and simply rotate the encoder for fine settings. Full-color LED's below the encoders signify what function they are controlling.

TASCAM uses the term "module" to represent the specific settings for input overview, signal processor, output overview, DCA/Mute group and FX unit. These can be saved and recalled to other locations. I like that I can save and copy everything or only the processor I need.

In Channel View, touching a channel "name" opens a detailed module overview. A convenient block diagram on the touch screen shows the signal routing for the selected channel, along with DCA and mute group assignments. A metering point function lets users choose specific points in the signal chain for the channel meter. A row of function access "buttons" open detailed screens for Input, Gate, EQ, Compressor/Limiter, send and pan. Touching the large "channel" section opens a screen for naming the channel, choosing the LED color and icon that appear in the Channel Name display.

Top surface detail of the console's three 7" touch screens; illuminated select, mute and solo buttons; and LCD name strip displays on each channel. The color LEDs below the rotary encoders change to indicate their function for each selected screen. Photo by author.

Let's Get Processing

Each channel has access to a full complement of first-rate digital processing including Gate, Parametric EQ, and Compressor-Limiter, along with typical input gain, digital trim, polarity, pad and 48 VDC phantom power. Input source selection can be locked to prevent inadvertent changes. Selecting a processor opens its associated editing screen and the rotary encoders are assigned to key processor parameters. LED's below the encoders illuminate to signify which function is being controlled. Rotating the encoder allows for fine adjustments while pushing while rotating offers quick, coarse adjustments.

Each channel also has a four-band fully parametric EQ with low-cut filter. The lower and upper bands can be set for shelving or peaking. An RTA function can be engaged and separate Pre/Post metering shows how the EQ affects signal level. EQ parameters can be edited using the rotary encoders or simply touching and dragging the curve on the screen. I liked the touch-and-drag handle for setting the "Q". Individual bands can be turned on or off for quick in/out comparisons and a "flat" button (with confirm) flattens the curve.

Factory presets are available for common instruments and vocals and up to 128 user presets per processor can be stored and recalled. When a preset is selected, you'll see a visual of the settings before you choose to recall it. This was much nicer than trying to remember what that saved preset you named "BV-1-EJT" actually did.

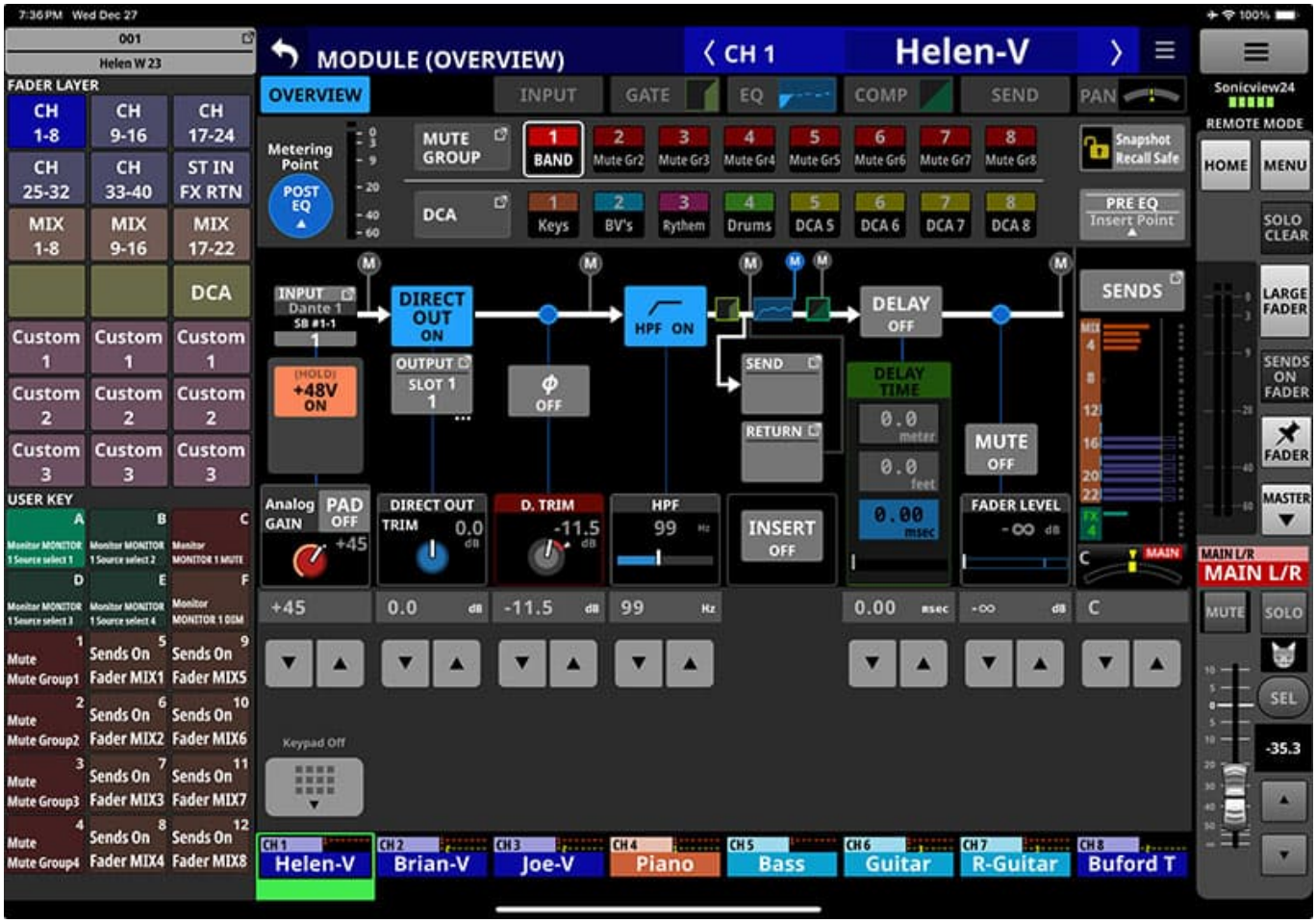
Each output offers a full complement of processing, including parametric EQ, compressor and 1/3-octave graphic EQ with RTA function. The four built-in FX modules presented a variety of good-sounding factory presets, and I was pleased with the overall sound of the FX engines.

The free Sonicview Remote control app can run on an iPad (shown here), a Windows PC or a Mac computer

And It Records

Sonicview presents several ways to capture and playback audio at a 96 kHz, 32-bit sample rate. For basic 2-track archiving, simply capture the main mix directly to the onboard stereo USB/SD recorder. Alternatively, connect a DAW to the rear panel USB port and capture up to 32 tracks from any of the 64 selectable sources, including mono input channels, mix buses and the main L/R output. For virtual sound checks, 32 USB sends can be routed back to the channels.

North American Sonicview mixers include a TASCAM IF-MTR32 32-channel Multi-track Recorder Card. With this card, the Sonicview mixer becomes a full multi-track recording system, capturing 32 channels directly to an internal SDXC card. Along with punch-in/punch-out, pre-record, auto-record, and markers, it automatically saves and closes the file every 60 seconds during recording to safeguard against data loss.



The Input Overview screen shows detailed information about the channel's signal chain

Dante Enabled — Superior Networking

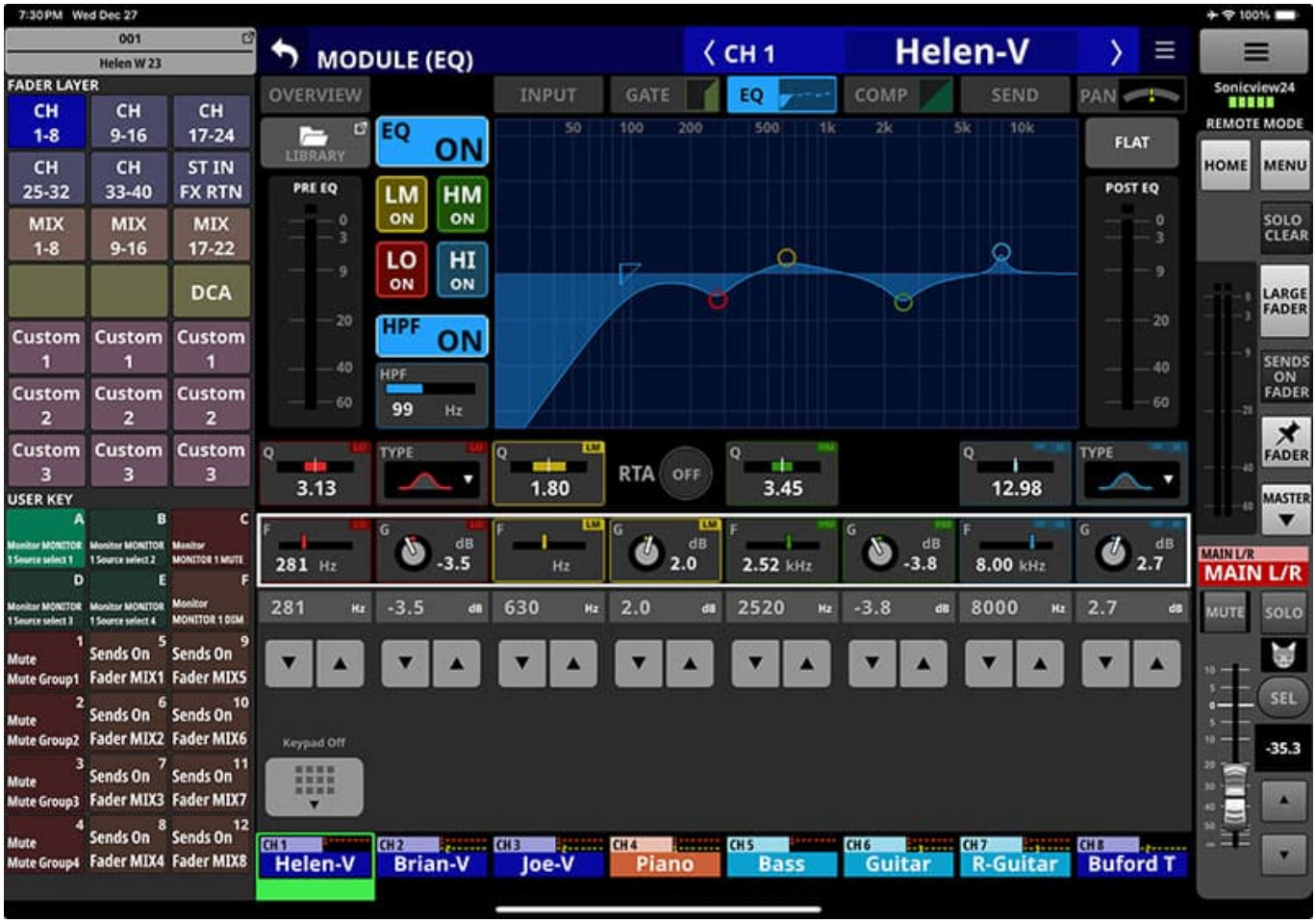
Sonicview includes a built-in 64 x 64 Dante audio-over-IP interface that supports Dante Domain Manager along with AES67 and SMPTE ST2110 interoperability. Two Dante ports on locking EtherCON connectors enable redundant Dante streams.

Complementing the Sonicview mixer is TASCAM's SB-16D Dante stage box. With 16 XLR inputs and 16 outputs, this rugged compact stage box connects directly to a Sonicview mixer or operates as a stand-

alone remote controlled Dante interface using the TASCAM IO Control app and Dante controller. Multiple SB-16D's can easily be deployed across the Dante network to expand the I/O capability.

Equipped with the same Class-1 HDIA mic preamps as the Sonicview mixer, each input channel has 48 VDC phantom power and SIG (signal present) and OL (overload) LEDs for input-level monitoring. Each line output also is equipped with SIG/OL LEDs. Rugged rubber bumpers allow the SB-16D to be used as a portable stage box or it can be rack-mounted. Capable of operating on AC mains power or 12 VDC (4-pin XLR-M), all rear-panel connections are recessed for protection. LED status indicators are provided for Dante, sample rate, DC power and Status.

I also used the stage box in standalone mode, with Dante virtual sound card and the control app on a recording gig. I was impressed with its ease of setup and would recommend it for someone looking to expand their Dante system.



The EQ screen for a selected channel provides ease of control with fast access to parameters

There's an App for that

When connected to a Wi-Fi router, TASCAM Sonicview can be controlled remotely using the Sonicview Remote control app on an iPad, Windows PC or Mac computer. The app screens match the Sonicview touchscreens, providing a familiar look and feel. The detail screens are sharp and bright, but on an iPad mini, things might be a bit crowded for someone with large fingers. The computer versions allow offline editing and shows can be saved and sent to the mixer at will. I did notice that only one user can be connected at a time. I would like to see a limited "personal mix" version that would allow multiple performers to control their own monitor mixes.

What's My View?

Each time I used the Sonicview 24XP, I discovered more cool and useful features that help set the Sonicview mixers apart from other units in its price class. Whether you mix concert gigs, house of worship, broadcast or recording events, TASCAM Sonicview is a powerful contender, and the view is perfectly clear.

At a Glance:

Full-Featured, Great Sounding and Easy-to-Use Digital Console

With its 96 kHz, 54-bit internal FPGA Mix engine, I/O expandability (MADI, AES/EBU, analog) and built-in Dante networking with redundancy, TASCAM has done its homework with the Sonicview family. And the SB-16D Stagebox is a powerful Dante interface whether used with Sonicview or on its own.

TASCAM Sonicview 24XP / SB-16D

PROS

- Intuitive VIEW (Visual Interactive Ergonomic Workflow)
- Large, bright touch screens with independent LCD channel name strips
- Built-in Dante audio networking
- High-definition Class-1 Mic Preamps
- Well-designed SB-16D Stagebox

CONS

- Only one user can access control app at a time
- Large fingers may have difficulty with small screen buttons

SPECS

Mix Engine: 96 kHz, 54-bit Float point FPGA

ADC: 32-bit, 112 dB converter dynamic range

Latency: <0.52 ms (mic input to line output)

Frequency Response: Mic/Line 20 Hz to 40 kHz +0/-1 dB (at 96 kHz)

Max input level: +32 dBu at Max Gain

Analog Dynamic Range: 108 dB

Crosstalk: 100 dB at 1 kHz

Phantom Power: 48 VDC

Dante: Dual (Primary and Secondary) on EtherCON connectors

USB: USB-B (Host connection), USB-C (2-Track Audio Playback, External Memory)

Expansion Slots: 2 (IF-MTR32 multi-track recorder card occupies one slot)

Network Control Port: RJ45

24XP Dimensions: 27.2 x 9 x 21.4»

24XP Weight: 39.7 pounds

Street Pricing: Sonicview 24XP, $6,999; Sonicview 16XP, $5,999; SB-16D Dante Stagebox, $2,499

MANUFACTURER: TASCAM

CONTACT: www.tascam.com