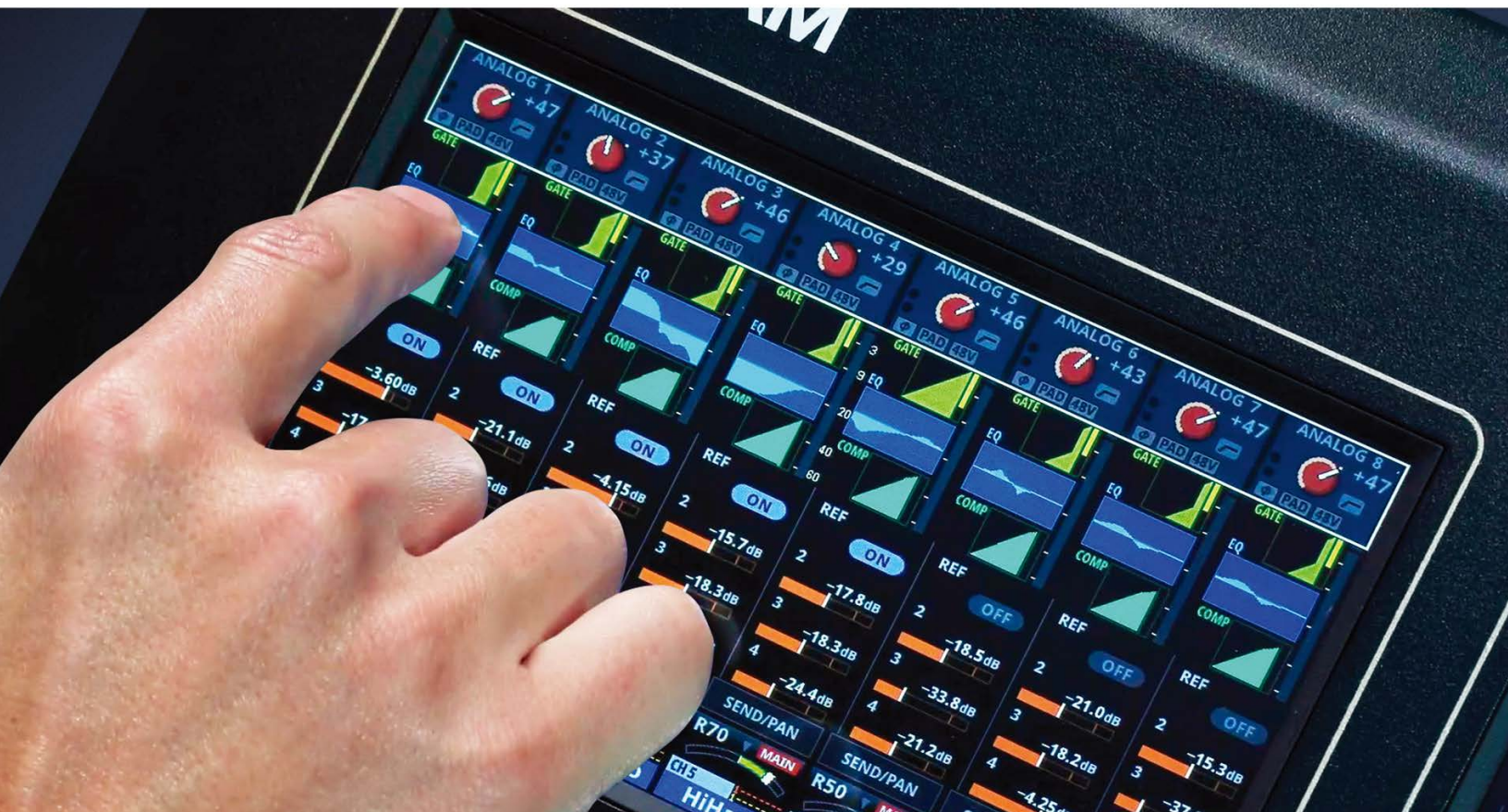# TASCAM®

# Sonicview

# CHOOSE A MODEL

Two Sonicview models are available, which differ in frame size and the number of physical inputs, mic preamps, faders, and touch screens. The Sonicview 16 offers 16 physical input channels with motorized faders and TASCAM's top-of-the-line Class 1 HDIA microphone preamps, while the Sonicview 24 provides 24. Internally, the architecture of the two models are the same, with a generous 44 input channels (40 mono channels and 2 stereo channels), 22 flex output buses, and the L/R main bus.

# INTUITIVE OPERATION AT YOUR FINGERTIPS

The Sonicview 24 offers motorized channel faders in three banks of eight while the Sonicview 16 has two banks of eight, plus a motorized stereo fader for the main bus. Above each bank of channel faders is a color touch panel that allows you to view entire mixer chanels, or get down to details, controlling each parameter with your fingertip.

# THE AMAZING VIEW

## ⬛VIEW

Truly the next generation in mixer user interfaces, the powerful intuitive TASCAM Visual Interactive Ergonomic Workflow (VIEW) system lets you quickly and easily configure the Sonicview touch screens.

Thanks to the VIEW user interface, there are three different ways to view your settings, and each touch screen can be configured independently, so you can monitor and control any combination of settings you want, in whichever screens you want, whenever you want. For instance, you could monitor levels for eight channels of vocals on screen 1, while tweaking the parametric EQ on a drum submix in screen 2 and keep an eye on the output-bus level and compression curve on screen 3 (Sonicview 24).

- To view the status of any eight adjacent channels at a glance, as you would see on vertical channel strips with an analog mixer, choose Channel Strip View.

- In Module View, you can monitor and control any three or two sets of parameters for one single channel, including the compressor, graphic EQ, aux/ effects send, and more

- Individual View is the ultimate in customized displays. View any functions for any channel, group ofchannels, and more—all on different screens, simultaneously. For instance, you could simultaneously monitor the output bus meter, adjust a graphic equalizer, and monitor levels on important input channels.

1. Channel Strip View lets you monitor and control eight adjacent channels, and view them as virtual channel strips like an analog mixer layout.
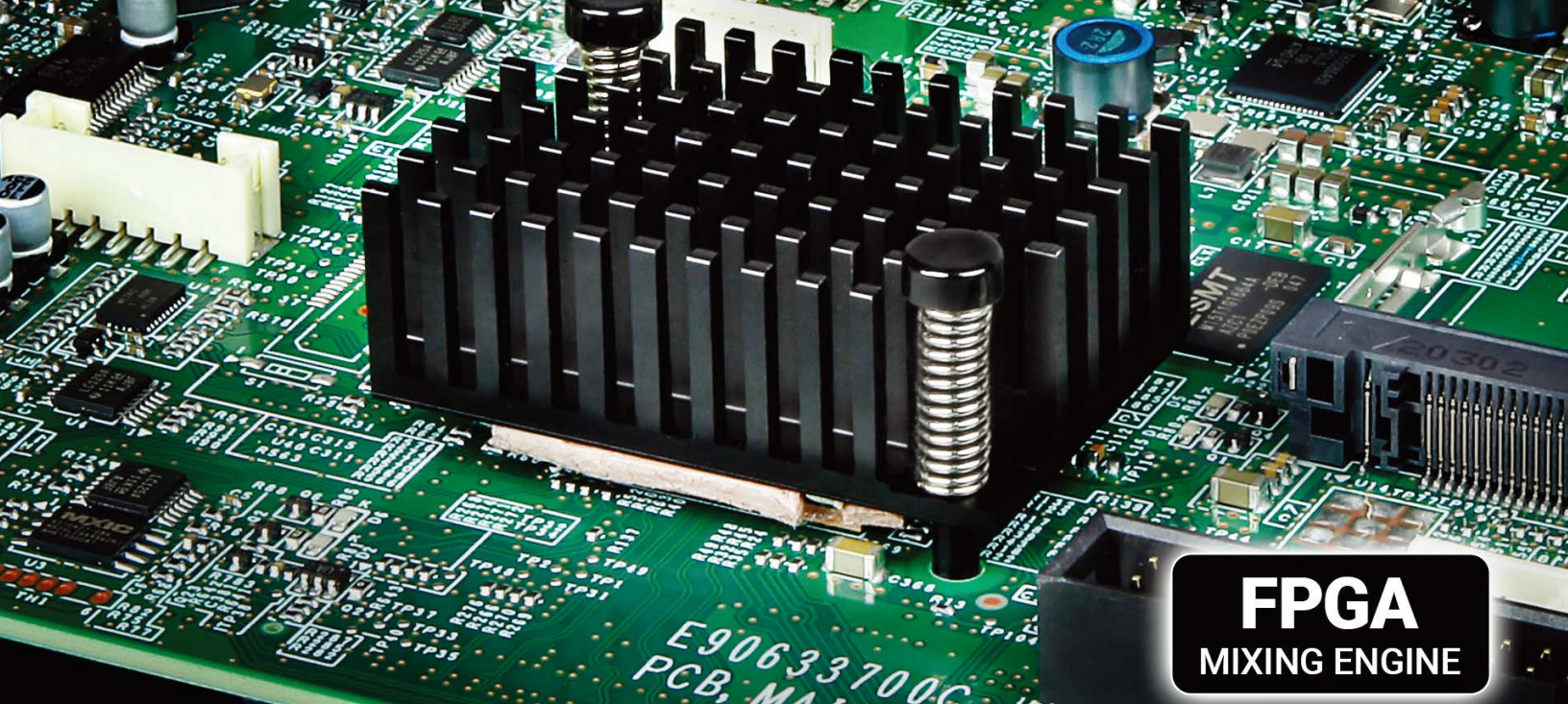


2. Module View lets you monitor and control any three sets of parameters simultaneously for one single channel.



3. Individual View lets you monitor and control a custom selection of functions for any channel or group of channels.

**FPGA**
**MIXING ENGINE**

# HIGH-END AUDIO QUALITY

Sonicview delivers the finest audio performance in its class, thanks to a 54-bit float-point FPGA mixing engine; continuous, high-definition 32-bit/96 kHz sampling; and 32-bit analog-to-digital converters. The mixing engine's float-point processing makes it possible to flexibly change levels without compromising resolution and FPGA mixing engine make it possible to ensures ultra-low latency, even in analog-to-analog connections. The result is no-compromises performance, including with Dante networks and in-line monitoring systems.



*Back panel of Sonicview 24

# INPUT CHANNELS AND PROCESSING

The Sonicview 24 offers 24 channels consisting of either 24 XLR mic/line inputs or 8 channels with 1/4" balanced TRS line inputs. The Sonicview 16 offers 16 channels consisting of either 16 XLR mic/line inputs or 8 channels with 1/4" balanced TRS line inputs. With both units you also get TRS insert points on two channels, two stereo pairs of RCA aux inputs, and an XLR input for a talkback mic.

# CHANNEL CONTROL AND PROCESSING

Sonicview delivers the finest audio performance in its class, thanks to a 54-bit float-point FPGA mixing engine; continuous, high-definition 32-bit/96 kHz sampling; and 32-bit analog-to-digital converters. The mixing engine's float-point processing makes it possible to flexibly change levels without compromising resolution and FPGA mixing engine make it possible to ensures ultra-low latency, even in analog-to-analog connections. The result is no-compromises performance, including with Dante networks and in-line monitoring systems.

Each input channel can use any or all of 11 processing functions, which can be independently set:

- Delay (Input/Pre-fader)
- Phase
- Digital Trim
- High-pass Filter
- Gate/Expander/De-esser
- Fader/Pan/Mute to L/R

- 4-band Parametric EQ
- Compressor/Ducker
- Solo
- Mix 1-22 Send/Pan (Pre/Post)
- FX 1-4 Send/Pan (Pre/Post)

# TOP-OF-THE LINE CLASS 1 HDIA MIC PREAMPS

Each Sonicview microphone input feeds a TASCAM Class 1 HDIA (High Definition Instrumentation Architecture) preamp—the finest mic preamp we've ever made. Thanks to an instrumentation amplifier with extremely good noise characteristics in the first stage, Class 1 HDIA microphone preamps exhibit excellent EIN, signal-to-noise ratio, distortion ratio, and frequency response. Sonicview ultra definition mic preamps will pick up the slightest nuance from rosin on a violin bow to the subtle dynamic changes of a voice or saxophone. The mic inputs can accept up to +32 dBu signals, providing plenty of headroom for sudden level increases.

The combination of Class 1 HDIA preamps, 32-bit/96 kHz ADCs, and our 54-bit FPGA mixing engine is impressive but we didn't stop there: We conducted extensive internal and external evaluations to tune Sonicview mixers for optimal performance. The result is best-in-class sound that will never disappoint.
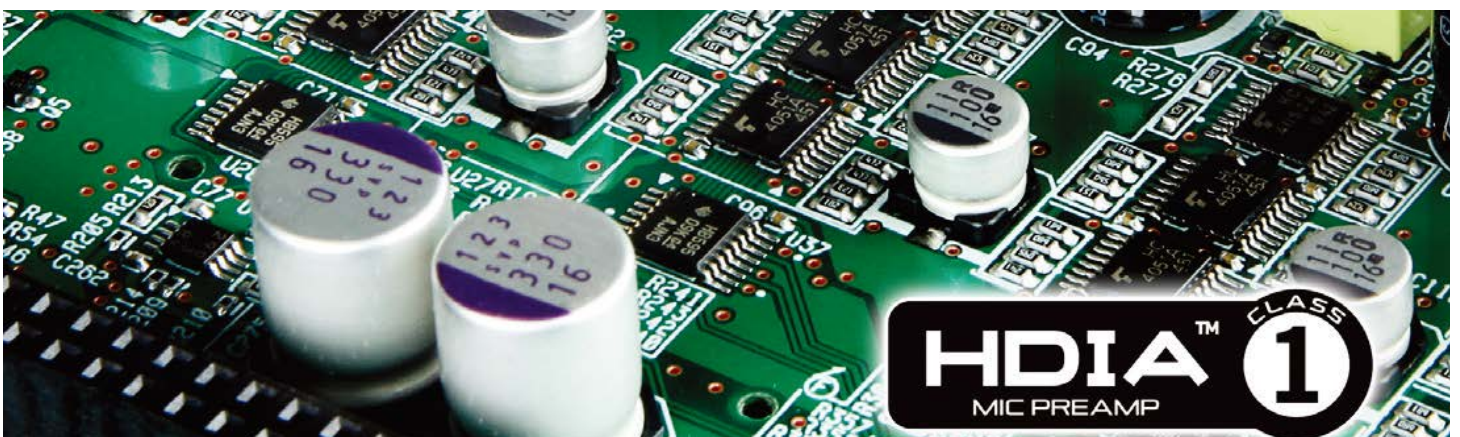
# BUILT-IN USB AUDIO INTERFACE AND STEREO RECORDING
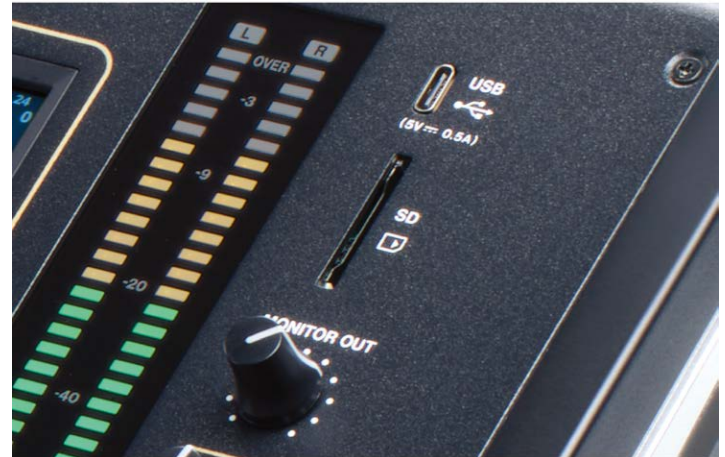
Sonicview's integrated 32-in/32-out USB audio interface makes it a first-rate front end for recording and broadcast studios, as well as for capturing live events. Record your choice of channel direct outs, flex buses, and the L/R main bus to your favorite DAW at up to 96 kHz with the same 32-bit precision used throughout the Sonicview. You can simultaneously capture the main mix directly to the onboard stereo SD recorder — handy when the band wants to listen to their performance at the hotel or on the bus.

# PHYSICAL OUTPUTS AND EXPANSION CAPABILITY

As you'd expect, the Sonicview 24 and Sonicview 16 offer plenty of physical outputs, with 16 XLR line outputs, and two XLR monitor outputs. If that's not enough, you can add more analog, MADI, or AES/EBU I/O with an optional expansion card. To further expand the system, add one or more optional 16-in/16-out SB-16D Dante-networked stage boxes. Microphone gain for all 16 inputs can be remotely controlled from the Sonicview, and the SB-16D can be used as a floor box or rack mounted.



# OUTPUT BUSES AND  PROCESSING

You get a wealth of output buses, with powerful signal processing and flexible routing options. In addition to the main L/R stereo bus, Sonicview provides 22 output flex buses, each of which is configurable as a subgroup, aux, or matrix. Provide multiple stereo in-ear monitor submixes without running short of buses and send to the analog outputs; create matrix mixes for multiple loudspeaker zones and send over the Dante network for restaurants and worship performances; and more. All output buses are equipped with 31-band graphic EQ, real-time analyzer functions, 4-band parametric EQ, compressor/ducker, delay, plus Solo, Pan, and Mute. Four additional effects processors can be assigned to any individual mixer channels for even more including an astounding reverb effect.

# DANTE-ENABLED FOR SUPERIOR NETWORKING



Dante® audio-over-IP networks integrate thousands of concert touring systems, as well as installed systems in recording studios, radio stations, corporate boardrooms, houses of worship, and much more. Sonicview consoles can serve as the audio center of these systems, thanks to a built-in 64-in/64-out Dante interface that supports Dante Domain Manager and have AES67 and SMPTE ST 2110 interoperability. Two Dante ports enable redundant streams.

## REMOTE CONTROL AND OFFLINE EDITING

Whether onstage, backstage, in a control room, or at the rear of a concert hall, you're always in full control of your Sonicview recording and mixing console. Just connect a Wi-Fi router to the Sonicview's Ethernet port and use free TASCAM Sonicview Control software for macOS, Windows, and iPadOS to manage your Sonicview from virtually anywhere in the venue. Edit settings offline in advance so you're ready to go when a session or show begins, then make adjustments from the console or from the software.

## WORK QUICKLY WITH FUNCTION KEYS

Sonicview offers intuitive, analog-like operation, while providing a variety of convenient digital functions that can be customized as needed. Eighteen user-defined function keys can be assigned to recording with the internal recorder, playback, and more. Several keys are conveniently preassigned to functions such as Sends On Fader and Snapshot Recall but you can reassign them as desired. A footswitch (not included) can be used to tap in delay-time settings.

# CLEAR, MISTAKE-FREE NAVIGATION

When you're mixing a show, broadcast, or crucial recording session, you can't afford to hit the wrong button or grab the wrong control. Sonicview's mixing surface makes it easy to see at a glance what you're controlling, even in a dark concert hall. Each channel strip includes a channel-name LCD with a full-color LED. The User keys feature full-color LEDs, so you can group each input source and function by color and view them easily. The Solo and Channel Select keys have distinctive shapes, and the Mute key is guarded with a cap. With these features and the customizable touch panels, you always know where you are and what you're controlling.



# EXTERNAL CONTROL, CLOCKING, AND MORE

In addition to audio I/O, Dante, and USB ports, Sonicview is equipped with 8-in/8-out GPIO terminals (on a DB25 connector) for external control, making it suitable for events and relay applications. BNC word clock In and Out/Thru enable digital audio synchronization, and an Ethernet port can connect to a Wi-Fi router for wireless control. Sonicview also has two TASCAM expansion slots.
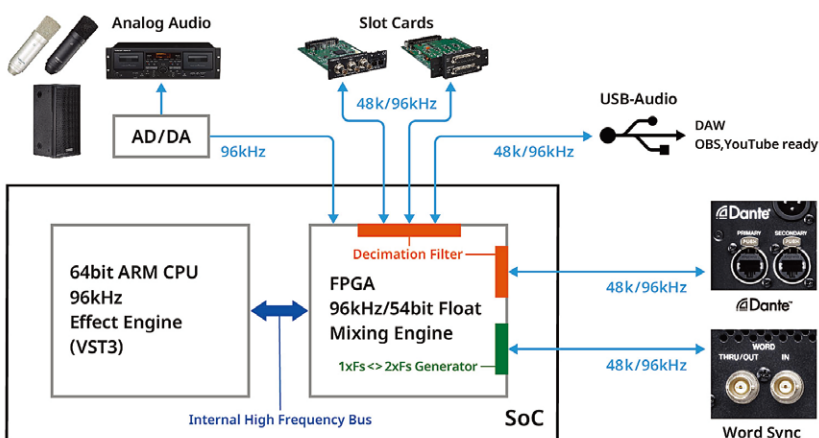


*US versions only

# THE MUSIC NEVER STOPS

Your business depends on reliable equipment that will stay in service with minimal interruptions, and we designed Sonicview accordingly. Sonicview's mixing engine and real-time operating system are completely separated from the physical mixing surface, greatly improving stability. In the unlikely event that the mixing surface becomes inoperable, the sound won't stop, and operation can be restored by restarting the control surface operating system. Meanwhile, the show will go on.

# SONICVIEW EXPANSION CARDS

## Optional Tascam Expansion Cards

The Sonicview features and connectivity can be further expanded using optional user installable cards that mount in the two rear-panel TASCAM Slots.

## TSQD-128A

Special 128GB SDXC SD card designed for maximum performance and reliability when used with the Sonicview 32-channel digital recorder

## IF-MTR32 32-CHANNEL MULTI-TRACK RECORDER CARD

With the IF-MTR32 card, the Sonicview becomes a full multi-track recording mixer, capturing all 32 channels directly to an internal SDXC card. The IF-MTR32 supports simultaneous 32-channel punch-in/punch-out, pre-record, auto-record, and markers. Best of all, it automatically saves and closes the file every 60 seconds during recording to safeguard against data loss so you can let the recorder do it's job worry-free while you focus on mixing.

## IF-MA64/EX 64-in/64-out MADI Interface Card

The IF-MA64/EX 64-in/64-out MADI interface card offers both BNC coaxial and optical connections. With the IF-MA64/EX card installed, transmit multiple audio channels digitally to devices like multi-track recorders, other mixers, interfaces and more.

## IF/AE16 16-in/16-out AES/EBU Interface Card

The IF-AE16 AES/EBU interface card delivers 16 input and 16 output channels on two 8x8-channel DB25 connectors. Transmit and receive digital audio to amplifiers, speakers other AES/EBU enabled pro audio equipment.

## IF-DA64 64-in/64-out Dante Interface Card

IF-DA64 64-in/64-out Dante Interface Card adds 64 more Dante channels of IO to the internal integrated Dante capability already provided with Sonicview mixers. By adding the IF-DA64, Sonicview can accommodate 128 Dante inputs and outputs for even greater capability in a large Dante system. When using a Dante 96kHz system, TASCAM Sonicview can accommodate 64 total Dante inputs and outputs when the IF-DA64 is installed.

## IF-AN16/OUT 16-channel Analog Output Card

IF-AN16/OUT 16-channel Analog Output Card delivers 16 line-level outputs on two 8-channel DB25 connectors. Expand the Sonicview analog outputs for even more flexibility.
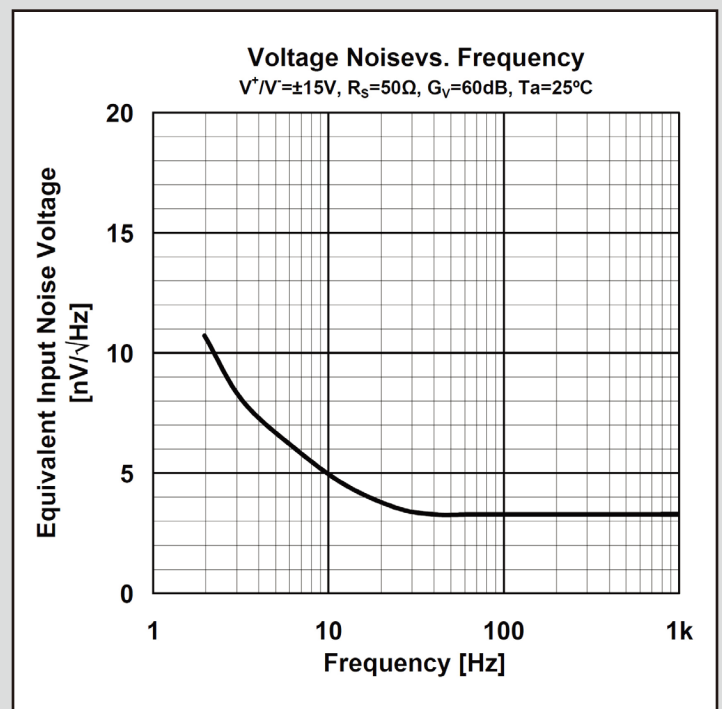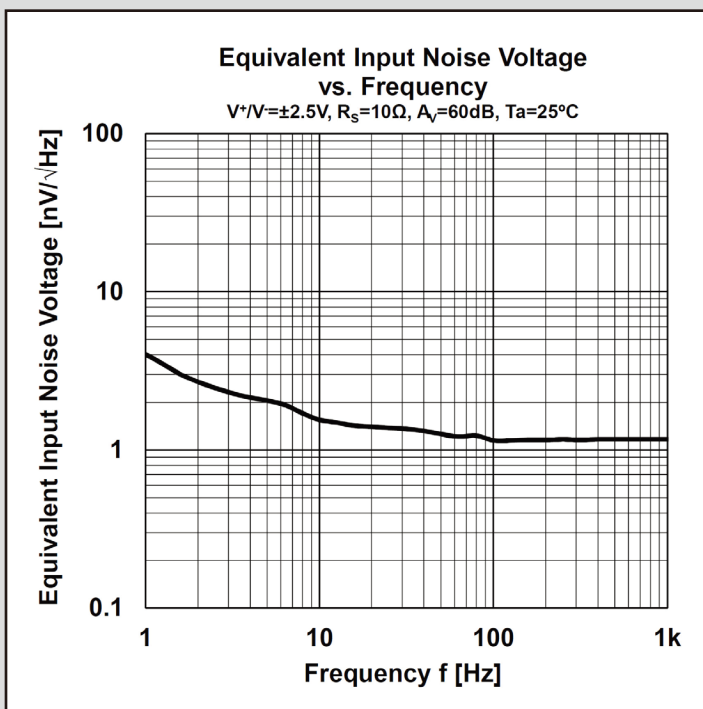
# TASCAM Class 1 HDIA Microphone Preamp

Each Sonicview microphone input feeds a TASCAM Class 1 HDIA (High Definition Instrumentation Architecture) preamp—the finest mic preamp we've ever made. Thanks to an instrumentation amplifier with extremely good noise characteristics in the first stage, HDIA microphone preamps exhibit excellent EIN, signal-to-noise ratio, distortion ratio, and frequency response—even when the gain is increased. The mic inputs can accept up to +32 dBu signals, providing plenty of headroom for sudden level increases.

When developing the HDIA microphone preamp and the Sonicview's analog inputs and outputs, we drew on TASCAM's more than 50 years of expertise in acoustic design, combined with our engineers' fresh ideas. Large and care-fully selected capacitors are implemented in key areas of the circuit to achieve a power-supply design that provides the energy required to handle low frequencies and loud signals. Peripheral discrete components, such as capacitors, resistors, and coils, were carefully selected. An intensive study was conducted to obtain the most fitting filter coefficients of ADC.

As a result of this intensive research and development, along with field testing by professional audio engineers, weachieved a sound that reproduces rich low frequencies and extended highs while maintaining TASCAM's signature sonic transparency. The result is best-in-class sound that will never disappoint.

## EQUIVALENT INPUT NOISE VOLTAGE VS. FREQUENCY SONICVIEW ULTRA-LOW NOISE OP AMP GENERAL OP AMP FOR AUDIO CIRCUIT (NJM4580)



Equivalent Input Noise Voltage vs. Frequency
$V^+/V^-=\pm2.5V$, $R_S=10\Omega$, $A_V=60dB$, $Ta=25°C$



Voltage Noisevs. Frequency
$V^+/V^-=\pm15V$, $R_S=50\Omega$, $G_V=60dB$, $Ta=25°C$

## Audio Performance

| | | |
|---|---|---|
| MIC PREAMPS EIN | <-128 dB | |
| FREQUENCY RESPONSE | +0 dB / -0.5 dB | 20 Hz–20 kHz, MIC/LINE IN TO LINE OUT |
| | +0 dB / -1.0 dB | 20 kHz –40 KHZ, MIC/LINE IN TO LINE OUT |
| DYNAMIC RANGE | >108 dB | MIC/LINE IN TO LINE OUT, PAD OFF, GAIN=12, Clock Master=INT, JEITA |
| | >110 dB | MIC/LINE IN TO DANTE OUT, PAD OFF, GAIN=12, JEITA |
| | >112 dB | DANTE IN TO LINE OUT, Clock Master=INT, JEITA |
| THD+N | <0.002% | MIC/LINE IN TO LINE OUT, A.REF=+4dBu, PAD OFF, GAIN=12, JEITA |
| | <0.002% | MIC/LINE IN TO DANTE OUT, A.REF=+4dBu, PAD OFF, GAIN=12, JEITA |
| | <0.002% | DANTE IN TO LINE PUT, INPUT=0dBFs, JEITA |

## Technical Specifications

| | | |
|---|---|---|
| MIC/LINE INPUT | | |
| MAXIMUM INPUT LEVEL | +12 dBu | PAD OFF, TRIM MIN |
| MINIMUM INPUT LEVEL | -63 dBu | PAD OFF, TRIM MIN |
| MAXIMUM INPUT LEVEL | +32 dBu | PAD ON, TRIM MAX |
| MINIMUM INPUT LEVEL | -42 dBu | PAD ON, TRIM MAX |
| LINE OUTPUT | | |
| NORMAL LEVEL | 0 dBu / +4 dBu / +6 dBu | |
| PREFERENCE LEVEL | -9 dBu | A REF: +6 dBu |
| | -18 dBu / -20 dBu | A REF: 0 dBu |
| | -14 dBu / -16 dBu, -18dBu / -20 dBu | A REF: +4 dBu |
| MAXIMUM OUTPUT LEVEL | +15 dBu | A REF: +6 dBu |
| (SELECTABLE) | +18 dBu / +20 dBu | A REF: 0 dBu |
| | +18 dBu / +20 dBu, +22 dBu / +24 dBu | A REF: +4 dBu |



Relative Level (1.00000 kHz)
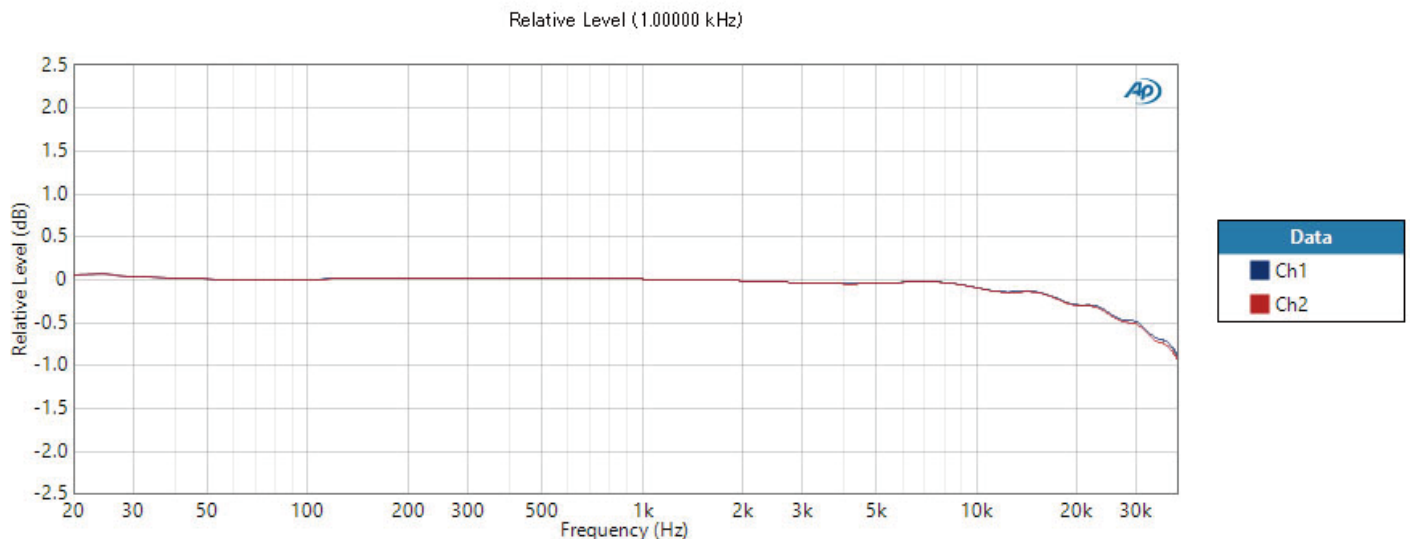
# SONICVIEW AND IP NETWORKS

A Dante 64-in/64-out interface is built into Sonicview. Whether an audio installation is large, medium, or small there is a need to connect everything together; mixers, recorders, speakers, power amplifiers, microphones, and more. This usually involves heavy cabling systems with limited routing capability and length that are prone to hum and noise.

Dante allows pristine digital audio to flow through standard slim cat 5 cables using Ethernet connectors and switchers to any Dante capable device. Reconfiguring the routing is as easy as a click on the Dante control software (created by Audinate).

Dante audio-over-IP networks integrate thousands of concert touring systems, as well as installed systems in recording studios, radio stations, corporate boardrooms, houses of worship, and much more. Sonicview consoles can serve as the audio center of these systems, thanks to a built-in 64-in/64-out Dante interface that supports Dante Domain Manager in addition to AES67 and SMPTE 2110 interoperability. Two Dante ports in Sonicview enable redundant streams.



## DANTE DOMAIN MANAGER (DDM)

Dante Domain Manager creates a domain that is independent of the network configuration and allows management  of Dante devices (routing settings, security, etc.) for each domain. It offers customizable security management of each domain and flexible networks that can be deployed across subnets or across a WAN, as well as real-time monitoring through the dashboard, detailed audit reports, and remote monitoring via SNMP.

For more information visit https://www.audinate.com/products/software/dante-domain-manager?lang=en.

## AES67 MODE

Developed by the Audio Engineering Society, AES67 is a technical standard that enables interoperability between various IP-based audio networking systems, such as RAVENNA, Livewire, Q-LAN, and Dante. Since it is a routable IP protocol, AES67 enables audio-over-IP solutions to scale beyond simple local area networks, passing through routers as well as switches.

Sonicview's AES67 mode enables the mixer to create and receive AES67 flows and route AES67 using a Dante Controller.

## SMPTE ST 2110-30 MODE

SMPTE 2110 is a suite of standards from the Society of Motion Picture and Television Engineers (SMPTE) that describes how to send digital media over an IP network—primarily useful in broadcast production and distribution facilities where quality and flexibility are more important than bandwidth efficiency. SMPTE 2110 is specified in several parts; ST 2110-30 is the part that refers to audio transport and is based on AES67. Sonicview's SMPTE ST 2110-30 mode allows for mutual operation with VoIP standards in broadcasting equipment and enables the creation of ST 2110-30 flows and route them with a Dante Controller. Dante Domain Manager is required.

For more information about SMPTE ST 2110-30 visit: https://go.audinate.com/hubfs/campaign/DDM/broadcast/audiv nate-dante-domain-manager-broadcast-aes67-smpte-2110-interoperability-wp.pdf?hsLang=es.

# INNOVATIVE, NEXT-GENERATION TECHNOLOGY

Sonicview's outstanding, cutting-edge performance is a direct result of TASCAM's engineering know-how, accumulated over many years of producing audio equipment for professional use. TASCAM's engineers have taken advantage of the latest technological advances while drawing on the advanced skills of the company's signal processing specialists to implement the Sonicview's 54-bit float-point FPGA processing, original reverb algorithms, and other innovative, next-generation technologies.

## THE AMAZING FPGA MIXING ENGINE

Sonicview's 54-bit float-point, field-programmable gate array (FPGA) mixing engine is a major contributor to the mixer's best-in-class audio performance. An FPGA is a programmable integrated circuit with very high computing performance and low power consumption into which the designer can program multiple logical operations. Unlike a CPU or DSP, only the necessary processing operations are programmed with an FPGA, so parallel processing can be done efficiently, increasing computing performance.

With the increased popularity of in-ear monitors, performers have become more sensitive to latency, so a digital mixer must keep latency as low as possible. The FPGA mixing engine's float-point processing makes it possible to flexibly change levels without compromising resolution and ensures ultra-low latency, even in analog-to-analog connections. While CPUs usually communicate through a general-purpose operating system or buses, an FPGA can directly access data sources, and since there is logic already built in, it delivers low latency and constant response speed. By employing an FPGA in Sonicview's mixing engine, the latency within the FPGA is kept at 2 samples (20.8 µS), and achieves an even lower latency of 0.51 ms between the mic input to line output.

In addition, thanks to its high processing efficiency, the FPGA uses less circuit area for the same processing compared to a CPU or DSP. Since it processes only the needed operations, the FPGA offers higher power efficiency and lower power consumption. As a result, although Sonicview has multiple color touch LCDs and features a rich power supply in itsaudio  circuitry, it achieves a low power consumption of 65W for Sonicview 16 and 85W for Sonicview 24.

The result is no-compromises performance, including with Dante networks and in-line monitoring systems.

## WHY 54-BIT FLOAT MIXING?

Sonicview's mixing engine employs 54-bit float-point processing, which provides the optimal balance of excellent audio performance and low power consumption, while requiring less processing capacity than 64-bit processing. Its 42-bit dynamic range for audio data is sufficient even when one channel is used for loud sounds and another channel is used for quiet sounds, so even quiet sounds have very good resolution.
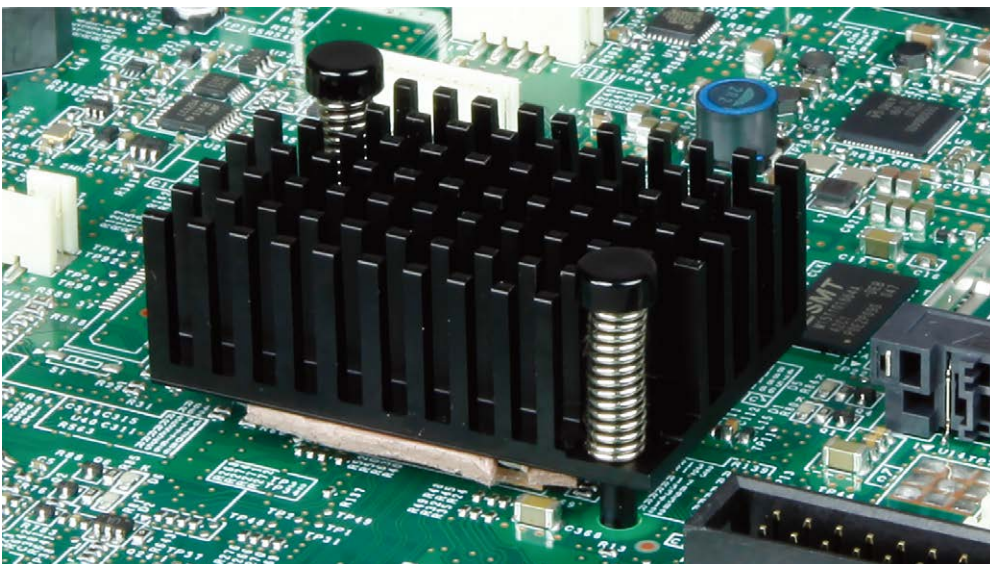
# MORE THAN 32-BIT AUDIO DATA FOR BETTER PROCESSING AND CONVERSION

Sonicview uses 32-bit A-to-D and D-to-A conversion and 54-bit float audio in its signal processing and signal transmission. 42-bit of the 54-bit are used as audio data. One advantage of more than 32-bit precision is that the filter performance is superior to the 24-bit precision often found in digital audio products. Because the low frequencies of the parametric EQ and graphic EQ are quite low compared to the 96 kHz sampling frequency, a high-precision calculation is required to prevent deterioration of the signal-to-noise ratio. Sonicview delivers the precise calculations and high resolution required.

# POWERFUL 96 KHZ PROCESSING AND EFFECTS

Sonicview's internal processing always performs 96 kHz processing, unlike many digital mixers in its class, which are limited to 48 kHz processing. The effects processor employs a powerful 64-bit ARM "system on a chip" (SoC) CPU with a 96 kHz sample rate. Using a SoC device enables complete internal processing of high-bandwidth signal data, and sharing caches between the FPGA and CPU results in increased processing speed. Since power-hungry IC pads for placing integrated circuits on a board are not needed with an SoC, power consumption is reduced.

The audible result is superior effects, including detailed control and improved sound quality for compressors, better-sounding EQ, and outstanding, very detailed, dense reverberation. This increased reverberation density is very difficult to achieve with other, traditional models.

Sonicview's Stereo Reverb and Plate Reverb algorithms are completely new designs that take advantage of the mixer's processing power. For the Plate Reverb, TASCAM increased the reverberation density even more than in the Stereo Reverb and devised many ways to create tones. Except for full-fledged modeling-type reverbs, most digital reverbs share the same main body and use an EQ to create a plate-like sound. In contrast, for Sonicview's Plate Reverb, creating a better tone by inserting the impulse response of the damping vibration into the input signal. A specialist engineer created an impulse response that mimics the vibration of a steel plate for more realistic results.

# THE SONICVIEW AUDIO INTERFACE

Sonicview's integrated 32-in/32-out audio interface makes it a first-rate front end for recording and broadcast studios, as well as for capturing live events. Record your choice of channel direct outs, flex buses, and the L/R main bus to your favorite DAW at up to 96 kHz with the same 32-bit precision used throughout the Sonicview ADC. The 32-bit ADC enables a dynamic range as high as 192 dB- considerably more than 24-bit interfaces.

The Sonicview 16 offers 16 analog audio input channels and the Sonicview 24 offers 24. But internally the FPGA mixing engine delivers a total of 64 selectable sources, including 40 mono input channels, 22 mix buses, and the main L/R bus. Of these, any 32 selectable sources can be sent and 32 returned via the integrated USB audio interface. Sonicview's snapshot library lets you store routing assignments for instant recall.

The combination of Sonicview 32-track recording by using optional IF-MTR32 card„ and the 32-in/32-out 32-bit/96 kHz USB audio interface simultaneously make Sonicview a versatile recording powerhouse

# DEFINABLE USER KEYS INSTANTLY ACCESS CRUCIAL FUNCTIONS

When mixing a recording, and especially a live event, you need to be able to make things happen very quickly, while still keeping an eye on your mix. Sonicview's 18 definable User keys let you access a variety of mixer and recording functions at the touch of a button. Full-color LEDs enable you to group each input source and function by your choice of ten colors and view them easily. For example, assign all your mute user keys to red, all monitor user keys to blue, and the talkback user key to green. Use the color scheme that works best for the way you work.

Assignable functions include:

- Tap Tempo: FX tempo parameter settings

- Mute Group: ON/OFF control of each group is possible

- Send: Send ON/OFF control of each module is possible

- Sends On Fader: allows easy switching between different sends with one button

- Snapshot: various snapshot functions available

- Select: incremental select, direct select

- Recall: incremental recall, number-defined recall, double-push recall

- Store: store current snapshot, number-defined store, double-push store
- Talk-back: ON/OFF control at once is possible
- Monitoring
- Source selection
- Mute control
- DIM control

# FLEXIBLE SUBMIX CONTROL WITH DCAS

Sonicview mixers provide eight DCAs (Digital Controlled Amplifiers) so you can easily control the level for groups of channels. When you have your drums submixed and processed the way you want them, assign the drum channels to a DCA. Now you can control the overall level of the submix with one fader yet still adjust individual drum channels within the DCA as needed. Use DCAs for sections of backup vocals, horns, strings — any group of channels for which you just want overall level control and don't need to add processing to the whole group. You can set a group name, group color, and icon for each DCA, as well as mute and solo.

Output buses can be assigned to DCAs as well, so you could, for example, create several monitor mixes on individual output buses, including bus processing, and control the overall level of the grouped monitor mixes with one DCA. You can even assign several DCA groups to another DCA group to control the level of two or more DCA submixes with one fader. Sonicview lets you control virtually any combination of submixes any way you want. To top it off, you can assign DCAs to programmable layer keys to select which custom combination of channels, DCAs, and output buses are controlled by the motorized faders.
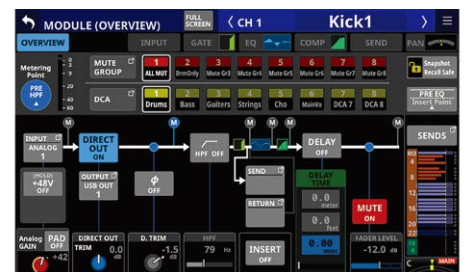
# SONICVIEW ACCESSORIES

## AK-DCSV24

**Dust cover for TASCAM Sonicview 24**

AK-DCSV24 is designed to fit perfectly over the TASCAM Sonicview 24, protecting it from dust and dirt.
The construction is a light durable polyester fabric.

- Custom designed dust and dirt cover for Sonicview 24
- Made of a durable light polyester fabric

## AK-DCSV16

**Dust cover for TASCAM Sonicview 16**

AK-DCSV16 is designed to fit perfectly over the TASCAM Sonicview 16, protecting it from dust and dirt. The construction is a light durable polyester fabric.

- Custom designed dust and dirt cover for Sonicview 16
- Made of a durable light polyester fabric

## AK-TB15

**Tablet/laptop PC shelf**

Tablet/laptop computer shelf for TASCAM Sonicview 16 and Sonicview 24. AK-TB15 securely holds a tablet device or laptop PC to a TASCAM Sonicview 16 or Sonicview 24 for remote control applications. Available for a tablet device (angled installation) and laptop PC (horizontal installation)

- Shelf to hold a tablet or PC on a TASCAM Sonicview 16 or Sonicview 24

**Includes:**

AK-TB15 × 1, Mounting screw × 4 (including 2 spare screws), Installation guidebook × 1

*Warranty card not included

# SONICVIEW FEATURES

## Key Features

- TASCAM VIEW (Visual Interactive Ergonomic Workflow) interface supports intuitive operation with three different view systems

- Multiple displays with three (Sonicview 24) or two (Sonicview 16) 7 inch touch panels

- 44 input channels (or 40 mono input channels and 2 stereo input channels)

- 22 flexible output buses and main L/R bus with 31 band graphic EQ

- 96 kHz, 54 bit float point FPGA mixing engine

- Ultra-low latency: 2 x samples (20.8 µS) in mixing engine, 0.51 ms analog to analog

- 32-bit/96 kHz AD/DA conversion

- 32-in/32 out, 32-bit/96 kHz USB audio interface

- 64-in/64-out built-in Dante interface; supports redundancy and DDM, AES67 and SMPTE ST 2110 interoperability
- Sonicview 16: 16 mic/line inputs (up to +32 dBu), 16 XLR line outputs with flexible routing

- Sonicview 24: 24 mic/line inputs (up to +32 dBu), 16 XLR line outputs with flexible routing

- 4 multi-effects processors

- TASCAM Sonicview Control software for macOS/Windows/iPadOS enables remote control and off-line editing

- 2 TASCAM expansion slots
  - Optional SDXC multi-track recording card, MADI, Dante, AES/EBU, and analog outputs cards available

# Other Features

- Hardware mixing surface and mixing engine operating system are independent of each other for high stability and continuous audio flow
- Library: Snapshot/Effect/Module/Parametric EQ/Graphic EQ/Gate/Compressor
- 18 assignable user keys, 7 custom fader layers, 8 DCA groups
- 24+1 (Sonicview 24) or 16+1 (Sonicview 16) 100mm motorized faders
- 16 (Sonicview 16) or 24 (Sonicview 24) encoder knobs with color LED
- 16 (Sonicview 16) or 24 (Sonicview 24) LCDs with color LED display channel name, input level, and gain reduction meter
- 2 channel internal recording/playback with SD card
- 8 TRS line inputs, 2 RCA stereo input pairs, XLR talkback input
- XLR monitor outputs
- ¼-inch and 1/8-inch headphone outputs
- Word clock In and Out/Thru
- 1000BASE-T gigabit Ethernet
- 8-in/8-out GPIO on DB25
- TRS footswitch jack
- XLR 4-31 lamp connector
- Power switch with guard
- Optional SB-16D 16-in/16-out Dante-enabled stage box





## Included Items Sonicview 16

| | |
|---|---|
| • TASCAM Sonicview 16: | 1 |
| • Power cord（JAPAN/USA/EUROPE/OCEANIA): | 3 |
| • Owner's Manual with Warranty: | 1 |
| • TASCAM ID Registration Guide: | 3 |

## Included Items Sonicview 24

| | |
|---|---|
| • TASCAM Sonicview 24: | 1 |
| • Power cord（JAPAN/USA/EUROPE/OCEANIA): | 3 |
| • Owner's Manual with Warranty: | 1 |
| • TASCAM ID Registration Guide: | 3 |

## SB-16D 16-in/16-out Dante Stage Box

Offering the same performance and hardware quality as the TASCAM Sonicview mixer, TASCAM SB-16D Dante-networked16-in/16-out stage boxes can be used as a floor stage box or rack mounted. Microphone gain can be remotely controlled from TASCAM Sonicview and SB-16D I/O comes up on the TASCAM Sonicview VIEW touch screens just as internal I/O does. Multiple stage boxes can be used simultaneously.

# SONICVIEW SPECIFICATIONS

## Mixers Specifications

Concurrent processing capacity

Input: 52, Monaural: 40, Stereo: 2 (Stereo), Fx Return: 4 (Stereo)

Bus: 32 [AUX/GROUP switchable MIX buses: 22, MAIN L/R buses: 1 (stereo), Fx send buses: 4 (stereo)

Built-in FX: 4

## Input Port Sonicview 24

96kHz
Up to 160 ports

48kHz
Up to 256 ports

MIC/LINE: 24

Stereo (RCA): 4 (2 stereo)

Dante:
32 (96kHz), 64 (48kHz)

SLOT:
32x2 (96kHz), 64x2 (48kHz)

USB Audio: 32

Built-in player: 2 (1 stereo)

OSC                                                            1

TALKBACK                                                       1

## Input Port Sonicview 16

96kHz
Up to 152 ports

48kHz
Up to 248 ports

MIC/LINE: 16

Stereo (RCA): 4 (2 stereo)

Dante:
32 (96kHz), 64 (48kHz)

SLOT:
32x2 (96kHz), 64x2 (48kHz)

USB Audio: 32

Built-in player: 2 (1 stereo)

OSC                                                            1

TALKBACK                                                       1

## Output Port Sonicview 16/24

96kHz
Up to 148 ports

48kHz
Up to 244 ports

LINE 16

Dante 32 (96kHz), 64 (48kHz)

SLOT 32x2 (96kHz), 64 (48kHz)

USB Audio 32

MONITOR OUT (analog) 2 (1 stereo)

Built-in recorder: 2 (1 stereo)

## Input/Output Port

Analog insert I/O          2 I/O (MIC/LINE input 15/16)

## Signal Processing

Mixer engine
96kHz/54-bit floating point arithmetic

ADC
96kHz, 32-bit

DAC
96 kHz, 24 bit

Digital I/O sampling frequency 96kHz, 48kHz

## Analog Audio Inputs/Outputs

### MIC/LINE input

Sonicview 16: 1-16 channel
Sonicview 24: 1-24 channel
Connector
XLR-3-31 equivalent (1: GND, 2: HOT, 3: COLD)

Maximum input level: +12dBu (PAD=off, TRIM min), +32dBu (PAD=on, TRIM min)

Minimum input level: -62dBu (PAD=off, TRIM max), -42dBu (PAD=on, TRIM max)

Input impedance
5.0kΩ or more

Phantom power
+48V supply possible

## LINE Input: 9-16 channels Sonicview 16

Connector: 6.3mm (1/4") standard TRS jack, balanced (Tip: HOT, Ring: COLD, Sleeve: GND)

Maximum input level: +12dBu (PAD=off, TRIM min), +32dBu (PAD=on, TRIM min)

Minimum input level: -62dBu (PAD=off, TRIM max), -42dBu (PAD=on, TRIM max)

Input impedance: 5.0kΩ or more

Analog Audio Input/Output Sonicview 24

MIC/LINE input
1-24 channels

Connector
XLR-3-31 equivalent (1: GND, 2: HOT, 3: COLD)

Maximum input level: +12dBu (PAD=off, TRIM min), +32dBu (PAD=on, TRIM min)

Minimum input level: -62dBu (PAD=off, TRIM max), -42dBu (PAD=on, TRIM max)

Input impedance
5.0kΩ or more

Phantom power
+48V supply possible

## LINE Input: 17-24 channels Sonicview 24

Connector: 6.3mm (1/4") standard TRS jack, balanced (Tip: HOT, Ring: COLD, Sleeve: GND)

Maximum input level: +12dBu (PAD=off, TRIM min), +32dBu (PAD=on, TRIM min)

Minimum input level: -62dBu (PAD=off, TRIM max), -42dBu (PAD=on, TRIM max)

Input impedance: 5.0kΩ or more

### Insert Input/output: 7-8 channels Sonicview 16

Connector: 6.3mm (1/4") standard TRS jack (Tip: SEND, Ring: RETURN Sleeve: GND)

48kHz
Up to 244 ports

Insert Input/output: 15-16 channels Sonicview 24

Connector: 6.3mm (1/4") standard TRS jack (Tip: SEND, Ring: RETURN, Sleeve: GND)

## RETURN (Ring)

Maximum input level: +18dBu

Nominal input level: -2dBu

Input impedance: 5.0kΩ or more

SEND (Tip)

Maximum input level: +18dBu

Nominal input level: -2dBu

Output impedance: 100Ω

## Talkback Input

Connector: XLR-3-31 equivalent (1: GND, 2: HOT, 3: COLD)

Maximum input level: +10dBu

Minimum input level: -65dBu

Gain adjustment range: 0≈55dB

Input impedance: 5.0kΩ or more

Phantom power: +48V supply possible

## Stereo (RCA) Input 1-2

Connector: RCA pin jack

Maximum input level: +6dBV (1.995Vrms)

Nominal input level: -10dBV (0.316Vrms)

Headroom: 16dB

Input impedance: 10kΩ

## Stereo (RCA) Input 1-2

Connector: XLR-3-32 equivalent (1: GND, 2: HOT, 3: COLD)

Specified output level: +6dBu (D.ref: -9dBFS)

+4dBu (D.ref: -14dBFS,-16dBFS)

+4dBu or 0dBu (D.ref: -18dBFS, -20dBFS)

Maximum output level: +15dBu (D.ref: -9dBFS, A.ref: +6dBu)

+18dBu (D.ref: -14dBFS, A.ref: +4dBu)

+20dBu (D.ref: -16dBFS, A.ref: +4dBu)

+18dBu (D.ref: -18dBFS, A.ref: 0dBu)

+20dBu (D.ref: -20dBFS, A.ref: 0dBu)

+22dBu (D.ref: -18dBFS, A.ref: +4dBu)

+24dBu (D.ref: -20dBFS, A.ref: +4dBu)

Note) D.ref: Digital reference level, A.ref: Analog reference level

output impedance: 100Ω

## Monitor Output (L/R)

Connector: XLR-3-32 type (1: GND, 2: HOT, 3: COLD)

Maximum output level: +24dBu

Specified output level: +4dBu

Output impedance: 100Ω

## Headphone Output

Connector: XLR-3-32 type (1: GND, 2: HOT, 3: COLD)

Maximum output level: +24dBu

Specified output level: +4dBu

Output impedance: 100Ω

## Digital Audio Input/output

### USB audio

Connector: Type-B

Number of inputs: 32ch *input to this unit

Number of outputs: 32ch *output from this unit

Sampling frequency
48kHz, 96kHz

Bit depth: 32 bits (integer)

## Dante (PRIMARY/SECONDARY) Redundant / Switched compatible

Connector: etherCON Cat5e compatible connector

Transmission protocol: Dante

Gigabit Ethernet standard: 1000BASE-T (IEEE802.3ab)

Cable: CAT5e STP

Number of channels: 64 channels (48kHz), 32 channels (96kHz)

### Control Input/output

GPIO
Connector: D-sub 25pin female, inch screw

Input circuit: pull-up (5V)

Output circuit: Open collector

Output impedance: 10 Ω

Pressure resistance: 20V

Maximum current: 35mA

+5V maximum supply current: 50mA

### FOOT SWITCH

Connector: 6.3mm(1/4") TS standard jack (Tip: SIG, Sleeve: GND)

### ETHERNET (for control)

Connector: RJ-45

Ethernet specification: 100BASE-TX 1000BASE-T

Protocol: TCP/IP

### Other Input/output

WORD IN
Connector: BNC (unbalanced)

Input level: 0.5Vpp - 5Vpp

Impedance: 75Ω +/- 10%

Input frequency: 48kHz, 96kHz

Allowable frequency deviation: +/- 100ppm

### WORD THRU / OUT

Connector: BNC (unbalanced)

Output level: 5V TTL equivalent

Output frequency: 48kHz, 96kHz

Impedance: 75Ω +/- 10%

## USB (top panel): Keyboard, storage combined use

Connector: Type-C

Specifiaction: USB2.0 HIGH SPEED (480Mbps)

Bus power: 5V-0.5A

Correspondence class: HID, mass storage

USB (rear panel): For USB audio interface (requires special driver)

connector: Type-B

Specification
USB2.0 HIGH SPEED (480Mbps)

### LAMP

Connector: XLR 4pin female (1: NA, 2: NA, 3: GND, 4: +12V)

Supply voltage: 0V~12V (brightness adjustable)

Maximum power: 5W

### Recorder/player Specifications

Recording media

SD card: SDHC (8GB~32GB CLASS10), SDXC (64GB~128GB CLASS10)

USB memory (playback only): 8GB~128GB

Supported file system: FAT32 (SDHC USB memory)

exFAT (SDXC, USB memory)

### Recording/playback Format

WAV/BWF Recording: 48kHz/96kHz, 24bit, 2ch

Playback: 48kHz/96kHz, 16/24bit, 2ch

MP3: Playback: 44.1kHz/48kHz, 32kbps~320kbps

AAC: Playback: 44.1kHz/48kHz, 64kbps~320kbps

## GENERAL

Main display: 7-inch, color touch panel display x2 (Sonicview 16)

Main display: 7-inch, color touch panel display x3 (Sonicview 24)

Resolution: 800x480

Channel display: monochrome x2

Resolution: 384x68

Fader: 100mm stroke, motor drive

External dimensions: 472.0(W) × 228.1(H) × 554.4(D) mm

Weight: 13kg

Power supply AC100-240V, 50/60Hz

Power consumption: 65W

Operating temperature: 0~40°C

### OS/operation Condition

USB Audio Interface

Windows

Compatible OS: Windows 11 64-bit

Windows 10 64-bit

Compatible PC: Windows compatible computer equipped with USB 2.0 or higher

Mac

Compatible OS: macOS Monterey (12)

macOS Big Sur (11)

macOS Catalina (10.15)

Compatible PC: Mac equipped with USB 2.0 or higher

### Remote App

Windows: Windows 11 64-bit

Windows 10 64-bit

Mac: macOS Monterey (12)

macOS Big Sur (11)

macOS Catalina (10.15)

iOS: iPadOS 15

iPadOS 14

**Bundled items: Power cord (no lock) (JAPAN, USA, EUROPE, OCEANIA) x3**

TASCAM ID registration guide

Owner's manual (with warranty)

**Options sold separately**

AK-DCSV16: Dust cover

AK-TB15: Tablet holder

IF-AE16: AES interface card, 16ch I/O each

IF-DA64: Dante interface card, 64ch I/O each, redundant mode supported

IF-MA64/EX: MADI interface card, I/O each 64ch, Coaxial/Optical compatible

IF-MA64/BN: MADI interface card, I/O each 64ch, Coaxial compatible

IF-AN16OUT: Analog output interface card, 16ch

IF-MTR32 MTR card, 32-track simultaneous recording, punch-in support

SB-16D: Stagebox, Dante compatible, I/O 16ch each, with GPIO for expansion

## PERFORMANCE

Signal Delay

48kHz ［ms］ route details

A to A  0.510  MIC/LINE IN » CH module » MAIN L/R BUS » MAIN L/R module » LINE OUT

A to A  0.620  MIC/LINE IN » CH module » MAIN L/R BUS » MAIN L/R module » MONITOR OUT

D to D  0.498  SLOT MADI IN » CH module » MAIN L/R BUS » MAIN L/R module » SLOT MADI OUT

A to D  0.458  MIC/LINE IN » CH module » MAIN L/R BUS » MAIN L/R module » SLOT MADI OUT

D to A  0.571  SLOT MADI IN » CH module » MAIN L/R BUS » MAIN L/R module » LINE OUT

D to A  0.666  SLOT MADI IN » CH module » MAIN L/R BUS » MAIN L/R module » MONITOR OUT

96kHz ［ms］ route details

A to A  0.510  MIC/LINE IN » CH module » MAIN L/R BUS » MAIN L/R module » LINE OUT

A to A  0.620  MIC/LINE IN » CH module » MAIN L/R BUS » MAIN L/R module » MONITOR OUT

D to D  0.104  SLOT MADI IN » CH module » MAIN L/R BUS » MAIN L/R module » SLOT MADI OUT

A to D  0.261  MIC/LINE IN » CH module » MAIN L/R BUS » MAIN L/R module » SLOT MADI OUT

D to A  0.374  SLOT MADI IN » CH module » MAIN L/R BUS » MAIN L/R module » LINE OUT

D to A  0.468  SLOT MADI IN » CH module » MAIN L/R BUS » MAIN L/R module » MONITOR OUT

## AUDIO PERFORMANCE

Microphone amplifier EIN (Equivalent input noise): Below -128dBu

Frequency characteristic: MIC/LINE IN » LINE OUT

20Hz-20kHz»+0dB, -0.5dB (48kHz)(JEITA)

20Hz-40kHz»+0dB, -1.0dB (96kHz)(JEITA)

Dynamic range: 108dB or more (MIC/LINE IN » LINE OUT, PAD=off, TRIM minimum, D.ref=-20dBFS, Clock Master=INT, JEITA)

110dB or more (MIC/LINE IN » Dante OUT, PAD=off, TRIM minimum, JEITA)

112dB (Dante IN » LINE OUT, Clock Master=INT, JEITA)

Distortion factor: 0.002% or less (MIC/LINE IN » LINE OUT, +4dBu input, PAD=off, TRIM minimum, JEITA)

0.002% or less (MIC/LINE IN » Dante OUT, +4dBu input, PAD=off, TRIM minimum, JEITA)

0.002% or less (Dante IN » LINE OUT, 0dBFS input, JEITA)

Crosstalk: 100dB or more (MIC/LINE IN » LINE OUT, 1kHz sine wave, JEITA)

*0dBu=0.775Vrms

*D.ref: Digital reference level

*RoHS compliant.

*Specifications and appearance are subject to change without notice for improvement.

Compatible OS

Windows

Windows 11, Windows 10 (November 2021 Update)

Mac

macOS Ventura New , macOS Monterey , macOS Big South , macOS Catalina