



dMix 128

REFERENCE DOCUMENTATION

dMix 128 Introduction

The dMix 128 is a high performance audio matrix designed for professional installations where reliability, flexibility, and pristine sound quality are essential.

With 128 channels of powerful signal routing, FPGA processing, and seamless control integration, the dMix 128 delivers uncompromising audio performance for studios, live venues, broadcast facilities, and corporate environments.

Developed with precision engineering and premium grade components, the dMix 128 ensures transparent audio reproduction and ultra low latency operation. Its intuitive software interface allows users to easily configure complex routing setups, apply advanced processing, and manage multiple zones with complete control.

Whether used as a standalone system or as part of a larger network, the dMix 128 offers exceptional scalability, making it the ideal choice for demanding audio professionals who require both power and precision.

dMix 128 Main Features

Advanced 128-Channel DSP Engine

The dMix 128 features a powerful 128 CHANNEL × 88 BUS digital engine with ultra-low latency signal processing. Key highlights include:

- **Independent Processing:** Each channel can be routed, mixed, and processed independently.
- **Pristine Sound:** High-fidelity processing suitable for any professional audio application.
 - **Low Latency:** Optimized for real-time signal handling.

Flexible Network Integration

The dMix 128 seamlessly integrates into modern networked audio systems with broad compatibility:

- **Standard Protocols:** Full compatibility with AES67 and MADI.
 - **Dante™ Ready:** Support via optional expansion card.
- **Scalability:** Multiple units can be linked for large-scale installations.
- **Sync:** Maintains sample-accurate synchronization across all linked units.

Intuitive GUI & Remote Control

The dMix Control Software provides a clean graphical interface for total system management without the need for additional hardware:

- **Real-Time Adjustments:** Control routing, EQ, dynamics, and levels instantly.
 - **Universal Access:**
 - Monitor and configure from any computer on the same network using a HTML5 compatible browser. No external app necessary.
 - On-board HDMI display port allows for direct GUI access without the need for a network or external browser based connection.
- **Streamlined Workflow:** Designed for intuitive configuration and monitoring.

Custom Protocol & Automation Ready

Perfect for broadcast and corporate AV, the dMix 128 is built for complex integration:

- **Third-Party Integration:** Compatible with systems such as Crestron, Q-Sys, or bespoke automation solutions.
 - **Custom Protocol:** Deep control via a dedicated communication protocol.
 - **Multi-Zone Support:** Ideal for complex installations requiring automated audio management.

Reliability & Installation Versatility

Designed for mission-critical environments and 24/7 performance:

- **Redundancy:** Features industrial-grade components and dual redundant power supplies.
- **Modular Design:** A flexible structure that is easy to install and configure.
- **Future-Proof:** Easy to expand as your project or venue needs evolve.

dMix 128 Technical Specifications

128-Channel Mixer with FPGA Processing

- 88 x Busses
- 12 x 8 Matrix
- 12 x Groups
 - 16 x DCA
- 6 x ARM FX / 2 x FPGA FX / 4 x External FX
 - 128 x DYNEQ Inserts
 - 24 x Multi Band Comp
 - 18 x GEQ (31-Band)
- 256 x Network Channels

I/O

- 32 x Inputs
- 24 x Analog Outputs
- 2 x Stereo Headphones
 - 1 x 64ch MADI I/O
 - 2 x AES3
 - 1 x Expansion Slot
 - 2 x AES67 Ports
 - USB-A, USB-C Ports
 - 1 x HDMI Display Port

Remote Device Selection

- Four Device Slots are available for networked hardware.
- Two Driver Slots are available for CoreAudio and ASIO devices.

Analog MIC/Line Inputs

- Input Impedance: 2.86 kOhms
 - Gain range: -4 dB to 50 dB
 - Max input level: 28 dBu (-4 dB gain)
- Dynamic range: 115 dB (-60 dBFS, 20 dB gain, 1 kHz, A-weighted)
 - THD: 0,001 % (-1 dBFS, 20 dB gain, 1 kHz, A-weighted)
- Equivalent input noise: -128 dBu (50 dB gain, A-weighted, 150 ohms)
- Frequency response: +/- 0.1 dB (20 Hz to 40 kHz at 96 kHz sampling rate)
 - Phase Shift: <math><10^\circ</math> at 20 Khz

Analog Outputs

- Output impedance: 50 ohms
- Max output Level (0dBFS): 24 dBu

- Dynamic range: 115 dB (-60 dBFS, 1 kHz, A-weighted)
- THD: 0,002 % (-1 dBFS, 20 dB gain, 1 kHz, A-weighted)
- Frequency response: +/- 0.1 dB (20 to 40 kHz at 96 kHz)
 - Phase shift: <math><5^\circ</math> at 20 Khz

AES/EBU IN/OUT

- Standard: AES3 (2009)
- Sample rates: 48, 96 kHz
- Impedance: 110 ohms

Headphones

- Output Power: 150 mW per channel on 16 ohms
 - Dynamic range: 100 dB

Latency

- Analog input to Analog output latency: 0.3ms
- dMix to dMix dNet latency via AES67: 0.25ms
 - dNet AES67 to Dante: 2ms latency

USB

- Type: A and C
- Max Current: 500mA
- Max Current available to all ports: 900mA

Power

- Voltage: 110 to 250 VAC
- Frequency: 50 Hz or 60 Hz
 - Power: 60 W

Operating Conditions

- Temperature range: 0°C - 40°C
 - Humidity: 0%-90%
- Storage Temperature: -20°C to 60°C

Dimensions

- Height: 176 mm / 6.92 in (4RU)
- Width: 420 mm / 19.92 in (for 19" rack)
- Depth: 240 mm / 12.81 in (not including connectors)
 - Unit weight: 7kg

Packaging information

- Package Weight: 21.91 lb - 10.3kg
- Box Dimensions (L x W x H): 48cm x 39cm x 36cm

Bar Code Numbers

- UPC (US & Canada): 786368749682
- EAN (Other Countries): 0786368749682
- GTIN-14 (Shipping Container Code): 1078636874968

dMix 128 Software Specifications

Gate

- Threshold: -100dB to 0dB
- Attack: 0.5ms to 500ms
- Release: 10ms to 2000ms
 - Hold: 0.5ms to 500ms
 - Depth: -100dB to 0dB
- SC Filter: 20Hz to 20kHz

Compressor

- Threshold: -80dB 0dB
 - Ratio: 1:1 - 20:1
 - Attack: 1ms - 500ms
- Release: 10ms - 2000ms
- Makeup Gain: 0dB - +24dB

EQ Channel

- 4 band parametric EQ (up to 8 band EQ)
- 4 bands can be converted to Dynamic EQ
 - Each Band Freq: 20Hz to 20kHz
 - Q: .1 - 15
 - Gain: -15dB to +15dB

HPF LPF

- HPF: 20Hz to 9.8kHz (selectable slopes)
- LPF: 40kHz to 20kHz (selectable slopes)

De-esser

- Threshold: -96dB to 0dB
 - Range: 0 to -15dB
- Frequency: 20Hz to 20kHz
 - Width: .1q to 15q

31 band EQ

- 31 band GEQ: 20Hz - 20KHz +-15dB

Multi band compressor

- Sidechain: Yes
- Gain: 0dB to 24dB
- Threshold: -80dB to 0dB
- Range: -100dB to 0dB
 - Ratio: 1:1 - 20:1
- Attack: .5ms - 500ms
- Release: 10ms - 2000ms

Saturation

- Range: 0 - 100

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dMix 128 Quickstart Guide

Thank you for purchasing the Violet Audio dMix 128 mixer. To control your dMix 128 mixer, you will need to connect it to a device of your choice via a network (Ethernet) cable. You can control your mixer using any device (tablet, phone, laptop or computer) that has an HTML5 web browser without the need to download an app.

Startup

Power On: Connect your dMix 128 to mains power and turn on.

Check your network: Wait for the Blue Startup LED to stop flashing (about 30 seconds), indicating the dMix 128 mixer is ready.

Connect your external control device: Connect your device either directly to the dMix 128 Ethernet port or ensure that the dMix 128 and your remote control device are both connected to the same network via a router.

Open your browser: Launch a HTML5 enabled browser like Chrome, Safari, or Firefox.

Enter the dMix 128's URL address: Type "dmix.local" into the address bar and press Enter.

Note: For multiple units you can change the default name.

Key Concepts

- **No App Needed:** You control the mixer directly through a HTML5 compatible web browser. Up to 20 remote devices can be connected simultaneously.
- **Input Processing:** Adjust Gain, EQ, dynamics, FX, and more directly from the interface.
 - **Mixer functions:** AUX, MTX, DCA, and SUB group controls provided.
 - **Comprehensive Routing:** Full control of I/O routing.
 - **Overviews:** Mixer level and resource overviews available at a glance.
- **Shows & Snapshots:** Create new show files and save settings as snapshots for quick recall.
- **View and MuteGroups:** Organize channels for easier viewing and muting by creating custom channel layouts per connected device.
- **Channel Customization:** Channel presets, color coding, naming, copy/paste settings, and linking for stereo channels supported.
 - **Tools:** RTA Analyser, white noise generator, and Oscillator provided.
 - **Operation Modes:** Live and Soundcheck operation modes supported.
 - **Scalable Design:** Additional units can be connected as your needs grow.
 - **Audio Interface:** You can use your dMix 128 mixer as an audio interface. It is class compliant on Mac, meaning no additional driver software is required. However, if you're a Windows PC user, then you must download and install its dedicated driver before connecting it to your computer. You can download the official drivers from the dmix 128 support page.

Important Safety Tip

Always start with monitors turned down and be cautious when learning new controls, as high volume levels can damage hearing.

Your mixer is ready, plug in your equipments and start mixing!!

Setup and Connections

Ensure the dMix 128 Mixer is connected to your device directly or via your Network.

Check the Violet Audio Youtube channel for video startup introduction here:

[Youtube @violetoaudioofficial](#)

Setup your dMix 128 mixer input source signals. Connect your equipment to the hardware inputs, adjust the gain, EQ, and dynamics and update the routing.

Setup your dMix 128 mixer output signals. Connect your equipment to the hardware outputs.

Navigating Your Way Around the dMix 128

Adjust the Gain

Adjust the Gain using the Gain control fader accessible on the Gain tab page.

Phantom Power

For a condenser microphone, enable +48V via enabling the Phantom Power icon found at the top of each Gain fader on the Gain tab page. Remember to turn on phantom power after connecting the microphone and turn it off before disconnecting to prevent potentially damaging the microphone.

Turn up the channel Volume and Master faders

Turn up the Channel fader for your selected input and adjust the Master fader carefully to your desired output volume.

dMix 128 Firmware Updates

Violet Audio will periodically release firmware updates for the dMix 128. Firmware updates will often add to or improve the current feature set in addition to addressing any current bugs. You can update your dMix 128 firmware directly via the user interface when your network is connected to the internet.

dMix 128 Compatible Platforms

The dMix 128 is compatible with the [Mixing Station AP Software](#), and most HTML5 web browsers. Please note: Direct connection to the on-board HDMI display port is available without external app or compatible browser connection.

In 2026, almost all modern web browsers across Mac, Linux, and Windows are HTML 5 compatible.

Below is a list of the primary HTML5-compatible browsers for operating system with expected operational functionality with the dMix 128 web control software:

Cross-Platform Browsers (Windows, Mac, and Linux)

These browsers use independent or shared engines (like Chromium) and offer the highest levels of HTML5 feature support.

- **Google Chrome:** Consistently ranked highest for HTML5 feature support and compatibility.
- **Mozilla Firefox:** High compatibility; often the first to implement new open-web standards.
- **Microsoft Edge:** Originally Windows-only, it now provides full HTML5 support across all three platforms.
 - **Brave:** A privacy-focused browser built on the Chromium engine with high HTML5 compliance.
 - **Opera:** Known for innovative features and a high compatibility score (often matching Chrome).
 - **Vivaldi:** Highly customizable and fully compatible with modern web standards.

Platform-Specific Browsers

- **Safari (Mac):** While standard on macOS, it often lags slightly behind Chromium-based browsers in implementing the newest experimental HTML5 features.
- **Konqueror / GNOME Web (Linux):** Specialized Linux browsers that support standard HTML5 elements like `<video>`, `<audio>`, and `<canvas>`.

Summary of Support by Operating System

Operating System	Recommended HTML5 Browsers
Windows	Chrome, Edge, Firefox, Brave, Opera, Vivaldi
Mac	Safari, Chrome, Firefox, Edge, Brave, Vivaldi
Linux	Firefox, Chrome, Edge, Brave, Vivaldi, Opera

Note on Internet Explorer: Support for Internet Explorer has officially ended. IE11 only partially supported HTML5, and versions 8 and earlier have no functional HTML5 support. In 2026, users should use Microsoft Edge for a compatible experience on Windows.

dMix 128 Use Cases

Digital mixers are versatile tools used across professional audio environments for combining, processing, and routing multiple audio signals with high precision and flexibility. They are well suited for live sound, recording studios, broadcasting, podcasting, and virtual conferencing, offering benefits like scene recall, wireless control, and multi-track recording for superior efficiency in complex audio environments.

Key Digital Advantages in Use Cases

- **Scene Recall:** Instantly recall entire mix setups for different performers or shows.
- **Wireless Remote Control:** Mix from anywhere in the venue using a remote device running a HTML 5 compatible browser.
- **Built-in Processing:** Integrated Gain, EQ, compression, and effects eliminate outboard gear racks.
- **Digital Snakes:** Lighter, easier-to-manage digital audio snakes.

Live Sound, Events, and Venues

Digital mixers are the go to choice for live sound reinforcement, from small clubs to large music festivals and houses of worship.

- **Concerts & Festivals:** Sound engineers manage numerous microphones and instruments. Save and recall "scenes" features are invaluable for rapid everchanging requirements.
- **Houses of Worship:** Managing microphones for speakers and choirs while sending tailored feeds to in-person and online audiences.
- **Theater Productions:** Complex sound cues and numerous microphones are managed via scene memory, ensuring consistency across every performance.
- **Conferences:** Routing various inputs (mics, video playback) for clear PA and broadcast with quick setup and recall.
- **Clubs and Music Venues:** Balancing multiple instruments, vocals, and effects in real-time while managing stage monitor mixes via apps.

Broadcasting, Recording & Production

Television, radio, and online streaming platforms depend on the reliability and advanced features of digital mixers like the dMix 128 for live broadcasts and detailed post-production.

- **Home & Professional Studios:** The dMix 128 can serve as a central hub for routing mics and instruments, offering low-latency monitoring and seamless integration with Digital Audio Workstations (DAWs).
 - **Live Broadcasts:** Facilitates quick switching between numerous audio sources and maintains consistent audio levels to meet strict broadcast standards.
 - **Music Production:** Producers leverage integrated high-resolution processing (EQs, compressors, FX) to fine-tune sound often without additional external hardware rack equipment.
 - **Film & TV Post-Production:** Combines dialogue, music, and sound effects with

automation features that streamline complex workflows.

- **Radio & TV Stations:** Combining microphone feeds, pre-recorded segments, and ad breaks while maintaining consistent audio quality.
- **Remote Production:** Cloud integration and remote control allow engineers to manage broadcasts from different physical locations.

Corporate and Educational Settings

The dMix 128 digital mixer can play a key role in corporate communications and professional training.

- **Virtual Meetings and Conferences:** Manage multiple audio feeds from various locations while using automatic gain control and noise suppression to improve clarity.
- **Conference and Meeting Rooms:** Integrated AV systems ensure that every participant, whether remote or in-person, is heard clearly via ceiling microphones and integrated controls.
- **Auditoriums and Lecture Theaters:** Large-scale installed systems provide consistent, optimal sound coverage for presentations.
 - **Educational Institutions:** Digital mixers are incorporated into curricula to prepare students for industry-standard equipment and workflows.
- **Schools and Universities:** Manage school-wide announcements and support audio for gymnasiums and sports facilities.

Commercial Spaces (Retail & Hospitality)

Professional audio systems in commercial settings are used to create clear public communication.

- **Restaurants and Cafés:** Background music systems, often over different volume zones.
- **Bars and Nightclubs:** High-quality sound systems with significant power handling to offer outstanding customer audio experiences.
- **Hotels and Gyms:** Sound for lobbies and other areas, and dynamic sound systems for workout spaces.
- **Public Address and Voice Alarm Systems:** Used in malls and airports for safety and emergency evacuation messages with independent volume control for different zones.