

CM3116

16-Channel Digital Mixing Console



Description

This professional audio mixer integrates domestically developed technology and is designed for live performances, streaming, and recording applications. Its core is equipped with an Allwinner dual-core ARM+DSP SOC chip, balancing information security and high-performance processing, supporting multi-tasking hardware capabilities, and ensuring low-latency and high-precision audio processing.

Multiple input/output designs are suitable for medium- to large-scale live performances, such as band performances and wedding celebrations, as well as multi-functional conference scenarios such as corporate meetings and government events. Its input/output configurations can meet the needs of multiple microphones and audio sources, and can be flexibly allocated to main sound reinforcement, monitoring, and recording equipment, balancing professionalism and cost control.

Features

- Supports 16-channel analog preamp inputs with XLR/TRS connectors, 52dB electronic gain, ultra-low noise, and flexible parameter adjustment for microphones, instruments, and line-level sources.
- Equipped with 2-channel stereo USB audio interfaces
- Provides 2-channel Main L/R outputs and 6-channel AUX outputs
- Built-in professional Allwinner dual-core ARM + DSP SoC chip, ensuring secure information processing and high-performance audio computing.
- Features a Gigabit Ethernet port for fast and reliable network communication.
- Supports cross-platform web control software compatible with Windows, Linux, macOS, Android, and iOS systems.
- Integrates real-time audio processing algorithms with built-in effects including reverb, compressor, and equalizer.
- Equipped with a 7-inch 1024×600 HD capacitive touchscreen, digital encoder, and dedicated buttons for

intuitive operation.

- Features a professional reverb processor with independent control of reverb level and time to enhance live performance and streaming effects.
- Equipped with 11 motorized faders, including 2 independent effect faders, with visual level indicators for real-time adjustment.

Specifications

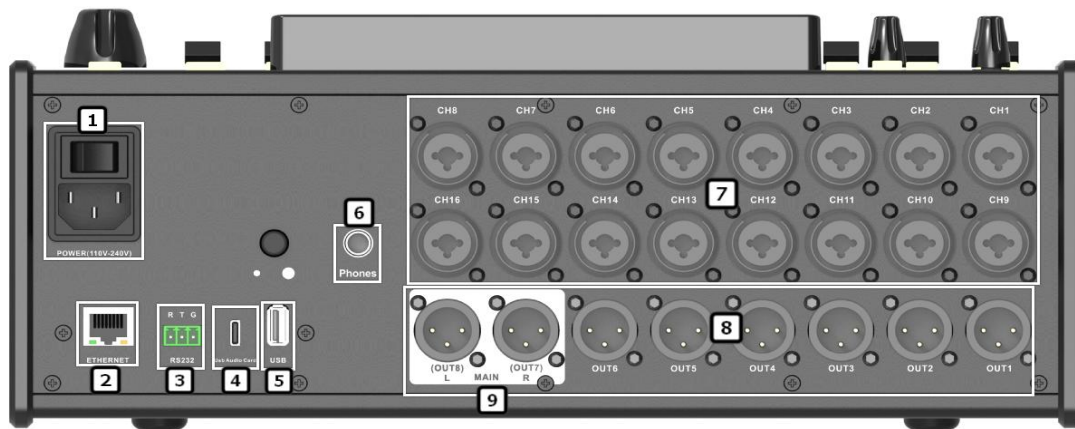
Model	CM3116
Display	7-inch HD Touchscreen, 1024 × 600 Resolution
Inputs	16-Channel Analog Inputs; 2×2 Stereo USB Audio Interface for Recording and Playback
Outputs	8-Channel OUT Outputs; 2-Channel USB Recording Channels
THD+N	<0.003% @ 4dBu, A-Weighted
Frequency Response	20Hz–20kHz, ±0.2dB
Sampling Rate	48K
Bit Depth	24 bit
Noise Floor	-89dBu, A-Weighted
Maximum Input Level	+20dBu, Balanced
Maximum Output Level	+20dBu, Balanced
Phantom Power	48V
A/D Dynamic Range	110dB
Input-to-Output Dynamic Range	108dB
Input Impedance (Balanced)	2KΩ
Output Impedance (Balanced)	100Ω
Channel Separation	70dB @1KHz
CMRR	-60dBu Type
Operating Temperature	0°C-55°C
Power Supply	100-240V
Power Consumption	20W

Front / Rear Panel



1. **Preamp:** The preamp section includes Gain adjustment knob, +48V phantom power, Phase Reverse button, PAN adjustment, Low Cut frequency control knob, and Low Cut function switch.
2. **48V Phantom Power:** Condenser microphones require +48V phantom power. Press the button to enable phantom power for the selected channel.

3. **Phase Reverse Button:** Reverses the phase of the selected channel.
4. **LOW CUT:** Displays the low-cut function status and allows adjustment of the low-cut switch and frequency for the selected channel.
5. **Delay:** Includes buttons for switching between the Main, Menu, and Scene interfaces.
6. **PAN:** Adjusts the stereo positioning of the selected channel. Touch the slider or use the data wheel for adjustment.
7. **GATE/COMP:** Allows parameter adjustment by changing the selected value or position, and supports list scrolling.
8. **EQ ON:** Press the SEL button to select the channel for EQ control.
9. **Quick Control Button Module:** Includes buttons for switching between the Main, Menu, and Scene interfaces.
10. **7-inch HD LCD Touchscreen:** Displays all processing modules and allows touch-based operation and control.
11. **Main Channel Output Level Display:** Displays the output level of the main channel.
12. **Mute ALL Button:** Mutes all channels with one press.
13. **Quick Control Button Module:** Includes buttons for switching between the Main, Menu, and Scene interfaces.
14. **Encoder Data Wheel:** Adjusts selected values or positions for fine parameter tuning and scrolls through lists.
15. **Copy/Paste Buttons:** Allows one-click copying of all settings from the selected channel and pasting them to other channels.
16. **Phones Monitoring Interface:** Provides headphone monitoring output.
17. **Level:** Adjusts the channel level.



1. **POWER:** Power input connector.
2. **ETHERNET Port:** Gigabit Ethernet port for network connection and integration with control software.
3. **RS232:** Serial communication interface with three pins: RTG.
4. **USB AUDIO:** USB audio interface supporting USB sound card functions. Connects to computers or mobile devices via a Type-C cable for lossless digital audio transmission. The system automatically recognizes the audio interface with plug-and-play operation.
5. **USB:** USB 2.0 Type-A port for connecting USB storage devices.
6. **Phones:** Headphone monitoring output.
7. **CH1–CH16:** 16-channel XLR/TRS analog inputs.
8. **OUT1–OUT8:** 8-channel XLR balanced analog outputs.
9. **MAIN L/R:** Main output interface using balanced XLR male connectors.