

CM16

16-Channel Digital Mixing Console



Description

This master-grade 16-channel digital mixing console features a high-performance DSP processor and advanced touchscreen control, offering 14 digital gain preamplifier channels with low distortion and ultra-low noise. It enables rapid mixing and scene storage, includes built-in effects processors, supports USB playback, and operates on a reliable ARM processor with a Linux-based system, delivering simple operation and robust functionality.

Features

- 10.1-inch capacitive touchscreen with 1280×800 resolution.
- 13 100mm motorized faders.
- Switchable between Chinese and English interfaces without reboot.
- Built-in USB recording and playback functions.
- Supports playback of APE, FLAC, MP3, and WAV lossless audio formats.
- USB player recognizes Chinese song titles.
- Built-in 16-channel independent feedback suppressors.
- 2 DCAs.
- Supports iPad touchscreen full-featured control with real-time data synchronization.
- Optional Wi-Fi hotspot.
- Supports up to 8 terminals for simultaneous control.

- Built-in 2 independent effect modules.
- ARM and DSP firmware upgradeable via network or USB drive.
- Per input channel: 4-band parametric EQ, noise gate, feedback suppressor, high/low-pass filters, compressor, and polarity inversion.
- Per output channel: 8-band parametric EQ, high/low-pass filters, compressor, and polarity inversion.
- Output channels: L/R, 6 BUS, 2 AUX, and Headphone (L/R).
- Selectable pre-fader or post-fader (PRE/POST) for 6 BUS and 2 AUX mix buses.
- Scene preset function with export/import via USB for data backup.
- Supports 32 PEQ mode presets.
- Built-in signal generator: sine wave, pink noise, and white noise.
- Channel parameter copy function for quick data duplication across identical channels.
- Connectivity: balanced XLR inputs and outputs.
- 8 fader groups, 1 system mute button, and 3 quick mute buttons.
- Panel lock button to prevent unintended operation.
- Customizable channel naming.

Specifications

Model	CM16
Screen Size	10.1"
Resolution	1280×800
Touch Control	Capacitive
Resolution	1280×800
Main Control CPU	Samsung 4418 quad-core Cortex™-A9
Boot Speed	22 seconds
Operating System	Linux
DSP	ADSP-21489 400Mhz
Analog Input	16CH (14MIC + 2Line)
Digital Input	S/P DIF, optical fiber
Digital Output	AES EBU
USB Playback	APE, FLAC, MP3, WAV playback formats.
USB Recording	Support recording
Analog Output	L/R+6BUS+2AUX+Headphone(L/R)
Output Noise Floor	-90dBu unweighted (AP 515 test AES17-20Khz)
Distortion	0.005% @4dBu 20~20Khz
SNR	-108dB unweighted
Dynamic Range	108dB
Frequency Response	20Hz-20KHz ±0.5dB
Maximum Input & Output Level	18dBu (6.2Vrms) balance
DCA	Support
Chinese and English Interface	Support
Electric Faders	13
iPad Control	Support
Effect	2 effects
Feedback Suppressor	16-channel feedback suppressors
Output Delay	Output delay 1 second

Ethernet	100M
RS-232 Protocol	Support RS232 protocol
WIFI	150M (optional)
USB Mouse	Support
Dimensions (W*D*H)	535×485×205mm
Power Supply	AC 100V-240V; 50/60Hz 55W
Net Weight	10.7kg
Gross Weight	14.9kg
Package Dimensions	635*580*335

Front / Rear Panel

Front Panel



The physical keys, faders and digital encoders on the front panel of the digital mixing console can respond in real time. The whole panel is divided into 6 control areas, namely, the common DSP parameter control area at the upper left, the touch screen and page switching control area in the upper middle, the monitoring control area at the upper right, the channel quick control area at the lower left, the mute group control area and the fader layer control area at the lower right.

(1) The commonly used DSP parameter control area at the upper right

1. Gain knob: Adjust the analog gain; rotate for coarse adjustment, step by 1dB; press and rotate for fine adjustment, step by 0.1dB.
2. Gate/Bypass knob: Rotate to adjust the noise gate threshold; press to toggle bypass or not.
3. Attack/Release knob: Adjust the noise gate attack time or release time. Press to toggle the attack time or release time.
4. 48V button: Turn on or off the phantom power for the currently selected input channel.
5. HPF/LPF knob: Rotate to adjust the frequency of the high-pass or low-pass filter; press to toggle the high-pass or low-pass filter.
6. Bess/But/Link knob: Adjust the type of the high-pass or low-pass filter.
7. -6/-24/-48 knob: Adjust the slope of the high-pass or low-pass filter.
8. Bypass button: The first Bypass button on the left switches the high-pass or low-pass filter bypass or not.
9. PEQ FREQ/Band knob: Rotate to adjust the frequency of a certain parametric equalization; press to switch the parametric equalization band.
10. PEQ GAIN/Band knob: Rotate to adjust the gain of a certain parametric equalization; press to switch the parametric equalization band.
11. Q knob: Adjust a certain PEQ bandwidth.
12. Bypass button: The second Bypass button on the left switches a certain parametric equalization bypass

or not.

13. LIMITER THRESH knob: Adjust the limiter threshold.

14. RATIO knob: Adjust the compressor slope.

15. ATTACK/RELEASE knob: Rotate to adjust compressor attack time or release time; press to toggle the attack time or release time.

16. Bypass button: The third Bypass button on the left switches the compressor bypass or not.

17. EFX SEND knob: Rotate to adjust the send amount of the currently selected input channel to an effect channel; press to switch the effect channel.

18. BUS SEND knob: Rotate to adjust the send amount of the currently selected input channel to a certain bus channel; press to switch the channel.

19. PAN knob: Adjust the pan of the currently selected input channel.

20. SOLO button: Turn on or off the solo for the current channel.

(2) The touch screen and page switching control area

1. HOME button: Switch to the fader layer A.

2. SCENE button: Switch to the scene page.

3. PLAY/PAUSE button: Switch to the Rec/Play page. If in the Rec/Play page, this button can switch USB play/pause.

4. EFFECT button: Switch to the effect page.

5. SETUP button: Switch to the setup page.

6. DATAWHEEL knob: Adjust the parameter selected on the touch screen.

(4) The channel quick control area at the lower position

1. SEL button: Select the channel.

2. MUTE button: Mute or unmute the channel.

(5) The mute group control at the lower right

MUTE GROUP: Set system mute and mute group 1-3 mute.

(6) The fader layer control area at the lower right

1. FADER LAYER: Click to switch to the layer A or B.

2. LOCK: Lock the panel and touch screen operations.