PDM-32

32-Channel Digital Mixing Console

Description

This product is a powerful, professional performance-grade digital mixing console distinguished by its unique design, intuitive operation, fast response, and robust signal-processing capability. It features 32 input channels with built-in microphone preamplifiers and 21 mix buses, delivering high-efficiency audio performance. The console operates at a 48 kHz sampling rate and is equipped with high-resolution 192 kHz ADC and DAC converters, ensuring precise and high-fidelity sound reproduction.

Features

- 10.1-inch capacitive touchscreen with a resolution of 1280×800.
- A total of 36 signal inputs, including 32channels XLR analog input with microphone preamps (including 8 COMBO interfaces), 1 set of stereo USB playback, and 2 channels of digital signal expansion.
- 32 XLR input channels include: 2 GEQ inserted modules, 48V phantom power switch, phase, gain, 0-500ms delay, pan, volume, customizable channel name color, 5-band PEQ (PEQ/High Shelving /Low Shelving options), HPF, LPF, noise gate, side-chain ducking, side-chain compression, and more.
- A total of 24 signal outputs, including 16 channels XLR analog output, 1 set of stereo USB recording output, 2 channels of XLR monitor output, 1 set of stereo TRS headphone monitor output, and 2 channels of digital signal expansion.
- 16 XLR output channels include: 4 GEQ inserted modules, delay 0-500ms, pan, volume, customizable channel name color, 9-band PEQ (PEQ/High Shelving/Low Shelving options), HPF, LPF and more.
- 25 ×100mm faders.
- 21 mixing buses, including 16 mono buses, 4 effects buses, and 1 set of stereo main output bus.
- Built-in 4 effects buses, and offer 8 effects including reverb, echo, chorus, wah, tremolo, distortion, pitch shift, and flanger, which can be freely combined and used.
- 6× 31-band GEQ modules, including 2 input GEQ modules and 4 output GEQ modules.
- 1 – channel microphone with talkback function, divided into 2 control keys.

- 8× DCA groups and 5×mute groups.
- Supports saving up to 100 scenes, including 5 quick load scene buttons.
- Optional expansion modules for Bluetooth/Dante 2X2/AES/stereo sound card.
- Supports connection to 2 stage boxes.
- Supports USB stereo playback and recording functions.
- Wireless network control functions; compatible with iOS, Android, and PC control.
- Equipped with a serial control interface for third-party intelligent control, with 3 selectable baud rates.
- 12V desk lamp power interface with adjustable brightness for lighting purposes.
- It supports switching between Chinese and English languages, and the APP can adapt to the system language.
- Two-level panel lock to prevent accidental operation.

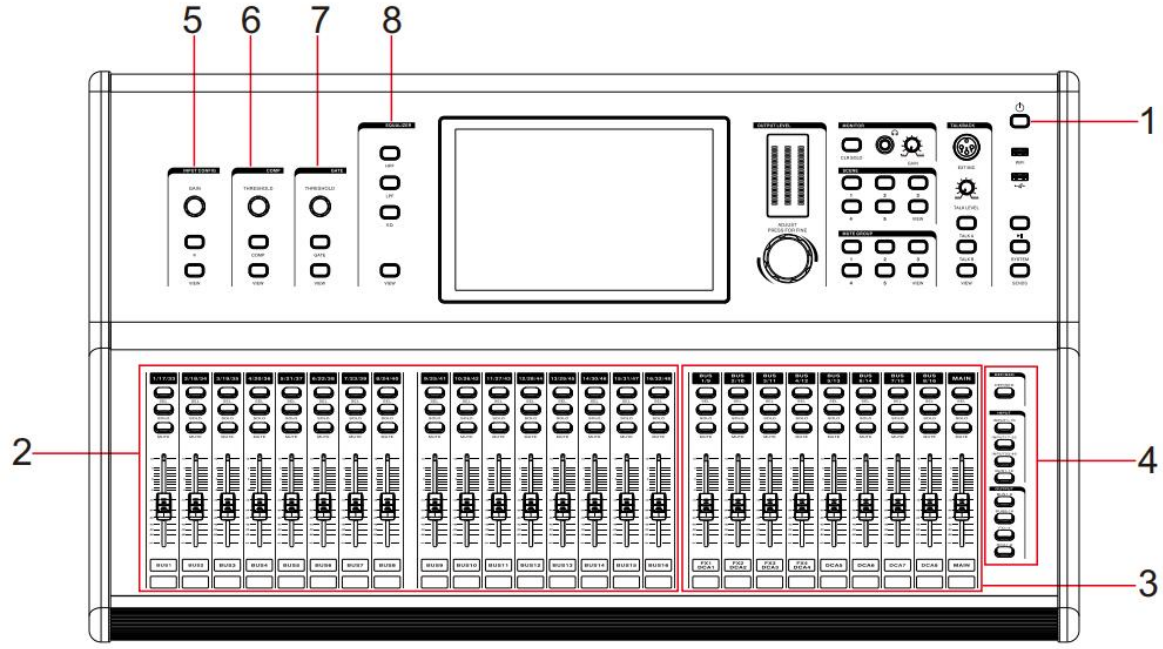
Specifications

Model		PDM-32
Channel Processing	Input Processing Channels	32 microphone or line inputs, 1 stereo USB playback, 1 talkback microphone input, 2 expandable digital inputs.
	Output Processing Channels	16 –channel AUX, 1-channel MAIN, 1-channel stereo monitor, 1-channel stereo USB recording, 2-channel expandable digital outputs.
	Internal Effects	4 mono channels with FX1 and FX2 featuring echo and reverb effects, and FX3 and FX4 featuring chorus, wow, tremolo, distortion, pitch shift, and flange effects.
	GEQ Modules	6 × 31-band GEQ modules, including 2 GEQ modules for input channels; 4 GEQ modules for output channels
	Noise Gate	Threshold: -100dB to -20dB, with noise gate and side chain ducking modes
	Compressor	Threshold: -48dB to +12dB Attack time: 3ms to 100ms Release time: 2x, 4x, 6x, 8x, 16x, 32x (release time is a coefficient multiplied by the attack time) Compression ratio: 1.0 to 127, Soft knee: 0 to 20dB
	Equalizer	Input: 5 bands, output: 9 bands Frequency :20Hz to 20kHz (-20dB/+12dB) Q value :0.404 to 28.852 Types :PEQ, High Shelving, Low Shelving.
	High-Pass / Low-Pass Filters (HPF / LPF Z)	High-pass: 20Hz to 400Hz (6/12/24/36/48dB slope) low-pass: 120Hz to 20kHz (6/12/24/36/48dB slope)
	Delay	0 to 500ms
	Phase	Standard/Inverted
	Scene Files	Up to 100 scenes can be saved
	Effect Library Files	Up to 100 effect presets can be saved
	Signal Processing Capability	40-bit floating-point processing, 48kHz sample rate
	A/D Converter	32-bit, 192kHz, 115dB dynamic rang
	D/A Converter	24-bit, 192kHz, 127dB dynamic range

Connectors	Microphone/Line Input XLR Interface	32, including 8 combo jacks, balanced input
	Talkback Input XLR Interface	1
	XLR Output Interface	16
	Minitor Output XLR Interface	2 Stereo
	Headphone Output TRS Interface	1 Stereo
	Digital Input / Output Expansion Interface	Supports DANTE 2X2,Bluetooth, AES, USB stereo sound card and HMLINK expansion card
	USB Interface	2, for connecting USB flash drives for stereo recording/playback, connecting WiFi module for wireless control
	Lamp XLR Interface	DC 12V output, switch and brightness can be configured
	Serial Port	RS232 DB9 serial port, configurable baud rate
IN 1-24 Inputs	Input Impedance	Unbalanced 5kΩ, balanced 10kΩ
	Frequency Response	20Hz to 20kHz (+/-0.5dB)
	Maximum Input Level	22dBu
	Phantom Power	+48V(IN1 to IN24)
	Gain	-12dB to 40dB
	S/N	115dB (gain = 0dB, A-weighted)
	Dynamic Range	116dB (gain = 0dB, A-weighted)
	Equivalent Input Noise	-110dBu (gain = 40dB, output = +4dB)
OUT 1-12 Outputs	THD	0.004% (gain = 0dB, output = 0dBu, unweighted) 0.01% (gain = 40dB, output =0dBu, unweighted)
	Frequency Response	20Hz to 20kHz (+/-0.5dB)
	Maximum Output Level	+22dBu
	Output Impedance	＜100Ω
	Crosstalk	-113dB@1kHz
	Noise Floor	-86dBu (gain = 0dB)
Monitor and Headphone	Output Impedance	＜50Ω
	Maximum Output Level	+20dBu
	Noise Floor	-81dB (potentiometer = MAX, volume = 0dB)
Talkback Microphone	Input Impedance	Unbalanced 3kΩ, balanced 6kΩ
	Maximum Input Level	+6.5dBu (potentiometer = MAX, intercom volume = MAX)
Digital I/O	Digital I/O	Bluetooth, AES/EBU, DANTE 2X2, stereo sound card
		USB stereo playback and recording, supports mp3, wav, and flac file playback.
	USB Format	3.0
	Recording Format	Wav
General	Maximum Gain	80dB from analog input to output
	Channel Crosstalk	-110dB
	Display Screen	10.1 "touch screen 1280x800 resolution
	Linear Potentiometers	25 X 100mm electric linear potentiometers
	System	Android

	Network	External WiFi module, supports control from iOS, Android, and PC
Hardware	Power	AC 100-240V 50/60Hz
	Power Dissipation	50W
	Work Temperature	5℃~40℃
	Dimensions (W×D×H)	Machine: 836x527.3x225.7mm Package: 985x665x370mm
	Weight	Net Weight: 18.8kg Gross Weight: 26.4kg
	Accessories	WiFi Module
		Power Cable

Front / Rear Panel



1. Power Button: Long press to turn on/ off
2. Input Fader Control Area: 16 motorized faders, each channel has Select (SEL) button, Solo (SOLO) button, and Mute (MUTE) button.
3. Output Fader Control Area: 9 motorized faders, each channel has Select (SEL) button, Solo (SOLO) button, and Mute (MUTE) button.
4. 9 × Function buttons:

(1) DEFINE Button : Click to switch to the custom layer page. The content displayed on the custom layer page is configured in SYSTEM -> Custom -> Custom Layer Page. The faders and buttons in areas 2 and 3 are used for channel control on the custom layer page.

(2) INPUT1-16 Button: Click to switch to the input layer page. The faders and buttons on the input layer are used to control INPUT1 to 16 channels.

(3) INPUT17-32 Button: Click to switch to the input layer page. The faders and buttons on the input layer are used to control INPUT17 to 32 channels.

(4) INPUT33-48 Button : Click to switch to the input layer page. The faders and buttons on the input layer are used to control INPUT33 to 48 channels.

(5) BUS1-16 Button : Click to switch to the output layer page. The faders and buttons on the input layer are used to control BUS1 to 16 channels.

(6) BUS1-8 Button: Click to switch to the output layer page. The faders and buttons on the output layer are used to control BUS1 to 8 and the MAIN output.

(7) BUS9-16 Button: Click to switch to the output layer page. The faders and buttons on the output layer are used to control BUS9 to 16 and the MAIN output.

(8) FX1-4 Button: Click to switch to the output layer page. The faders and buttons on the output layer are used to control FX1 to 4 and the MAIN output.

(9) DCA1-8 Button: Click to switch to the output layer page. The faders and buttons on the output layer are used to control DCA1 to 8 and the MAIN output.

5. Input Configuration Area

(1) GAIN Knob: Adjusts the gain parameter of the current input channel.

(2) Φ Button: Configures the phase inversion (normal or reverse) of the current input channel.

(3) VIEW Button: Quickly switches to the input configuration parameter page.

6. Compressor Configuration Area

(1) THRESHOLD Knob: Adjusts the threshold parameter of the compressor for the current input channel.

(2) COMP Button: Configures the compressor on/off for the current input channel.

(3) VIEW Button: Quickly switches to the compressor configuration parameter page.

7. Noise Gate Configuration Area

(1) THRESHOLD Knob: Adjusts the threshold parameter of the noise gate for the current input channel.

(2) GATE Button: Configures the noise gate on/off for the current input channel.

(3) VIEW Button: Quickly switches to the noise gate configuration parameter page.

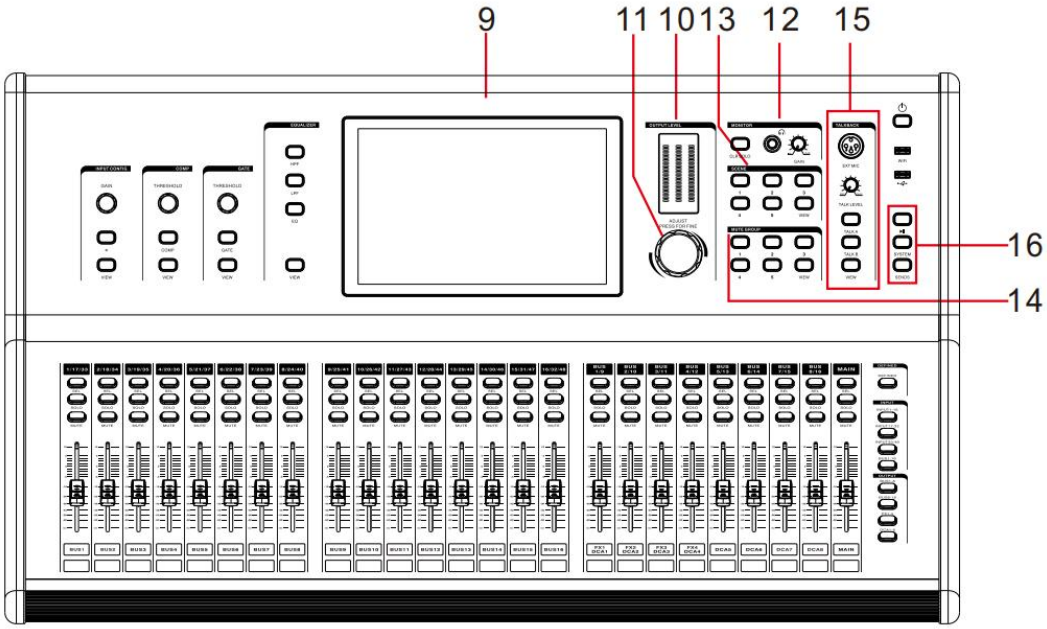
8. EQ Configuration Area

(1) HPF Button: Configures the high-pass filter (HPF) on/off for the current channel.

(2) LPF Button: Configures the low-pass filter (LPF) on/off for the current channel.

(3) EQ Button: Configures the EQ on/off for the current channel.

(4) VIEW Button: Quickly switches to the EQ configuration parameter page.



9. Display Screen

High-definition touchscreen. Common touchscreen operations on the layer page include:

Swipe left or right to switch layers.

Single-click to select a channel.

Double-click to enter the channel editing page.

10. Level Meters

Real-time display of the signal levels for the main output (left and right channels) and monitor output.

11. Main Knob

Used for parameter adjustment.

12. Monitor Area

(1) CLR SOLO Button: Short press to turn off monitoring for all channels.

(2) Headphone Jack: Connect headphones here.

(3) Headphone Volume Potentiometer: Adjust the monitoring volume.

13. Scene Configuration Area

(1) 5 Scene Buttons: Short press to quickly load scene mode parameters.

(2) VIEW Button: Quickly switch to the scene configuration page.

14. Mute Group Configuration Area

(1) 5 Mute Group Buttons: Short press to control the mute group on/off.

(2) VIEW Button: Quickly switch to the mute group configuration page.

15. Talkback Microphone Configuration Area

(1) Talkback Microphone Jack: Connect a talkback microphone here.

(2) Talkback Microphone Volume Potentiometer: Adjust the talkback microphone volume.

(3) TALK A and TALK B Buttons: Select different output destinations for A and B paths. Configure the working mode of the A and B buttons in the system page: Lock Mode and Non-Lock Mode.

In Lock Mode, a short press on the A or B button keeps the talkback state active.

In Non-Lock Mode, the button must be held down to maintain the talkback state.

VIEW Button: Quickly switch to the talkback microphone configuration page.

16. Other Interfaces and Buttons

(1) Two USB Ports:

One is used to connect a Wi-Fi module to provide wireless network connectivity for tablets, phones, or computers.

The other is used to connect a USB drive for recording/playback, scene import/export, effects library import/export, and system updates.

(2) Play/Pause Button:

Single-click to quickly play or pause USB audio.

Double-click to enter the multimedia playback page.

(3) SYSTEM Button: Single-click to enter the system page.

(4) SENDS Button:

Single-click to enter the quick send signal configuration state. The SENDS light flashes to indicate the current send state.

Observe the channel status bar on the right side of the display during the configuration process.

After configuration, short press the SENDS button to exit the send state.

A. Configuring Single Input Channel to Multiple Buses:

Select the input channel layer button and the bus layer button to be configured.

Short press the SEL button of the input channel to be configured, then short press the SENDS button.

In the send state:

Operate the SOLO button of the bus to configure the send bus on/off.

Operate the MUTE button of the bus to configure whether the input channel sends post-fader or pre-fader signals.

Adjust the bus fader to configure the signal level sent from the current input channel to the current bus.

B. Configuring Multiple Input Channels to a Single Bus:

Select the input channel layer button and the bus layer button to be configured.

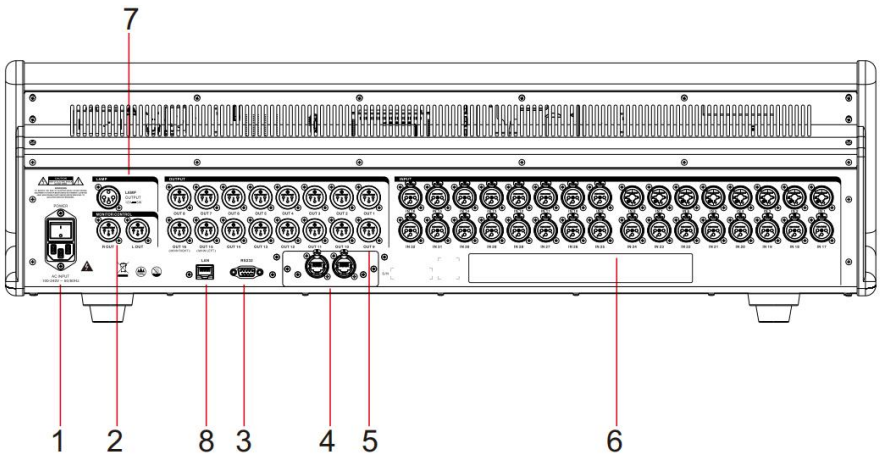
Short press the SEL button of the bus to be configured, then short press the SENDS button.

In the send state:

Operate the SOLO button of the input channel to configure the send bus on/off.

Operate the MUTE button of the input channel to configure whether the input channel sends post-fader or pre-fader signals.

Adjust the input channel fader to configure the signal level sent from the input channel to the current bus.



1. Power Input and Switch
2. Monitor Output : Functions the same as the headphone monitor jack on the front panel, but with a different interface.
3. Control Interface: RS232 interface with configurable baud rate. The default baud rate is 115200 bps.
4. Expansion Module / HMLINK Slot
   This slot supports optional cards such as AES/EBU, DANTE, and sound cards, all in stereo mode.
   It can also accommodate an HMLINK module for connecting to stage boxes.
5. Output Interfaces
   16-channel XLR output interfaces. The output interfaces can be custom-assigned to different buses. By default, OUT15 & 16 are assigned to the main output bus.
6. Input Interfaces
   32-channel XLR input interfaces. Among these, IN1-8 are combo interfaces, compatible with both XLR cables and 1/4” TRS cables for connecting audio sources.
7. LAMPPort : Lamp interface. The device provides a 12V power output for connecting a lamp.
8. LAN Port: Used for connecting to an Ethernet network.