


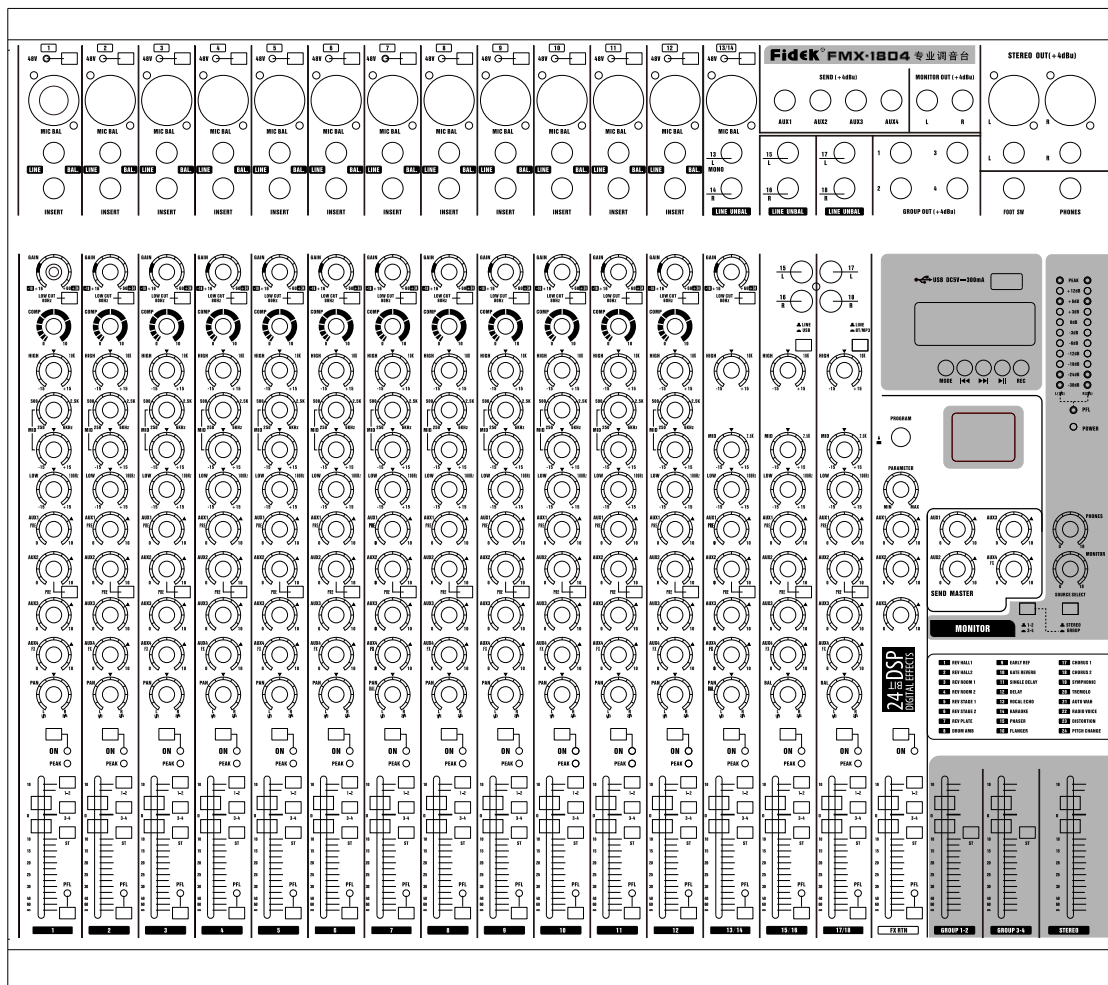
编制		FMX-1804-IB-02-0 说明书  <b>技术要求：</b> 1、说明书大小：A4/20P 2、白底黑字； 3、纸质：80g书写纸。 4. 环保要求：符合ROHS, CP65   出英文版图纸
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设计资料版本变更履历表					QRD-1112-A.O
序号	开发阶段	版本	变更内容	变更人	日期
1	PP	V3.0	出英文版图纸	罗敏欣	2023-12-26
<b>备注：</b>		开发阶段--分EV、DV、PP、MP；版本--EV(V1.0、V1.1、...)、DV(V2.0、V2.1、...)、PP(V3.0、V3.1、...)、MP(V4.0、V4.1、...) 例：开发阶段"EV",版本 "V1.0"			

# FMX-1804

## Manual



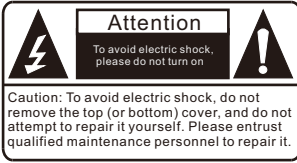
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## ◀◀ Safety guidance



**Note:** To reduce the risk of electric shock, do not remove the cover; there are no user-accessible parts inside. Have it serviced by a qualified technician.

**WARNING:** To reduce the risk of fire or electric shock, do not expose this equipment to rain or moisture.



When this symbol appears, it warns you that there is uninsulated dangerous voltage inside the enclosure. This voltage is enough to cause electric shock.



When this symbol appears, it warns you that there are important operating and maintenance instructions in the attachment. Please refer to the operating manual.

**Detailed Safety Instruction:** You must read the safety and operating instructions before operating this equipment.

**Storage Instruction:** Safety and operating instructions must be retained for future reference.

**Heed Warnings:** All warnings on the equipment and operating instructions must be followed.

**Follow instruction:** The operating instructions and user instructions must be followed.

**Water and moisture:** This device should not be used near water (such as near a bathtub/wash basin /kitchen sink/laundry tub, etc.).

**Ventilation:** This device should not be placed or positioned in such a way as to prevent its normal ventilation, e.g. the device should not be placed on a bed/sofa/blanket or similar surface that blocks its ventilation openings, or placed in a built-in device, e.g. In bookcases or cabinet shelves that may impede air circulation through vents.

**Heat:** This equipment should be placed away from heat sources such as heating/temperature devices /stoves or other devices that generate heat (including power amplifiers).

**Power supply:** This equipment can only be connected to the type of power supply specified in the instruction manual or marked on the equipment.

### Warning

In order to ensure the safety of your personal and property, please be sure to read the safety instructions and related precautions before using the product, and operate in accordance with the safety instructions.

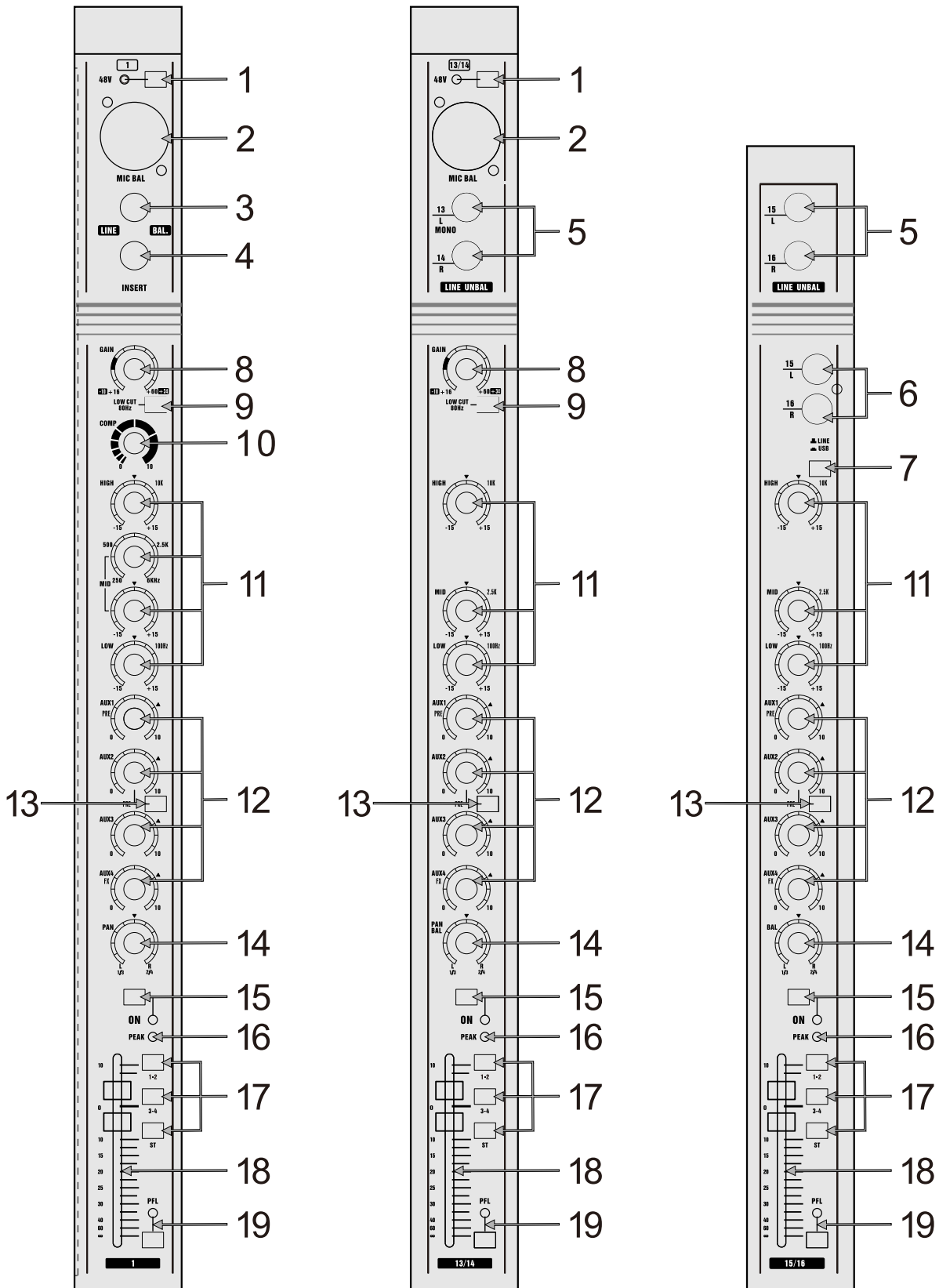
- 1: For adequate ventilation and heat dissipation, please ensure that the distance between the product and surrounding objects is at least 100MM.
- 2: Do not cover the ventilation openings with items such as newspapers/tablecloths/curtains to avoid obstructing ventilation.
- 3: Do not place exposed flame sources, such as lit candles, on the product.
- 4: The product is only suitable for use in areas below an altitude of 2,000 meters.
- 5: The product must not be exposed to water drops or splashes, and items filled with liquids such as vases cannot be placed on it.
- 6: The product is Class I equipment and should be connected to a power grid power output socket with a protective ground connection.
- 7: The disconnecting device of the grid power supply is the power plug, and the disconnecting device should be easy to operate.
- 8: When the power switch is "off", the product is still connected to the power grid. Please do not remove the product casing without authorization to avoid the risk of electric shock to the human body. If you want to completely disconnect from the mains power supply, please disconnect the mains power supply disconnecting device, that is, the power plug from the mains power supply.

## ◀◀ Feature

1. This mixer uses ultra-low impedance circuits and professional balanced input and output to minimize noise and achieve incredible quietness. Each input channel is equipped with a split microphone preamplifier, not a standard integrated circuit, but a paired ultra-low-noise transistor that operates at high current, making the product quality rich in the low frequency band and clear in the mid frequency band.
2. The 60mm long-throw fader makes the tuning effect more precise, and high-quality components have undergone very strict component testing and product testing.
3. In order to produce the best sound quality, each mono channel is equipped with high-cut equalization/low-cut equalization and mid-band sweep equalization. This design will produce first-class "musical" sound.
4. Built-in 24 high-quality digital effectors, each group or mixing bus can be selected arbitrarily.
5. With USB recording and playback functions, and a 26-bit/48K USB audio interface, you can use the USB audio interface to play music from the computer, or use recording software to record the output signal of the mixer. It supports USB standard specifications and does not need to install a driver. Enables high-quality recording and playback.
6. Built-in Bluetooth /U disk playback and recording, supports the playback of Mp3/WMA/WAV and other files, and can also support the playback of high-quality lossless FLAY audio files. The recording is in MP3 format and can reach a rate of 256kbps.

# Function introduction

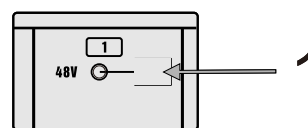
## 1. Input part



# Function introduction

## 1: PHANTOM+48V switch and indicator light

Use this switch to turn phantom power on or off. When this switch is on, DC+48V power can be applied to the XLR input socket. When the switch is on, the indicator light will light up. An independent phantom power switch for each MIC channel



### Remark:

**1: If you do not need phantom power, be sure to set this switch to off.**

**2: When phantom power is turned on, pay attention to the following phenomena to prevent damage to the mixer or external equipment or noise.**

--If a device that does not use phantom power is connected to the XLR input socket, turn this switch off.

--Never disconnect the XLR plug cable when this switch is on.

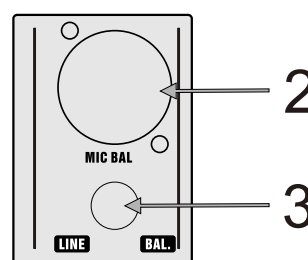
--Before turning on or off the phantom power, set the {STEREO} master fader and {GROUP} fader and other output controllers to the minimum level.

## 2/3: Channel input jack

--2: MIC jack is a balanced XLR type input jack.

--3: LINE jack is a balanced headphone input jack.

Balanced or unbalanced headphones can be inserted into these jacks.



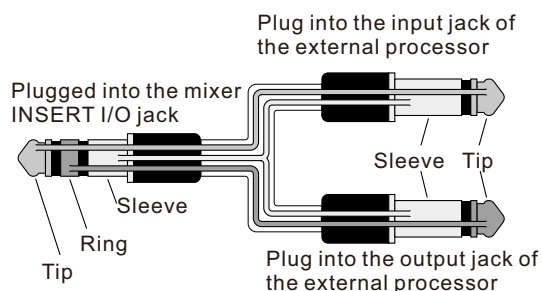
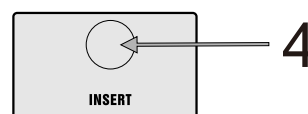
### Remark:

**When an input channel provides both a MIC jack and a LINE jack, you can use one of the jacks, but you cannot use both at the same time. You can only connect to one jack of each channel at a time.**

## 4: INSERT I/O jack

Between the equalizer and channel fader for the unbalanced headphone input channels (1-6).

These jacks can be used to independently connect these channels to various devices such as graphic equalizers, compressors and noise filters. These are TRS (tip, ring, sleeve) headphone jack that supports two-way operation.

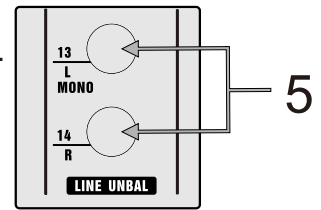




## « Function introduction

### 5: Stereo input jack LINE(L/MONO,R)

This input jack is an unbalanced phone type line stereo input jack.

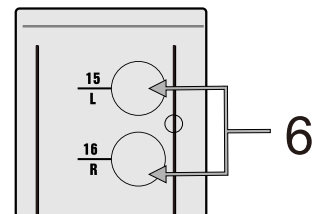


### 6: Stereo input jack LINE(L,R)

This input jack is used to connect line-level instruments, such as electronic keyboards and audio equipment.

Two jack types are available: phone type and RCA pin type.

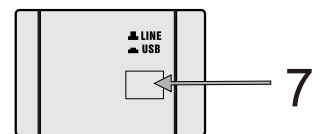
**Note: On any given channel, you can use either a phone jack or an RCA jack, but not both together. If both types of jacks are used at the same time, only the phone jack will function.**



### 7. Line USB Switch

Switch between LINE stereo input jack and USB2.0 jack (CH15-16).

Switch between LINE stereo signal input jack and Mp3/Bluetooth (CH17-18).



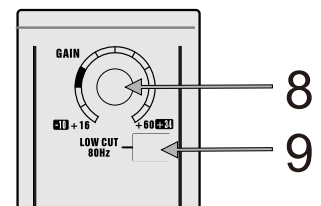
### 8: GAIN knob

Used to adjust the gain of the input signal to obtain the best signal-to-noise ratio and dynamic range.

### 9: LOW CUT high-pass filter switch

This switch turns the HPF on or off. To turn the HPF on, press this switch. The HPF will clip frequencies below 80Hz.

(Note, however, The mixer will not apply HPF to the line input of a stereo input channel regardless of the switch setting.).



### 10: COMP knob

Used to adjust the amount of effect applied to channel compression. When the {COMP} knob is turned to the right, the threshold/ratio and output gain are adjusted simultaneously.

--Threshold: +22 dBu to -8 dBu

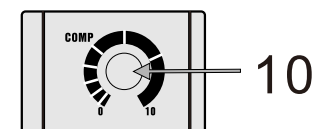
--Output gain: 0 dB to +7 dB

--Ratio: 1:1 to 4:1

--Attack time: about 25ms

--Release time: about 300ms

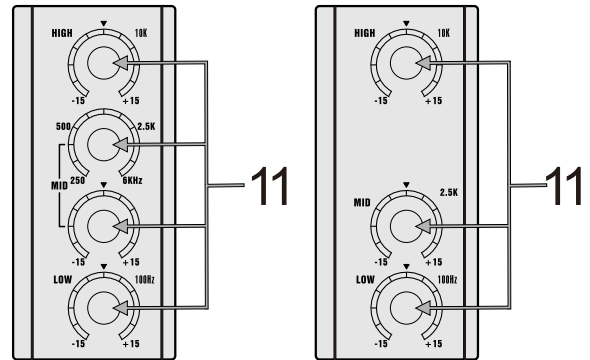
**Note: Avoid setting the compression ratio too high as the resulting higher average output level can create feedback.**



# Function introduction

## 11: Equalizer knob

This three-band equalizer adjusts channels in three frequency bands: high/mid/low. Setting this knob to the ▼ position produces a flat frequency response. Turning the knob to the right enhances the corresponding frequency band, while turning the knob to the left Frequency bands that can be attenuated. The table on the right shows the EQ (equalizer) type/basic frequency and maximum attenuation/enhancement of the three frequency bands.



## 12:AUX1-4

The AUX1 knob controls the signal level of the channel's pre-fader signal sent to the AUX1 bus;

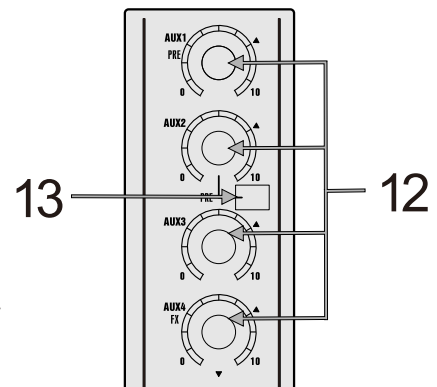
The AUX2 knob controls the signal level of the signal sent from this channel to the AUX2 bus;

The AUX3 knob controls the signal level of the channel's post-fader signal sent to the AUX3 bus;

The AUX4 knob controls the signal level of the channel's post-fader signal sent to the AUX4 bus.

Normally these knobs should be set close to the ▲ position. If a stereo channel is being used, the L (odd) and R (even) channel signals will be mixed and sent to the AUX1-4 communication bus.

Frequency	Type	Basic frequency	Maximum weaken/enhance
HIGH (高)	Slope	10kHz	± 15 dB
MID (中)	Mono	250-6kHz(variable)	
	Stereo	2.5kHz	
LOW (低)	Slope	100Hz	



## 13:PRE switch

This switch is used to select whether to send the pre-fader or post-fader signal to the AUX2 bus.

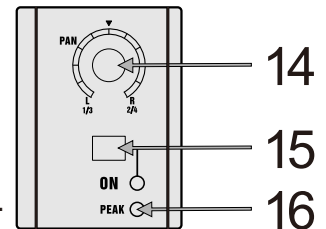
**Please note that this switch only affects AUX2.**

## Function introduction

### 14: PAN control, PAN/BAL control, BAL control

The PAN control determines the positioning of the channel signal on the Group1-2/3-4 bus or the stereo L and R buses.

The BAL control knob sets the balance between the left and right channels. Signals going to the L input (odd channels) are sent to the Group1/3 bus or stereo L bus; signals going to the R input (even channels) are sent to the Group2/4 bus or Stereo R bus.



### 15: ON switch

This switch outputs the channel signal to the stereo L and R buses. To send the signal to the stereo bus, press the switch to set it to on. The switch lights green to indicate it is on.

### 16: PEAK (peak value) indicator light

Detects the peak level of the post equalizer signal and lights up red when the level reaches 3dB below the cutoff level.

### 17: Bus distribution switch

When this switch is turned on, the signal can be output to the corresponding bus. The 1-2 switch is assigned to GROUP1-2, the 3-4 switch is assigned to GROUP3-4, and the ST switch is assigned to STEREO L/R.

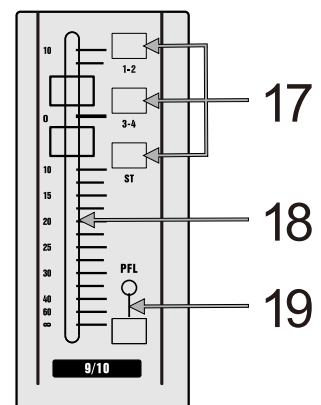
### 18: Channel fader

Adjust the output level of the signal input to this channel. Use this fader to adjust the volume balance between each channel.

**Note: In order to reduce noise, please adjust the unused channel faders to the minimum.**

### 19: PFL (pre-fader monitor) switch

This switch is used to monitor the channel pre-fader signal. To set this switch to on, please press switch to make it light up (an independent indicator light for each channel). When the switch is turned on, the mixer Output channel pre-fader signals to the PHONES and C-R OUT jacks for monitoring.



## Function introduction

### 20: SEND socket (AUX1-4)

These are impedance-balanced phone-type output jacks. These jacks output the signal from AUX1-4 respectively. These jacks can be used, for example, to connect to an effector or prompt box or other monitoring system.

### 21: MONITOR OUT jack

These impedance-balanced TRS phone jacks connect to monitoring systems.

#### Remark:

When the PFL indicator light is on, the channel signal of the pressed PFL switch will be output. When the PFL indicator is turned off, the bus signal selected in MONITOR section 34 will be output.

### 22: STEREO OUT jack

These are XLR-type and TRS phone-type balanced output jacks that can output a mixed stereo signal. The signal level can be adjusted via the STEREO master fader before being output. For example, these jacks can be used to connect a power amplifier that drives the main speakers.

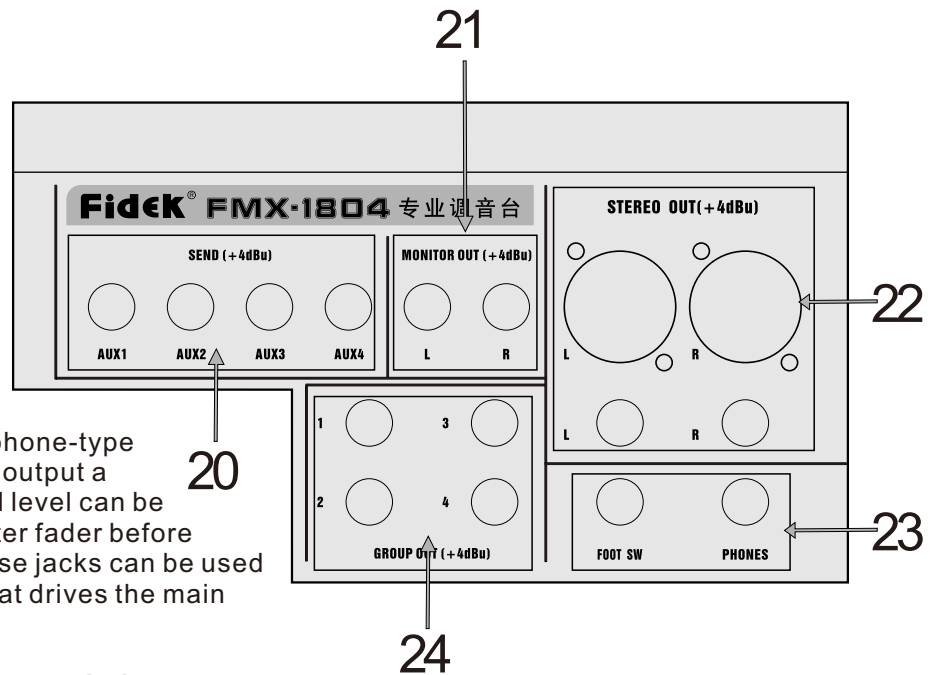
### 23: PHONES jack/FOOT SW foot switch

1: Earphone connection jack. This is a balanced earphone type output jack. The signal monitored by these jacks is selected by the level meter signal switch and the channel PFL switch.

2: Foot switch controls the effect on or off.

### 24: GROUP OUT jack

These are impedance-balanced headphone-type output jacks that can output Group 1-2/3-4 signals. These jacks can be used to connect to the input jacks of an MTR/outboard mixer or other similar device. The signal level is determined before being output. Adjustable via the STEREO master fader. For example, you can use these jacks to connect a power amplifier that drives your main speakers.



## Function introduction

### 25: Digital effects

--PROGRAM (program) dial

Select internal digital effects.

--PARAMETER control

Adjust the parameters of the selected effect (depth, speed, etc)

--AUX1-3 control

Adjusts the signal level sent by the internal digital effector to the AUX1-3 bus.

--ON switch

Enable or disable the use of the internal effector. Only the internal effector comes into play.

If this switch is turned on and the foot switch turns off the effect at the same time, the ON indicator light will flash.

--Bus distribution switch

These switches determine the bus to which the built-in effects signal is sent. When this switch is turned on  the signal can be output to the corresponding bus. Switch 1-2 is assigned to GROUP1-2. Switch 3-4 is assigned to GROUP3-4.

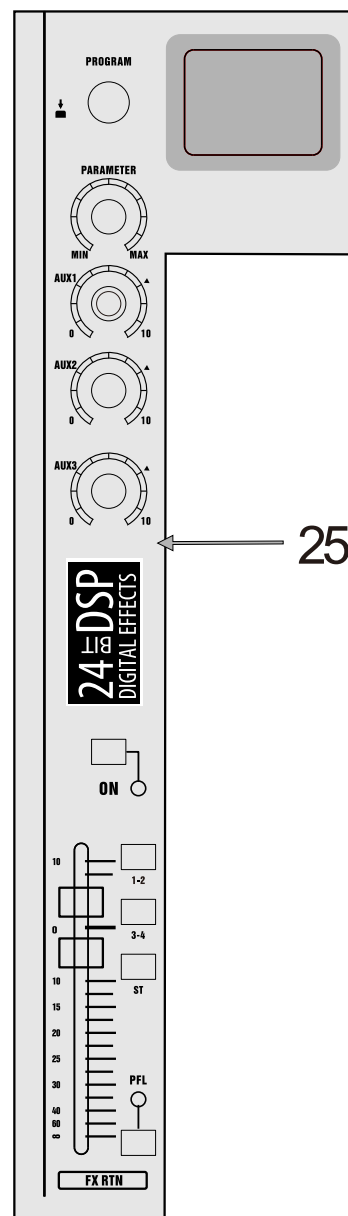
The ST switch is assigned to STEREO L/R.

--PFL switch

If you wish to output the internal effector signal to the PFL bus, set this switch to on.

--FX RTN fader

Adjusts the level of the signal sent from the internal effector to the STEREO bus.

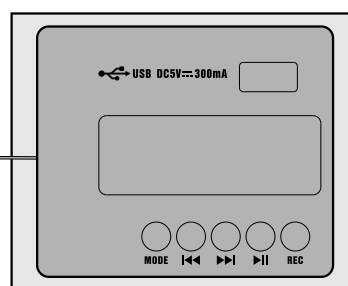


### 26: MP3 playback

(Note: Please press the corresponding switch of LINE  Crystal /BT/MP3  at point 7 before it can be used normally)

The Bluetooth name is "FIDEK". If the Bluetooth state is not connected to the mobile phone for 2 minutes, it will enter sleep state and can be woken up by pressing any key.

The MODE button can switch between BT/USB, disconnect Bluetooth, and enter PAIR state. **◀◀** Previous song button, **▶▶** next song button, **⏸** play/pause button. Long press the REC button to record, short press the REC button to exit the recording playback state, and long press the **▶||** button to play back the recording file.



# Function introduction

## 27: SEND MASTER

AUX1-4 control adjusts the output to the AUX 1-4 jack signal level.

Note: SEND 4 controls entry into digital effects at the same time signal size of the transmitter.

## 28: ST switch at GROUP

If this switch is turned on, the mixer will send the signal processed by the GROUP fader to the stereo bus.

GROUP1/3 signals are sent to stereo L,  
GROUP2/4 signal sent to stereo R.

## 29: GROUP fader(1-2,3-4)

Adjusts the signal sent to the GROUP OUT1 to 4 jacks signal level.

## 30: STEREO main fader

Adjusts the signal level sent to STEREO OUT.

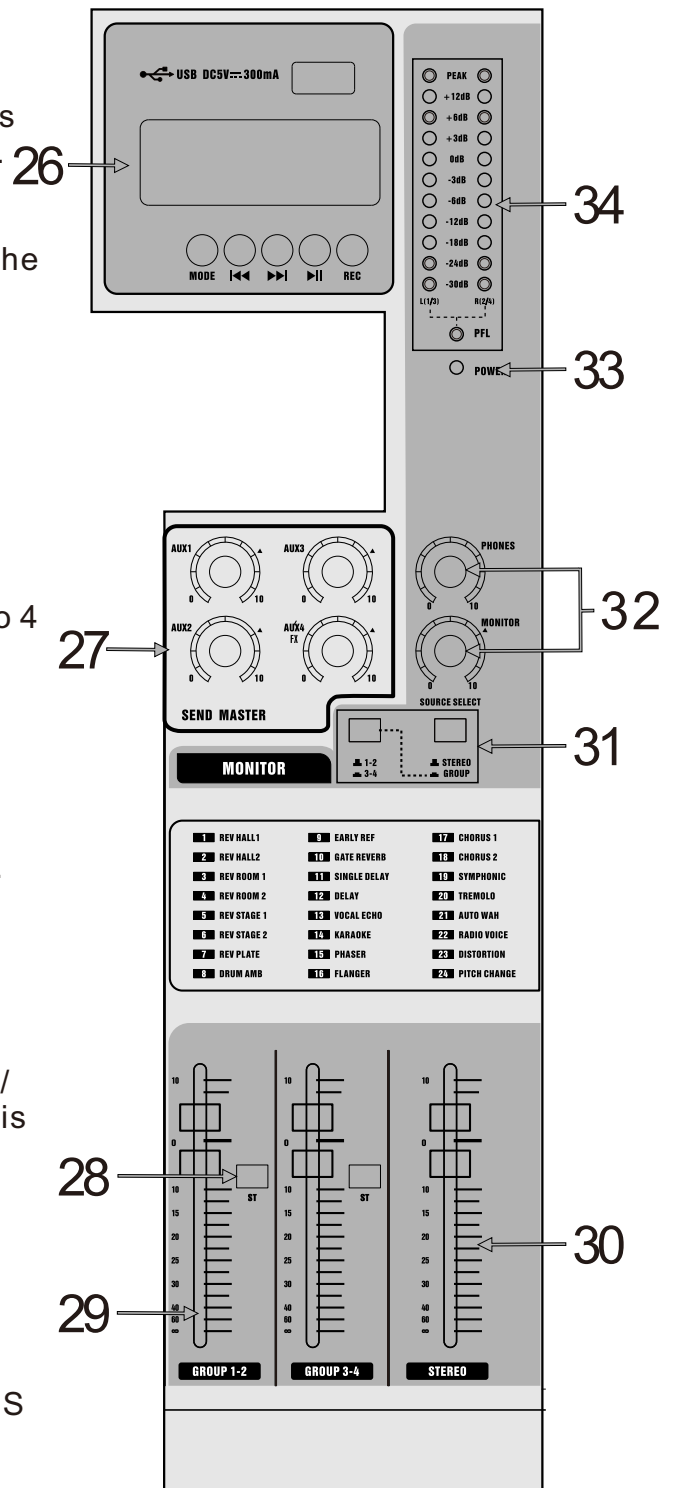
## 31: Monitor signal selection switch

Set the signal sent to the MONTIOR OUT jack/ PHONES jack and level meter. You can use this switch to send the signal from the STEREO L/ R bus/GROUP1

-2 or GROUP3-4 bus selection signal.

## 32: C-R/PHONES control

Controls the signal level output to the PHONES jack and the C-RL and R jacks.



## 《 Function introduction

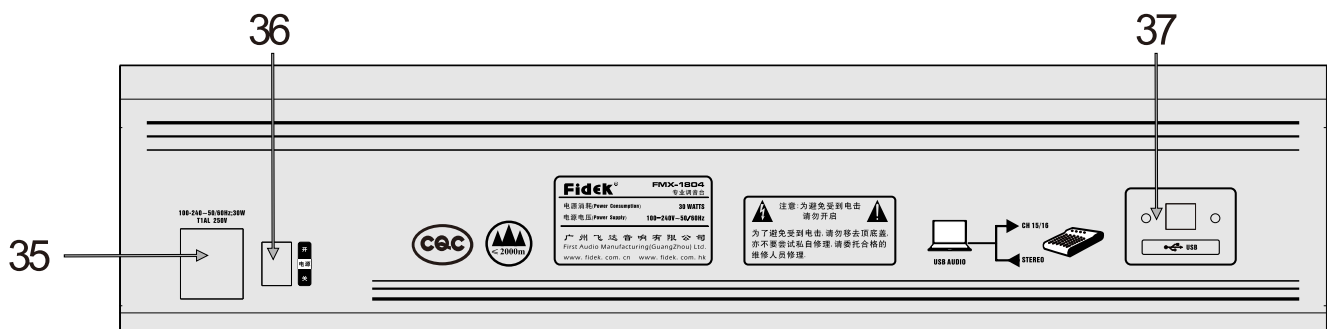
### 33:POWER (power) indicator light

This indicator light lights up when the mixer is powered on.

### 34:Level meter

The LED display indicates the signal level (the signal level sent to the C-R OUT and PHONES jacks) by the selector switch mentioned in 31 above. Corresponds to the "0" point of the standard output level. Indicates when the output level reaches the cut-off level. The PEAK light lights up red.

## 3. Rear panel power supply part





### 35:Power socket.

The power input socket inputs 100-240V~50/60Hz; AC voltage.

### 36:Power switch.

The power switch that controls the operation of the entire machine.

### 37: USB interface.

(Note: Please press the LINE  /USB  corresponding switch at point 7 before it can be used normally) Connect to the computer through a USB cable.

The USB audio input from the STEREO L/R post-fader signal is output to the computer.

## Parameter introduction

### General technical specification sheet

0dBu=0.775Vrms signal generator source impedance=150Ω

Frequency	Input to stereo output	+0.5dB/-1.5dB (20Hz-22kHz) reference level 1kHz, GAIN to minimum
THD+N	Output to stereo output	0.05% @ +10dBu(20Hz-20kHz), GAIN to minimum
Noise (20-20kHz)	Equivalent input noise	-124dBu (MIC input, GAIN knob maximum)
	Residual noise	-95dBu (all channel faders are MIN, and the main fader is set to 0dB)
	Squelch	-86dBu (the measured channel Gain/fader is set to 0dB, the tone is set to center; the main fader is set to 0dB)
Crosstalk(1kHz)		-60dB
Input channel		Mono: 12; Mono/Stereo: 1; Stereo: 2; INSERT input: 12
Output channel		Stereo: 2; Monitor output: 1; Headphone output: 1; Auxiliary output: 4; Group output: 4; INSERT output: 12
Generatrix		Cabinet sound: 1; Group: 4; Auxiliary: 4
Function of input channel	INSERT	Have a compressor, feedback, or other processor insert the signal
	LOW CUT	80Hz,-12dB/octave (MIC only)
	COMP	Single knob compressor(Threshold/Scale/Gain) Threshold: +22dBu to -8dBu, ratio: 1:1 to 4:1, output level: 0dB to 7dB, attack time: about 25msec, release time: about 300msec
	EQ	HIGH: Gain: +15dB/-15dB, Frequency: 10kHz
		MID: Gain: +15dB/-15dB, frequency adjustable range Mono: 250Hz-6kHz, Stereo: Fixed 2.5kHz
		LOW: Gain: +15dB/-15dB, Frequency: 100Hz
PEAK LED	Lights up when the channel input signal reaches 3dB below peak clipping distortion	
Level meter	Monitor output level	2X11 LED level meter
Built-in digital effects		24 effects, PARAMETER control, FOOT SW: 1 switch
USB Audio	Connect to computer to play	USB 2.0 compatible, sampling rate: 48kHz, Bit accuracy: 16-bit
Bluetooth/MP3	U disk play/recording	Support: MP3/WMA/WAV and other files. Recording: MP3 format, 256kbps
Phantom supply voltage		48V
Supply voltage/power consumption		AC100-240V,50/60Hz;30W



## Parameter introduction

### Input and output characteristics


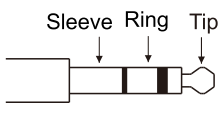
Analog input characteristics (0dBu=0.775V) (1) Sensitivity: main output 4dBu lowest input level.

Input port	GAIN	Actual load impedance	Use under rated	Input level		Interface
				Sensitivity(1)	Maximum input	
MIC INPUT CH1-6	MAX	3kΩ	50-600Ω MIC	-60 dBu	-30 dBu	XLR-3-31 type Phone jack (balanced)
	MIN			-24 dBu	+3 dBu	
Line INPUT CH1-6	MAX	20kΩ	10kΩ LINE	-34 dBu	-10 dBu	Phone jack (balanced)
	MIN			-6 dBu	+24 dBu	
MIC 7-8	MAX	3kΩ	50-600Ω MIC	-60 dBu	-30 dBu	XLR-3-31 type(balanced)
	MIN			-30 dBu	-5 dBu	
Line 7-8	MAX	10kΩ	10kΩ LINE	-28 dBu	-5 dBu	Phone jack (unbalanced)
	MIN			-12 dBu	+22 dBu	
ST INPUT 10-12	--	10kΩ	10kΩ LINE	-14 dBu	+12 dBu	Phone jack-RCA (unbalanced)
	--					

### Analog output characteristics

Output port	Actual source impedance	Use under rated	Output level		Interface
			Standard position output(1)	Max input(2)	
MASTER OUT (R,L)	100Ω	10kΩ LINE	+4 dBu	+18 dBu	XLR-3-31 type Phone jack (balanced)
AUX OUT GROUP OUT MONITOR OUT	100Ω	10kΩ LINE	+4 dBu	+18 dBu	Phone jack (impedance balanced)
EARPHONE OUTPUT	100Ω	40kΩ LINE	3mW+3mW	10mW+10 mW	Stereo phone jack (unbalanced)

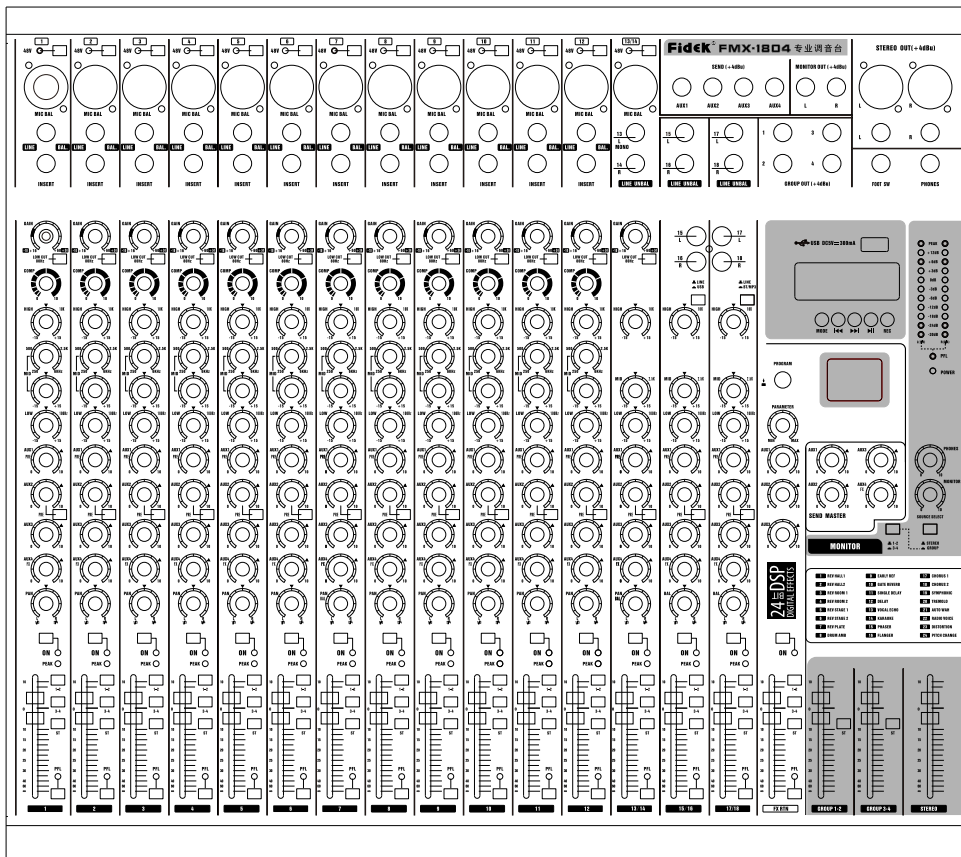
### Connector polarity

MIC INPUT MAIN OUT	Pin 1: ground Pin 2: hot (+) Pin 3: cold (-)	
HEAD-PHONE	Tip: L Ring: R Sleeve: ground	
INS I/O	Tip: Output Ring: Input Sleeve: ground	
MIC/LINE/AUX SEND GROUP/MONITOR OUT STEREO OUT	Tip: hot (+) Ring: cold (-) Sleeve: ground	
LINE(立体声)	Tip: hot Sleeve: ground	

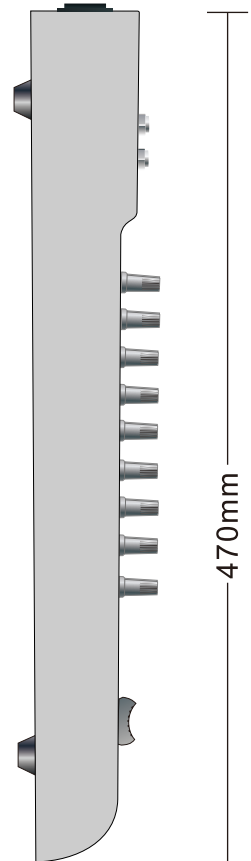
# Parameter introduction

Size/Weight:

Model	Weight	Size(W*D*H)
FMX-1804	9.0KG	535x470x120



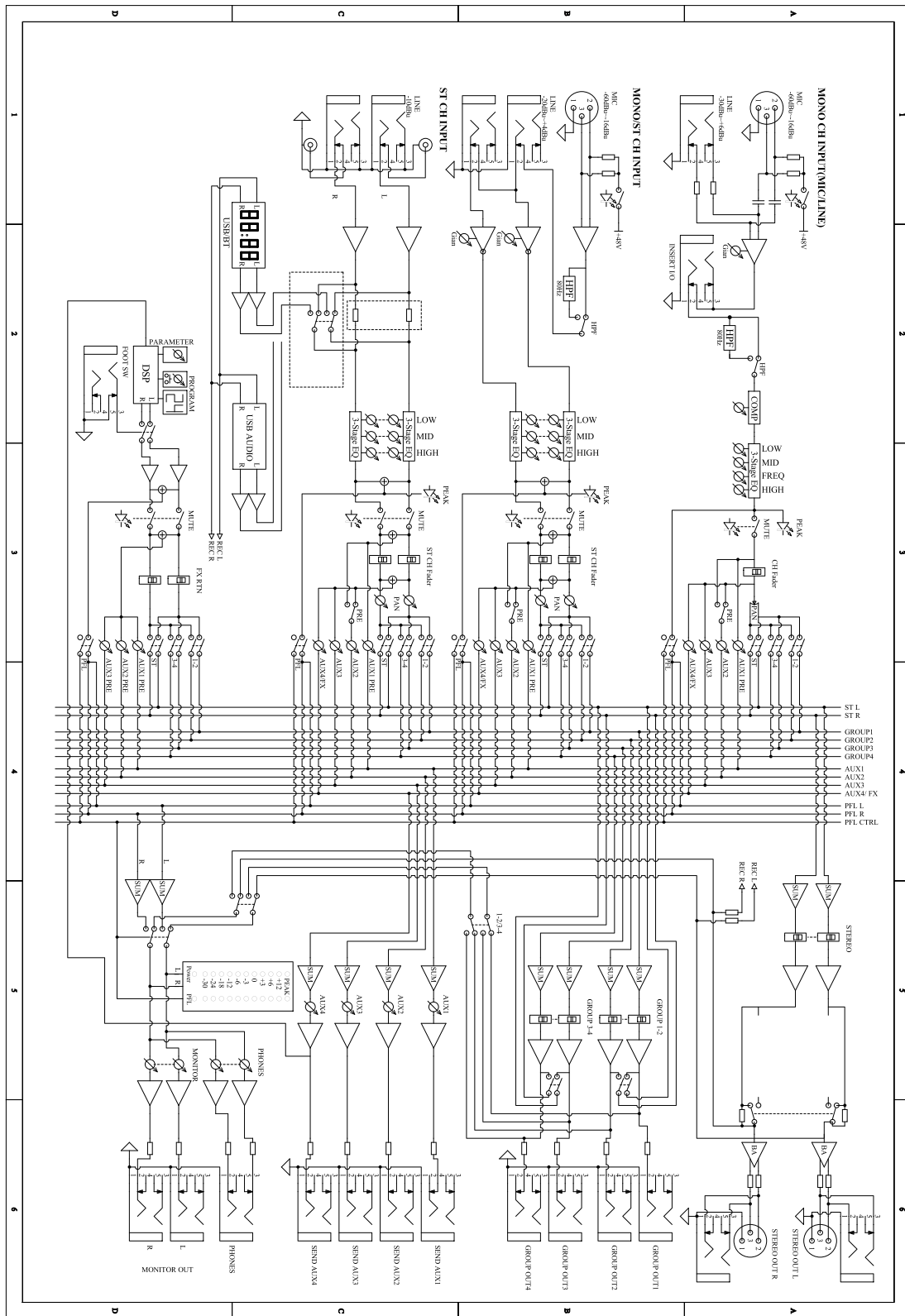
535mm



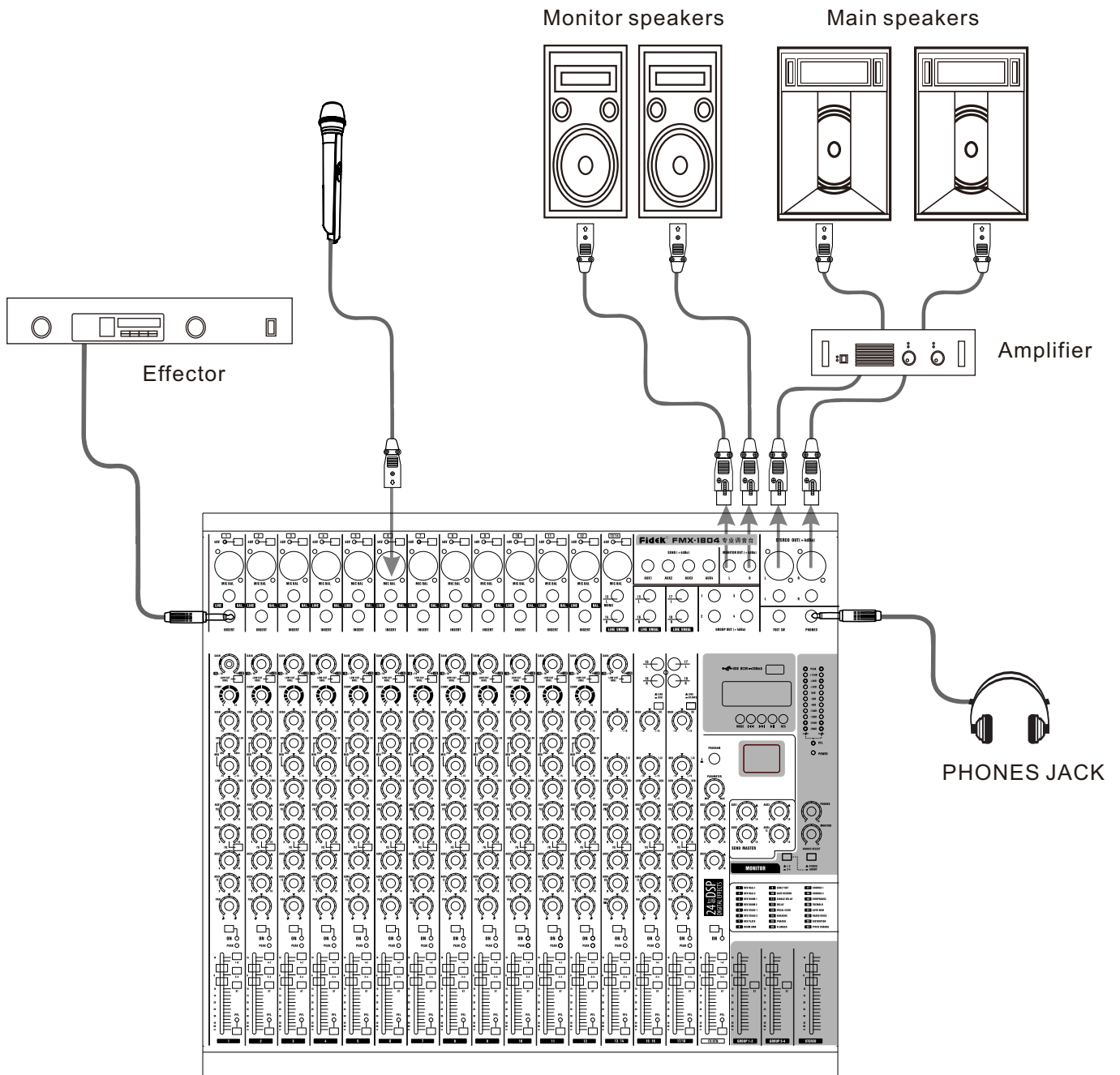
120mm

470mm

# Block scheme



# Application examples





微信二维码

If you have any questions, suggestions or complaints,  
please contact our customer service department  
Toll-free service hotline: 8008303013  
Customer service hotline: 4008308282

Website: [www.fidek.com.cn](http://www.fidek.com.cn)

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