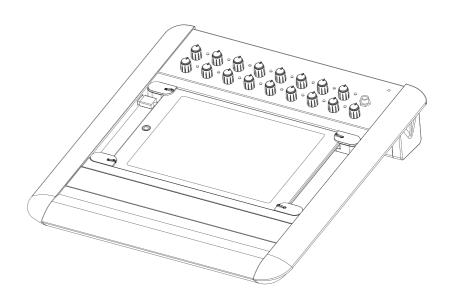




# Mil DIGITAL MIXER

16 INPUT CHANNELS 8 OUTPUT CHANNELS





Contents	. 1
Quick guide	. 2
Product Introduction	. 3
Digital mixer front panel	. 4
Digital mixer rear panel	5
Interactive operation interface instructions	6
1. Ch1-8/CH 9-16:1~16input channels	
Input channel function	
2. AUX: 6 auxiliary outputs	
3. EFFECT: DELAY/REVERB	
A:DELAY	
B:REVERB	
4. GROUP	
5. 48V	
6. EFFECT:DELAY/REVERB	
7. CLEAN SOLO	
8. CLEAN MUTE	
9. SYSTEM	
10. HOME	
Main output control	18



# Quick guide



Quick Connect Guide

#### — Application download

Open the APP Store application in IPAD, search MIXX16 to download and install



#### MIXX16 Quick connect

Mixer communicates with IPAD

1: Turn on the power switch of the mixer, open the WIFI setting of IPAD, and connect to MIXX16 (WIFI factory password: 12345678)

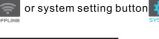


2: Open MIXX16 Software



MIXX16 Digital..

3: Click the software connection status button or system setting button to enter the connection page.



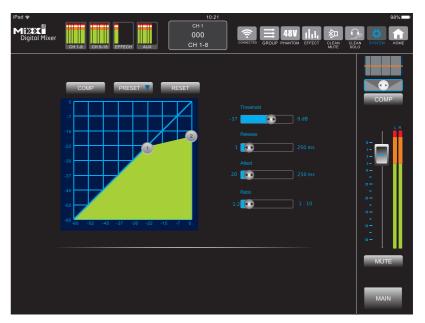
4: Click "Search" to display the IP address, click the IP address and then click Connect.



5: After connection successfully, it will automatically jump to the channel homepage. The connection status button lights up blue to indicate that the connection is successful.



■ Main output compressor: You can set a level point, once the signal exceeds the critical point will be attenuated volume, so that the overall volume stable, to avoid howling or overload loudspeakers.



Threshold: Set the compressor threshold value (critical level),-60 dB~0 dB. Start: When the input signal exceeds the threshold value, the time require to open the compressor, settable range: 1ms-250ms.

Recovery: when the input signal is lower than the threshold value, the time require to shut down the compressor, settable range: 20ms-250ms.

Ratio: compression ratio 1:1 to 1:10, the greater the compression ratio, the smaller the margin compression, the smaller the compression ratio, the greater the margin compression.

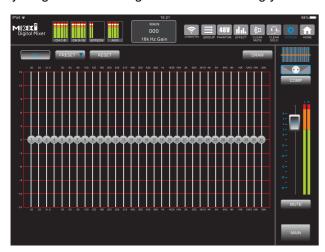
- Main output channel fader: Adjustable range -60 dB~10 dB.
- Mute: Mute switch for controlling main output.

### Main output control

Main output channel function:



Output EQ:31-band EQ, can adjust the frequency for compensating the defect of loudspeaker and acoustic. Click "DRAW", so you can drag the frequency range ball-balancing effect of the drawing you want to.



### **Product Introduction**

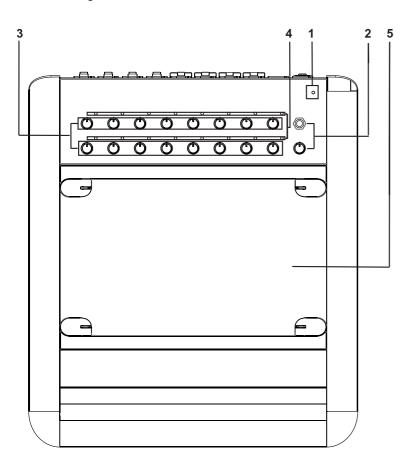
MIIXX16 Digital Mixer is a 16 input and 8 output digital wireless control mixer, is a new mixer through the tablet computer application control, can support all Apple iOS tablet, Windows 8 tablet. Using Wi-Fi to connect, anywhere in the wireless network within the scope of control. With 16 channels of broadcast quality microphone amplifier (including 4 modular jack), 2 main output, 6 auxiliary output. Adopt high performance 40 bit floating-point digital signal processor, 24 bit AD/DA converter. Built-in effects processor, compression and limiter, threshold, parametric equalizer... Wireless control mode makes you can walk between the on the stage and the crowd. It is 16-channel digital field mixer that with the iPad tablet computer perfect touch on the scene.

#### **Functions:**

- Intuitive touch control, covering almost all the major mixing functions.
- The mixer interface can be adjusted for each channel control, including solo, mute, audio-visual, fader, you can see the full level meter.
- Channel interface control powerful DSP effects, including 4-band input channels PEQ, High-pass filter, compressor, gate primary and secondary channels, including 31-band graphic EQ, Limiter, effects channel including reverb and delay.
- Each channel can edit their own names and icons for easy identification, the icon can be imported from a picture library.
- + 48V phantom power on each channel can be individually switch.
- Very low noise, high dynamic design.
- 6 auxiliary output can be used to monitor the mix.
- · Shared global reverb and delay effects.
- Seamless access, you can adjust the sound target domain any location, you can also go directly on the stage to adjust respective monitoring, access control allows the players on stage have the ability to adjust their own monitoring.

# Digital mixer front panel

- 1. POWER: The power indicator lights up to indicate that the power is on.
- 2. PHONES: Stereo earphone monitor output socket and monitor volume control knob.
- 3. GAIN: 16 input signal gain control knob, maximum gain 60dB.
- 4. PEAK: Peak indicator: When the audio signal input is normal will light green; when the audio signal input is overload will light red.
- 5. IPAD: shelving.



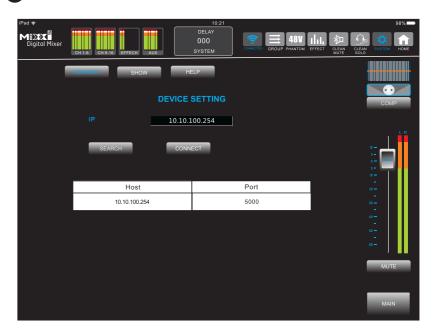
### 7 CLEAN SOLO:

CLEAN SOLO: Click on this button, after 2 seconds, all channel monitor function is deleted.

#### 8 CLEAN MUTE:

CLEAN MUTE: Click on this button, after 2 seconds, all channel mute function is deleted.

### 9 SYSTEM:



CONNECT: Via searching out the mixer or enter IP manually to connect the target mixer.

SHOW: Can save or recall the preset performance parameter.

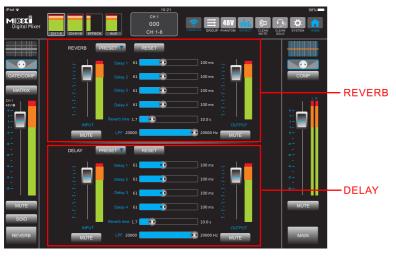
HELP: Provide Quick Start Guide and via Internet to update the firmware of the mixer.

### 10 HOME:

Click this button, the main screen area is displayed as follows:

### 6 EFFECT:DELAY/REVERB

Click this button, the main screen area is displayed as follows:



■ Effect (reverb): It's function is to change the original sound waves, modulate or delay acoustic phase, enhance harmonic properties, etc, to produce a variety of special sound effects. Apply across the sound effect(effects, impacts).

Delay(1, 2, 3, 4): the time that the sound back to ear after reflection, range:30ms-100ms. 4 bands of delay group make the sound superposition effect more exquisite.

Reverb time: reverb effect lasting time, setting range: 0.1S~10S.

LPF:low-pass filter, setting range is 20Hz~20000Hz.

Reverb with preset save function, reset parameter function, input level, output level control and mute switch function.

■ Delay(ECHO): Delay is ECHO effects producer.

Delay Left: Control the interval time of the left channel echo, range is 10ms-1000ms.

Delay Right: Control the interval time of the right channel echo, range is 10ms-1000ms.

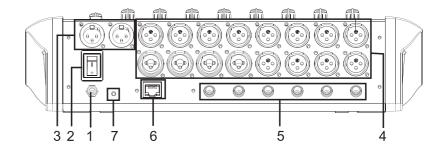
The longer the delay time is, the longer the duration of the echo is, until you can clearly hear the sound of double or multiple.

Feedback amplitude: Feedback rate of ECHO effect, set the range  $(0\%\sim100\%)$ , control ECHO times, feedback rate is 0%, is actually the reverberation effect, feedback rate is 100%, will form the endless ECHO effect. So ECHO effect is generally controlled at around 30%.

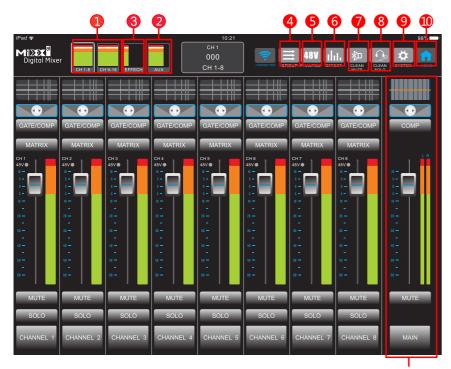
Amplification: The echo has functions of preset saving, resetting parameters, input substitution, output reset adjustment and mute switch function.

### Digital mixer rear panel

- 1.DC power input socket: rated voltage 12V/rate power 48W.
- 2. Power supply switch: I/O ship type switch, switch to I to connect the power supply, switch to O to shut off the power.
- 3.LR Balanced output: mixer main output, connected to the main sound system.
- 4.Input Channel: 12 XLR type balanced input port +4 XLR compatible with 6.3 sockets input, all channels can enter the line level or the microphone signal, and contain individually-controlled phantom power, providing power to the input microphone.
- 5. Auxiliary output: 6 auxiliary unbalanced output, each channel can be individually controlled, can be connected to the power amplifier or stage IEM and other audio equipment.
- 6.Internet access: Used to connect computers and local area network (LAN)
- 7. RESET: The embedded button switch is used to reset the device. To reset only the network settings, press and hold the reset button for ten seconds while turning on the power.



### Interactive operation interface instructions

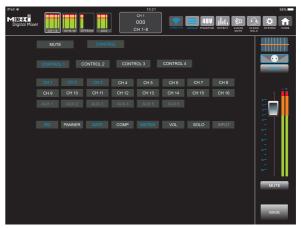


Main output control

#### 1 Ch1-8/CH 9-16: 1~16input channels

The main interface 1 to 8 input channels and the main output channel, press "CH9-16" to switch to 9-16 channel, press "AUX" switch to the auxiliary output channel.

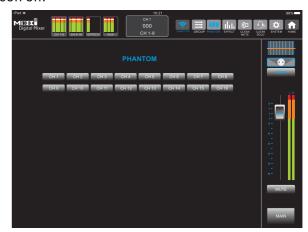
Control group: After entering control edit interface, as picture shows: after click "control 1", select 1,2,3,4 channel, and then select the simultaneous adjustment function that you want, then click control group"1", so that you can adjust the parameters of 1,2,3,4 channel at the same time.



5 48V:

48V:Independently control 16 input channel's 48V phantom power on/off.

Which channel requires 48V power supply, you lit the corresponding channel icon on.





Group: Set 4 Mute Group and 4 Control Group.



Mute Group: After entering mute edit interface, as picture shows: after click "mute 1" select 1, 3, 6, 8 channel, and then click mute group "1", so 1, 3, 6, 8 channels are in the same mute group.

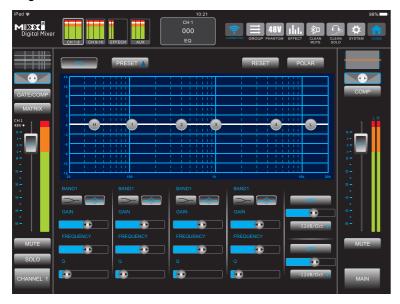


### Input channel function



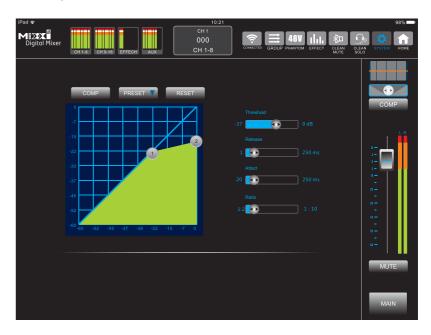
- ■L/R PAN adjustment: adjust the distribution of sound source in space, such as adjust to the left, put the sound source to the left channel.
- Auxiliary transmission: adjust the sound source flow to each auxiliary output level.
- ■Input channel fader: Adjustable range -60 dB~10 dB.
- ■Mute: Mute switch, click the button to close the channel audio input.
- ■Solo: monitor switch, click on this button, you can use headphones to hear the sound signal before the channel fader.
- ■Channel name: click on this button, allows to edit name or select an image to identify the channel.

INPUT EQ:4 band PEQ,BAND1 and BAND 4 can be set between the shelf and clock shape. Can adjust frequency, gain and Q value within the range.



- Up and down drag frequency adjustment gain, Gain range: -15dB~ 15dB.
- Left and rightdrag frequency adjustment frequency, Frequency range: 20Hz~20KHz.
- Q value: Adjust audio curve slope.
- HPF: High-pass filter, the high frequency signal can be normally passed, and lower than the threshold value of low frequency signal is blocked, weakened.
- LPF: low-pass filter, the low frequency signal can be normally passed, and higher than the threshold value of low frequency signal is blocked, weakened.
- Presets: Can use preset effects.
- Reset : Reset parameter.
- Polarity: Phase inversion.

■ Compressor: It's a kind of amplifier with the input signal level increase and its own gain reduction.



Threshold: Set the compressor threshold value (critical level),-60 dB~0 dB. Start: When the input signal exceeds the threshold value, the time require to open the compressor, settable range: 1ms-250ms.

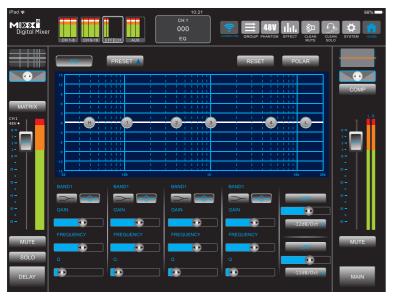
Ratio: compression ratio 1:1 to 1:10, the greater the compression ratio, the smaller the margin compression, the smaller the compression ratio, the greater the margin compression.

Presets: Can use preset effects.

Reset: Reset parameter.

### B REVERB:

INPUT EQ: 4 band EQ,BAND1 and BAND 4 can be set between the shelf and clock shape. Can adjust frequency, gain and Q value within the range.



- Up and down drag frequency adjustment gain, Gain range: -15dB~15dB. Left and rightdrag frequency adjustment frequency, Frequency range: 20Hz~20KHz.
- Q value: Adjust audio curve slope.
- Presets: Can use preset effects.
- Reset : Reset parameter.
- L/R PAN adjustment: adjust the distribution of sound source in space, such as adjust to the left, put the sound source to the left channel.
- Auxiliary transmission: adjust the sound source flow to each auxiliary output level.
- Input channel fader: Adjustable range -60 dB~10 dB.
- Mute: Mute switch, click the button to close the channel audio input.
- Solo: monitor switch, click on this button, you can use headphones to hear the sound signal before the channel fader.



■ Gate: The system sets a level threshold, if higher threshold the level signal will be amplified, lower threshold the level input signal level will be reduced. Usually use to eliminate background noise when no music signal input. Threshold: Set the value of the threshold (critical levels), -60 dB~0 dB.

Start: When the input signal exceeds the threshold value, the time require to open the compressor, settable range:1ms-250ms

Recovery: when the input signal is lower than the threshold value, the time require to shut down the compressor. settable range:20ms-250ms.

■ Compressor: It's a kind of amplifier with the input signal level increase and its own gain reduction.

Threshold: Set the compressor threshold value (critical level), -60 dB~0 dB.

Start: When the input signal exceeds the threshold value, the time require to open the compressor, settable range: 1ms-250 ms.

Recovery: When the input signal is lower than the threshold value, the time require to shut down the compressor. settable range:20ms-250ms.

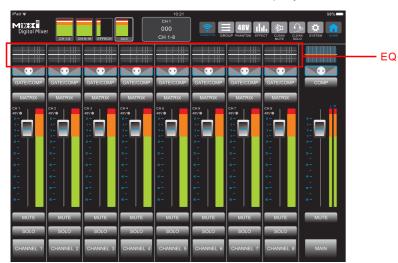
Ratio: Compression ratio 1:1 to 1:10, the greater the compression ratio, the smaller the compression margin, the smaller the compression ratio, the greater the compression margin.

Presets: Can use preset effects.

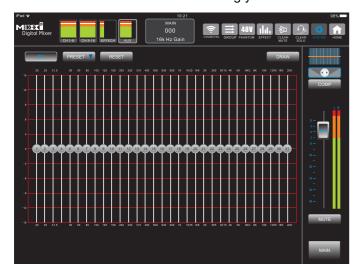
Reset: Reset parameter.

### 2 AUX: 6 auxiliary outputs

Click this button, the main screen area is displayed as follows:



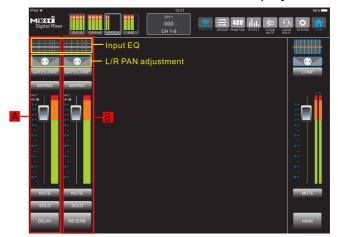
■ Auxiliary output EQ: 31-band EQ, can adjust the frequency for compensating the defect of loudspeaker and acoustic. Click "DRAW", so you can drag the frequency range ball-balancing effect of the drawing you want to.



- ■Pre-fader: Click this button to select Pre Fader, Post Fader, Pre Dsp. Pre Fader means that the signal is not limited by the fader, and there is a signal output without the fader, and the sound does not increase when the fader is pushed up. Post Fader said that when the fader is not pushed, the signal is not sent out, and the signal is getting bigger when the fader is pushed up. Pre Dsp: Select this button, you will hear the analog sound field without preset.
- ■Input channel fader: Adjustable range -60 dB~10 dB.
- ■Mute: Mute switch, click the button to close the channel audio input.
- ■Solo: monitor switch, click on this button, you can use headphones to hear the sound signal before the channel fader.
- ■Channel name: click on this button, allows to edit name or select an image to identify the channel.

#### 3 EFFECT: DELAY/REVERB

Click this button, the main screen area is displayed as follows:



#### A DELAY:

INPUT EQ: 4 band EQ,BAND1 and BAND 4 can be set between the shelf and clock shape. Can adjust frequency, gain and Q value within the range.