RELACART MIXX16 Digital Mixer Manual

Product Introduction:

•MIXX16 is a digital mixer through a tablet computer application control, using Wi-Fi to connect, you can mix in real time on the tablet devices from anywhere within the scope of wireless network.

・Featured 16 channels of studio-quality Onyx microphone preamps, 2 main output, 6 auxiliary output.

・Adopt high performance 40 bit floating-point digital signal processor, 24 bit AD/DA converter.

・Ultra low-noise, high-headroom design.

・Multi-touch control, flash visual feedback, and can be intuitive to see the complete frequency response curve.

・Input channel built-in 4 -band PEQ, high-pass filter, compressor, gate.

・The main output and auxiliary channel with 31 bands of built-in graphic equalizer, limiter.

・Shared global reverb and delay effects.

・Tuning process can be stored, the stored sound effect could be recalled in the corresponding occasions, no need to reset the parameters.

・Each channel can edit their own names and icons for easy identification, no need to use label sticker.

・Digital signal processing, reducing signal noise accumulated during transmission, to achieve high-quality signal transmission over long distances.

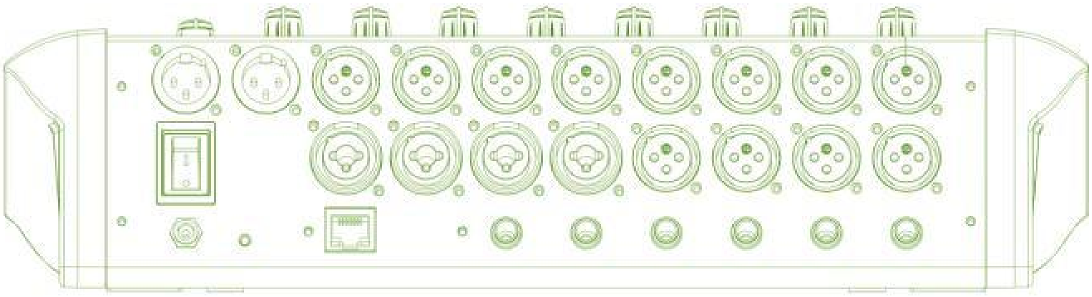
・Built-in WI-FI module, no external router, use the tablet device can search Wi-Fi signal directly.

・It support up to 10 devices to synchronized Wi-Fi control, allowing multiple engineers to simultaneously control consoles.

MIXX16 digital mixer front panel (Pic 1)

1. PHONES: Stereo earphone monitor output socket and monitor volume control knob.
2. GAIN: 16 input signal gain control knob, maximum gain 60dB.
3. PEAK: Peak indicator: When the audio signal input is normal will light green; when the audio signal input is overload will light red.

MIXX16 Digital mixer rear panel (Pic 2)



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)

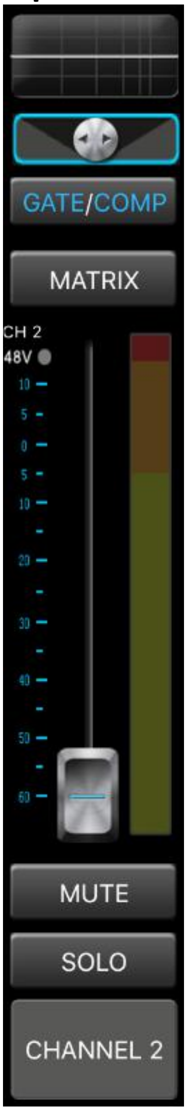
The connection and usage of digital mixer and tablet device.

As MIXX16 digital mixer comes with Wi-Fi module, you just use the tablet to search the WiFi of MIXX16, and then open application (now available on APP STORE) click “”,Press “connect”, after 2 seconds“” lit.

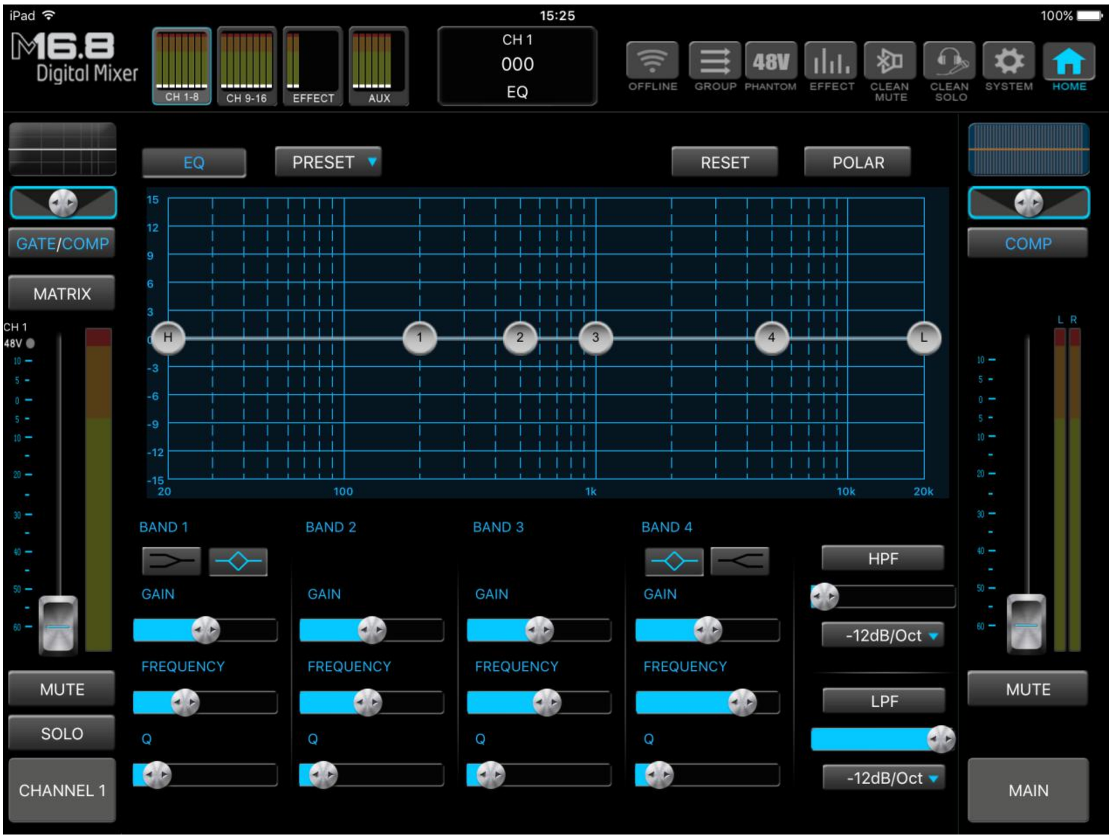
Interactive operation interface instructions

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.

Input channel function:



1.INPUT EQ:4 band PEQ,BAND1 and BAND4 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

Up and down drag 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

2.PAN: 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.

3.Gate and Compressor:

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.

4.Matrix: By using the principle of the matrix, adjust the channel source to the aux output level..

5.Input channel fader: Adjustable range -60 dB~10 dB.

6.Mute: Mute switch, click the button to close the channel audio input.

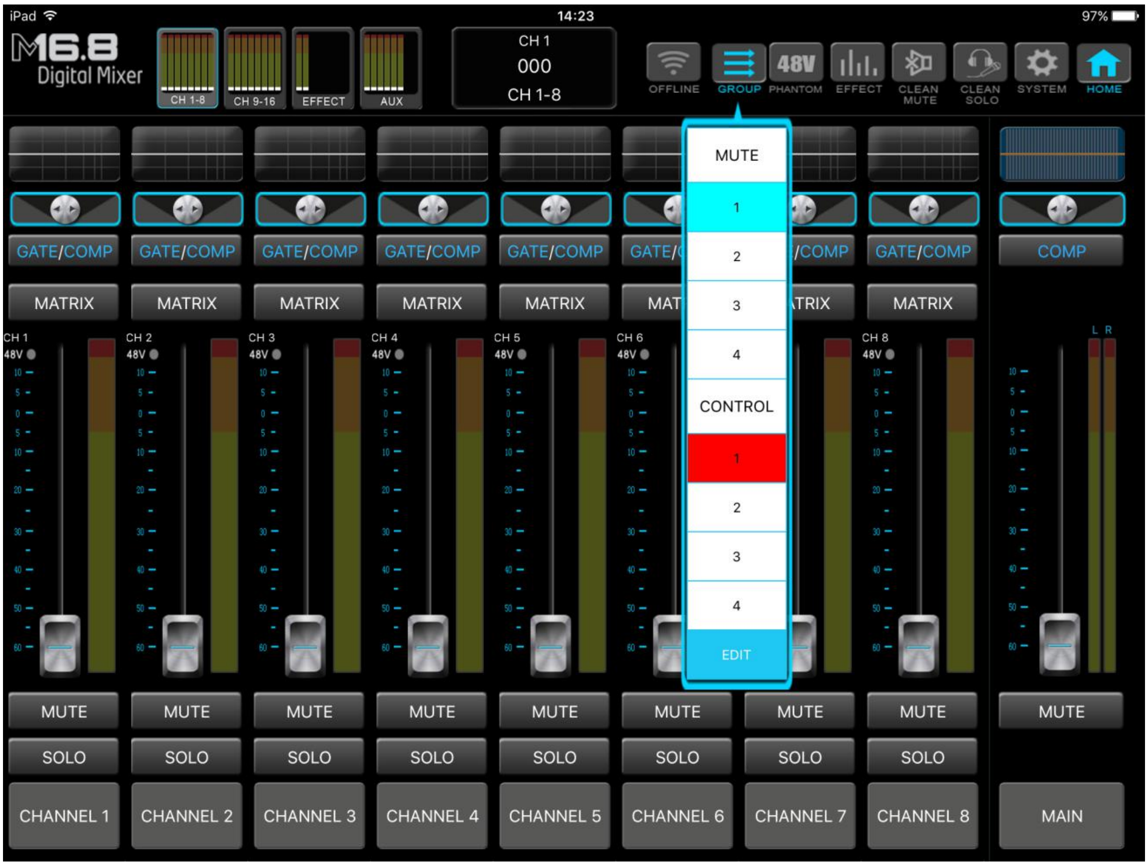
7.Solo: monitor switch, click on this button, you can use headphones to hear the sound signal before the channel fader

8.Channel name: click on this button, allows to edit name or select an image to identify the channel.

Group:Set 4 Mute Group and 4 Control Group.

Mute Group: After entering mute edit interface, as picture shows: after click“mute 1”select1,3,6,8 channel， and then click mute group “1” ,so 1 ,3,6,8 channels are in the same mute group.


iPad
14:24
97%
M16.8
Digital Mixer
CH 1-8
CH 9-16
EFFECT
AUX
CH 1
000
CH 1-8
OFFLINE
GROUP
48V
PHANTOM
EFFECT
CLEAN MUTE
CLEAN SOLO
SYSTEM
HOME
MUTE
CONTROL
MUTE 1
MUTE 2
MUTE 3
MUTE 4
CH 1
CH 2
CH 3
CH 4
CH 5
CH 6
CH 7
CH 8
CH 9
CH 10
CH 11
CH 12
CH 13
CH 14
CH 15
CH 16
REVERB
DELAY
MAIN
AUX 1
AUX 2
AUX 3
AUX 4
AUX 5
AUX 6
COMP
MUTE
MAIN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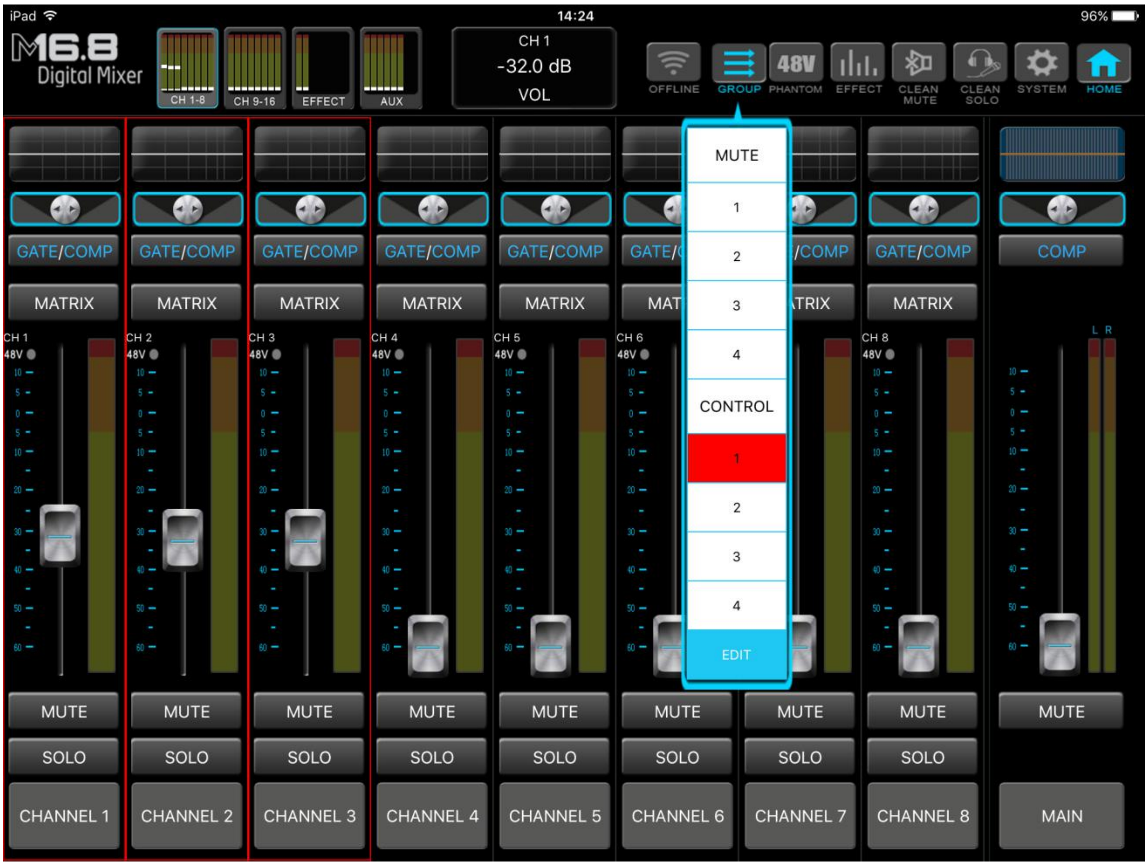
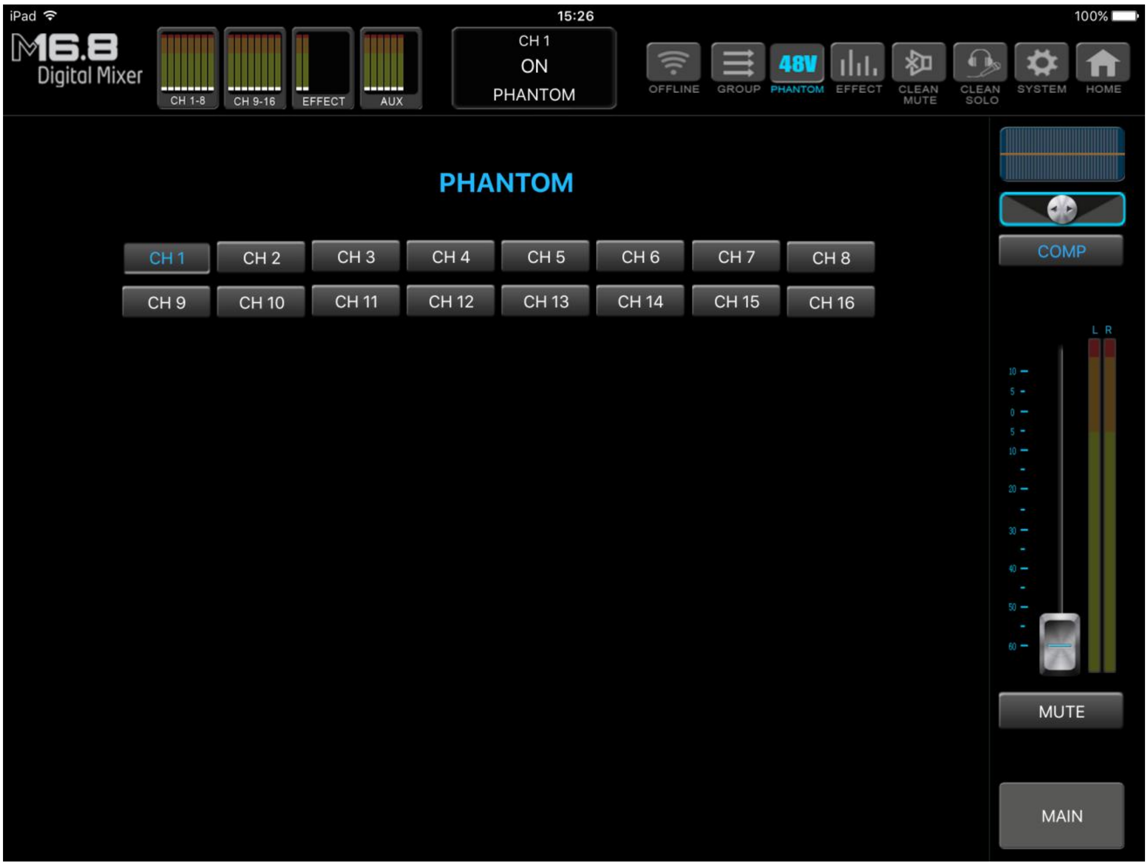
1
2
3
4
CONTROL
1
2
3
4
EDIT
GATE/COMP
MATRIX
COMP
MUTE
SOLO
CHANNEL 1
CHANNEL 2
CHANNEL 3
CHANNEL 4
CHANNEL 5
CHANNEL 6
CHANNEL 7
CHANNEL 8
MAIN

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.



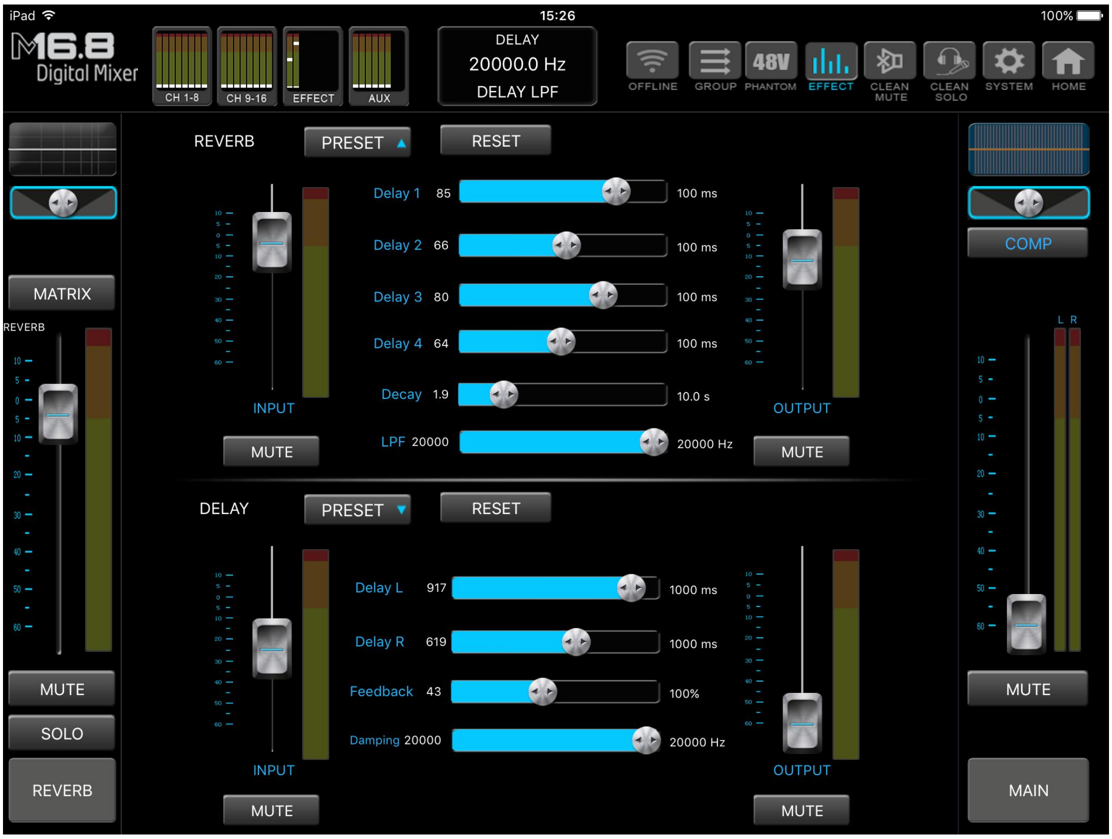
48V:Independently control 16 input channel's 48V phantom power on/off. Which channel requires 48V power supply, you lit the corresponding channel icon on.



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

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

EFFECT： REVERB and ECHO



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).

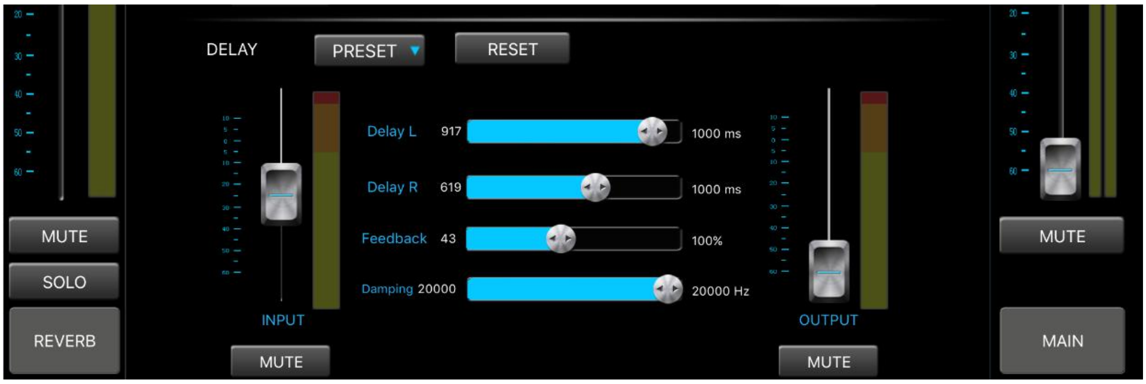
Delay(1、2、3、4)：the time that the sound back to ear after reflection, range:30ms-100ms. 4 bands of delay group make the sound superposition effect more exquisite.

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.

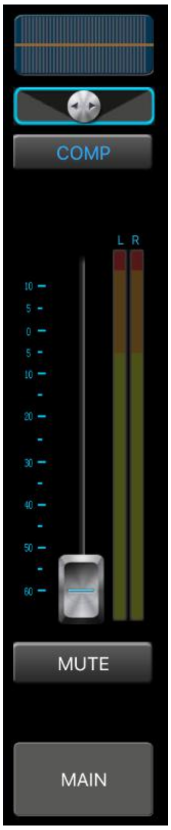
Delay Right: Control the interval time of the right channel echo, range is 10ms-1000ms.

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%~100%), 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%.

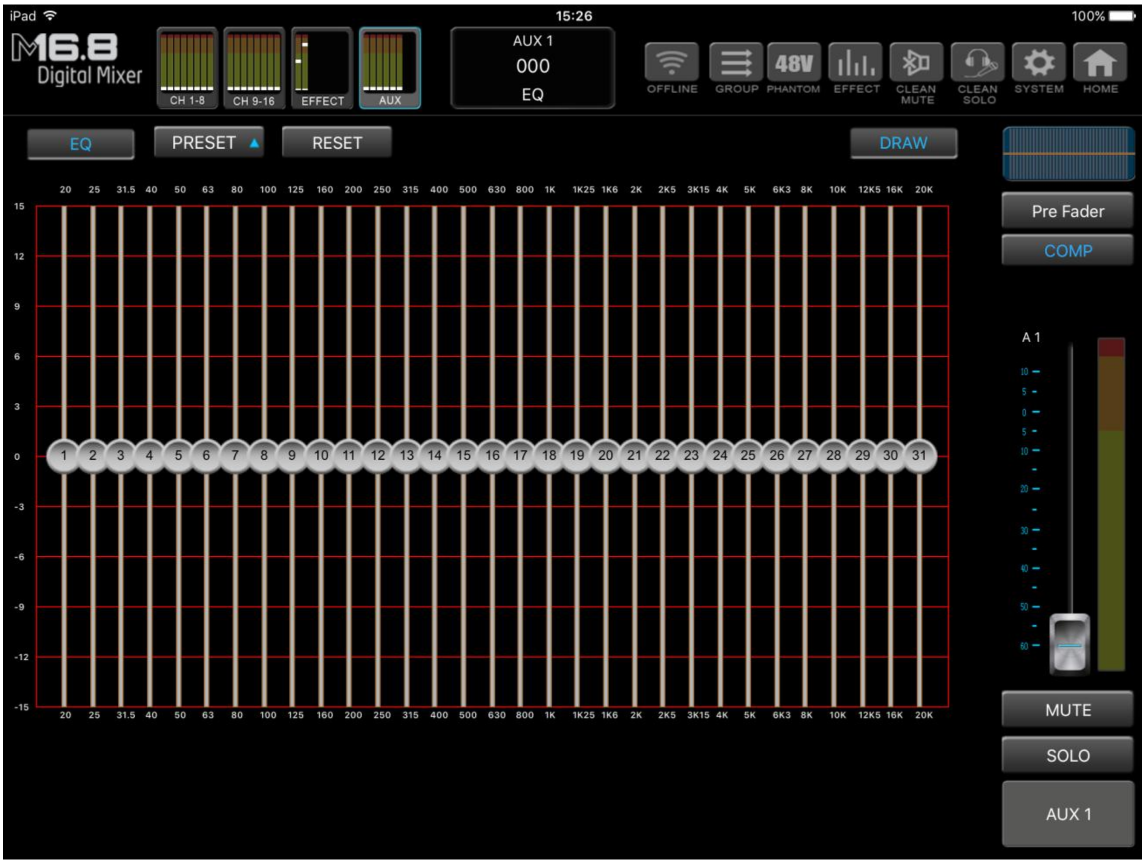
LPF：

Main output channel function:



1.Output EQ:

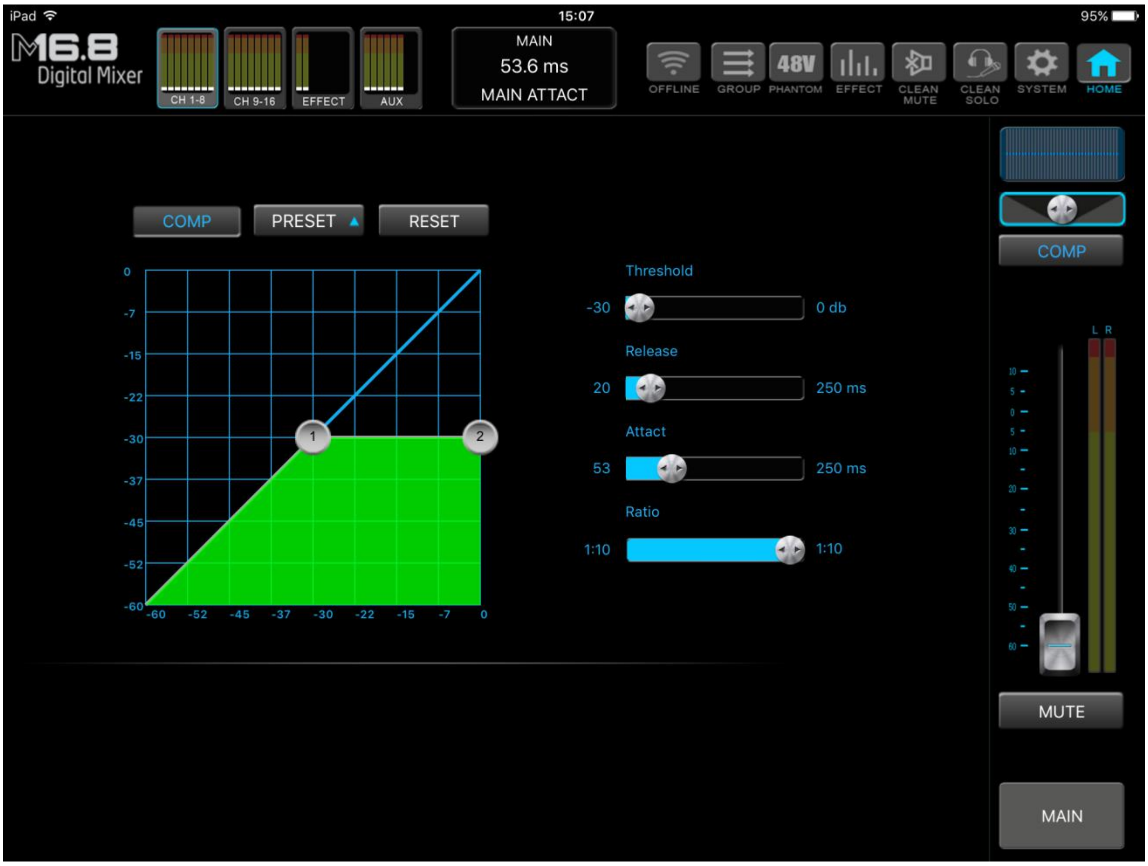
31-band GEQ, can adjust the frequency for compensating the defect of loudspeaker and acoustic. Click “ DRAW ” , so you can drag the frequency range ball-balancing effect of the drawing you want to.



2. PAN: L/R PAN

3. 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 .

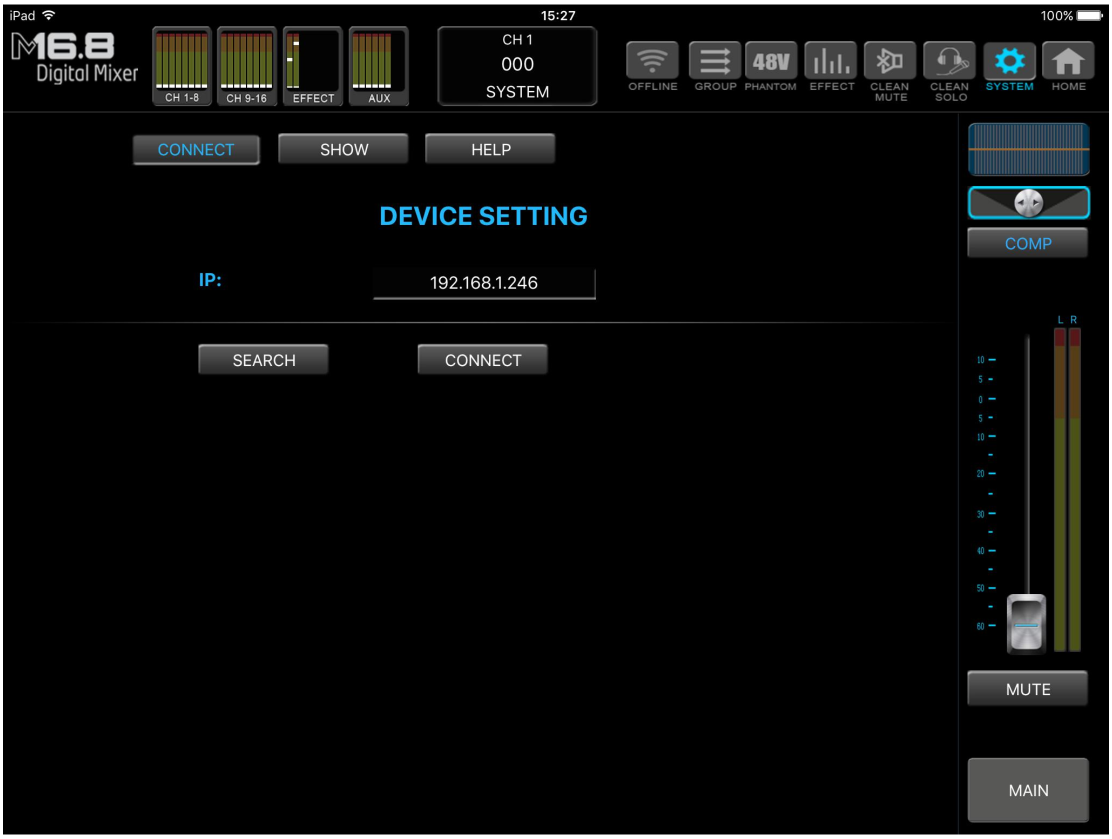
Ratio: compression ratio 1:1 to 1:10, the greater the compression ratio, the smaller the margin compression, the smaller the compression ratio, the greater the margin compression.

4.Main output channel fader: Adjustable range -60 dB~10 dB.

5.Mute: Mute switch for controlling main output

6.Channel name: click on this button, allows edit a name or select an image to identify the channel.

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.