KONANIabs KSP-M1406 User Manual

KSP-M1406 Product User Manual

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1、Introduction

The KSP-M1406 digital mixing console brings a very professional functional experience to the user with its innovative design and powerful DSP functions to effectively integrate digital mixing systems, using a new concept that blends modern digital and traditional operation. Its compact size, easy-to-use interface and professional mixing effects enable it to perform excellently at a professional gig as well as fully satisfy less experienced individual users by providing powerful effects.

KSP-M1406 has powerful processing power and advanced features for the convenience and speed brought by the software operation process designed to quickly call up the mixing interface. A convenient and fast operating experience that allows everyone to enjoy the convenience and power of a digital mixer.

Product Features.

- 16 analogue inputs (8 digital gain amplifier channels, 4 2 stereo input channels, 2 high-resistance mono channels, 2 USB playback channels) with minimal distortion and ultra-low noise floor, adjustable multi-function parameters, and good consistency due to digital gain to prevent misuse.
- 7" HD touch screen, user-friendly software interface, clear navigation design; digital encoder and dedicated keypad for quick and easy access to all settings.
- 4 built-in effects for vocal and performance use, with built-in effects to simplify system wiring; the unit comes with its own effects module for classic reverb, big room reverb, etc.; FX effects can be returned to the mix using a dedicated return channel and do not occupy the mono and stereo input channels.
- Scene storage is one of the most practical and significant features that distinguishes an analogue mixer, storing 30a complete scene, all of which can be exported to an external storage device for backup storage so that it can be recalled at any time later.

Features.

- ♦ 7" HD touch screen 1024x600 resolution.
- ♦ Built-in USB recording and playback function (supports APE, FLAC, MP3, WAV lossless audio formats).
- 8 DCA groupings, 8 mute groupings, inputs, auxiliary outputs, FX effects channels can be programmed in.
- ♦ 4-band parametric equalizer, compressor, noise gate, polarity, delay for each input channel.
- Each output channel with 6segment parameter equalisation, 31-terminal graphic equalisation, high and low pass, voltage limiter, delay, feedback suppression.
- Selectable signal send positions (Pre_Fdr, Psot-Fdr, Pre_Dyn, Per_All) for each of the 4 AUX auxiliary output channels and the 4 FX effects channels.
- ♦ Support30 for group scene presetting functions.
- ♦ Built-in signal generator: sine wave, pink noise, white noise.
- ♦ Channel parameter copy function, fast duplication of data for identical channels.
- ♦ Channel Link function, where adjacent channels can be bound to each other for the same settings.
- \diamond With a panel lock button (to prevent misuse).
- Customizable channel names.

2、Specifications

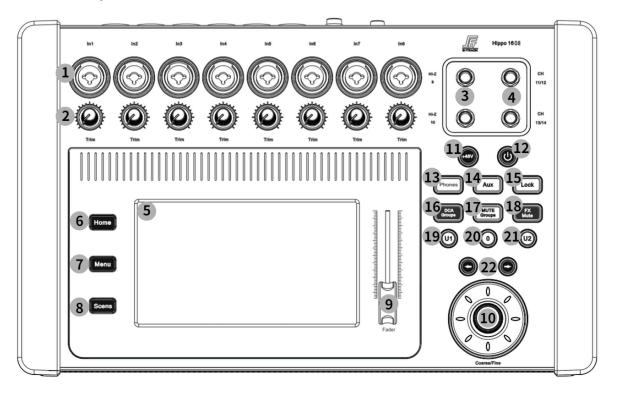
Total harmonic distortion + noise	<0.300% @4 dBu A+ right
Frequency response	20HZ ~ 20K HZ ,±0.2dB
(20~20KHz)	
Sampling rate	48k
Quantified digits	24bit
Background noise	>-90dBu A+ right
Maximum level (input)	+dBu20, balanced
Maximum level (output)	+dBu20, balanced
Phantom power	48V
Digital/analogue dynamic range	110dB
Input to output dynamic range	105dB
Input impedance (balanced)	2ΚΩ
Output impedance (balanced)	100Ω
Channel Isolation @1kHz	100dB
Common mode rejection ratio	-60dBu @0dBu
Operating temperature	0°C -55 °C
Working power	19V/2A
Power consumption	20W
Size	410mm x 253.5mm x 69mm

3、Packing list

Mainfra	Power adapters	Storage
me		Boxes
1 PSC	1 PSC	1PSC

4、Interface/Key Description

4.1. Front panel.



① CH1-CH8: balanced XLR/TRS combined mono input jacks.

2 Trim knob: adjusts the level of the analogue input signal before the analogue-to-digital conversion, channels 1 - 8.

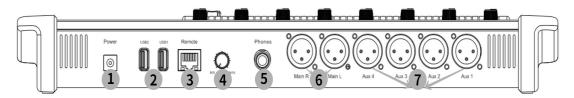
- ③ HI-Z 9-10: high-resistance mono channel for instrument inputs.
- ④ CH11 CH14 : TRS stereo input jacks.
- 5 7" high definition LCD touch screen.
- 6 Home button: return to the main screen.
- O Menu button: access to the display controls and system settings interface.
- 8 Scene button: access to the scene preset screen
- 9 FADER: volume attenuation fader.

Data wheel: changing the selected value or position allows for fine tuning of parameters and scrolling through the list.

11 +48V button: opens the phantom power interface to view the status of all channels of the on/off fantasy power supply.

- 12 The rest screen button.
- 13 Phones button: monitor level volume control.
- 14 AUX button: navigation to the AUX overview screen.
- 15 Lock button: operating system interface lock to prevent misuse (default password:123456).
- 16 DCA Groups button: navigation to the screen where the DCA groupings can be controlled and edited.
 - 17 Mute Groups button: navigation to the screen where mute groups can be controlled and edited.
 - 18 FX Mute button: mute or unmute all effect channels.
 - 19 U1 button: user-defined button.
 - 20 O button: resets the current output channel gain value to the default value (0 dB).
 - 21 U2 keys: user-defined keys.
 - 22 rightarrow Press the button: to navigate left or right.

4.2. Rear back panel.



① Power Supply: Use the power supply supplied with the mixer, do not use any other power supply instead.

2 USB 2.0 (Class A): for connection of USB storage devices and WIFI adapters.

③ Remote: Ethernet interface for connection to PC-based interactive software.

④ Trim knob; for adjusting the signal level of the monitor interface.

5 Monitor: stereo TRS interface to which the line or headphone output is diverted when the monitor channel is activated.

6 Main R/L: balanced XLR male connector.

O AUX: auxiliary output 1 to 4 channels, balanced XLR male connector.

5. Instructions for use

5.1. Software and documentation downloads

① View the IP address of the device: enter [Menu] [Network] to view the IP address information of the device, the default is automatically assigned by DHCP, you can choose to set the IP address manually.

② Download: Open your browser, enter the IP address of the device and click "Enter" to navigate to the download screen, which offers three download options: audio files, operating instructions/user manuals and interactive software downloads (Windows, Android, mac OS, linux supported).

③ Default password: (LOCK, scene reset password) 123456.

5.2. PC software login connection

					U	Maunal IP		Connect
lect Mixer from List					2	Scan	Status :	
Name		IP	Mode		Status	Remark		
hoppo8	192.168.2.32	hopp	08	No Link				
Hippo16_6d1e68957d97d3a1	192.168.2.27	hippo		No Link				
Hippo16_045f88957d96a263	192.168.2.35	hippo		No Link				
Hippo16_6d1e68957d97d3d0	192.168.2.77	hippo		No Link	\sim			
Hippo16_045f88957d96b3d3 Hippo16_045f88957d96b152	192.168.2.52	hippo		No Link	(3)			
Hippo16_045f88957d96b152		hippo hippo		No Link	\mathbf{U}			

1 Maunal IP: enter the IP address to manually search for devices to connect to.

② Scan: search for devices, all devices in the same network segment can be found.

③ Device list: display of online device names, IP addresses and other information.

④ Connect: select the listed devices and click on "Connect" to connect, automatically jumping to the main interface.

5.3. Main screen

	1 ch 1-8		Ch 9-14/USB	FX	1-4	Aux 1-4	İİ	DCA Groups	
Menu	2 C E	GCE	GCE	GCE	GCE	GCE	GCE	GCE	LE
	3 сн 1	CH 2	СН 3	CH 4	CH 5	CH 6	СН 7	СН 8	Main
Aux	4								
	5 solo	Solo	8	Solo	Solo	Solo	Solo	Solo	Solo
6		48 ao 🛛 🗎	18 -Inf	48 +inf	48 -inf	48 -inf	48 -inf	48 -inf	0.0
Play/Rec (7)Ø "	Ø,	9	Ø 10	Ø 10	Ø 10	Ø 10	Ø 10	10
		<u> </u>	s	s	s	s	s	s	
DCA Groups	10 🔳		°	°	s	*	°	°	
		20 30	20 30	20 30	·20 ·30	20 30	20 30	20 30	
Mute Groups	50	·so							so
FX Mute	ал ^і 🔞	СН 2	CH 3 00	CH 4 00	CH S	сн 6 00	сн 7 🔍	CH 8 00	LR
	(13) Mute	Mute	Mute	Mute	Mute	Mute	Mute	Mute	Mute

① Navigation bar: shows the type of channel and the range of channels.

② Overview of functions: Display of the current channel with the functions (GEQ, COMP, Gate) switched on.

3 Channel name: displays the channel name (customisable name) and navigates to the channel configuration screen at the touch of a button.

④ Channel name: displays the channel name (customisable name) and navigates to the channel

configuration screen at the touch of a button.

5 Sound and image slider: adjustment of the image of the distribution of the sound source in space, by touching the slider or using the data wheel.

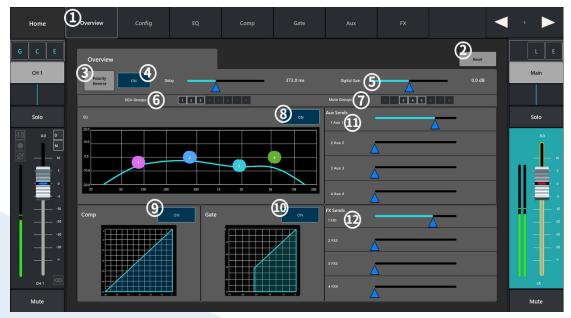
- 6 Solo: routing of the channel signal to the listening interface.
- ⑦ 48: indicates that phantom power is switched on for the channel.
- Ø: indicates that the input signal polarity has been changed for the channel.
- 9 D: shows that the current channel has been assigned to a DCA grouping.
- 10 M: shows that the current channel has been programmed into the Mute group.
- 11 Level meter: display of the current channel's real-time signal level.
- 12 Channel faders: the current channel gain can be adjusted by touching the fader slide.

13 LINK: linking the channel to an adjacent channel and the channel settings will all be copied to the adjacent channel.

14 Mute: channel mute (shown in red), shown in orange to indicate that the channel is muted by a mute grouping or DCA grouping mute.

5.4. Input channels

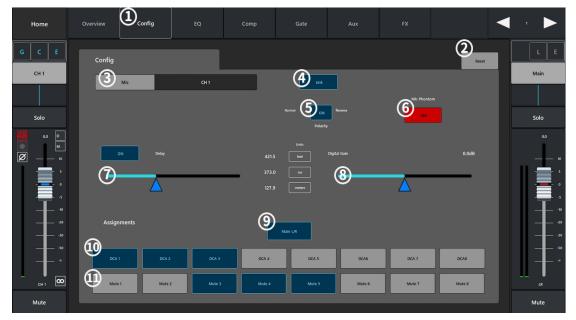
5.4.1. Overview



- ① Overview: shows the channel controls that are currently enabled for the channel.
- 2 Reset: restores the configuration of all parameters of the interface to their default state.
- ③ Polarity Reverse: changes the polarity of the current input signal.
- ④ Delay: display of the delay configuration and delay information.
- 5 Digital Gain: control of the channel digital gain (+/-15dB) by means of a slider.
- ⑥ DCA Groups: shows that the channel has been assigned to a DCA grouping.
- ⑦ Mute Groups: shows that the channel has been assigned to a mute group.
- 8 EQ(ON/OFF): switches the equalizer on/off and displays the equalization zone graph.
- 9 Comp (ON/OFF): switches the compressor on/off and displays the graph.

- ⁽¹⁰⁾ Gate(ON/OFF): switching the noise gate on/off and displaying the graph.
- 11 AUX Sends: Sends the current channel signal to the AUX auxiliary output channel;
- 12 FX Sends: sends the current pass signal to the FX effects channel.

5.4.2. Config configuration



① Config: parameter configuration interface.

2 Reset: restores the current interface parameter configuration to its default values.

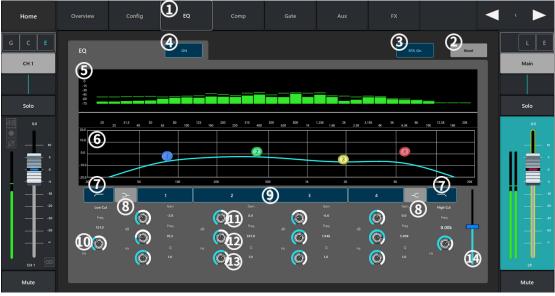
③ MIC: displays the name of the channel and, when touched, displays the keypad for custom naming of the channel.

④ Link: linking the channel to the adjacent channel, the channel settings will all be copied to the adjacent channel.

5 Polarity: changes the polarity of the current channel input signal.

- 6 Mic Phontom: switches the phantom power supply for this channel on or off.
- ⑦ Delay: turns the current channel delay on or off (delay range: 0 1000ms).
- 8 Digital Gain: control of the channel digital gain (+/-15dB) by means of a slider.
- 9 Main L/R: Routing of the signal from this channel to the Main channel output.
- IDCA Groups: shows that the channel has been assigned to a DCA grouping.
- 11 Mute Groups: shows that the channel has been assigned to a mute group.

5.4.3. EQ equaliser



1) The EQ equalizer configuration interface.

2 Reset: restores the current interface parameter configuration to its default values.

③ RTA On: turning the Real Time Analyzer on/off.

④ ON button: switches the equalizer on or off.

5 RTA display: display of channel signal amplitudes and peaks.

⁽⁶⁾ Parametric equalizer diagram: graphical representation of the equalizer curve according to the parameter configuration.

Tow cut filter/high cut filter button: the filter uses the frequency set by the frequency controller as the cut-off frequency and attenuates frequencies above or below the cut-off frequency.

8 Low frequency shelf filter / high frequency shelf filter: change equalizer bands 1 and 4 from parametric filters to shelf filters, with no bandwidth control provided when the shelf filter is enabled.

Band 1-4 buttons: enable/disable the relevant parametric equaliser band, the band is fully
parameterised and the frequency range is 20Hz-40KHz;

Image: Sets the cut-off frequency of the low-cut/high-cut filter.

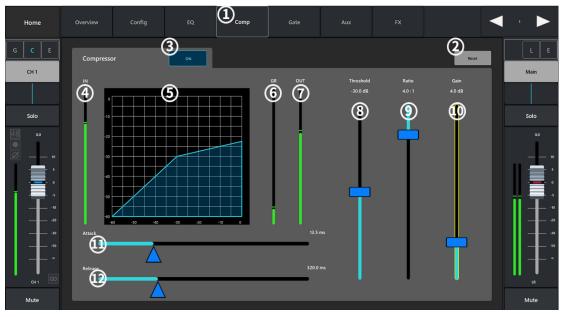
11 Gain: Adjusts the gain at the frequency setting of the relevant equaliser band, from -15dB to +15dB;

12 Freq : sets the centre frequency of the relevant equalizer band, the Freq control is used to set the inflection frequency of the shelf filter if the shelf filter is enabled.

13 Q knob: adjusts the bandwidth of the relevant equalizer band; the bandwidth control is hidden when the shelf filter is selected.

14 Auxiliary slider for fine-tuning of parameters.

5.4.4. Comp Compressor

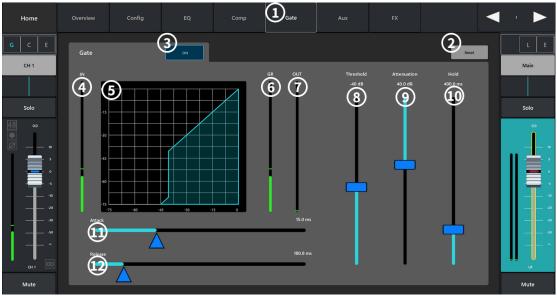


- 1) Compressor configuration interface.
- 2 Reset: restores all parameter settings in this screen to their default values.
- ③ ON: turning the compressor on/off.
- ④ IN: display of the input level.
- 6 Compressor diagram: Compressor curve diagram with horizontal scale from 0 dB to 60 dB.
- 6 G.R: shows the level of the signal attenuated by the compressor.
- ⑦ Out: display of the output level after processing by the compressor.
- ⁽⁸⁾ Threshold: sets the threshold at which the compressor starts to attenuate the signal level, and starts to operate when the input signal exceeds the threshold.
- 9 Ratio: sets the input/output compression ratio for when the input signal exceeds a threshold value.
- ⁽¹⁰⁾ Gain: adjusts the total output gain to compensate for the level lost by the signal after compression.

11 Attack: sets the start time for the compressor to start operating in response to a signal exceeding a threshold.

12 Release: sets the release time for the compressor to stop compressing in response to a signal falling below a threshold.

5.4.5. Gate Noise Gate



- ① Gate noise gate configuration interface.
- 2 Reset: restores all parameter settings in this screen to their default values.
- ③ ON: Opening/closing of the noise gate.
- ④ IN: input level.
- (5) Noise gate graph: noise gate graph with a horizontal scale of 0dB to 75dB.
- 6 G.R: shows the signal level reduced by the noise gate.
- O OuT: shows the output level after noise gate processing

⑧ Threshold: sets the threshold at which the audio signal is allowed to pass, below which the signal is attenuated by the noise gate.

④ Attenuation: sets the amount of output signal attenuation when the input signal falls below a threshold value.

10 Hold: sets how long the noise gate remains open after it has been opened and how long it remains open when the input level drops below a threshold.

11 Attack: sets the response rate of the noise gate for signals exceeding a threshold.

12 Release: sets the response rate of the noise gate to attenuate the audio signal when the signal is below a threshold.

5.4.6. AUX Sends Auxiliary Sends



① AUX auxiliary transmit configuration interface.

- 2 Reset button: restores all parameter settings in this screen to their default values.
- ③ The name of the auxiliary output channel.

④ Auxiliary send slider: sets the level of the audio signal sent from this channel to the AUX auxiliary output channel.

(5) Display of the gain value of the current transmit channel.

6 Mute: Mute the auxiliary transmit channel without affecting any other auxiliary outputs or transmissions.

⑦ Touch the drop down box to send Pre_Fdr/Post_Fdr/Pre_Dyn/Per_All signals to the AXU output channels;

5.4.7. FX Sends Effects Send

- ① FX effects sending configuration interface.
- 2 Reset: restores all parameter settings in this screen to their default values.
- ③ FX effector channel names.
- ④ Send slider: sets the level of the audio signal sent to the effect mix signal for this channel.
- (5) Display of the gain value of the current transmit channel.
- 6 Touch the drop-down paragraph to select the type of effector.
- ⑦ Touch the drop-down box to select the Pre_Fdr/Post_Fdr signal to be sent to the FX effects channel.

5.5. Output channels

5.5.1. Overview Overview



- ① Overview screen.
- 2 Reset: restores all parameter settings in this screen to their default values.
- ③ Delay: displays the delay configuration and the delay information.
- ④ DCA Groups: shows that the channel has been assigned to a DCA grouping.
- (5) Mute Groups: shows that the channel has been assigned to a mute group.
- (GEQ) ON: Turns the equalizer on or off.
- 1 (Limiter) ON: turns the pressure limiter on or off.

5.5.2. config Configuration

Home	Overview Dconfig	PEQ	GEQ	Limiter	Anti- Feedback			Main
	Config						2 Reset	LE
	× 3	Main						Main
	Delay 4 ON			565.0 fr				Solo
					nsters			0.0 D M 10
	Assignments							
	5 DCA 1 DCA	2 DCA 3	DCA 4	DCA 5	DCA6	DCA 7	DCA8	
	6 Mute 1 Mute	2 Mute 3	Mute 4	Mute 5	Mute 6	Mute 7	Mute 8	
								Mute

- ① Config: parameter configuration interface.
- 2 Reset: Restores all parameter settings in this screen to their default values.
- ③ Mic : displays the channel name, touch the display keypad to customise the channel name.
- ④ ON: switching the delay timer on or off, as well as displaying the delay configuration and information.
- $\bigcirc \quad$ DCA Groups: shows that the channel has been assigned to a DCA grouping.
- 6 Mute Groups: shows that the channel has been assigned to a mute group.



5.5.3. PEQ Parametric Equaliser

- 1 PEQ parametric equalizer configuration interface.
- 2 Reset: restores the current interface parameter configuration to its default values.
- ③ RTA On: turning the Real Time Analyzer on/off.

④ ON: Turns the equalizer on or off.

5 RTA display: display of channel signal amplitudes and peaks.

6 Graphical representation of the equalizer curve according to the configuration of the equalizer parameters.

C Low-cut/high-cut filter: the filter attenuates frequencies above or below the cut-off frequency by using the corresponding frequency controller set frequency as the cut-off frequency.

8 Low-cut shelf/high-cut shelf filter: changes the equalizer band 1 to channel 6 from a parametric filter to a shelf filter, which, when enabled, does not provide bandwidth control.

9 Enabling or disabling the different frequency bands of the parametric equalizer.

10 Freq (low cut/high cut): sets the frequency of the inflection point of the low cut/high cut filter.

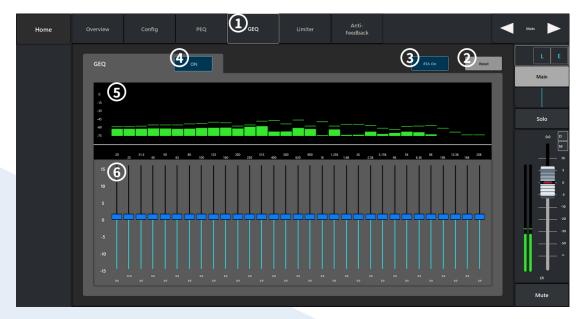
11 Gain: Adjusts and displays the gain at the frequency setting of the relevant equaliser band, ranging from -15db to +15dB;

12 Freq: adjusts and displays the centre frequency of the equalizer, which ranges from 20Hz to 20KHz for all bands, if the shelf filter is enabled the Freq control is used to set the inflection frequency of the shelf filter.

13 Q: Adjusts the bandwidth of the relevant equalizer band, selecting a shelf filter where the bandwidth control will be hidden.

14 Auxiliary slider for fine-tuning of parameters.

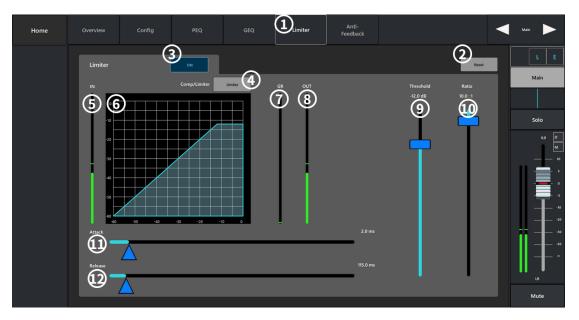
5.5.4. GEQ Graphic Equaliser



- ① GEQ graphic equalizer configuration interface.
- 2 Reset: restores the current interface parameter configuration to its default values.
- ③ RTA On: turning the Real Time Analyzer on/off.
- ④ ON: Turns the equalizer on or off.
- 5 RTA display: display of channel signal amplitudes and peaks.

6 Graphic equalizer: 31-band graphic equalizer control, select the corresponding frequency band to push the slider to set the parameters.

5.5.5. comp/Limiter pressure limiter

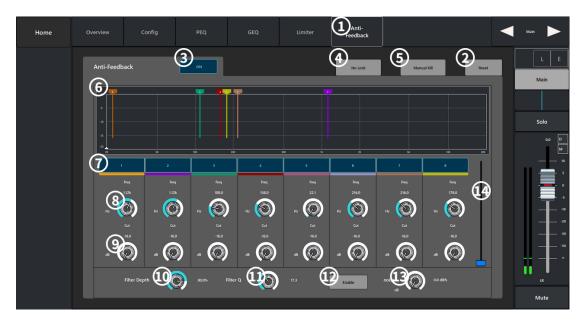


- ① Comp: compressor configuration interface.
- 2 Reset: restores all parameter settings in this screen to their default values.
- ③ ON: turning the compressor on/off.
- ④ IN: display of the input level.
- (5) Compressor diagram: Compressor curve diagram with horizontal scale from 0 dB to 60 dB.
- 6 G.R: shows the level of the signal attenuated by the compressor.
- ⑦ Out: display of the output level after processing by the compressor.
- ⁽⁸⁾ Threshold: sets the threshold at which the compressor starts to attenuate the signal level, and starts to operate when the input signal exceeds the threshold.
- 9 Ratio: sets the input/output compression ratio for when the input signal exceeds a threshold value.
- ^(III) Gain: adjusts the total output gain to compensate for the level lost by the signal after compression.

11 Attack: sets the response time for the compressor to start operating in response to a signal exceeding a threshold.

12 Release: sets the response time for the compressor to stop compressing when the signal falls below a threshold.

5.5.6. Anti-Feedback feedback suppression



- ① Anti-Feedbac: parameter configuration interface.
- 2 Reset: restores all parameter settings in this screen to their default values.
- ③ ON: enables/disables feedback suppression.
- ④ NO Lock: displays the current frequency of the feedback being recognized.

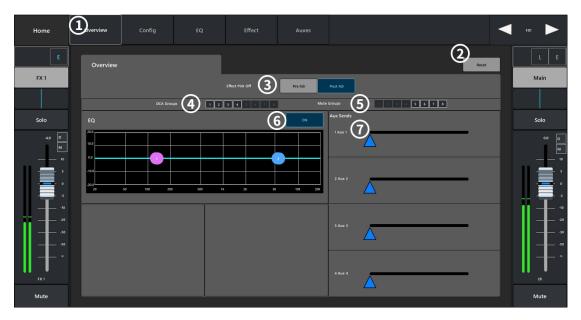
S Manual Kill: when a suspicious feedback frequency is identified, a touch of this button applies a filter at that frequency.

6 Display: shows the whistle points captured by the filter at different frequencies and the amount of attenuation.

- ⑦ Fiters : Enable or disable filters for different frequency bands.
- 8 Freq: sets the centre frequency of the filter.
- 9 Cut: sets the amount of filter attenuation.
- 1 Filter Depth%: increase or decrease the depth of all filters.
- 11 Filter Q: sets the bandwidth of all filters.
- 12 Noise: noise gain setting.
- 13 Auxiliary slider for fine-tuning of parameters.

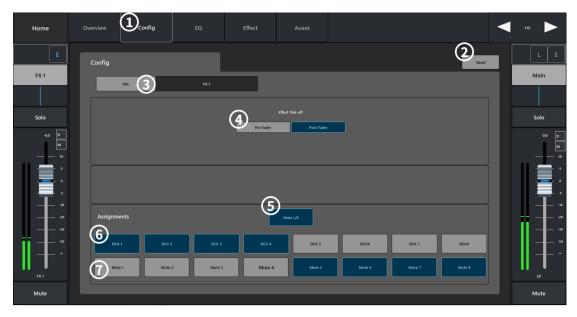
5.6 FX effects channel

5.6.1. Overview Overview



- ① Overview screen.
- 2 Reset: restores all parameter settings in this screen to their default values.
- ③ Effect Pick OFF: selection of the Pre_Fdr/Post_Fdr signal.
- ④ Delay: displays the delay configuration and the delay information.
- 5 DCA Groups: shows that the channel has been assigned to a DCA grouping.
- 6 Mute Groups: shows that the channel has been assigned to a mute group.
- ⑦ ON: Enables the equalizer curve overview graph.
- ⑧ AUX Sends: sends the current effects signal to the auxiliary output channel.

5.6.2. config Configuration



- ① Config: parameter configuration interface.
- 2 Reset: Restores all parameter settings in this screen to their default values.
- ③ Mic : displays the channel name, touch the display keypad to customise the channel name.
- ④ Effect Pick OFF: selection of the Pre_Fdr/Post_Fdr signal.
- (5) Main L/R: sending the current channel signal to the main output channel.
- 6 DCA Groups: shows that the channel has been assigned to a DCA grouping.
- 0 Mute Groups: shows that the channel has been assigned to a mute group.

5.6.3. EQ equaliser



- ① EQ: parameter configuration interface.
- 2 Reset: restores the current interface parameter configuration to its default values.
- 3 RTA On: turning the Real Time Analyzer on/off.
- ④ ON: Turns the equalizer on or off.

5 RTA display: display of channel signal amplitudes and peaks.

6 Graphical representation of the equalizer curve according to the configuration of the equalizer parameters.

C Low-cut/high-cut filter: the filter attenuates frequencies above or below the cut-off frequency by using the corresponding frequency controller set frequency as the cut-off frequency.

8 Enabling or disabling the different frequency bands of the parametric equalizer.

9 Freq: sets the frequency of the inflection point of the low-cut/high-cut filter.

(10) Gain: Adjusts and displays the gain at the frequency setting of the relevant equaliser band, ranging from -15db to +15dB;

11 Freq: adjusts and displays the centre frequency of the equalizer, which ranges from 20Hz to 20KHz for all bands, if the shelf filter is enabled the Freq control is used to set the inflection frequency of the shelf filter.

12 Auxiliary slider for fine-tuning of parameters.

Home	Overview	Config	EQ	Effect	(1) _{Auxes}					FX1
E	Aux Sends								2 Reset	LE
FX 1	(3)		Pre All					6	(7)	Main
Solo	Aux 1	_		4		_	5	6 Mute	Post_Fdr	Solo
-4.0 D M 10	Aux 2	_				_		Mute	Pre_All 🔻	0.0 D M
					\triangle					
	Aux 3					_		Mute	Pre_Dyn 👻	
	Aux 4					_		Mute	Post_Fdr 👻	
FX 1										LR LR
Mute										Mute

5.6.4. AUX sends effects auxiliary sends

1 AUX auxiliary transmit configuration interface.

2 Reset button: restores all parameter settings in this screen to their default values.

③ The name of the auxiliary output channel.

④ Auxiliary send slider: sets the level of the audio signal sent from this channel to the AUX auxiliary output channel.

5 Display of the gain value of the current transmit channel.

6 Mute: Mute the auxiliary transmit channel without affecting any other auxiliary outputs or transmissions.

Touch the drop-down box to select the Pre_Fdr/Post_Fdr/Pre_Dyn/Per_All signal to be sent to the AXU output channel.

5.6.5. Type of effect

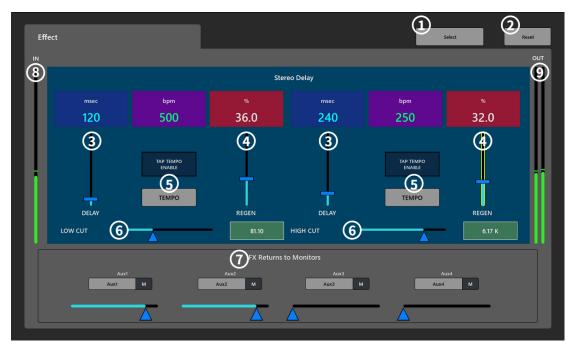
5.6.5.1. MONO DELAY Mono Echo



① Select: switch between effect types.

- 2 Reset: restores all parameter settings in this screen to their default values.
- ③ Delay: sets the delay time, in milliseconds.
- ④ Tap Tempo: setting the rhythm of regeneration with a tap.
- (5) Regeneration: sets the ratio of echo attenuation, which slowly and gradually decays according to the ratio range.
- 6 Low/High Cut: attenuates or cuts out sounds below this set frequency, between 20Hz and 20KHz
- ⑦ FX Returns to Monitors: The current effect is sent to the auxiliary output channel.
- 8 IN: the level of the signal without effects processing.
- 9 OUT: level after effects processing.

5.6.5.2. Stereo Delay Stereo Echo



- ① Select: switch between effect types.
- 2 Reset: restores all parameter settings in this screen to their default values.
- ③ Delay: sets the delay time, in milliseconds.

④ REGEN: sets the ratio of echo attenuation, where the echo is slowly and gradually attenuated according to the ratio range.

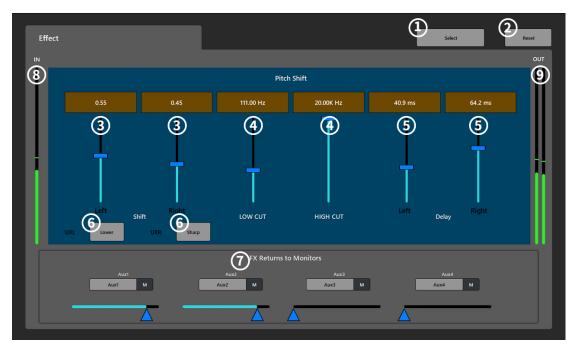
- (5) Tap Tempo: setting the rhythm of regeneration with a tap.
- 6 Low/High Cut: attenuates or cuts out sounds below this set frequency, between 20Hz and 20KHz
- ⑦ FX Returns to Monitors: The current effect is sent to the auxiliary output channel.
- 8 IN: the level of the signal without effects processing.
- 9 OUT: level after effects processing.

5.6.5.3. Basic Chorus

	Effect						Select	Reset
8				Basic C	horus			9
		2.08 Hz	1.10 ms			20.0 Hz	20.00K Hz	
		3	(4)	Sine Sine) Saw	6	ଁ	ļ,
		Rate	Depth			Low Cut	High Cut	
				\sim				
				FX Returns to	Monitors Aux			
		Aux1 M	Aux		Aux3	м	Aux4 M	
								•

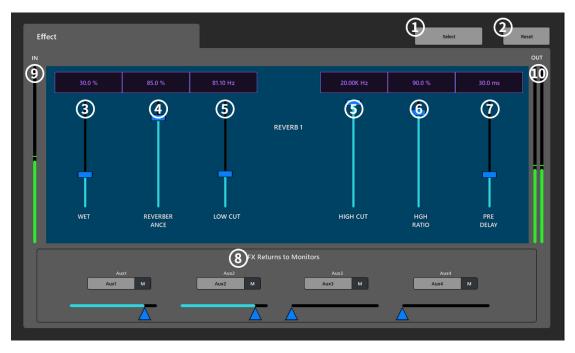
- ① Select: switch between effect types.
- 2 Reset: restores all parameter settings in this screen to their default values.
- ③ Rate slider: sets the speed of the tone change.
- ④ Depth slider: sets the time range for audio signal adjustment
- (5) Sine/Saw option: selects the mode of vocal pitch change.
- 6 Low /HIGH Cut slider: attenuates or cuts out sounds below this set frequency, in the range between 20Hz and 20KHz.
- ⑦ FX Returns to Monitors: The current effect is sent to the auxiliary output channel.
- ⑧ IN: the level of the signal without effects processing.
- 9 OUT: level after effects processing.

5.6.5.4. Pitch Shift



- ① Select: switch between effect types.
- 2 Reset: restores all parameter settings in this screen to their default values.
- ③ Left/Right: control of the amount of sliding of the two outputs by means of a slider.
- ④ Low/High Cut: attenuates or cuts out sounds below this set frequency, in the range of 20Hz to 20KHz.
- 5 Left/Right: pushing the slider will change the range of the pitch change in semitone intervals.
- 6 Lower/Sharp: selection of a higher or lower pitch.
- ⑦ FX Returns to Monitors: The current effect is sent to the auxiliary output channel.
- 8 IN: the level of the signal without effects processing.
- 9 OUT: level after effects processing.

5.7.5.5. REVERB-1 dense reverb



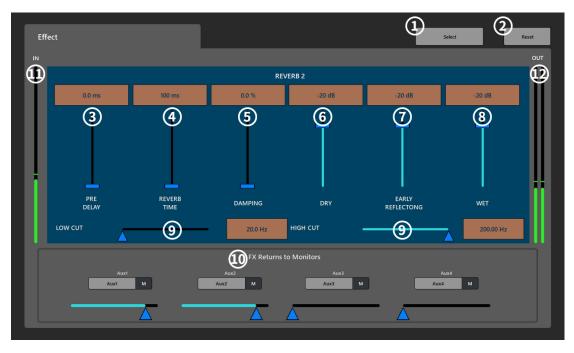
- ① Select: switch between effect types.
- 2 Reset: restores all parameter settings in this screen to their default values.
- ③ WET: wet sound gain control.

④ ReverberAnce: adjusts the total amount of delayed signal returned to the input channel, thus changing

the sense of reverberation.

- (5) Low /HIGH Cut: attenuates or cuts out sounds below this set frequency, in the range 20Hz to 20KHz.
- 6 HGH Ratio: changes the total amount of high frequency reflections.
- \bigcirc Pre Delay: change the pre-delay time.
- ⑧ FX Returns to Monitors: The current effect is sent to the auxiliary output channel.
- 9 IN: the level of the signal without effects processing.
- 10 OUT: Electricity after effect treatment

5.6.5.6. REVERB - 2Dense Reverb



- ① Select button: effect type switching.
- 2 Reset button: restores all parameter settings in this screen to their default values.
- ③ Pre Delay: change the pre-delay time.
- ④ Reverb TIME: sets the reverberation time.
- **DAMPING:** control of the amount of high frequency attenuation.
- 6 DRY: sets the direct sound gain.
- ⑦ Early Reflectong: sets the early reflective sound gain.
- 8 WET: sets the wet sound gain.
- 9 Low/High Cut: attenuates or cuts out sounds below this set frequency, in the range of 20Hz to 20KHz.
- 11 FX Returns to Monitors: The current effect is sent to the auxiliary output channel.
- 12 IN: the level of the signal without effects processing.
- 13 OUT: Electricity after effect treatment

5.7 Playback/recording

Audio player	
「し Local しocal しocal しocal しocal しocal しocal しocal しocal しocal しocal しocal しocal しocal しocal しocal しocal しのう	
【2〕 USB 【2〕 USB	
3 Record	
6	02/16/04:30
	8 option

- ① Local: list of local music files.
- 2 USB: list of audio files within external USB (Class A) removable hard disk devices.
- ③ Record: list of recorded files.
- ④ Delete: allows only local files and recorded files to be deleted.
- 5 List: displays the current list of tracks, touch to select a track to play.
- 6 Audio file playback progress bar, with swiping to determine playback position.
- \bigcirc Playback controls: stop, previous song, pause, next song, record, play mode, mute, volume adjustment.
- 8 Option: navigation to the recording screen.

5.8. Other functions

5.8.1 Menu settings



- ① DCA Groups: navigation to the DCA grouping interface.
- 2 RTA: navigation to the real-time analyser interface.
- ③ FX Overview: navigation to the effects preview screen.
- ④ Noise Generator: noise generator with, for example, sine wave, pink noise, white noise signals.
- 5 Scenes: the scenario setting screen, offering 30 scenarios.
- 6 Clear: one-touch clear function (gain, algorithm, sound and image, mute).
- Copy/Paste: Copy/paste, which allows the current channel configuration parameters to be copied to other channels, limited to copying and pasting the same type of channel to each other.
- 8 Update: uploading audio files to the device via the PC.
- 9 Initialize Cfg: Clears the current scene file configuration.
- Scan Mixer: PC connection to the device side (login connection instructions are provided on the next page).
- 11 Upload Software: Upgrade to the device via PC software.

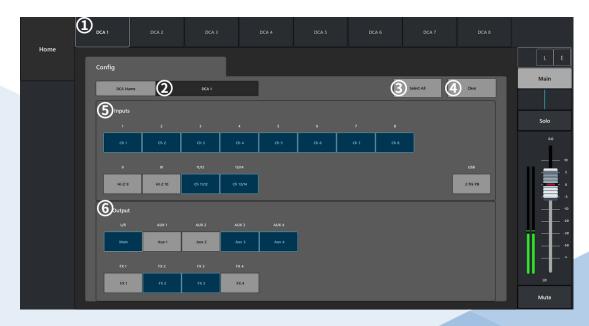
5.8.2. DCA Groups grouping

5.8.2.1. DCA Groups main interface

	Сн 1-8		Ch 9-14/USB	FX	1-4	Aux 1-4	1	DCA Groups	
Menu									LE
	2 DCA 1	DCA 2	DCA 3	DCA 4	DCA 5	DCA 6	DCA 7	DCA 8	Main
Aux									
									Solo
Play/Rec	0.0	0.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0
Play/Rec	10	**	— *	· · ·	10	10	•	10	
	<u>3</u>	. 💻					. 📃 .		
DCA Groups	·		۰. ۱.		····		····		
	20	20		20	20		20		20
Mute Groups									30
	·50 ∞					·50	·so %		
	DCA 1	DCA 2	DCA 3	DCA 4	DCA S	DCA 6	DCA 7	DCA 8	ur ur
FX Mute	Mute	Mute	Mute	Mute	Mute	Mute	Mute	Mute	Mute

- ① DCA Gougou: the main DCA grouping interface.
- 2 The name of the DCA grouping channel.
- ③ DCA grouping channel faders, which control the gain of all channels programmed into the group.
- ④ Mute: Mute the grouping channels.

5.8.2.2. DCA Groups configuration interface



- ① DCA grouping options: select the relevant DCA grouping available for editing.
- 2 DCA Name: display of the name of the grouping channel, with the possibility of customising the name.
- 3 Select All: All channels are selected for assignment to the DCA grouping.
- ④ Clear Assignments: Clears all assignments in the selected DCA group.

(5) (6): Touching the channel assignment button adds the channel to the selected DCA group, and both input/output and effect returns can be assigned to the DCA group;

When a channel is grouped into one or more DCA groups, the output of the channel is equal to the sum of all the faders in the DCA group plus the value of the channel's fader. The same principle applies when a channel is part of a DCA and mute group. If the audio signal of the channel is required to pass, the mute of all groups must be cancelled.



5.8.3. MUte Groups interface

- ① Mute grouping option: select the mute grouping available for editing.
- 2 Mute Name: Grouped channel name display, customizable name change.
- 3 Mute: activates mute or unmutes channels that have been assigned to a mute group.
- ④ Select All: select all or clear all mute group assignments.

5 Close Edit: tap to navigate to the Mute Group Mute screen, as shown in Figure 2.

6 Assign button: touch the channel name to add the channel to the selected DCA group.

When a channel is muted by a mute group, the mute button for that channel will turn orange. When a channel is muted by a channel mute button and a mute group, the mute button for that channel turns red. All mutes associated with the channel must be cancelled in order for the audio signal to pass.

Scree Image: Construction of the construc

5.8.4. Scene scenario configuration

① Scene: a list of scenes, selected for editing by means of a drop-down slider.

2 Load button: touch the scene number in the list to load it.

③ Save button: a save button for saving the contents of the current scene to another scene.

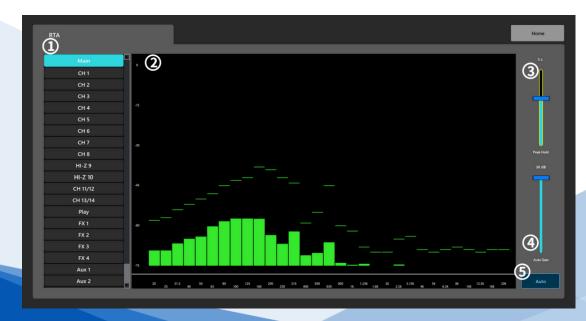
④ Manual Save button: manually saves the current scene.

⁽⁵⁾ Auto Save button: automatically saves the scene, saving all parameter settings on the basis of the user's last operation.

5.8.5. Noise Generator

Home	Noise Generator				(1) Reset
	2 AUX 1	AUX 2	AUX 3	AUX 4	
	Aux 1	Aux 2	Aux 3	Aux 4	
		FX 2			
	FX 1	FX 2	FX 3	FX 4	Main
	3				
	0N	Frequency			2000 HZ
	Sine Noise			\overline{O}	 -
	5 White Noise	Gain			-20 dBFS
	Pink Noise			8	-

- 1 Noise Generator configuration interface.
- 2 Assign button: touching the channel name assigns the noise to that channel output.
- ③ ON: turns the noise generator on or off.
- ④ Sine Noise: enables sine wave signal output.
- (5) White Noise: enables white noise signal output.
- 6 Pink Noise: enables the pink noise signal output.
- ⑦ Frequency: sets the noise output frequency.
- 8 Gain slider: sets the noise output signal level.

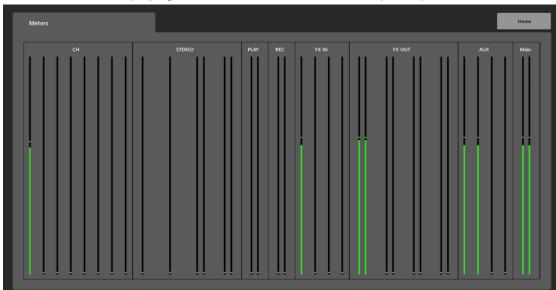


5.8.6. RTA Real Time Analyzer

RTA Real Time Analyzer sources mainly include Input channels, Playback channels, Main L/R, AUX

auxiliary outputs, FX effects, which can be used for real time analysis by selecting different signal sources.

5.8.7. Leveling Overview



Level overview for displaying real-time level information for all input/output channels

5.8.8. Auxiliary Overview



① Selectable groups CH1-8, HI-Z 9-10/Stereo CH11-14/SUB, FX effects in the navigation bar.

- 2 Enter the name of the channel.
- ③ Control slider: for adjusting the signal level of the auxiliary transmission.
- ④ Pre Fdr: shows the position of the signal transmission (before or after the fader).
- 5 Aux Master: regulates the total level of the auxiliary outputs.

6. Warranty Regulations

- > In mainland China, this product has a 2-year warranty.
- Three packages are available for product performance failures that are not caused by human damage during the warranty period.

The warranty card is valid after it has been stamped by the sales unit. Alterations are not valid!

- > The following (including but not limited to) are not covered by the three-pack service.
- No warranty card or missing a valid invoice or dated beyond the validity period of the three-package service.
- Damage caused by failure to use, maintain or manage the product in accordance with the instructions for use.
- > The product model or code on the warranty voucher does not correspond to the actual item.
- > Damage caused by dismantling and repair by a non-authorised service provider.
- Normal discolouration, wear and tear and consumption of the product during use are not covered by the warranty.
- > If the product is not available due to the user's own network, please consult customer service.