

# DA1165,65

## User's Manual

## **DIGITAL MIXING CONSOLE WITH 16 CHANNELS**

















## **Important Safety Instructions**





This symbol, wherever used, alerts you to the presence of un-insulated and dangerous voltages within the product enclosure. These are voltages that may be sufficient to constitute the risk of electric shock or death



This symbol, wherever used, alerts you to important operating and maintenance instructions.

Please read.



Alternating current/voltage (for adapter).

**ON:** Denotes the product is turned on.

**OFF:** Denotes the product is turned off.

#### WARNING

Describes precautions that should be observed to prevent the possibility of death or injury to the user.



#### CAUTION

Describes precautions that should be observed to prevent damage to the product.

Disposing of this product should not be placed in municipal waste but rather in a separate collection.

#### WARNING

#### **Power Supply**

Ensure that them a inssource voltage (AC outlet) matches the voltage rating of the product. Failure to do so could result in damage to the product and possibly the user. Unplug the product before electrical storms occur and when unused for long periods of time to reduce the risk of electric shock or fire.

#### **External Connection**

Always use proper ready-made insulated mains cabling (power cord). Failure to do so could result in shock/death or fire. If in doubt, seek advice from a registered electrician.

#### Do Not Remove Any Covers

Within the product are areas where high voltages may present. To reduce the risk of electric shock do not remove any covers unless the AC mains power cord is removed. Covers should be removed by qualified service personnel only.

No user serviceable parts inside.

#### Fuse (for adapter).

To prevent fire and damage to the product, use only the recommended fuse type as indicated in this manual. Do not short-circuit the fuse holder. Before replacing the fuse, make sure that the product is OFF and disconnected from the AC outlet.

#### **Operating Conditions**

Always install in accordance with the manufacturer's instructions.

To avoid the risk of electric shock and damage, do not subject this product to any liquid/rain or moisture.

Do not use this product when in close proximity to water.

Do not install this product near any direct heat source. Do not block areas of ventilation. Failure to do so could result in fire.

Keep product away from naked flames.

#### IMPORTANT SAFETY INSTRUCTIONS

Read these instructions

Follow all instructions

Keep these instructions. Do not discard.

Heed all warnings.

Only use attachments / accessories specified by the manufacturer.

#### Cleaning

When required, either blow off dust from the product or use a dry cloth.

Do not use any solvents such as Benzol or Alcohol. For safety, keep product clean and free from dust.

#### Servicing

Refer all servicing to qualified service personnel only. Do not perform any servicing other than those instructions contained within the User's Manual.

## PORTABLE CART WARNING

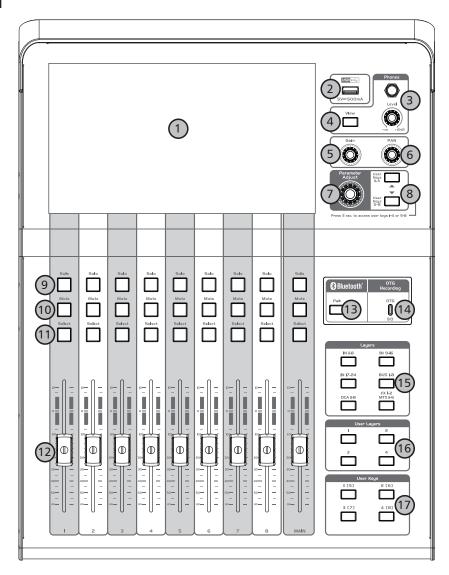


Carts and stands - The component should be used only with a cart or stand that is recommended by the manufacturer. A component and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the component and cart combination to overturn.



### Index

#### **Front Panel**



Page 8: 1. LCD Screen\_\_\_\_\_\_7. Parameter-adjust Knob

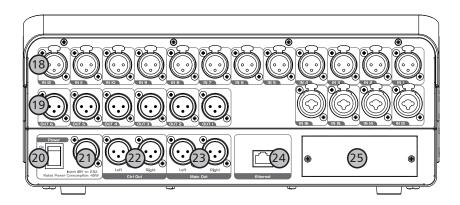
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#### Index

#### **Rear Panel**



Page 10: 18. MIC in \_\_\_\_\_\_ 25. Optional Module

under the EM disturbance, the ratio of signal-noise may be changed above 3dB.

\* The mixer for professional use. They can be used in following electromagnetic environment: residential, commercial and light industrial, urban outdoors.

They are the apparatus not intended for rack mounting.

\* The peak inrush currents equal to 8.33 A.

\*This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1)this device may not cause harmful interference, and (2)this device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- -- Reorient or relocate the receiving antenna.
- -- Increase the separation between the equipment and receiver.
- -- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -- Consult the dealer or an experienced radio/TV technician for help.



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#### Notation

--In this reference manual, the switches on the panel are all called "keys". The control knob on the panel are all called "knobs".

--The virtual buttons displayed on the LCD screen are called "button" or "icon", That which shows the top of LCD screen and used to access to corresponding interface by touching will be called "icon", Other virtual buttons which used to process corresponding function by touching will be called "button". And the area where parameters shows on the display are called "parameter box".





#### Introduction

Thank you for purchasing the Digital Mixing Console. As one significant feature of your mixer means its function is multiple and powerful. With 16microphone preamplifiers, Digital 4 band full parametric EQ, Compressor, Noise Gate, Delay, Remote control, 9 precision motor fader for level control, 10.1 inch LCD display operation in real-time, Program, Save, Load ,Copy, Record, BT/OTG play functions and son.

This digital mixer can help you to creat a wonderful shows will make you more determined in your choice. Also the unit will bring you an unparalleled sense of superiority since it is powerful and easy to operate. As a professional audio product built by our team which has more than 20 years of experience in the industry. With the tireless efforts of our development team, Our products have been endowed with many advantages such as excellent performance, reliable quality and full of innovation so that our products can sell well in different market and alway well received by consumers in application of different places and bring customers inexperienced value experience.

We suggest that you use this manual to familiarize yourself with the features and applications before using.

# 2

## **Summary of features**

- 16 XLR analog inputs (including 4 XLR/TRS combo socket) with digital gain control applied.
- 8 XLR socket mixing bus outputs.
- Main and CTRL L/R Outputs
- +48V phantom power
- All input channes can be assigned to headphone output / monitor.
- USB port used for preset save/load and firmware updates.
- Equipped with Bluetooth play function.
- Equpped with OTG audio play/record function.
- Used to form one LAN for APP to connect and control the network port.
- 9 precision motorized 100mm faders
- 32 bit floating point digital signal processing
- 10.1 inch colorful LCD touch screen for graphical view and setup.
- 24-bit / 48 / 96KHz sampling rate.
- Up to 24 DSP processing channels
- Program, save, load & copy functions
- Digital noise gate
- Digital compressor/limiter
- Digital 4-band full parametric EQ
- L/R Channel Control
- Lantency Adjustment
- 8 DCA Group/8 Mute Group
- · Authority management



## **Summary of features**

2

- Automatic Mixing
- RTA Real-time Spectrum Analysis.
- FBC Feedback Howl Suppressor
- User Defined Keys
- Talkback / Mic input
- Ducker
- Safe (Recall Safe function)
- Optional Function (DANTE-32S network audio module, USB-32X record card )

## **Useful Data**

**Purchased at:** 

Please write your serial number here for future reference.

Serial Number:

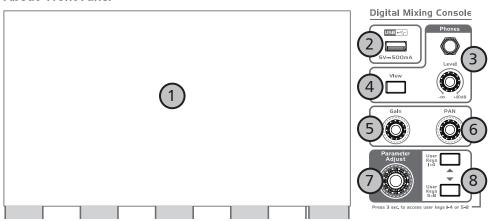
Date of Purchase:





#### **Function Details**

#### **About Front Panel**



#### 1. LCD Screen

The screen can be operated by touching it to display related information on the current intreface, such as channel, channel name, level value, etc.

#### 2. USB Port

It is used to update software, update GUI image, save or load the preset data in device and so on. Please refer to DSP control interface for more details.



#### 3. Phone Port & Level Knob

Plug headphone into the phone port and then turn the level knob to adjust the headphone volume. Please press to light the "solo" key on front panel before headphone operates. Simultaneously the headphone volume can be controlled by setting SOLO value in parameter box on LCD screen too.

#### 4. View Key

Press it to switch current interface to Ctrl-Room interface.

#### 5. Gain Knob

Used to set the input signal gain(0-50dB) for any channel among CH1-16 and read the gain value set from LCD screen.

**Note:** That adjusting the knob appropriately is very important to reduce the noise or avoid overload distortion issue.

LED Sig & Clip LED:

- The Clip LED will light red when input signal is more than +16dB. It means signal overloads.
- It means the input signal reach the peak when the clip LED light yellow.
- The Sig LED will light green if the input signal exceeds -48dB. It means related channel stays signal-input status.

#### 6. Pan Knob

Used to control the distribution of audio signal between left and right channel when the input channel selected. User can rotate the knob to locate the sound source on the left side, right side or the middle position. And related PAN setting can display in real time, Once two channels linked as stereo pair, The stereo pan will show on the display.

#### 7. Parameter-adjust Knob

Used to change the paramter value of the related functions. Touch to select the parameter box on the display and then turn the knob to adjust the value. Please note related contents shown on the display during operating due to different functions may have different operations.



#### **Function Details**

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#### 8. Parameter Next/Prev Key

The two keys can be used in following two ways:

1. Press the two keys alternately to select any parameter-box showed on the display quickly regardless the both keys are lit or not.

2.When the "▲" key is always on by default, The 4 physical user keys(U1-U4)located on the front panel will work as the shortcut keys of item#1-4 set on the "User key" interface. Press and hold the "▼" key for 3S to light it, And then the 4 physical keys(U1-U4)will work as the shortcut keys of item#5-8 set on the "User key" interface.

#### 9. Solo Key

Select the channels need to be monitored and then press the key to illuminate it and then the audio signals of selected channels will be assigned into Ctrl-room or headphone output. Total 9 "solo" keys located on the front panel which correspond to the 8 selected channels + 1 main channel displayed on the bottom of LCD screen separately and control them.

#### 10. Mute Key

Press the key to illuminate it and then mute all assigned output of corresponding channels. Total 9 "mute" keys located on the front panel which correspond to the 8 selected channels+1 main channel displayed on the bottom of LCD screen separately and control them.

#### 11. Select Key

Total 9 "select" keys built on the front panel which correspond to the 8 selected channels + 1 main channel displayed on the bottom of LCD screen separately, Press any key to illuminate it and then the interface of corresponding channel will be selected by highlight.

#### 12. Motor Faders

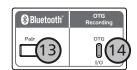
Total 9 motor faders built here and can be used to adjust the level of corresponding channel. 8 of them work as level fader of CH01-24 and the other one work as the fader of main channel.

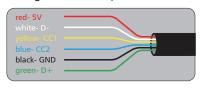
#### 13. Pair Key

Firstly touch the "OTG/BT" icon on LCD screen to enter the Bluetooth interface, And then press the key to activiate the Bluetooth and then connected to user's cell-phone or iPad or other audio device via searching the Bluetooth name which is same as your device's. And then slide the fader icon of "assign to main" on the display to approriately adjust the signal level, Finally the signal can be assigned to the Main or BUS 1~8 channel according to your selection.

#### 14. OTG

Using a Type C cable to connect with user's cell-phone or PC or other devices through "OTG I/O" port on the front panel. And then to play or record the audio. (Note: The cell phone will be recharged once connected to OTG, recharging voltage: 5V = 2.5A)





(Pin-wiring diagram of Type C)

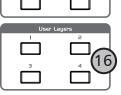
#### 15. Layer

Total 6 physical layer keys located on the front panel, Press any key to quickly recall the corresponding 8 fixed channels besides the main channel and showes on the bottom of LCD screen.

#### 16. User Layer

Total 4 physical user keys located on the front panel, there are 8 optional channels which can be customized under each layer. The 4 physical keys can works as shortcut keys to enter corresponding channel interface user customized by pressing. Please refer to #5.3 DSP control description for more details.





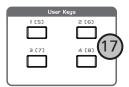




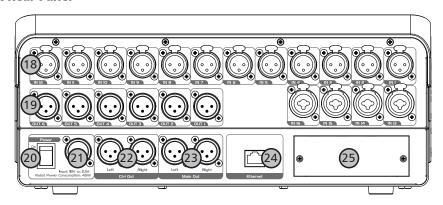
#### **Function Details**

#### 17. User Keys

Physical keys (User keys 1-4) work as shortcut keys for custom function applied on item# $1\sim8$  of USER KEYS interface. Refer to #5.13 DSP control discription for more details.



#### **About Rear Panel**



#### 18. MIC Input Jack

This Digital Mixer equips 16 microphone preamplifiers for use with all types of microphones.

The preamplifier has a Class A input buffer which followed by a dual-servo gain stage.

This arrangement will bring ultra-low noise and wide gain control which help to boost signals without increasing unwanted background noise.

#### 19. OUTPUT 1-6

Enter the interface of "signal assignment->analog output" and then select BUS01-08 or MTX01-06 or MAIN L/R As a mixing audio output port.

#### 20. Power

It works as the power switch and the mixer can be powered once the switch turns on.

#### 21. DC Input

The provided adaptor can be plugged into your device and then connected to the power supply.

#### 22. Ctrl Out

These are the balanced control-room outputs. Rotate the "Parameter Adjust" knob to adjust the gain of Solo button on LCD screen to control the output level.

#### 23. Main Output

This Digital Mixer features both XLR main outputs.

#### 24. Ethernet

This port is for Ethernet control which can be proceeded via iPad or PC linkage after connected to the router. Then the device can be operated remotely.

#### 25. Optional module

Select our optional module that you want for extra function.

Please contact with distributor to get more information about the optional modules.

- Ensure the same sampling ratio applied on all equipments before Digital Audio Expansion System is linkaged.
- After the Dante card inserted, please try to switch current sampling ratio in unit's system menu one time in order to ensure the same sampling ratio.
- It is recommended to use gigabit switches under 96K routing mode.



In addition to control directly on the machine, the Digital Mixer can also achieve remote operation via the app, which greatly facilitates the users.

#### 5.1 Channel Interface

Below channel interface will appear once powered on. Touch "CHANNEL" icon or "MIX LAYER" icon on the display to enter channel interface or mixer interface separately. The multiple channels can be displayed or controlled simultanesouly under the mixer interface.





- Channel -

- Mixers -

#### 5.1.1 Sends

In case the "IN1-8"/"IN9-16"/"IN17-24" layer selected on the front panel, the signal can be assigned to BU01-08 or FX01-02 channel.

In case the "FX1-2/MTX1-6" layer selected on the front panel, the signal can be assigned to BU01-08 channel. In case the "BUS1-8" layer selected on the front panel, the signal can be assigned to MTX1-6 channel.



- a). Touch the "ON" button to send to BUS channel.
- b). Touch the "PRE" button to light it and then the assigned signal will be out of fader's control. Otherwise the signal will be under the fader's control. c). Slide the fader icon on the current interface or turn the parameter-adjust knob to adjust the gain value of selected BUS channel.

#### 5.1.2 Phase

Touch this button to reverse the signal of selected channel (reverse the phase by 180°). It can be used to fix the reversed audio signal after touching the button.

#### 5.1.3 Stereo Link

These channels under "CH01-24", "BUS01-08" or "MTX01-06" layer can be linked as a stereo pair, Each stereo pair formed with two adjacent channel and they are predefined and cannot be changed. Related linkage follows below rules:

CH01-02

CH03-04

CH05-06

etc...

Firstly select the current channel by pressing the "SELECT" key on the front panel and then touch the "ST LINK" button to illuminate it. At this time the other channel will be linked with it. Once the stereo pair forms successefully, The same parameter settings(such as DSP setting, sub-group send. solo status and main assignments, etc.) applied on the current channel will be passed to the other channel in the pair.



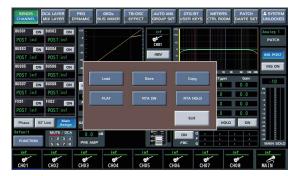


#### 5.1.4 Main Assign

Touch the button to assign the signals of the selected channel to the main channel.

#### 5.1.5 Function Button

Touch it to enter the function interface. Following function buttons "Load, Save, Copy, Clear, Audio analysis on, Audio analysis hold" involved on this page.



Touch "Load" button to enter "Load" interface and. User can load previous parameters saved in your device for current operating. Or load setting parameters from your USB stick via USB port into your device for current operating.





Touch the (5) button to select files from USB stick or device and then touch (2) or (3) button to import selected files into device or USB stick.

Firstly touch the (6) button and then touch the (3) button and then a "naming" tip will pop up. One folder with "DAT16" suffix will be created after naming completed to save all device's data and then import the folder into USB stick. Or find the folder with "DAT16" suffix from USB stick and press the (2) button and then key in passwords (initial passwords) to import the folder into your device.

- 7) Under factory mode touch the "channel" button. The left list will appear 16 kinds of channel preset parameter for calling.
- 8) Under factory mode touch the "Safe Recall" button to enter below interface, User can reselect related parameters by tick or untick and then load them. Please refer to the description of h) point "Safe Recall Mode" of #5.18 system interface for more details.







Touch "save" button to enter save interface, It is available to save data files set ok into device, or export saved data files into USB stick via USB port.





- 1). Key in the customized name before saved.
- 2). Select saving scene.
- 3). Page up.
- 4). Page down.

Touch "copy" button to enter the copy interface.



- a). Select a channel or bus that you want to copy its settings onto other channels. The selected channel box will flash.
- b). Touch the tick in the box to select the parameter you want to copy.
- c). Select corresponding channels which related copied settings will be passed to, you can select them one by one by touching or touch the "Select" button to select all. "Copy" button to finish copy. Please notice the information displayed on LCD screen during your operation.

#### 5.1.6 Gate on / Gate View

The function applied on the CH01-24 of the unit.

- a). Touch the small window area of dynamic compression curve to switch into the dynamic parameters interface.
- b). Gate-status indicator: The signal can't pass when the Gate value is less than threshold, Or the singal can pass when the Gate value is more than threshold. Refer to the description of 5.5 dynamic parameters interface for more operation details.

#### 5.1.7 Compressor

Compression function applied on the CH01-24, BUS01-08, MTX 01-06 and Main channel for this unit.

a) "PRE EQ" BUTTON

Touch the button to light it or not to switch EQ control between PRE EQ and POST EQ.

- b). "SIDE CHAIN" means to use another signal to compress or modulate the current audio signal. The scope of input channel CH01-24 / output channel BUS01-08 / MTX01-06 / MAIN channel can be selected.
- c). Compressor-status indicator.
- d). Preamp gain module applied on CH01~16.
- e). Delay function is avaiable for CH09-24, BUS01-08, MTX01-06, MAIN channel based on 48K sampling ratio, While available delay function applied on CH17-24 / BUS01-04 / MAIN channel based on 96K sampling ratio. Please refer to #5.5 Dynamic Parameters interface for other operation details.











#### 5.1.8 Faders Interface

- a). Gain value shows here.
- b). The icon shows the current channel, Touch it and then a virtual keyboard will appear on the display, and you can customize the name & color applied on the current channel at this time.
- c). 48V button: Touch it to see a prompt window which shows warning information "Are you sure turn on +48V phantom power of this channel?", If click ok to enable the 48v phantom power as well as its' red backlight illuminates.

**Note:** Only condenser microphone needs phantom power. Don't connect the phantom power to any devices which don't need it. Otherwise the device will be damaged.

- d). Mute: Touch the button to mute the selected channel and its backlight will synchronize the Mute button on front panel to light on or off simultaneously.
- e). Solo: Touch the button to monitor the audio signal of selected channel and its backlight will synchronize the Solo button on front panel to light on or off simultaneously.
- f). Pan Icon: It indicates the left and right channel positions of the current audio. And user can adjust it by the Pan knob on the front panel.
- g). The input signal indicator.
- h). Fader: Slide it to adjust the audio signal and it synchronize the fader on front panel to control input level and catch the same effect. Also the gain applied on faders will automatically become "0" dB if both "solo" button and "select" button are pressed simultaneously.
- i). Compressor-status indicator.

#### 5.1.9 PEQ Interface

- a). Touch window area which shows the curve of PEQ and then it switches to PEQ interface.
- b). Touch to light it to enable the equalizer of selected channel. Real-time display the EQ settings on LCD screen, The EQ value can be set by either sliding the curve on LCD screen or rotaing the parameter-adjust knob after related parameters box selected by ticking.
- c). FBC switch, The FBC function is available for CH01-08 / BUS01-04 channel under 48K sampling ratio or for CH01-06 / BUS01-02 under 96K sampling ratio.
- d). Touch the button to enter PATCH page. Here user can assign the routing to channels. Refer to the description of 5.16 PATCH interface for more details.
- e). Touch the button after the "insert return" set ok to decide whether the inserted signals output through fader control.
- f). Touch the button to control the input signal will output from the channel after the "insert return" set ok.
- g). The solo volume can be adjusted here, Touch it to light green and then turn the parameter-adjust knob on the front panel to adjust the input level value of solo.
- h). Signal indicator for the main channel.
- i). Signal indicator for the solo channel.

#### 5.1.10 Channel module icon

The channel module icon will display the channel name and current gain value. Press any button built on front-panel Layer area and then press and hold the corresponding module icon, A virtual keyboard interface will pop up to allow user to rename channel name.





C PATCH

f) INS ON

3.0

## 5

#### **DSP Control**

#### 5.2 DCA Layer Interface

Touch the "DAC LAYER" icon on the LCD screen to enter below interface, There are 8 DCA layers where 8 optional channels & related parameters can be set under each DCA layer can be customized according to actual needs or usage habits, once setting completed, the related settings can be quickly accessed on this interface. Please refer to the description of 5.11 "Group Set" interface for more details.



#### **5.3 USER LAYER**

Press the any one of 1~4 "User Layer" keys on front panel and then touch the "DCA Layer/Mix Layer" icon on LCD screen, The original "Mix Layer" icon will change automatically to "User Layer" icon to enter the "User Layer" interface. There are total 4 physical user layers keys (U1~U4) which can be accessed as well as 8 channels can be set on each layer.





#### Setup Method:

Click the "system->User layer setup "icon on LCD screen to enter setup page, Here user can customize the selected channels on each layer and arrange sequency.

#### **5.4 PEQ Interface**

Touch the "PEQ" icon on LCD screen to enter below PEQ interface. Then the audio signal's frequency / gain / EQ value can be adjusted within 20Hz- 20KHz range.



a). Select related parameter box by touching it as well as the green background illuminates, And then the parameter value can be adjusted by sliding the fader icon on the display or rotating the "parameter-adjust" knob on the front panel. during adjusting parameter, the movement of the fader icon always synchronizes to the physical "parameter-adjust" knob.

**Remark:** During adjusting frequency, user can hold simultaneously the "Select" key on the front panel to make fine tuning.

- b). Used to switch between EQ1-2 and EQ 3-4 as current EQ band.
- c). Function button: touch it to pop up submenu which includes six buttons such as Load, Save, Copy, FLAT, RTA on and RTA hold button. Then touch corresponding button to operate related function.
- d). Used to turn on or off the equalizer.





#### 5.5 Dynamic Parameters Interface

Touch the "Dynamic" icon on LCD screen to enter the dynamic interface, Please follow below steps to setup related parameters:



- a). Attack Time: Touch it to set the time how long it takes the gate to open when the signal applied on the selected channel beyond the trigger level, It can be set from 0.5 to 200 ms. The noise issue can be avoided efficiently if ATTACK time set appropriately. b). Release Time: Used to set the amount of time for the gate to go from open to fully close. It can be set from 0.01 to 1 second. The noise issue can be avoided efficiently if the Gate off- time set appropriately.
- c). Threshold: Touch it to set the trigger level of noise Gate for the selected channel. It can be set from 20 to -84 dB. The trigger level will decide which level at the gate will open. An audio signal which exceeds the trigger level will go though smoothly.
- d). Attack Time: Used to set the speed how fast the compressor applied on the selected channel will enable. The attack time is usually set from  $10\sim250$  milliseconds.
- e). Release Time: Used to set the compression time applied on the selected channel. It means to set how long it take the signal which is less than trigger level to reach the normal gain. The time is usually set from 10~1000 milliseconds.
- f). Comp Ratio: Touch it to set the compression ratio for the selected channel. It means the ratio of the output level to the input level based on ratio scope  $10:1\sim1:1$ . For example, a ratio of 4:1 means any signal which is higher than trigger level will be compressed by 4:1 ratio.
- g). Gain: Touch it to set the compression gain of the selected channel. When it compress the signal, that the gain goes down usually leads to the antennuation of the whole level, At this time the button can be used to recover the lossed level and readjust the previous compression ratio. And the range of gain adjustment is usually  $0 ext{dB}$  to  $+12 ext{dB}$ .
- h). Threshold: Touch it to set the compression trigger level applied on the selected channel. The copressor will enable to compress the signal level once the signal amplitude beyond the trigger level, Usually -83  $\sim$  +20dB will be set as the scope of trigger level usually.
- i). Function Button: Touch it to pop up sub-menu including "Load, Save, Copy" button and then touch any button to take corresponding operation.
- j). Once parameter box selected ,the corresponding parameter value can be changed by sliding the fader icon or rotating the physical "parameter-adjust" knob on the front panel.

#### 5.6 GEQ Interface

Touch the "GEQs" icon on LCD screen to enter the GEQ interface. The unit devides the frequency of 20Hz~20KHz into 31-band EQ points and can real-time display the spectrum during output. There are 4 groups of channels can be set to the main EQ or 8 BUS EQ under 48K sampling ratio. Only 2 groups of channels can be set to the main EQ or 8 BUS EQ based on 96K.



- a). Fader Icon, Used to adjust the gain value applied on each frequency band applied on the selected channel, And the gain value can be adjusted with the Adjust Parameter knob on the front panel too.
- b). There are 4 buttons from GE01 to GE04 which used to select output channel.
- c). Used to turn on or off the GEQ function.
- d). Touch it to restore to the default values.
- e). Touch it to enable all faders built on front panel to sync with the fader icon on LCD screen.
- f). Select different fader icon by clicking "up, down, left, right" button to adjust the frequency gain applied on them.



5

#### 5.7 Bus Mixer Interface

Touch the "Bus Mix" icon on LCD screen to enter below BUS MIXER interface.

The signal inputs into CH01-24 / FX01-02 and then output from BUS01-08 / FX01-02 / MTX01-08 and Main channel through the bus mixer.

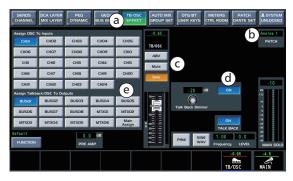
The settings applied on this interface will sychronize with the settings of "SENDS" interface. Please refer to below steps for more operation.



- a). Input-channel selection list: Touch channel icon one by one or touch "All to 0dB" / "All Pre" / "Clear All(OFF)" button to select all channels at one time.
- b). Output-channel selection list: Total 17 channels(BUS1-8/MTX1-6/FX1-2/MAIN) can be selected as output channels here. User can touch the "BUS1-8/MTX1-6/FX/MAIN" button to view the whole channel list.
- c). Touch the "CH1-24" and "FX1-2" button alternately to view the whole input-channel list.
- d). "All Pre" Button: Touch to light it and then the "Pre-fader" function applied, It means the signal out of fader's control.
- e). "Clear All(OFF)" Button: Touch and light it and then all input channels will be off, Otherwise some or all input channel are on.
- f). "All to 0dB" Button: Touch and light it and then 0dB gain value will be applied on all input channels.
- g). "Fend on faders" Button: Touch and light it and then the corresponding gain value of selected input channel will be applied on the physical fader of front panel.

#### 5.8 TB/OSC Interface

#### 5.8.1 Talkback

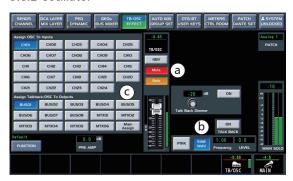


- a). Touch the "TB/OSC" icon on LCD screen to enter above interface.
- b). Touch the "PATCH" button on LCD screen to enter PATCH interface and then touch the "TB/OSC" icon on this interface to select from analog 1-16 as sound sources.
- c). "Mute" Button: After sound sources selected, Touch the red "Mute" button to open TALKBACK channel.
- d). "ON" Button: Touch it to play or pause the background music from talkback dimmer.
- e). Talkback channels can be assigned into BUS / MATRIX / MAIN channel outputs.





#### 5.8.2 Oscillator



- a). Oscillator and TB channel share the same one indicator, It is necessary to mute the talkback channel before operating the oscillator.
- b). The oscillator can produce automatically pink noise or 20Hz~20KHz sine signal. user can operate the frequency-box or level-box on the interface to adjust the size of sine frequency and level.
- c). The signal generated can either input from CH01-24 or output from BUS / MATRIX / MAIN channel. The corresponding dynamic spectrum can be viewed in PEQ or GEQ interface.

#### 5.9 Effect Interface

The unit supports 12 effects setting. The corresponding effect parameters selected on the screen can be adjusted with parameter-adjust knob. Details of each effects desribed as below table.





No.	Preset	Description	Parameters
1	Hall	Simulate the sound effect of a large hall	Pre Delay(110ms), Decay(50%), Room Size(50%), Brightness(70%), Diffusion(70%), Efx Out(48%), Dry Out(32%)
2	Room	Simulate the effect of a studio with echo	Pre Delay(20ms), Decay(20%), Room Size(10%), Brightness(90%), Diffusion(40%), Efx Out(48%), Dry Out(32%)
3	Plate	Simulates the effect of a classic gramophone record	Pre Delay(0ms), Decay(40%), Room Size(50%), Brightness(80%), Diffusion(50%), Efx Out(48%), Dry Out(32%)
4	Delay	Make the sound output a little later than the input	Time(480ms), Decay(24%), Hi Damp(32%), Efx Out(72%), Dry Out(32%)
5	Stdelay	Add anothe input sound to the stereo output at a different time.	L Time(240ms), R Time(480ms), L Decay(24%), R Decay(24%), Hi Damp(32%), Efx Out(72%), Dry Out(12%)
6	Karaoke	Analogue karaoke sound effects	Rev Out(48%), Echo Out(48%), Dry Out(32%)
7	Flanger	Simulate the effects when different persons play the same instruments at the same time.	Feed Back(7%), Depth(41%), Mod Freq(0.03Hz), Efx Out(50%), Dry Out(32%)
8	Chorus	The illusion of playing multiple instruments can be created, when playing with a single instrumen	Feed Back(7%), Depth(41%), Mod Freq(0.03Hz), Efx Out(64%), Dry Out(32%)
9	DelayRev	The delay of Room effect.	Pre Delay(0ms), Rev Decay(30%), Room Size(50%), Brightness(50%), Diffusion(70%), Delay Time(600ms), Delay F.B(20%), DelayBright(50%), Efx Out(48%), Dry Out(32%)
10	StDelayRev	The stereo delay of Room effect.	Pre Delay(0ms), Rev Decay(30%), Room Size(50%), Brightness(50%), Diffusion(70%), L Time(440ms), R Time(880ms), L F.B(40%), R F.B(15%), DelayBright(50%), Efx Out(48%), Dry Out(32%)
11	FlangerRev	Stereo Chorus and Hall Reverb.	Pre Delay(0ms), Rev Decay(31%), Room Size(31%), Brightness(11%), Diffusion(48%), Mod F.B(31%), Mod Depth(41%), Mod Freq(0.03Hz), Efx Out(48%), Dry Out(32%)
12	ChorusRev	Simulates the sound effects when turning the horn and woofer.	Pre Delay(0ms), Rev Decay(19%), Room Size(9%), Brightness(50%), Diffusion(60%), Chorus F.B(7%), Mod Depth(41%), Mod Freq(0.03Hz), Efx Out(48%), Dry Out(32%)

## 5

#### 5.10 AUTO MIX Interface

#### 5.10.1 AUTO Mix

Once the "AUTO MIX" function activiates, The total gain outputs applied on all selected channels will go down to 0dB automatically. It can effectively reduce howling, reverberation and other external noise produced when multiple microphones are used simultaneously.



- a). Touch it to switch into the AUTO MIX interface.
- b). "AutoMix On" Button: Touch and light it to enable "Auto Mix" function.
- c). Used to set the response time for AUTO MIX function.

#### 5.10.2 Ducker

The ducker function usually used on the scene of voiceover, When the announcer speaks, the volume of backgroud music will reduce automatically. Once the volume of signal beyond the specific threshold, the output volume will be attenuated into the specific limits.



- a). Duck / Priority channel selection, Click one time to setup priority channel; Click dual times to setup duck channel.
- b). Touch it to switch to ducker interface.
- c). Touch it to turn on/off the ducker.
- d). Touch it to clear all opened ducker channels.
- e). Used to setup the release time of ducker.
- f). Used to setup the holding time of ducker.
- g). Used to setup the depth of ducker.
- h). Setup the level of trigger signal required to activate ducker.





#### 5.11 Group Set Interface

#### 5.11.1 Group Set

Touch the "Group set" icon or follow "System Unlocked->Group set->DAC 1-8" touching steps on LCD screen to enter "Group Set" interface as below image:



For example: If the DCA 01 group selected, Then touch "Setup" button to select single or multiple channels which will be grouped together such as CH01, CH02, CH03, etc and touch the "Setup" button again to confirm the group set. User can touch the "Name" button to customize the name & color mark of the group, Once the DCA01 group recalled, All channels within this group such as CH01, CH02, CH03 will be under the unified control of the group through SOLO, MUTE or Gain control.

#### 5.11.2 Mute Group Set:

Follow"Group set-> Mute group" or "System Unlocked->Group set->Mute group" touching steps on LCD screen to enter "Mute group setup" interface as below image. The set mute group will be under the control of "User keys->Mute group" page.





For example: If the "MUTE GROUP1" selected, Then touch "Setup" button to select single or multiple channels which will be grouped together such as CH01, CH02, CH03, etc and touch the "Setup" button again to confirm the group set. User can touch the "Name" button to customize the name of the mute group, Once the MUTE GROUP1 recalled, All channels within this group such as CH01, CH02, CH03 will mute.

#### 5.12 OTG / Bluetooth Interface

Touch the "OTG / BT" icon on LCD screen to enter OTG / BT interface, It is available to use cell phone or other audio device to connect with OTG or BT to play audio or record. The audio can be assigned into the main channel or BUS channel.



- a). Indicator bar to shows the status of OTG signal playing.
- b). Indicator bar to shows the status of input signal recording.
- c). Touch to light it and the singal will be assigned to the MAIN channel.
- d). The fader used to adjust the output level from the MAIN channel.
- e). "ON" Button: Touch to light it and the signal will be assigned into BUS01 channel.
- f)."PRE" Button: Touch to light it and the signal will be out of control of the MAIN channel's fader(d).

- g). Bluetooth signal indicator.
- h). "REC Input Source" box: Touch to light the box and then turn the "parameter-adjust" knob on the front panel to select recorder input channels from BUS1-8 and the MAIN.

Note: Other buttons on the BT interface will have the same function as the OTG interface's.



#### 5.13 User Keys Interface

User can operate the display by following two optional ways to enter the USER KEYS interface as below:

- 1. Touch "USER KEYS" icon>>" User Key Setup" button on LCD screen to enter.
- 2. Touch "SYSTEM UNLOCKED" icon>> the "user keys" button on the LCD screen to enter.

Select anyone of item NO.1~NO.8 listed on the left of dispaly and then rotate the "parameter-adjust" knob to asssign the function you want on it as user keys. Total 8 user keys can be set with different functions such as USER LAYER, DANTE SETUP, MUTE GROUP, DCA SET UP, CH SELECT, Preset Reacall, MAIN MUTE SOLO, BUS SEND and TAP KEY and so on.

After setting completed, under common case the "▲" key lights is always on by default, The 4 physical user keys(U1-U4)located on the front panel will work as the shortcut keys to correspond to the settings of item NO.1~item NO.4 separately set on the "User key" interface. When the "▼" key illuminates by 3S pressing, The U1~U4 physical keys will switch to correspond to the settings of item NO.5~item NO.8 as shortkeys.





#### 5.14 Meters Interface

Touch "METERS" icon on LCD screen to enter meters interface as below:

User can view the audio signal display applied on the input /output channel based on Pre-fader or Post-fader setting by touching the "PRE" or "POST" button.





#### 5.15 CTRL Room Interface

Touch the "Ctrl Room" icon on LCD screen to enter "CTRL-ROOM"interface, and then user can choose solo channels or DCA group needed.

a). C-Room setting list. In each group the CH01-24 / BUS1-8/ FX01-02 / MTX1-6 and Main channel can be



- selected or adjusted with the button on front panel.
- b). Use it to solo the main channel automatically.
- c). Used it to switch between single channel and Multi channels, Touch to light the button to solo Multi channels simultaneously or solo the single channel when the button lights out by touching.
- d). Touch to light the "Pre fader" button and then the solo ouputs will be out of faders' control, if the "Pre fader" button lights out by touching, the solo outputs will be under the faders' control.
- e). Touch it to clear all solo settings.





#### 5.16 Patch Interface

Touch the "PATCH" icon on the LCD screen to enter the INPUT PATCH interface as below:



- a). Input Patch: Touch any channel on the interface to pop up a signal source list and then touch to select input signal source. Such as analog 1-16, digital 1-32 for CH01.
- b). Bus Mix Input: It is used to let input signal enter output bus directly without passing through the DSP processing of input signal. Audio can transmit once both input channel and BUS output selected.

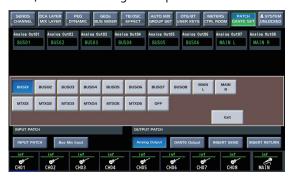


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Input Patch

Bus Mix Input

- c). Analog output: it is used to select which channels output from analog such as Analog1, If Bus01 selected, the signal of Bus01 will input from out1 of analog.
- d). Dante Output: It is used to select which channels output from Dante. E.g if Bus1 is selected for Dante out1, It means the signal output from Dante Out1 is Bus01.



GAMENTS

COLUMNIS

CONTROL

COLUMNIS

**Analog Output** 

Dante Output

#### e). Insert Send

Total 24 inserts (INS01-24 SEND) here and user can select any sound source among "analog 1-8" or "digital 1-32"as audio direct send and then output from corresponding ports by selecting "Analog output setting>>Analog Out01-10 "or" Dante output>>Dante Out01-32".

For example: selecting Analog 1 from "INS01 SEND", the CH01 signal will send and output from the port of "Analog output setting>>Analog Out01".

#### f). Insert Return

User can select "Analog 1-16" or "Digital 1-32" from "NIS01-24 Return" as sound sources to directly return. Select the INS channel under mono-channel page and click the "INS on" to enable it. E.g. Select "Analog 1" from" INS02 RETURN", Audio signal will input from CH01 and insert into CH02.

Then switched to mono-channel page by pressing the "channel" button on the panel or clicking "mono" icon on LCD screen. Select CH02 and turn on "INS On" button and then audio signal will input from CH02 and output from Bus/Main channel. That whether the signal level can be controlled by corresponding faders will be decided by operating the POST or PRE button.

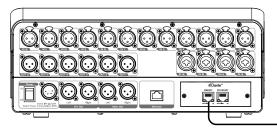




Insert Send

Insert Return

#### 5.17 Dante Set Interface





Touch the "Dante Set" icon on LCD screen to enter Dante setting page, firstly connect "digital audio extension system " to "mixer" with network cable according to above hooking diagram. Then touch "Scan" button to search, the name of linked devices will be listed.



Select the name of the digital signal receiving device:



In below box user can select the device and channel which will be sent.







#### 5.18 System Interface

Touch "System Unlocked" icon on LCD screen to enter below interface:



- a). "Enter" Button: Touch it to reconfirm once some parameters are changed so that current settings can be saved.
- b). "Device Setup" Button: Touch it to enter below interface:



01-01	Sampling Rate	48KHz and 96KHz as optional modes
01-02	Card Type	DANTE and NO CARD as two status, It shows DANTE if DANTE card inserted. And shows NO CARD if none card inserted.
01-03	Meter Peak holding time	infpermanent . 2sHoling 2 seconds OFFNone. Above three options
01-04	VERSION	Display the version information of current firmware
01-05	Device ID	Display current ID information

c). "Panel Setup" key: Touch it to enter below interface:



02-01	AUTO CHANNEL	Selecting ENABLE to open it and DISABLE to close it. If it opens, click the
02-01	SELECT	Mute/Solo button on one channel to be switched to the corresponding channel.
02-02	Auto Return	Three options can be selected such as 3min, 5min and OFF. After
02-02	Auto Return	relative function set, it will return to default interface upon time it up.
02-03	Default Page	Single Channel and Multi Channel as two options. It will return to the
02-03		selected page by default after setting.
02-04	Delay Unit	Meter and Millisecond as two options.
02-04	Delay Offic	Meter and Millisecond as two options.
02-05	Link Mode	Stereo Link and Fader Link as two options. Both modes can be linked
02-03	LITIK WIOGE	by fader. Difference means stereo link also has the function of channel link.
02-06	REMOTE SYNC	ENABLE selected to turn on and DISABLE selected to turn off. It will
02-00	KLIVIOTE STINC	synchronize with ipad if it turns on.
02-07	LCD brightness	The Province of the Province of the Publisher of A O
02-07	setting	The dimming can be adjusted based on the Lighting grade 1-8.

d). User setup: Click it to enter below interface, There are two options (ENABLE and DISABLE) for each item and user can setup according to actual needs.



03-01	Digital In/Out Level	ENABLE
03-02	Fader Gain	ENABLE
03-03	Channel Mute&Solo	ENABLE
03-04	Channel DSP Function	ENABLE
03-05	Channel FBC	ENABLE
03-06	Channel sends	ENABLE
03-07	Channel Copy	ENABLE
03-08	GEQ	ENABLE

5

e). Network setup: Click it to enter below interface:

NO.	ITEM	DESCRIPTION	SP€C
04-01	NETWORK	REMOTE CONTROL	CONTROL
04-02	NETWORK	MAC ADDRESS	0-A1-B0-F6-2-7
04-03	NETWORK	IP ADDRESS	192.168.1.101
04-04	NETWORK	IP MODE	DHCP

04-01	Remote control	CONTROL, MONITOR ONLY, DISABLE
04-02	MAC address	Display MAC address
04-03	IP Address	Display IP address
04-04	IP Mode	Two Optionals: Static / Dynamic

f). Audio setup, Click it to enter below interface:

NO.	пем	DESCRIPTION	SPEC
05-01	FBC	RESPONSE	FAST
15-02	FBC	SENSE	HIGH
05-03	FBC	RELEASE TIME	60 Seconds
05-04	REC	REC INPUT	BUS3-4
5-05	REC	REC LEVEL	-10dB
05-06	OUTPUT GEQ	OUTPUT GEQ1-2	BUS1 - 2
05 - 07	OUTPUT GEQ	OUTPUT GEQ3-4	MAIN LR

05-01	Release	FAST and SLOW as response speed can be selected here
05-02	FBC Speed	Three optonal speed ( LOW/MID/HIGH) for FBC sensing speed.
05-03	FBC Release Time	Time can set as 30s, 60s, 5m, 10m, 15m, 30m, 60m, 2h, 3h, 4h, 5h, 6h, 7h, 8h, 24h total 15 kinds of options.
05-04	Recording setting	Available to set as BUS1-2, BUS3-4, BUS5-6, BUS7-8, MAIN LR as recording inputs.
05-05	Recording level	Set the level from -15dB to 10dB and -10dB set by defaulted
05-06	GEQ Output 1-2	Available to set as BUS1-2, BUS3-4, BUS5-6, BUS7-8, MAIN LR channel, Click "GEQs" icon on GEQ interface and then select GEQ01 or GEQ 02, User can call related settings applied on corresponding channels.
05-07	GEQ Output 3-4	Available to set as BUS1-2, BUS3-4, BUS5-6, BUS7-8, MAIN LR channel, Click "GEQs" icon on GEQ interface and then select GEQ03 or GEQ 04, User can call related settings applied on corresponding channels.

- g). User Keys: Use it for shortcut settings, Details as 5.13 User Keys Interface.
- h). Safe Setup.

Under normal recall scene, all mixing parameters will be setup. In some cases, user can user can save existing settings applied on some channels by safe recall function. That either to setup parameters of safety-calling function applied on each scene or to setup overall parameters of safety-calling function applied on all scenes is available.

It will enter the safe recall interface through each of following two optional ways:

- 1). Orderly touch the "system unlocked" icon>>"SAFE Setup" button on LCD screen to enter the safe recall interface.
- 2). Orderly touch "Channel" icon>>"FUNCTION" button>>"Load" button >>"Safe recall ON" button on LCD screen to enter the safe recall interface.





Operation instruction of safe recall function

1). SAFE SETUP FOR CHANNEL(Step#1)

Follows shows the directions for checkbox of channel parameters, Enter below interface to check the checkbox on the right, Then these parameters saved in the scene memory will be recall. These corresponding parameters will be neglected if no check the checkbox.





• PRE AIVIP	Enable to recall the gain parameters applied on PRE AMP of Channel.
• MUTE	Enable to recall the parameters applied on mute channels.
• DELAY	Enable to recall the parameters applied on delay channels.
• Volume controller	Enable to recall the parameters applied on volume or level knob.
• GATE	Enable to recall the parameters applied on channel gates.
• COMP	.Enable to recall the parameters applied on channel compressions.
• EQ	Enable to recall the parameters applied on channel EQ.
• TO MAIN	.Enable to recall the parameters applied on the MAIN outputs.
• SEND	Enable to recall the parameters applied on channel assignment.
• SEND ON	Turn on the recall function to assign parameters applied on channels.

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#### 2). RECALL SAFE MODE(Step#2)

"APPLY ALL" button: After completing the step#1, Click it to recall all parameters selected to apply on all channels.

"CLEAR ALL" button: After completing the step#1, The all selections of corresponding through step#1 will be cancelled if click the button.

"RESET ALL" button: After completing the step#1, it means to repeat the step#1 to recheck corresponding parameter-boxes if click the button.

#### 3). SAFE MODE ON

Enable or disable the safe recall mode with this button

• NAME.....Enable to recall the channels' name.

#### 4). SAFE SETUP FOR OTHERS

Following shows the directions how to apply safe-setup for other parameter items.

- DAC ASSIGN.....Enable to recall the DAC-ASSIGN parameters. • MUTE ASSIGN......Enable to recall the MUTE-ASSIGN parameters. • IN/OUT PATCH......Enable to assign the parameters applied on IN/OUT patch. • GEQ SETUP.....Enable to recall the parameters of GEQ SETUP. • FX SETUP ......Enable to recall the parameters of FX SETUP. AUTOMIX SETUP.....Enable to recall the parameters of AUTOMIX SETUP. • DANTE SETUP.....Enable to recall the parameters of DANTE SETUP. • USER LAYER SETUP.....Enable to recall the parameters of USER LAYER SETUP.
- SYSTEM SETUP......Enable to recall the parameters of SYSTEM SETUP(spectrum analysis ON/OFF, Auto solo for the MAIN, Digital level control, Background audio attenuation, Audio setup)
- i). Mute Group Setup: Please refer to 5.11 group setting interface for more details.
- j). Patch, Please refer to 5.16 PATCH for more details.
- k). Dante Setup: Please refer to 5.17 Dante setting interface for more details.
- I). Auto MIX setup: Please refer to 5.10 Auo mix interface for more details.
- m). Digital Level Control: Click it to enter below interface:



#### **Digital Signal Input**

Touch the "system unlocked" icon>>"Digital level control" button>>"Input channel" button on LCD screen to enter above interface, The OdB set for the ON-status channel by default, Touch to light the corresponding paramter-box and then rotate the "parameter adjust" knob to adjust the gain value according to actual requirement.

5

#### **Digital Signal Output**

Touch the "system unlocked" icon>>"Digital level control" button>>"Output channel" button on LCD screen to enter above interface, The 0dB set for the ON-status channel by default, Touch to light the corresponding parameter-box and then rotate the "parameter adjust" knob to adjust the gain value according to actual requirement.



- n). Default Setting: Touch the button to pop up prompt information "Are you sure to reset to default settings ", Click "OK" to confirm to restore defaulted settings. It means related DSP parameters user customized will restore to the defaulted value.
- o). Update software: Touch the button to key in the passwords in pop-up prompt information, Or press the shortcut keys"View +Main Solo" to enter the software update interface. User can won the updated software from your supplier or log onto the official network to loaddown the updating package of software & images.
- p). User keys setting, please refer to the 5.3 user layer interface for more details.
- q). DCA setting , Please refer to the 5.11 group setting interface for more details.
- r). Password setting button: Touch it to enter the password setting interface.



#### s). Locked/unlocked mode

Touch the "locked" button to pop up a tips "Are you sure to lock the machine?", CLick "OK" to enter locked mode. Under the lock mode, it is subject to the settings of "user setting" and disable function is invalid. A password dialogue frame will pop up once user clicks the locked function, Click it again to key in the passwords and then it will switch into system unlock mode from lock mode.











t). Current setting and device name will be displayed here, Click correspond setting box to pop up a virtual keyboard, User can customize the current settings and device name.



u). Factory Setting: Touch it to enter below interface and key in initial password and then all set parameters will restore to the factory setting.





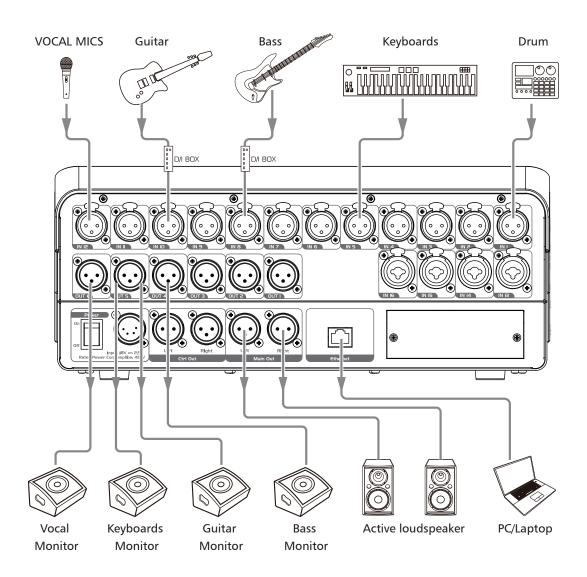
## **Software Update**

Since function of the Digital Mixer will also change when you update the software, this manual can help you familiar with the basic function, for the precision, please refer to the real digital mixer.

We will always update the Digital Mixer software. Please contact with the supplier or download the package of updated software & images from the official network to upgrade your software.



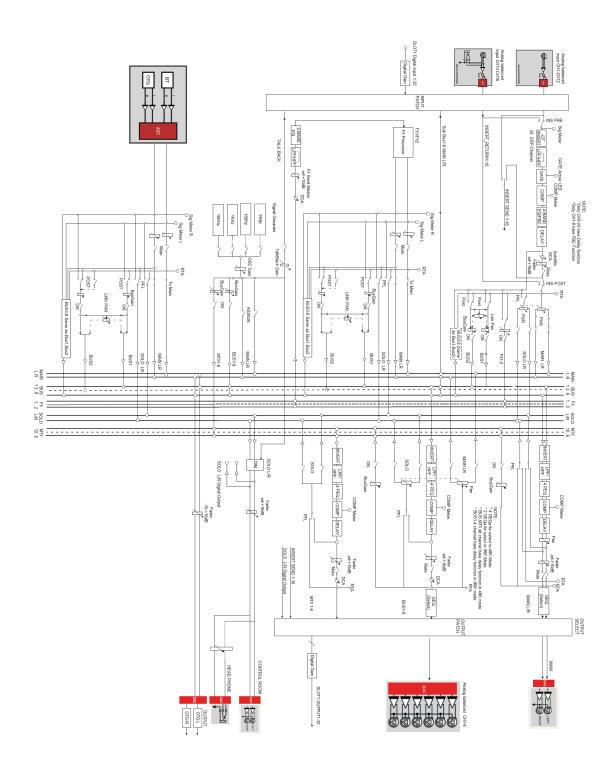
## **Hookup Diagram**





## **Block Diagram**









## **Technical Specification**

Frequency Response	22Hz~20KHz at 0dBu +1/-2.5dB
Distortion(THD&N)	<0.03% at 0dBu 1KHz
SNR(Signal to Noise Ratio)	107dB
Maximum XLR Outputs Level	+20dBu ±0.5dB
Maximum HeadPhones Output Level	+20dBu ±0.5dB
Input to Output Crosstalk (at +0dBu 1KHz)	<-105dBu
Adjacent Channels Crosstalk (at +0dBu 1KHz)	<-105dBu
Bus Noise	<-89dBu
ADC Dynamic Range	113dB
DAC Dynamic Range	113dB
Internal Processor	32-bit , floating point
ADC bit depth	32bit
DAC bit depth	24bit
Input Impedances	6.8ΚΩ
Output Impedances	120Ω
Noise Gate	
Threshold Range	-84dBu ~ +19dBu
Attack time	0mS ~ 250mS
Release time	5mS~2S
Compressor	
Threshold Range	-83dBu - +20dBu
Attack time	0mS ~ 250mS
Release time	5mS ~ 2S
Ratio	1:1 to 40:1,inf:1
Gain	0dB - +12dB
EQ	
Low (LowPass or LowShelf)	20Hz~20KHz ±(15db±2db)
Low Mid	20Hz~20KHz ±(15db±2db)
High Mid	20Hz~20KHz ±(15db±2db)
High(HighPass or HighShelf)	20Hz~20KHz ±(15db±2db)
Dimensions	349*452*147mm
Weight	6.7 kg



Notes	



	Notes



#### **Guarantee**

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**Topp Pro** guarantees the normal operation of the product against any defect of manufacture and / or vice of material, by the term of (12) months, counted as of the date of purchase on the part of the user, committing itself to repair or to change, to its election, without position some, any piece or component that will fail in normal conditions of use within the mentioned period.

This guarantee is valid if the original buyer will have to present/display this certificate properly sealed and signed by the selling house, accompanied by the corresponding invoice of purchase where it consisted the model and serial number of the acquired equipment.

The guarantee does not cover:

- Damages caused by the illegal use of the product, repair and/or nonauthorized modification conducted by people by **Topp Pro**.
- Damages caused by the connection of the equipment to other equipment different from the specified ones in the manual of use, or by bad connection to these last ones.
- Damages caused by electrical storms, blows and/or incorrect transport.
- Damages caused by excesses or falls of tension in the network or by connection to networks with a tension different from the required one by the unit.
- Damages caused by the presence of sand, acid of batteries, water, or any strange element inside the equipment.
- Deteriorations produced by the course of the time, use and/or normal wear of the unit.
- Alteration or absence of the serial number of factory of the equipment.

The repairs could only be carried out the authorized technical service by **Topp Pro**, that will inform about the term and other details into the repairs to take place according to this guarantee.

**Topp Pro**, will repair this unit in counted a term nongreater to 30 days as of the date of entrance of the unit to the Technical Service. In those cases in that due to the particularitity of the spare part, outside necessary their import, the repair time and the viability of the same one will be subject to the effective norms for the import of parts, in which case one will inquire to the user about the term and possibility into repair.

With the object of its correct operation, and of the validity of this one guarantee, this product will have to be installed and to be used according to the instructions that are detailed in the manual associate or the package of the product.

This unit will be able to appear for its repair, next to the invoice of purchase (or any other proof where the date of purchase consists), to its authorized distributer Topp Pro or an authorized technical center on watch by **Topp Pro**.

#### **Exclusion of damages:**

THE RESPONSABILITY OF **TOPP PRO** BY ANY DEFECTIVE PRODUCT IS LIMITED THE REPAIR OR THE REPLACEMENT OF HE HIMSELF, TO TOPP OPTION PRO. IF WE CHOSE TO REPLACE THE PRODUCT, THE REPLACEMENT CAN BE A RECONDITIONATED UNIT. TOPP PRO WILL NOT BE RESPONSIBLE BY THE DAMAGES BASED ON THE LOST, INCONVENIENCE, LOSS OF USE, BENEFITS, LOST SAVINGS, BY THE DAMAGE TO OTHER EQUIPMENT OR OTHER ARTICLES IN THE USE SITE, OR BY ANY OTHER DAMAGE IF HE IS FORTUITOUS, CONSEQUENT OR OF ANOTHER TYPE, ALTHOUGH TOPP PRO HAS BEEN NOTICED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states do not allow to the exclusion or the limitation to the fortuitous or consequent damages, so the aforesaid limitation can not be applied to you.

This guarantee gives specific legal rights him, you you can also have other right that varies of state to state.



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