# <u>PROPHON</u>

# MANUAL, QUICK-GUIDE PDSP-SERIES

4 channel system amplifiers with DSP















# Warning!

- Caution: to avoid electric shock hazard, do not remove cover plate, open, or disassembly in any way, there is no repairable parts inside, contact qualified trained professional for repair and service!
- To avoid fire, damage to product, and/or electrical shock, this equipment cannot be exposed to rain, water or humid environments
- This equipment is intended for professional and commercial use only, not for home use.
- This equipment is capable of (through loudspeakers) producing high SPL (Sound Pressure Levels) that can be damaging for ears and hearing, due to high levels or long time exposure.

There are different standards and regulations in each country, make sure to respect and follow local laws regarding SPL. To be safe, avoid prolonged exposure to volumes exceeding 90 dB, short bursts of high SPL can also be damaging to ears and result in hearing loss and / or tinnitus, please keep volume down.

- Keep away from water, rain, moisture, humid environments.
- Read and understand the manual before installing or using.
- Pay attention to all warnings!
- Use and install the equipment only in the intended manner.
- This equipment may not be tempered with or in any other way changed to be used in a way it was not intended to by the manufacturer
- Clean and wipe only with dry cloth, not with wet cloth.
- The highest ambient temepature is 50° C (122° F)
- Do not restrict or in any way obscure or block the ventillation intake in the front, or outlet in the back
- This equipment uses ventillation cooling systems with fans, when installing make sure there is enough free intake air in front of the amplifier to cool the equipment, and make sure there is enough space for the hot outlet air to dissapate behind the amplifier.
- Do not install heat generating equipment above, below, in front of or at the back of this amplifier.
- This equipment must be earthed, Do not cut earth on the power in for omiting ground loop.
- Protect all connectors in the back, especially the mains Power input connector
- This equipment needs to be serviced regularly for prolonging the life-span and to make sure the equipment is safe, make sure the mains power is disconnected before service, only qualified personnell may service this equipment.
- If the amplifier in any way act suspiciusly disconnect the blue power input powercon connector.
- This product is not equipped with an All-Pole power switch, to completely disconnect from the AC power the AC connector must be unplugged from the AC socket.
- Make sure the mains voltage and frequency match the values specified before connecting the amplifier to the mains.
- Rack mount equipment must have reliable grounding.
- Only use accessories and attachements shipped with the product, or buy original accessories from authorized supplier.
- For personnel safety we recommend that all electrical products are connected to a RCCB (Residual current circuit breaker) and that the equipment is earthed.
- During lightning storms and / or during time when the amplifier is not used, disconnect the power-in cord.
- This device must be maintained and serviced by qualified personell only, if the amplifier do not work properly or work faulty only qualified personell may repair.
- If the product is dropped, or in any other way misshandled it must be verified by qualified service-personnel before use.
- Never place objects containing liquid close to or on top of this device.
- When mounting in a rack, never mount more than four amplifiers, due to heat dissapation issues.
- Avoid switching the on/off switch in quick succession, it can cause the equipment to have a shorter life-span.
- Only replace fuses with same type and with same value, only qualified personnell may change fuses.
- When disposing of this equipment, make sure you comply with the laws within your country,
- Sort and seperate plastic and cardoard for a better environmet.



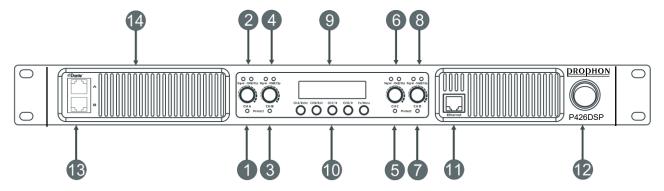
## 1.Product introduction

First of all, thank you for purchasing this network power amplifier. This power amplifier has the characteristics of small size, light weight, high efficiency, DSP processing, networking, and good sound quality.

# 1. 1 Power amplifier characteristics

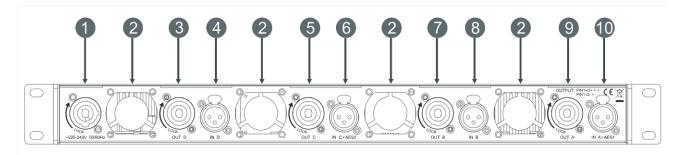
- The latest Class D amplifier technology ensures high-quality sound output accuracy.
- High efficiency switching power supply, power supply efficiency greater than 85%, low heat loss.
- DC protection, short circuit protection, overload protection, temperature control protection.
- High-performance DSP digital signal processing, each channel supports input/output EQ, frequency division, compressor limit, delay (0-1S).
- Each channel contains independent load detection to detect speakers.
- TCP/IP network monitoring and debugging.
- Audio source supports analog signal, AES digital signal, DANTE network signal(Optional with Dante Module).
- Support input, output signal matrix routing.

#### 1. 2 Front Panel Features



- 1. Channel Avolume control knob
- 2. Channel A indicator
- 3. Channel B volume control knob
- 4. Channel B indicator
- 5. Channel C volume control knob
- 6. Channel C indicator
- 7. Channel D volume control knob
- 8. Channel D indicator
- 9. LCD display screen
- 10. Menu operation edit button area
- 11. Network connection interface
- 12. Power switch
- 13. Network audio interface
- 14. Vents

#### 1. 3 Rear Panel Features

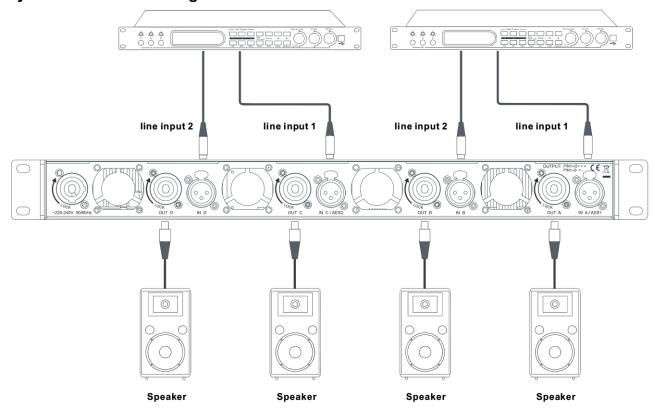


- 1. AC outlet
- 2. Cooling fan
- 3. Channel D output
- 4. Channel D input
- 5. Channel Cinput

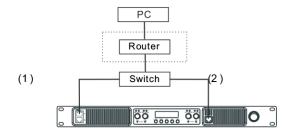
- 6. Channel Cinput
- 7. Channel B input
- 8. Channel B output
- 9. Channel A output
- 10. Channel A input

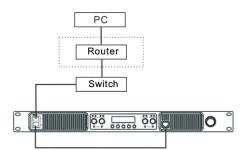


# 1. 4 System connection diagram

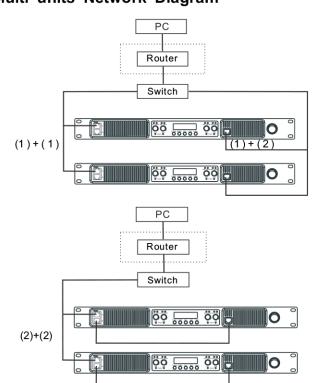


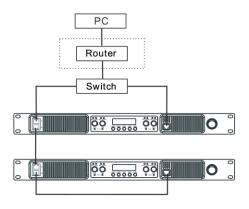
# 1. 5 Single Unit Network Diagram





# 1. 6 Multi-units Network Diagram







# 2. Basic operation instructions

#### 2.1 Boot steps

- Make the input and output volume of all channels minimum.
- 2. Check whether the load is consistent with the power of the amplifier. Inconsistent is not recommended.
- 3. Connect the input and output correctly.
- 4. Check if the input and output are short-circuited.
- 5. Make sure all channel input and output volume is minimized.
- 6. Turn on the amplifier and turn on the input and output.
- 7. Slowly turn up the volume until the volume is adjusted to the appropriate level.

#### 2.2 Buttons Function Description

This device has five buttons , four encoders, and five buttons from left to right are [ChA/Enter], [ChB/Exit], [ChC/ $\blacktriangleleft$ ] , [ChD/ $\blacktriangleright$ ] and [Fn/Menu]. The four encoders correspond to the volume adjustment of channel A and channel B, channel C and Channel D from left to right.

- 1. Press the [ChA/Enter] button: to adjust the channel A's mute and pass through in the main interface, and to confirm the current selection in the menu interface.
- 2. Press [ChB/Exit] button: to adjust channel B's mute and pass-through in the main interface, and exit the current selection when in the menu interface.
- 3. Press [ChC/◀], [ChD/▶] button: When the device is in two channels, it has no effect on the main interface (in the case of four channels, the main interface is used to adjust the mute and pass of C and D channels respectively). Select and adjust parameters in the menu interface.
- 4. Press [Fn/Menu] button: It is used to switch between the menu interface and the main interface.

#### 2. 3 Parameter Adjustment Instructions

After entering an interface , it is not possible to adjust the parameters inside immediately, but you can press 【ChC/
■1、【ChD/▶】 buttons to continue to select the

**◄]** . [ChD/▶] buttons to continue to select the parameter interface to be adjusted.

After confirming the interface for adjusting parameters, press [ChA/Enter] to enter the parameter selection mode. At this time, the selected parameter will display in reverse color (the interface with fewer parameters will skip this step). Press the 【ChC/◀】、【ChD/▶】 buttons to continue selecting the parameters to be adjusted. Press the [ChA/Enter] button to enter the editing mode after the parameters need to be adjusted. At this time, the normal display will be restored and a flashing subscript indication will appear. At this time, the parameters can be adjusted by pressing the 【ChC/

**◄**], 【ChD/▶】 buttons.

Press [ChB/Exit] button to exit the current step, press [Fn/Menu] directly to return to the main interface. The long press of the button in this manual refers to holding down the button for more than 3 seconds, and releasing it less than 3 seconds is a short press. Unless otherwise emphasized that a long press, the present specification, the "Press xx" refer to short press. Note: The menu description and frame structure in this manual are used for the general description of the device. However, as the version is updated, the actual device display and function parameters you use probably will not exactly match the instructions.

The company reserves the right to make changes to the products described in this manual without prior notice.

#### 2. 4 Volume adjustment

In any interface, as long as the encoder is rotated, the volume of the corresponding channel can be adjusted. After the non-main interface rotates the encoder and no operation is performed for a short period of time, it returns to the previous operation interface.

Pressing the [Ch A / Enter] button on the main interface will switch the channel A mute/restore, and pressing the [Ch B / Exit] button will switch the channel B mute/restore,and pressing the 【ChC/◀】 button will switch the channel C mute/restore,and pressing the 【ChD/▶】 button will switch the channel D mute/restore. In the non-main interface, press the 【Fn/Menu】 button to switch to the main interface and perform the above operation.

**Note**: For ease of use, the encoder is only used as a channel volume adjustment and cannot be used to adjust other parameters.

#### 2. 5 Straight through adjustment

Long pressing the [ChA/Enter] button on the main interface will switch the channel A through/restore. Long Pressing the [ChB/Exit] button will switch the channel B through/restore. Long Pressing the [ChC/◀] button will switch the channel C through/restore. Long Pressing the [ChD/▶] button will switch the channel D through/restore. In the non-main interface, first press the 【Fn/Menu】 button to switch to the main interface and then perform the above operations. During the pass-through, the "through" of the main interface of the current channel will be highlighted. At this time, the input and output balance settings of the current channel will not work. After cancelling the direct pass, the function will be restored.

#### 2. 6 Menu adjustment

Press [Fn/Menu] button on the main interface to switch to the menu adjustment interface. Short press this button to the main interface.

## 3. Function description

## 3. 1 Normal boot process

1. Connect the power cord, press the power switch, and the product name and version number will appear on the display.

Network Amplifier V1.0.0

2. The device then starts to load data. When the device finishes, the main operation interface is as below. The upper right corner of the main interface shows the current device's IP address. The middle display shows the channel pass–through status and volume of different channels from left to right respectively.

Prog:M IP:..10.93 BP BP 0 0 (db)



#### 3. 2 Main interface

- 1. After normal boot, enter the main display interface.
- 2. Turn the knob to adjust the channel volume.
- 3. Press 【ChA/Enter】、【ChB/Exit】、【ChC/ $\blacktriangleleft$ 】、【ChD/ $\blacktriangleright$ 】 to adjust the mute/restore of channels A, B, C and D.
- 4. Long press [Ch A /Enter], [Ch B / Exit], 【ChC/◀】、【ChD/▶】 to adjust channels A, B, C and D Pass/restore.
- 5. Short press [Fn/Menu] to switch to menu selection. The volume parameter is as follows

  Music volume: Mute, -100dB~0 dB, step 0.5dB.

#### 3. 3 Input mode

Enter the menu selection list interface, move the cursor to indicate the input mode, press [Ch A /Enter] button to enter the input mode menu.

#### 3. 3. 1 Input Channel Switching

After enter into the input mode menu, press [Ch A /Enter] button to enter into the parameter adjustment function.

Press 【ChC/◀】、【ChD/▶】 to select the channel parameters, and then press [Ch A /Enter] button to enter into the parameter adjustment interface. Press 【ChC/◀】、【ChD/▶】 to switch the input channel interface.

Press [Ch B / Exit] button to return to the menu selection list.

## 3. 3. 2 Input Mode Selection

After entering the input mode menu press [Ch A /Enter] button to enter the parameter adjustment function, press [ChC/◀]、[ChD/▶] to select the input mode parameters, and then press [Ch A /Enter] to enter the parameter adjustment interface. A blinking underline icon will appear in the modifiable parameters section. Press [ChC/◀]、[ChD/▶] to adjust the parameters. Press

[ChC/◀] 、 [ChD/▶] to adjust the parameters. Press [Ch B / Exit] to return to the input channel switching function step by step.

Input mode includes analog mode, AES mode.
Analog mode: Used for analog signal input.
AES mode: Used for AES signal input.
The input mode switch is adjusted simultaneously in pairs.
According to the different needs of the signal source in the input mode to switch to the corresponding input mode, otherwise there will be no output.

#### 3.3.3 Noise Generator Settings

noise switch is on.

After entering the input mode interface, press 【ChC/▶】 key to switch to the noise parameter interface, press [ChA / Enter] button to select the parameter to be adjusted, use the 【ChC/◀】、【ChD/▶】 buttons to adjust.

Generator mode: Used to generate white noise, pink noise, inside the device.

The parameter range is as below:
White noise: On/Off, -100dB~0dB, Step 0.5dB
Pink noise: On/Off, -100dB~0dB, Step 0.5dB
Note: The generator must be turned on, and the white
noise/pink noise signal is output only if the white noise/pink

#### 3. 4 Route management

Route management includes input routing and output routing, which can adjust the routing settings of the input and output channels. The input route refers to route processing when the signal is input, for example, channel A input is routed to channel B. The output route refers to performing certain processing on the input before performing route processing. For example, the channel signal is equalized and then routed to channel B for subsequent processing.

**Note:** The route management can only be adjusted through the GUI interface. When using it, you need to go online through the GUI. For details, please refer to the GUI help documentation.

#### 3. 5 Program Management

Enter the menu selection list interface, move the cursor to the program management, and press [Ch A /Enter] button to enter the program management menu.

#### 3. 5. 1 Program call

In the program management menu interface, move the cursor to the program call and press [Ch A /Enter] to enter the program call sub-interface. If no program is currently available, it will return directly to the program management interface.

After entering the program call sub-interface, press the 【ChC/◀】、【ChD/▶】 buttons to select the program to be called, and press [Ch A /Enter] to enter the call confirmation interface. The steps for confirming the operation are described below.

#### 3. 5. 2 Program storage

In the program management menu interface, move the cursor to the program storage and press [Ch A /Enter] button to enter the program storage sub-interface.

After entering the program storage interface, press the [ChC/◀]、[ChD/▶] buttons to select the saved program number, and press the [Ch A /Enter] button to switch to the storage confirmation interface. The steps for confirming the operation are described below.

#### 3. 5. 3 Program deletion

In the program management menu interface, move the cursor to the program deletion and press [Ch A /Enter] button to enter the program deletion sub-interface. If no program is currently deleted, it will return directly to the program management interface.

After entering the program storage interface, press the 【ChC/◀】, 【ChD/▶】 buttons to select the program number to be deleted. Press the [Ch A /Enter] button to switch to the delete confirmation interface. The steps for confirming the operation are described below.

#### 3. 5. 4 Steps for confirming the operation

When the program is called, the program is stored, or the program is deleted, the operation confirmation interface will jump to the operation confirmation interface. Pressing the 【ChC/▶】 once will activate the current operation. Pressing the 【ChD/◀】 once, the current operation will be canceled and return to previous interface.

# 3. 6 Device Settings

#### 3. 6. 1 Device Lock Settings



Panel locking is mainly to prevent mis-operation or to prevent parameter mis-adjustment in case of interference, and limit other users' changes to the parameters and functions of the device. Support operation panel lock/unlock and GUI lock/unlock:

1. The operation panel lock/unlock:

Enter the device settings menu, select the device lock, and press [Ch A /Enter] to enter the device lock interface. Enter the password as required, then move the cursor to lock/unlock and press [Ch A /Enter] to confirm.

#### 2.GUI lock/unlock:

After connecting online, click on the "panel lock "in the upper right of the GUI main interface to enter the password to unlock the device.

The password can be entered up to 8 digits, each digit can be entered as 0~9 or a space. The unlock password must be the same as the password set. Otherwise, the unlocked password cannot be unlocked. Remember the set lock password.

#### 3. 6. 2 Device TCP/IP Settings

The TCP/IP settings are used for online operation with the GUI. Proper configuration ensures online accuracy and stability. The default setting is to automatically obtain an IP address, this is also the recommended method of use, but you can also set the IP address manually as required. The method is as below:

Enter the device setting menu, select the device TCP/IP settings, and press [Ch A /Enter] to enter the setting interface. Move the cursor to change the DHCP mode to "NO" first, and then modify the IP, MASK (subnet mask). The specific setting depends on the LAN, refer to the computer's TCP/IP settings. After modifying the parameters, press [Ch A /Enter] to confirm and save. Note: When the device is directly connected to the computer, please select to automatically obtain IP. When manually setting the IP address, make sure that the computer and the device are in the same local area network. The set IP address is also in the same network segment, for example, the computer's IP address is 192. 168. 10. 5. Then the IP address of the device must be set to 192. 168. 10. xxx (xxx represents any number between 0 and 255), not others. At the same time, the correct subnet mask must be set according to the IP address.

#### 3. 6. 3 Device Restore Factory Settings

Enter the device settings menu, select the device to restore the factory settings, press [ChA/Enter] to enter, and then follow the steps to complete the recovery operation. Restoring factory settings will erase all saved programs and current parameters. Please operate with caution.

#### 3. 6. 4 Device Language Selection

Enter the device settings menu, select the device language, and press [Ch A /Enter] to enter. Select the appropriate language in English or Chinese.

# 3. 6. 5 Device Version Display

Enter the device setting menu, select the device version, and press [Ch A /Enter] to enter the current software version. The result of the display is determined by the software version and cannot be modified.

#### 3. 7 Channel Parameter Settings

After entering the channel parameter setting interface, press the  $[ChD/\triangleright]$  button to select the parameter interface to be modified, and press [ChA/Enter] to select the parameter to be modified by pressing  $[ChC/\blacktriangleleft]$ ,  $[ChD/\triangleright]$ .

#### 3. 7. 1 Input Equalizer Parameters

Input Equalizer: 6 Band

Type: PEQ / Low Pass / High Pass

Frequency: 19. 7Hz~20200Hz

Gain:  $-15dB^{\sim}+15dB$ , Step 0.5dB

Band width: 0. 011~3. 595

#### 3. 7. 2 Frequency division network parameters

High-pass/Low-pass filter

Slope: 12dB/18dB/24Db/30dB/36dB/48dB Type: Bussel/Butterworth/Linkwitz-Riley

Frequency: 19. 7Hz~20200Hz

Gain:  $-15dB^{\sim}+15dB$ , Step 0.5dB

Bandwidth: 0. 011~3. 595

Polarity: +/-

#### 3. 7. 3 Output Equalizer Parameters

Output EQ: 8 band
Types: Parameter

Frequency: 19. 7Hz~20200Hz

Gain: - 15 dB ~ + 1 5 dB , Step 0. 5dB

Bandwidth: 0. 011~3. 595

#### 3. 7. 4 Delay setting

After entering the channel parameter setting interface, press the 【ChD/►】 button to select the parameter interface until the delay parameter setting interface appears. The parameters correspond to the delay of each channel, the delay range is 0~1s, and the step is 21us.

Select the delay to be modified, press the [Ch A/Enter] button, and press the [ChC/◀] and [ChD/▶] buttons to modify the parameters while the cursor is blinking. The lower left "ON" and "OFF" are the delay function switches. If the display is "ON", the delay of the current channel is already in effect.

The delay is displayed in three units of milliseconds (ms), feet (ft), and meters (m) simultaneously, where feet and meters are converted in milliseconds. Adjust any one of these values, and other displays will be modified accordingly.

#### 3. 7. 5 Limiter Settings

After entering the channel parameter setting interface, press the 【ChD/►】 button to select the parameter interface until the limiter parameter setting interface appears. This interface sets the output limiter level, which is divided into four levels of OFF, -3dB, -6dB, -9dB, and -12dB, and will take effect after the parameters are switched. There is no limit in the closed state.

#### 3. 7. 6 Channel Copy and Link

Channel copy is used to copy the parameters of one channel to another, avoiding the cumbersome setting of repetition, but the two channels are independently adjusted afterwards. The channel link is to link two channels together on the basis of channel replication, and then adjust the parameters of any channel, and the other channel will also change.



#### 3.7.7 Load Detection Menu (GUI Only)

The load detection function is used to test the operating status of the speaker in each frequency band. Click to open, the device will produce a sine signal with a frequency that gradually changes from 19.7Hz to 20.2KHz, and then detect the feedback of each frequency band to determine the working status of the speaker. This function can only be operated through the GUI interface. When it is used, it needs to be online through the GUI. It can draw and record the load curve.

**Note**: When scanning the load, please disconnect the external input of the amplifier first, when the GUI scans the load, the interface cannot be closed before the scan ends.

#### 4. Device manual reset function

Turn the power on while holding down the [Fn/Menu] button, and wait for the display to show "Reset ..."

When prompted, let's wait for the device to reset completely. After the reset is successful, the main interface will be displayed. The reset operation will clear all saved program data. Please operate with caution.

You can also enter the device settings menu interface, select the device to restore the factory settings, and then follow the prompts to complete the operation.

#### 5. PC software installation

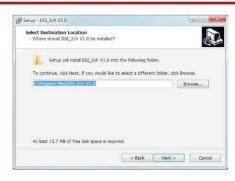
- 5.1 Insert the software installation CD provided in the attachment, open the CD and select Setup.exe to install it.
- 5.2 Installation menu appears, select the desired language and click OK to install.



5.3 Click OK to proceed with the installation.



- 5.3 The software will tell you about the installation path.
- 5.4 Follow the software operating procedures until the installation is complete.



# 6. PC software online operation

Make sure the computer devices are properly connected, open GUI to operate after waiting for the device's LCD main interface shows IP address correctly.

(1) Click the GUI interface menu bar settings -> connection settings, enter the connection settings interface, as below:



(2) Click Scan. If the connection is normal, the device IP address will be dispalyed as below:



(3) Select the device that needs to be connected, click on the connection in the upper right corner, then start to read the data to connect, the device will be displayed on the device list, and return to the main interface after the connection is completed to perform other operations. Tap the online button again to disconnect.



Two channel device's software main interface is as below:



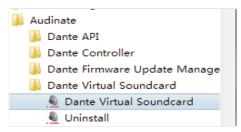


Four channel device's software main interface is as below:

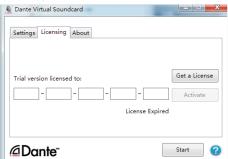


# 7. Dante control function (optional

- (1) Configure the Dante routing of the GUI interface and connect the network cable.
- (2) open Dante Virtual Soundcard software.



(3) Enter the registration interface and register the corresponding license



(4) Click Settings, select WDM interface, click start.

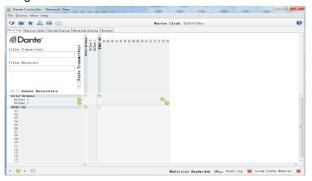


(5) Open Dante Controller software again.

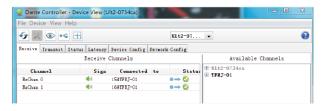


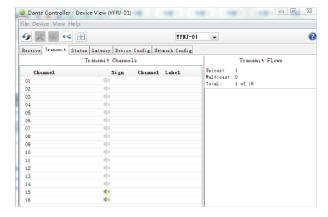
As shown in the below figure, connect the output to the four green ones  $\checkmark$ , which indicates the channel selection. The

selected channels are 15 and 16 channels respectively corresponding to the two receiving ports of the Dante board. For the specific channels, see the virtual sound card settings.



When the connection is normal, click on the Device View to see the device status. At this time, there is signal transmission, you can see the Sign status bit turns green on the Dante Receive interface, and see the sign status of the 15 and 16 channels on the Transmit interface of the PC. Bit becomes green.





# 8. Computer interface software communication control function

- (1) Control all parameters and functions of the device through the computer interface software (GUI). After connecting online, the panel cannot be operated.
- (2) Communication functions include system parameter setting and reading, audio parameter adjustment, program management and other functions.
- (3) System parameter setting and reading include: setting of configuration parameters, read level, plus/disable function lock and other audio parameter adjustments include adjustment of the audio processing related parameters of each channel.
- (4) The program management can read, write, recall, save, and delete the data of 30 user programs.
- (5) Computer Interface Software Instructions, please click the "Help" button in the reference software and refer to the pop-up documentation.



# 9. Necessary online control tips

Before users perform online control operations, be sure to read the following precautions carefully, otherwise, the risk of abnormalities such as going offline and crashing the computer during online control will increase.

- (1) In order to ensure that the machine is in the normal working range, please check whether the AC power supply (AC) meets the scope of the machine before use.
- (2) If conditions permit, the AC power outlet must have a ground connection setting. And have a grounded power supply connected to the computer and the machine.
- (3) Do not repeat installation of the control program of the same version or model in the computer.
- (4) On-line control operations should be avoided under strong signal interference.
- (5) The following actions may cause the online control to fail and may even damage the device or the computer:
- a. Before implementing the connection, please do not plug in the online interface on the machine after the machine is turned on.
- b. After successful connection, please do not move the computer, device and online control line.
- c. After successful connection, please do not use the device panel operation, including touching any button on the device.
- d. After connecting successfully, please do not plug or unplug the connector of the device or personal computer.
- e. Upon successful connection, please do not open the same type of on-line control software on your computer.
- f. After successful connection, please do not use a computer to control multiple different devices.
- (6) Please refer to "important safety matter" contents in "use instructions" of machine.



1. Computers could be with Online Control





2. Computer interface could be with online control

3. AC power grounding indicator

#### 10. Random accessories

Accessory name	Quantity	
Product Software CD	1 piece	
Product User Guide	1 book (This file)	

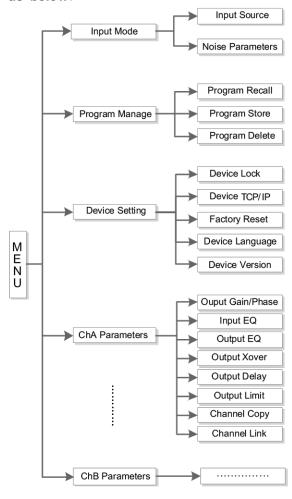
# 11. Common Troubleshooting Guide

Fault phenomenon	Method of exclusion	
No display on the device LCD	Check if the power cord is connected     The power switch is turned on	
Device and Computer Interface Cannot Connect Online	Check if the network cable is properly connected     Check if the interface software matches the device version     Check if the IP address is correct     Close the interface software, and then open the interface software online in administrator mode	
Output channel without output	1. Make sure the input is normal 2. Ensure that the output to the amplifier, speaker circuit is normal 3. Check the input mode selection is correct 4. Check if the route setting is correct 5. Restart the device and reset it if there is no output 6. Cannot be resolved after multiple reboots, please contact the dealer	

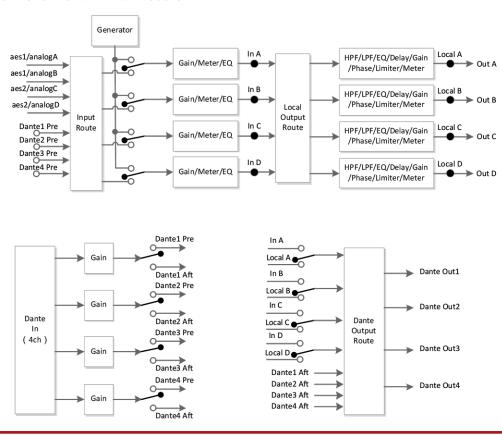


# 12. Signal flow chart

#### 12. 1 Menu interface process is as below:



# 12. 2 The DSP signal flow chart is as below. The figure shows the signal flow of the 4-channel DANTE module.







# 13. Technical Specifications

	P426DSP	P418DSP	P4260DSP	
Channel	4	4	4	
Output power	All channels driven output power,THD=1%			
8Ω	350Wx4	800Wx4	1300Wx4	
4Ω	500Wx4	1500Wx4	2400Wx4	
2 <b>Ω</b>	600Wx4	1800Wx4	2600Wx4	
Input Gain	-100dB~0dB, Step 0.5dB			
Output Gain	Mute, -15dB~+15dB, Step 0.5dB			
Input/Output FO	Input 6 band/Output 8 band, Gain :-15dB~+15dB, Step 0.1dB, Frequency: 19.7Hz~20.2kHz			
Input/Output EQ	Band width: 0.011 ~ 3.595, 19.7Hz~2000Hz ( Subwoofer )			
Frequency Division	Slope: 12dB/ 18dB/ 24dB/30dB/36dB/48dB, Type: Straight/Bessel/Butterworth/Linkwitz-Riley			
Compressor	OFF/-3dB/-6dB/-9dB/-12dB			
Delay	0~1s , Step 21us			
Frequency response (@8Ω)	20Hz~20KHz, ± 0.3dB			
Slew Rate	50V/us			
THD+N	<0.3%			
SNR	105dB			
Crosstalk	>65dB			
Damping Factor	>800 (8 <b>Ω</b> 20Hz~200Hz)			
Input Impedance	20Κ $\boldsymbol{\Omega}$ (bal), 10Κ $\boldsymbol{\Omega}$ (unbal)			
Power Efficiency	>85%			
Height	1U			
Product Dimension	482x397x45mm	482x451x45mm	482x451x45mm	
Packing Dimension	530x545x90mm(WxDxH)			
Weight (Kg)	Net 8.0 / Gross 9.7	Net 10.0 / Gross 11.7	Net 11.0 / Gross 12.7	