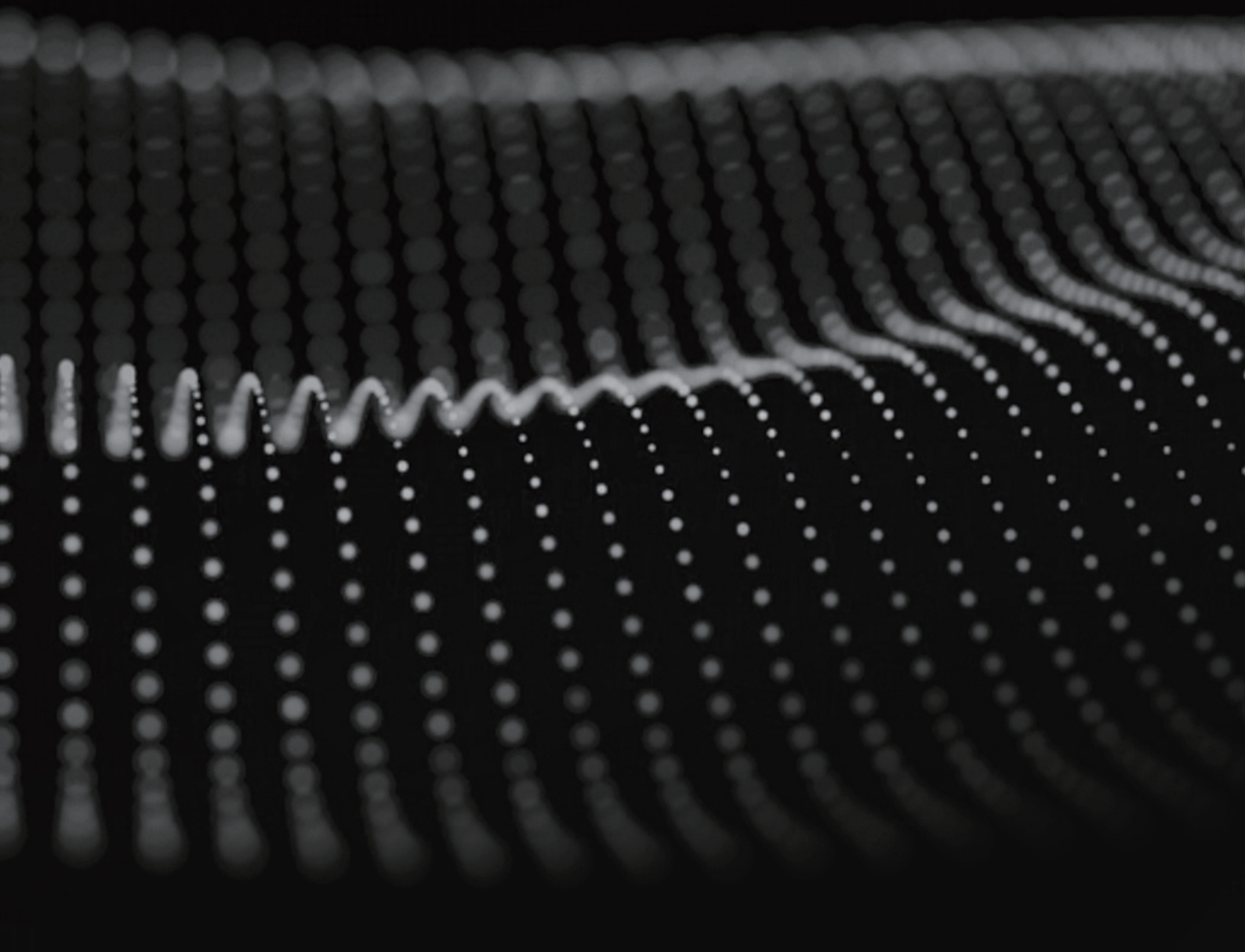


# DENAFRIPS

## Venus 15th - User Manual

---

Committed to providing high-quality HiFi audio solutions  
Bringing exceptional audio experiences to customers worldwide.



# Contents directory

Important precautions to note.....	2
Product overview.....	3
Function panel introduction.....	4
This section describes the ports on the rear panel.....	8
Technical specification.....	9
Configuration guide.....	13
Drive installation.....	15
Common troubleshooting methods.....	20
After-sales service.....	21

# Important precautions to note



warn

Do not open the cover if there is electrical danger inside the machine



- To reduce the risk of electric shock, do not remove the outer cover (or rear cover).
- If maintenance is required, it should be carried out by qualified maintenance personnel.
- In order to avoid the risk of fire and electric shock, do not let the unit get wet or damp.

- 1 Read the protective measures - Read the instructions carefully before using the equipment. Warnings about all protection and operations.
- 2 Follow the instructions - Please follow the operation and use information in the manual. Do not violate the instructions.
- 3 Keep away from water and moisture - do not place equipment near water, such as bathtub, washbasin, sink, washing machine, etc.; Also do not in high temperature and humidity. For use in environments such as wet basements.
- 4 Cleaning - Do not use liquid cleaners or mist cleaners, please use a dry cloth. Clean. Remove the power plug before cleaning the device.
- 5 Power supply - Please use the power supply according to the product instructions. Should be rationally arranged. Do not step on the cable or pull the power cord to avoid damage. Don't pay attention to plugs, convenience outlets, and wires where devices connect.
- 6 Ventilation The product housing has ventilation holes for ventilation. In order to ensure Product performance is reliable should avoid equipment overheating, please do not cover. Overwrite the device. Do not use similar tables like beds, sofas carpets, etc. Face to face with this product. Newspapers tablecloths, curtains and other objects are acceptable. It covers the vents. Do not place the device in a position that may block ventilation. Hole next to the curtain. If the device is built-in mounted, such as a bookcase or on the shelves, please make sure there is adequate ventilation. Equipment on both sides above, keep a distance of 10cm (4 ") behind each other. No support or top shutters. The back edge should be 10cm (4 ") away from the back panel or wall, allowing for ventilation space for heat dissipation.
- 7 Heat a product away from heat sources, such as radiators furnaces, etc., can be generated. Thermal objects (including power amplifiers).
- 8 Prevention of Foreign bodies or liquids - Care should be taken to prevent objects or liquids from passing through. The hole pours into the machine because of possible contact with current or live parts. Cause fire or electric shock. This product should not be placed in the rain or splash. Nor can water containers, such as vases, be placed on them.
- 9 Lightning A need to protect equipment during lightning. lightning please power. The wire is removed to effectively prevent lightning shock.
- 10 If you do not use this product for a long time, please dial the power plug. Good grounding prevents the machine from being damaged.
- 11 Maintenance - Users themselves do not open the enclosure of the device, so as not to. An electric shock. In the following cases, maintenance service is required, please send the machine to plant local special maintenance point for maintenance.
  - a) Foreign matter, liquid into the machine.
  - b) The equipment is rained.
  - c) Machine operation is abnormal.
  - d) Machine fall or body damage.
- 12 Disconnect device a plug, appliance coupler and power switch as Disconnect the device. The disconnecting device shall be maintained for easy operation.
- 13 This product is only suitable for safe use at altitudes below 2000m.
- 14 This product is only suitable for safe use in non-tropical climates.
- 15 Equipment of Class I structure shall be connected to a protective ground connection. Warning on the grid power output outlet.

# Product overview

VENUS 15: The ultimate digital audio decoding experience

## 1. Digital/analog isolation design

VENUS 15 uses a thorough digital and analog isolation design to ensure that digital signal processing and analog output are completely independent. Through physical isolation technology, the digital processing board is connected to the R2R ladder. The network array is completely separated, effectively reducing the noise floor, thus providing a higher signal-to-noise ratio and pure sound quality performance. The two boards are physically connected via high-precision OCXO modules to ensure every detail is perfectly reproduced.

## 2. High-end Furnace Controlled Crystal Oscillator (OCXO)

VENUS 15 is equipped with dual OCXOs with frequencies of 45.1584 MHz and 49.152 MHz, these ultra-precision oscillators are housed in a metal housing at the heart of the DAC and are designed for the high end audio application design. The ultra-low phase noise and high precision of OCXO make the clock signal abnormally stable and ensure the high-fidelity transmission of digital audio signals. With new power supply design, constant current supply ensures that the OCXO works steadily, delivering linear and long-lasting audio performance.

## 3. Adaptive FIFO buffer

To eliminate jitter completely, VENUS 15 uses an advanced adaptive FIFO buffer. This technology is able to store the source digital audio data in memory, ensuring the data transmission process is stable and accurate. With the DAC's built-in ultra-low phase noise, ultra-accurate OCXO clock for reading, jitter is almost negligible, greatly improving audio detail recovery.

## 4. Proprietary USB audio solution

VENUS 15 is equipped with a proprietary USB audio solution powered by the STM32F446 Advanced AMR microcontroller, completely eliminating the traditional digital audio receiver chip. Digital data passing through onboard FPGA decoding, the signal path can be shortened, improving the clarity and purity of the signal. The specially optimized USB interface design reduces the cross interference of the digital input interface, ensuring the most effective sound reproduction effect.

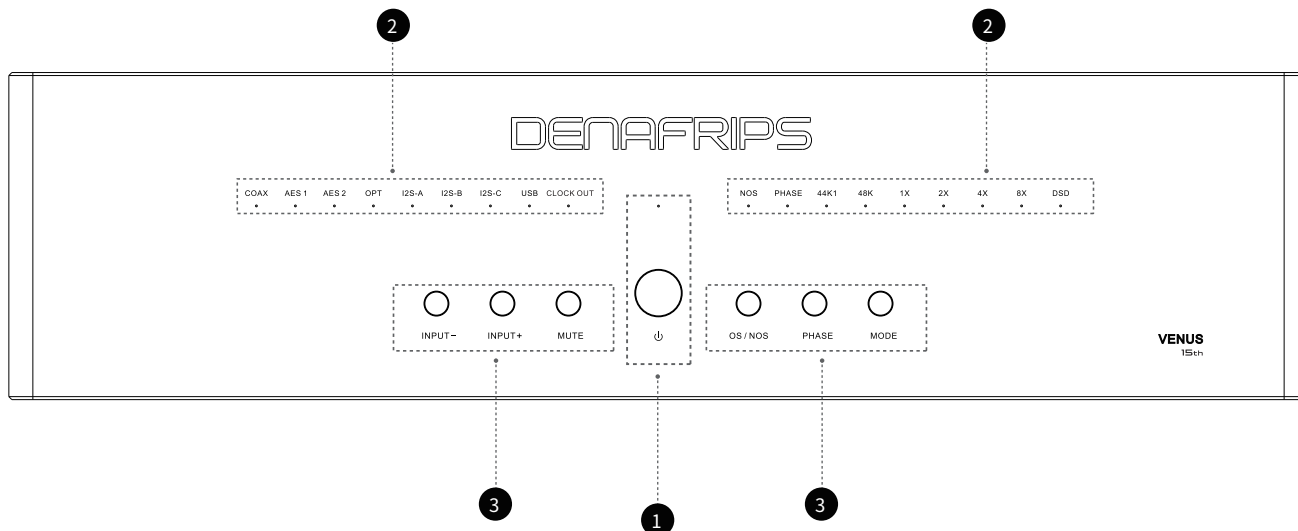
## 5. High-resolution audio support

VENUS 15 supports PCM data streams up to 24bit/1536 KHZ and native decoding capabilities up to DSD1024. Whether it's high-resolution PCM signals or DSD formats, VENUS 15 offers the ultimate audio experience. The included Windows platform driver (THESYCON USB driver) ensures compatibility with a wide range of devices.

## 6. Professional design and optimization

VENUS 15 is based on DENAFRIPS' successful TERMINATOR line of products and is committed to providing a digital-to-analog conversion experience with extreme sound quality through continuous innovation and optimization. Designed for the audio enthusiast seeking the ultimate in sound quality, it is the pinnacle of high-end digital audio.

# Function panel introduction



## 1. Power button and LED indicator

①. Power LED indicator, used to indicate the power status of the device.

Steady on: The device is working properly and powered on.

Blinking: The device is performing some activity (such as starting, updating, or processing data).

Off: The device is powered off or powered off.

②. Power button

The DAC can be turned on or off by pressing the power button.

## 2. These LED lights on the DAC panel are used to indicate the current input source, sample rate, frequency doubling, audio format, and other specific states.

①. Input source indicator: COAX, AES 1, AES 2, OPT, I2S-A, I2S-B, I2S-C, USB.

These LED lights represent different input ports. When an input source is selected and activated the corresponding LED lights up.

②. Sampling rate indicator: 44K1(44.1kHz sampling rate); 48K(48 kHz sampling rate).

These LED lights represent the current sampling rate of the incoming audio signal.

③. Frequency doubling indicator: 1X(original sampling rate); 2X(twice the sampling rate);

4X(4 times the sampling rate); 8X(8 times the sampling rate).

These LED lights represent the frequency multiplier (such as a multiple of the original sampling rate) of the current input audio signal.

④. Audio Format indicator: DSD, indicating the format of the current input audio signal. DSD is a high resolution audio format that offers much higher sound quality.

⑤. Other status indicators: CLOCK OUT(clock output); NOS(original bit rate); PHASE.

When CLOCK OUT is on, the DAC is output clock signals. These clock signals can be used to synchronize other audio devices ensuring all devices use the same clock source, which reduces jitter and other timing issues and improves the overall performance of the audio system.

When the NOS light is on, it means that the DAC is in raw rate mode, and the DAC directly processes the input digital audio signal without any oversampling. Reason. This mode preserves the original characteristics of the audio signal and avoids distortion or changes in audio characteristics that may be introduced during the oversampling process.

When the NOS light is off, the DAC will process the input digital audio signal to improve the sampling rate

when the DAC is in the supersampling rate mode. Oversampling pass Overinterpolation algorithms add more data points potentially improving audio quality and reducing distortion and noise.

PHASE: The phase is usually used to describe the offset degree of the waveform or the time relationship between the waveforms. Reversing the phase can help solve some acoustic phase locate problems or other audio phenomena.

<b>COAX lamp, AES 1 lamp, AES 2 lamp OPT lamp, USB lamp</b>	<b>I2S-A lamp, I2S-B lamp, I2S-C lamp</b>
<p>It changes according to the key change of the sound source</p> <p>Off: The audio source is not selected</p> <p>On: The audio source is selected</p>	<p>Off: The left and right channels of the DSD are L/R</p> <p>On: The left and right channels of DSD are R/L</p>
<b>44K1 light, 48K light</b>	<b>1X light, 2X light, 4X light, 8X light</b>
<p>Varies according to the sampling rate of the input signal</p> <p>Off: The input signal is not the sampling rate</p> <p>On: The input signal is the sampling rate</p>	<p>According to the input signal sampling rate n times the frequency change</p> <p>Off: The input signal is not n times the frequency of the sampling rate</p> <p>On: The input signal is n times the frequency of the sampling rate</p>
<b>DSD lamp</b>	<b>CLOCK OUT lamp</b>
<p>Off: PCM audio</p> <p>On: DSD audio</p>	<p>Off: indicates the internal clock</p> <p>On: External clock</p>
<b>PHASE light</b>	<b>NOS(original bit rate) light</b>
<p>Off: The phase is reversed</p> <p>On: In phase</p>	<p>Off: Indicates the supersampling rate</p> <p>On: indicates the original bit rate</p>

### 3. Control button

①.INPUT-, INPUT+, MUTE, OS/NOS, PHASE, MODE. Press these buttons to set the audio input source output mute state Oversampling rate/source rate, phase reversal and direct control of operating mode.

#### ②.Key description

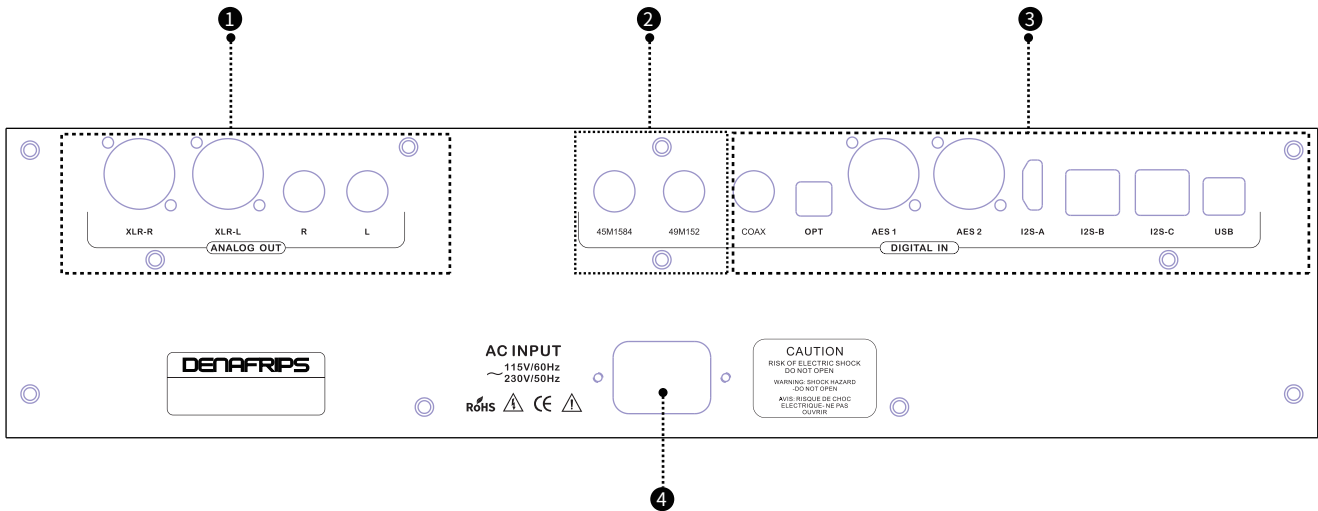
The MUTE button	OS/NOS (supersampling rate/original bit rate) key
<p>Press this button to enable/disable mute. When muted,The input signal LED will flash from left to right.</p>	<p>Press this button to switch between OS/NOS modes On: The system is in NOS mode Off: The system is in OS mode</p>
PHASE Keys	The MODE button is pressed
<p>Press this button to switch phase output On: positive phase Off: The phase is negative</p>	<p>The MODE button toggles between multiple inputs, Such as optical fiber input, coaxial input, USB input, etc.</p>
Input-key	INPUT+ button
<p>In Home mode: Press the button to the left to select the source In menu mode: Press the key to enter CLOCKOUT Clock output switching mode In function Settings: Press the button to switch the corresponding clock</p>	<p>In Home mode: Press the button to the right to select a sound source In menu mode: Press the key to enter CLOCKOUT Clock output switching mode In function Settings: Press the button to switch the corresponding clock</p>

Digital audio signal input sampling rate, the following table describes the input sampling rate LED indicator status.

Basic sampling rate	multiplier	Input format
44.1 kHz	1X	44.1 kHz
	2X	88.2 kHz
	4X	176.4 kHz
	8X	352.8 kHz
	16X = 2X + 8X	705.6 kHz
	32X = 4X + 8X	1411.2 kHz
48 kHz	1X	48 kHz
	2X	96 kHz
	4X	192 kHz
	8X	384 kHz
	16X = 2X + 8X	768 kHz
	32X = 4X + 8X	1536 kHz
DSD	1X	DSD 64
	2X	DSD 128
	4X	DSD 256
	8X	DSD 512
	16X = 2X + 8X	DSD 1024



# This section describes the ports on the rear panel



## 1. Audio signal output

Xlr-r: Represents the analog signal XLR right channel output, connected to the right channel input of the sound system or amplifier.

Xlr-l: Represents the analog XLR left channel output, connected to the left channel input of the sound system or amplifier.

Rca-r: Indicates the analog signal RCA right channel output, usually marked in red. The right channel input is connected to the sound system or amplifier.

Rca-l: Indicates the left channel output of the analog signal RCA, usually marked with white or black. The left channel input is connected to the sound system or amplifier.

The output can be balanced by XLR (1 ground, 2 positive, 3 negative), or single-ended by RCA.

The RCA and XLR outputs are shared, so only use one at a time. It is not recommended to use both RCA and XLR output.

## 2. Clock output interface

45M1584 and 49M152: Clock output interfaces for synchronizing and transmitting high-precision clock signals. Synchronization of clock signals is essential for reducing jitter and improving audio quality is crucial. Clock synchronization between different devices ensures that digital audio signals remain consistent during transmission and processing. Less signal distortion.

## 3. Digital audio input interface

There are eight input interfaces, namely COAX, OPT, AES 1, AES 2, I2S-A, I2S-B, I2S-C, and USB

COAX: (coaxial) digital interface, stable interface transmission, suitable for short distance connections, providing high audio quality.

OPT: (Optical fiber) digital interface, interface free from electromagnetic interference, suitable for long distance connections, providing clear audio transmission. AES 1 and AES 2: AES/EBU digital audio interface is a professional digital audio interface standard that provides high quality, low noise audio transmission. Suitable for professional audio equipment and audio workstation connection.

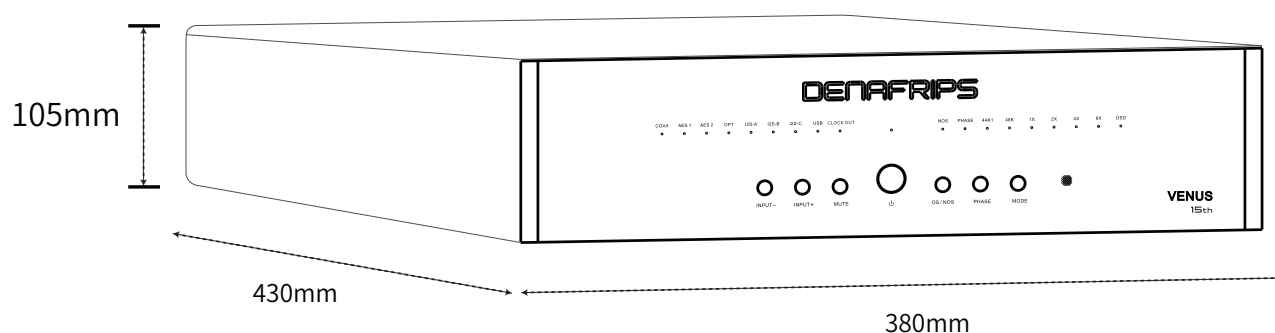
I2S-A, I2S-B, I2S-C: (interic audio) interface, interface for transmitting high fidelity audio data, commonly used to connect digital audio Processor, digital audio interface board and other equipment. Multiple I2S interfaces may indicate multichannel audio transmission.

USB (universal serial Bus) interface provides convenient digital audio transmission, allowing high-fidelity audio data transmission, suitable for connecting to a PC, Macs and various digital audio devices.

## 4. Power input port

This machine uses a 3-core power cord, the user needs to ensure that the power grounding is good; By using the power input interface correctly, you can ensure that the DAC device is obtained Stable and reliable power support.

## Technical specification

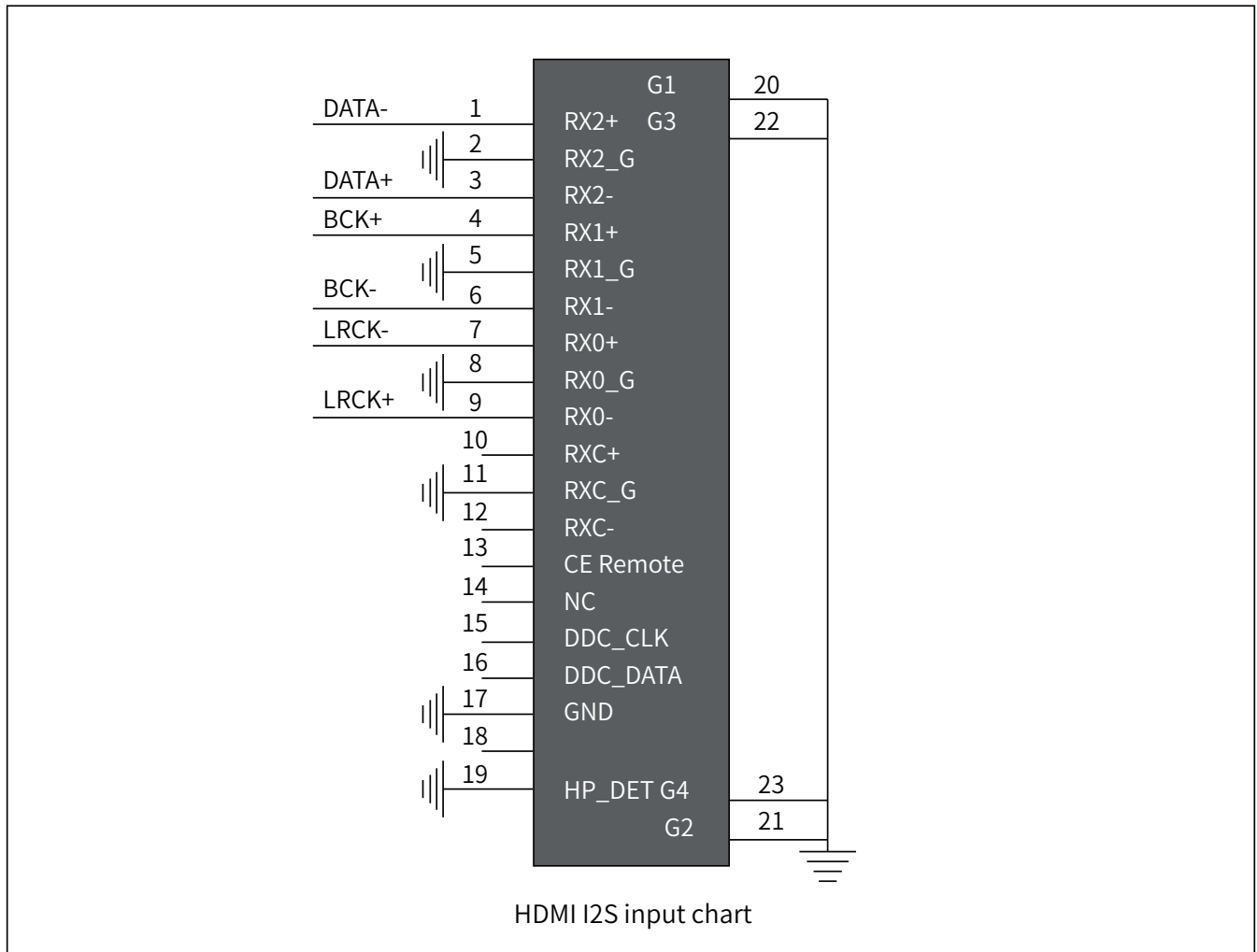


Instructions	Argument
R-2R DAC	Proprietary R2R + DSD architecture
	Truly balanced 26BIT R2R + 6BIT DSD (32-stage FIR filter)
	Matching precision thin film 0.005% R-2R network array
Bright spot	Packaged ultra-low noise power supply
	High-end furnace controlled crystal OCXO
	Total isolation between digital board and R-2R board
	Adaptive FIFO buffers and relocks
	DSD1024 and PCM1536 are supported by USB and I <sup>2</sup> S input
	Proprietary USB audio solution based on STM32F446 Advanced AMR MCU
	Licensed Thesycon USB driver for Windows platforms
	Driverless on Mac and Linux
	Double AES/EBU input is supported
	Sharp filter/slow filter option
	I <sup>2</sup> S pin configuration
	I <sup>2</sup> S DSD channel switching configuration
DSD	Coaxial /AES/Opt Input DSD64/2.8224 MHz (DoP)
	DSD1024/45.1584 MHz * for USB and I <sup>2</sup> S inputs only
PCM	All inputs are 24-bit /44.1, 48, 88.2, 96, 176.4, 192 KHZ

Instructions	Argument
PCM	1536kHz* on USB and I <sup>2</sup> S inputs
Digital input	Coaxial via RCA TOSLink x 1 AES/EBU x 2 (Supports dual AES/EBU L/R channel input) USB2.0B type I <sup>2</sup> S via HDMI LVDS I <sup>2</sup> S via RJ45 LVDS I <sup>2</sup> S via RJ45 LVCMOS
Analog output	2.2 RCA for Vrms: 625 ohms 4.4 XLR at Vrms: 1250 Ω
Analog output	Non-oversampled NOS Oversampled OS
Ac power requirements	115 volts AC 60 Hz; 230 volts AC 50 Hertz
Power consumption	≤20W
Frequency response	20-80 kilohertz (+1/-3 dB)
THD+N	0.0015% (a 加权)
Signal-to-noise ratio	129 decibels
Dynamic range	>132 dB
Stereo crosstalk	-120 dB
dimension	430W x 380D x 105H mm
weight	19 kg
colour	Silver/Black
Keep under warranty	12 months

Mode	LED			I2S PINOUT						
	1X	2X	4X	PIN	DATA		BCK		LRCK	
	DATA	BCK	LRCK	模式	1	3	4	6	7	9
0	0	0	0	0	DATA-	DATA+	BCK+	BCK-	LRCK-	LRCK+
1	1	0	0	1	DATA+	DATA-	BCK+	BCK-	LRCK-	LRCK+
2	0	1	0	2	DATA-	DATA+	BCK-	BCK+	LRCK-	LRCK+
3	1	1	0	3	DATA+	DATA-	BCK-	BCK+	LRCK-	LRCK+
4	0	0	1	4	DATA-	DATA+	BCK+	BCK-	LRCK+	LRCK-
5	1	0	1	5	DATA+	DATA-	BCK+	BCK-	LRCK+	LRCK-
6	0	1	1	6	DATA-	DATA+	BCK-	BCK+	LRCK+	LRCK-
7	1	1	1	7	DATA+	DATA-	BCK-	BCK+	LRCK+	LRCK-

I2S pin diagram (factory mode is "0" mode)



## Set the clock output function

Setting procedure	Key operation	LED light indicator
1. Press the MUTE key to enter the menu mode Then press the INPUT- button to enter the clock output Function setting	Press the MUTE button first + input-key	When there is no clock output, the indicator is not on. When there is a clock output The CLOCKOUT light and the corresponding clock light will be on.
2. In the dual AES function setting press again INPUT+	Press the INPUT+ button again Make a switch	CLOCK OUT is on +C0AX is on: A word clock whose output and input signal sample rates are equal;
		CLOCK OUT is on +AES1 is on: Output word clock;
		CLOCK OUT is on +AES2 is on: Output half of the master clock;
		CLOCK OUT is on +OPT is on: Output master clock;

# Configuration guide

## **DENAFIRPS Indicates DDC clock synchronization**

1. Press Mute + Source reduction to enter the setting mode
2. Press the volume down button continuously
3. After the corresponding mode is adjusted, the CLOCK OUT indicator is turned off
4. CLOCK on = Enable clock input
5. To confirm the Settings, press the Settings button once

## **DENAFIRPS VENUS 15TH Clock Out setting**

1. Press the Mute button to enter the mute/Setting mode
2. Tap the input button multiple times. When you press/release the Input-button, you will see the leds light up in the following order
  - COAX (no clock output)
  - AES1 (44.1K/48K)
  - AES2 (24/25Mhz) <- for Soundaware
  - OPT (45/49Mhz) <- for GAIA
  - I<sup>2</sup>S-A (CLOCK output is disabled, please note that the CLOCK LED will also be turned off)

## **I<sup>2</sup>S pin configuration**

1. Select I<sup>2</sup>S-A
2. Press the mute button once to enter the configuration mode
3. Press the phase button, 1X 2X 4X will open/close in fixed mode, representing binary 000-111
4. Wait 10 seconds
5. The DAC returns to the running mode

## **It is recommended that I<sup>2</sup>S match the source, that is, DDC/Transport/Streamer**

1. Connect the i2s cable
  2. Turn Down the volume (minimum)
  3. Play familiar music (first PCM, then DSD)
  4. Traverse the DAC's i2s setting, 000-111
  5. One of the modes should match the source played by PCM and DSD.
- An Audio Tone Test (audio tone test) is recommended to ensure that the L/R channel is in phase/in-phase correctly.

## **I<sup>2</sup>S DSD channel switching configuration**

1. Select I2S
2. Press the mute button once to enter configuration mode
3. Toggle NOS button
  - Coaxial cable open = DSD channel switching
  - If AES1 is enabled = Normal
4. Wait 10 seconds
5. The DAC returns to working mode

# Configuration guide

<p><b>Filter function setting</b></p> <p>1. Press the MUTE key to enter the menu MODE and then press the Mode key to enter the filter function setting (Press the MUTE button +MODE button first)</p>	<p>8x light</p>
<p>2. In the filter function setting, press the MODE key to switch between the fast roll down and slow roll down (Press the MODE button to switch)</p>	<p>If the 1X indicator is off, the device rolls off rapidly</p>
	<p>1X on: Rolls off at a slow speed</p>
<p><b>USB upgrade function Settings</b></p> <p>1. Select USB input on the startup screen and press the standby button to enter standby (Press the standby button first)</p>	<p>Standby light</p>
<p>2. Press the MODE key after entering the standby mode (Press the MODE button again to enter the upgrade state)</p>	<p>Standby light</p>
<p><b>DSD left and right channel function Settings</b></p> <p>1. Press the MUTE key to enter the menu mode and then press the NOS key to enter the DSD left and right channel function Settings (Press the MUTE button +NOS button first)</p>	<p>USB light on</p>
	<p>2. Press NOS button in DSD left and right channel function Settings to switch L/R and R/L (Press the NOS button again to switch)</p>
<p><b>Double AES function Settings</b></p> <p>1. Press the MUTE key to enter the menu mode and then press the INPUT+ key to enter the double AES function setting (Press the MUTE button +INPUT+ button)</p>	<p>USB on +CLOCK OUT on</p>
	<p>2. In the dual AES function Settings, press INPUT+ again (Press the INPUT+ button to switch)</p>
	<p>OPT On: Single AES</p>

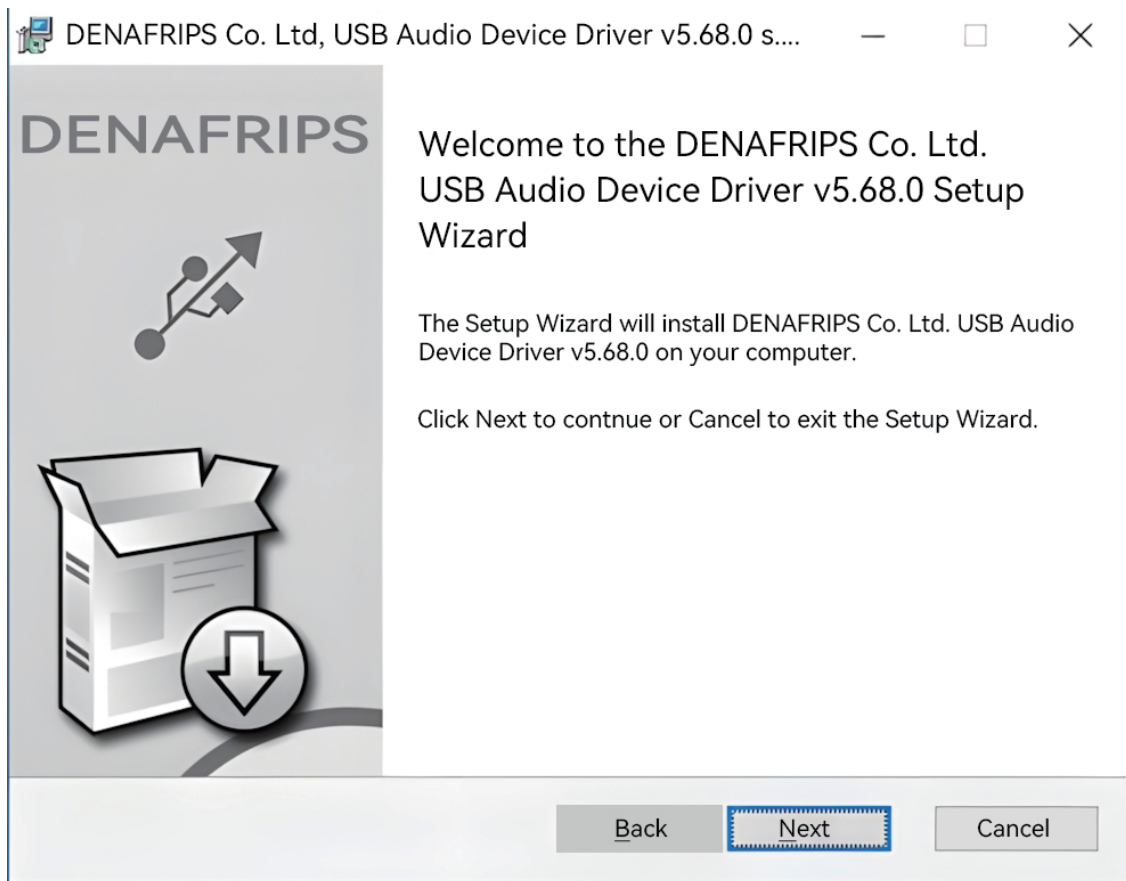
# Drive installation

USB Driver Installation - Windows operating systems (Windows 10 and above can be installed) require a USB driver. The USB driver is licensed by THESYCON and is designed to provide the highest quality audio playback for computer audio systems.

Note: Mac and Linux operating systems do not require USB drivers.

Installation Guide:

1. Do not connect the USB cable from the computer to the DAC. Unplug the USB driver before it is installed.
2. From the support page to download the driver: <https://www.denafrips.com/download-thesycon>.



3. Double-click the driver on the computer



### Installing DENAFRIPS Co. Ltd. USB Audio Device Driver v5.68.0

Please wait while the Setup Wizard installs DENAFRIPS Co. Ltd. USB Audio Device Driver v5.68.0.

Preparing the installation ...



Back

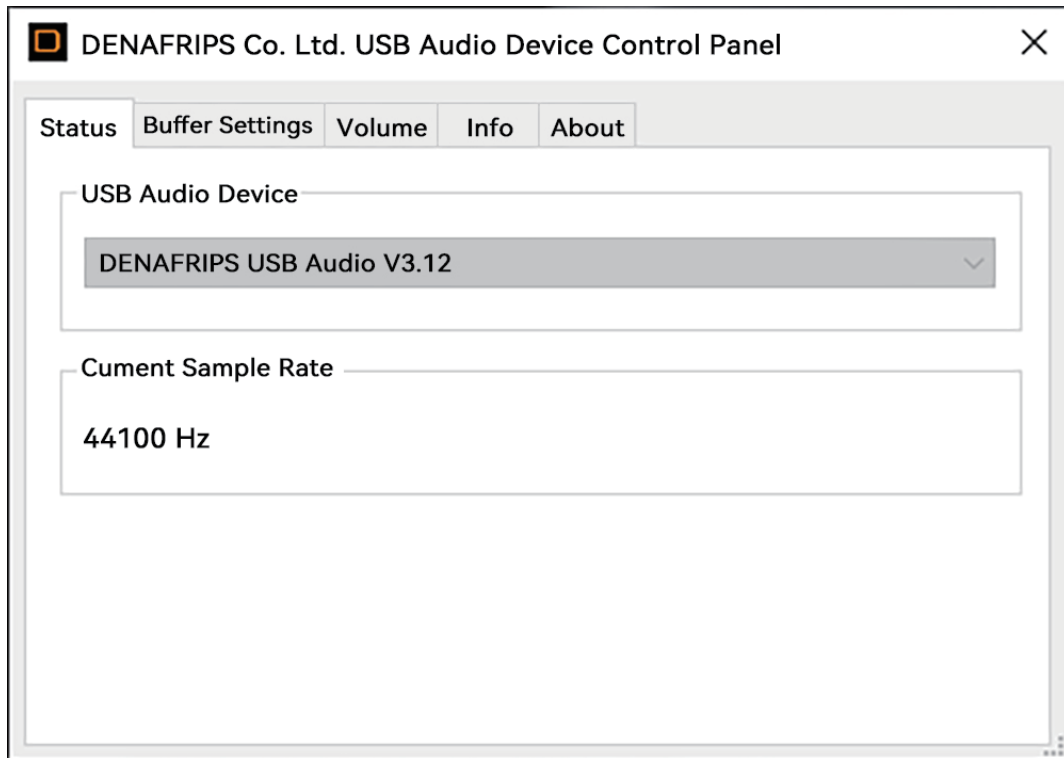
Next

Cancel

4. Follow the on-screen instructions to complete the installation.



5. Restart your computer and connect the USB cable to the DAC  
Find the driver icon in the lower right corner of your computer.



6. Click the driver icon and select USB Input



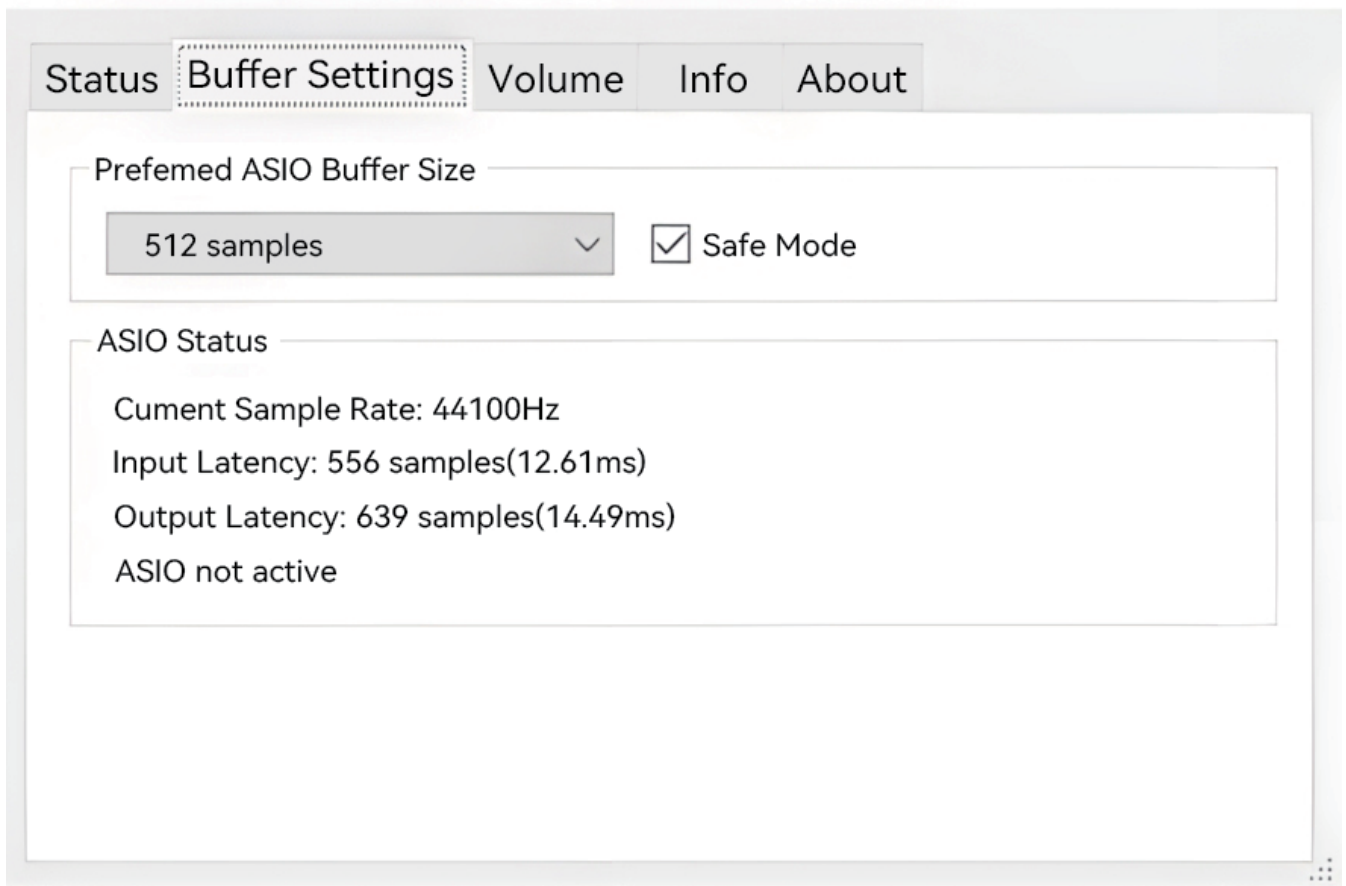
7. Select DENAFRIPS USB DAC as the default Windows sound card.



## 8. DENAFRIPS USB DAC properties



## 9. Direct sound default format



### 10. Size of the ASIO buffer

1. Roon	2. JRiver
3. Foobar2000	4. Sonicstudio Amarra

### 11. Play software recommendation

## Solutions to common faults

Phenomenon	Solution
A. No sound output	<ol style="list-style-type: none"> <li>1. Check all cables to ensure that the input source is properly connected to the DAC.</li> <li>2. Check the volume Settings to ensure that the volume is not set to silent and the volume is moderate.</li> <li>3. Replace the data cable or cable to ensure that it is not damaged.</li> <li>4. Check the input selection and Settings of the DAC to ensure that the correct input source is selected.</li> </ol>
B. Noise or noise	<ol style="list-style-type: none"> <li>1. Use high-quality power cables and power adapters to ensure power stability.</li> <li>2. Check all cables and interfaces to ensure good contact.</li> <li>3. Try to avoid placing the DAC in areas with high electromagnetic interference, such as near the power cord or wireless Next to the equipment.</li> </ol>
C. Sound quality distortion	<ol style="list-style-type: none"> <li>1. Ensure that the sampling rate and format of the input signal match the format supported by the DAC.</li> <li>2. Adjust the filter and decoder Settings of DAC and select the appropriate sound quality mode.</li> <li>3. Check all signal cables and connectors to ensure that they are securely connected.</li> </ol>
D. The device cannot be turned on	<ol style="list-style-type: none"> <li>1. Check whether the power cable and power adapter are correctly connected, and ensure that the power socket is powered on.</li> <li>2. Restart the DAC, or reconnect the DAC after the power is powered off.</li> <li>3. If the problem persists, you can contact the manufacturer, we will provide detailed solutions.</li> </ol>
E. The input signal cannot be recognized	<ol style="list-style-type: none"> <li>1. Ensure that the format and sampling rate of the input signal match the format supported by the DAC.</li> <li>2. Check the input ports and cables to ensure that they are not damaged or in poor contact.</li> </ol>
F. The DAC cannot recognize the USB device	<ol style="list-style-type: none"> <li>1. Make sure you have the latest USB driver for the DAC installed.</li> <li>2. Check that the USB cable and port are properly connected.</li> <li>3. Replace the USB cable or use a different USB port.</li> </ol>

## After-sales service

1. Thank you for choosing DENAFRIPS brand products. This product enjoys 1 year free warranty service. During the warranty period, if due to non-human factors Caused by product failure, we will provide you with free repair or replacement services.

Warranty period: within one year from the date of purchase, in normal use, Any product quality or functional problems without human damage.	DENAFRIPS offers free repair or replacement Parts service, and bear freight in both directions.
Warranty period: within one year from the date of purchase in case of artificial damage,Any product quality or functional issues occur.	The specific charging standard will be based on the actual fault situation and The cost of replacement parts is determined please contact us After-sales service center to get a detailed repair quote. The customer is responsible for the return freight.
After warranty period: paid warranty service, after the expiration of the warranty, we You will still be provided with paid repair services.	The specific charging standard will be based on the actual fault situation and The cost of replacement parts is determined, please contact us After-sales service center to get a detailed repair quote. The customer is responsible for the return freight.

2. Under any of the following circumstances, the product will not enjoy free warranty service:

- a. The product has exceeded the specified warranty period from the date of purchase, and the product no longer enjoys free warranty service.
- b. The physical product does not match the product model, bar code and purchase date on the warranty card.
- c. Without the authorization of DENAFRIPS technical personnel, the circuit or components are modified or repaired by oneself.
- d. Damage caused by human factors (such as falling, impact, flooding, fire, etc.).
- e. Damage caused by irresistible natural forces (such as earthquake, flood, lightning strike, etc.).
- f. Damage caused by exceeding the permitted use environment.
- g. Damage caused by wrong use or improper storage (including but not limited to: excessive voltage leads to the burning of lines or components; Collision case Or internal device damage; Damage caused by too much dust; Product oxidation or corrosion etc.)

# DENAFRIPS

telephone: 020-84923054  
mailbox: support@denafrips.com  
Official website: <https://www.denafrips.com/>

