MATRIX

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Mini-i User Guide
用户手册

2-TOSLINK   44.1kHz
VOLUME -65dB 01 01:25
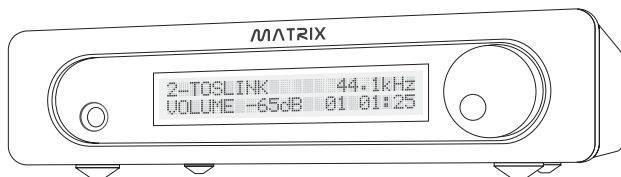
Desktop Digital Audio Processor
桌面数字音频处理器

ΣΔ 192KHz 24bit

Thank you for purchasing ΜΛΤRΙΧ digital audio processor! This manual book provides you with general information you need to start using your audio processor. Please read carefully before installing and using it.

Enjoy the unbounded pleasure brought you by the remarkable performance of mini-i.

Be sure to keep all user documentation handy for future reference, including the Model No. & Serial No.

CAUTION:
For the prevention from fire and electric shock, do not let the appliance drench with rain and get wet.

CONTENTS

● FEATURES

All the following features enable Mini-i to explore every small detail in the music for you, and provide you a tactile sensation of its sound performance, with its ultra-high resolution and signal-to-noise ratio, to fully meet your demands for a high-quality Hi-Fi.

- A double-AD1955-balanced structure with two AD1955 24bit 192kHz D/A converting units.
- A professional digital receiver chip of ultra-low jitter and an independent system clock.
- USB, AES/EBU,OPTICAL, and coaxial digital signal input modes, and a coaxial output.
- Up to 24bit/192kHz digital signal input.
- A professional stereo OP-Amp, OP275/OPA2134, to provide you with the best signal playback effect.
- A digital volume controller that covers 90 steps.
- Both balanced and unbalanced output, which enables it to be connected to other analog devices with different interfaces at the same time.
- Its internal circuit units adopt the multi-stage stabilized voltage supply independently.
- Its internal headphone amp unit can easily drive any headphones of 300 ohms and below.
- Its LCD Panel displays current play message and setting information, which is user-friendly.
- Working mode: PRE mode and DAC mode.
- Conveniently remote-controlled.
- Automatically saves the current volume value and channel state while shutting down. Restart, it will restore to the pre-shutdown settings.
- Automatically saves the current volume value and channel state while shutting down. Restart, it will restore to the pre-shutdown settings.
- While starting up or switching channels, the sound will fade in so as to prevent shock and hearing damage caused by excessive volume.

● INTRODUCTION

Please put Mini-i in a well-ventilated place away from heat source, and avoid dust accumulation and excessive vibration.

For the prevention from fire, please reserve some secure space around Mini-i according to the following requirements:
- At least 5cm on both sides and its back,
- At least 10cm from its top.

Do not stack Mini-i with other equipments which generate lots of heat, otherwise it may lead to the decline of Mini-i's working stability. It may even damage Mini-i, or cause other serious accidents.
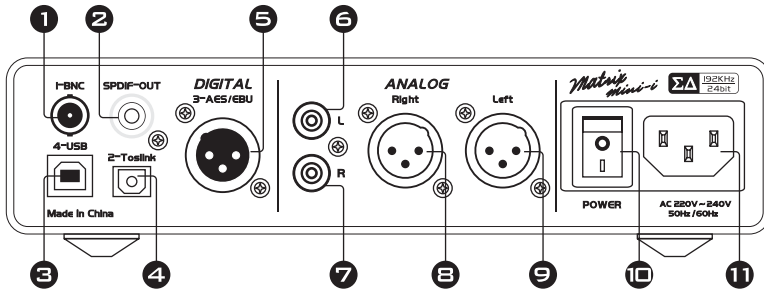
Mini-i cannot bear fierce collisions. Please handle it gently while carrying, so as not to cause unnecessary damage.

● FRONT PANEL
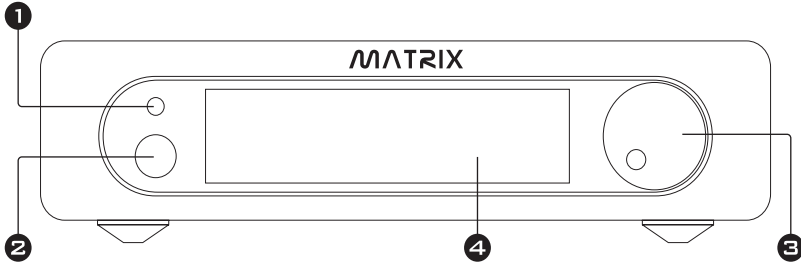
1 Remote-control Receiver	**3** Power/Volume / channel control knob
2 Headphone jack	**4** LCD panel

● BACK PANEL

|	
1 Digital coaxial input	**7** R analog output
2 Digital coaxial output	**8** R XLR output
3 USB input	**9** L XLR output
4 OPTICAL input	**10** Power switch
5 AES/EBU input	**11** Power in
6 L analog output	

NOTE: The USB input interface is only to be used on a computer with Windows 2000/ XP /VISTA/ Windows 7/Mac OS X operating system.

● REMOTE CONTROL

MATRIX
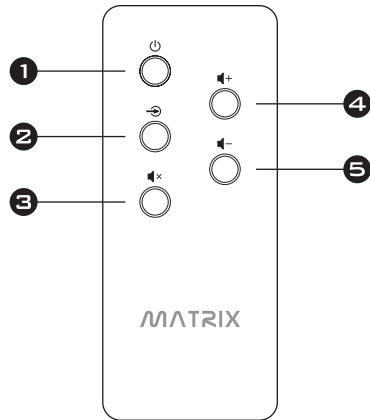
1. Power
2. Input Channel Switch
3. Mute
4. Volume Up
5. Volume Down

●LCD PANEL

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2-TOSLINK    ▌▌▌▌44.1kHz
VOLUME -65dB  01 01:25
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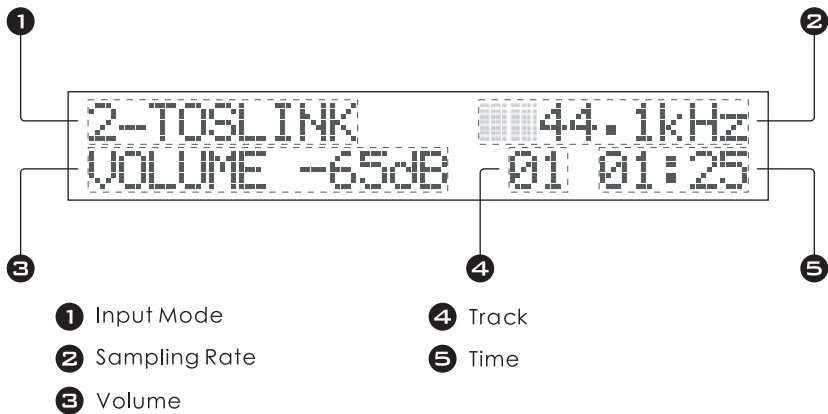
1. Input Mode
2. Sampling Rate
3. Volume
4. Track
5. Time

●SETTINGS & USAGE

POWER ON

Turn on the power, and Mini-i will automatically start self-check. After 0.5 second, the internal headphone output relay will automatically close. Meanwhile, the LOGO

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and the software version No. will be displayed on the LCD panel.

Self-check completes after about 1 second. Then it will enter into the normal working state, and the LCD panel will display the current information.

Pressing the volume knob for 2 seconds will put Mini-i on standby.

If you don't use Mini-i for a long time, please turn it off and unplug the power cable.

INPUT SETUP

Press the Volume/Channel control knob on the front panel to switch the signal input channels. While switching, the LCD panel will display the current input channel in area 1. It switches over in an order of 1-2-3-4 circularly. If the currently selected channel is not connected to external devices, the LCD panel will display NO SAMPE in area 2, indicating no signal input. If the input signal is detected, the current input signal sampling rate and signal format will be displayed.
The channel setting will be automatically saved while shutting down. Restarted, it will maintain this setting state. On switching the channel, the volume will increase gradually until it reaches the pre-set value within about 1.5 seconds to prevent you from hearing damage.

VOLUME SETUP

In the state of playing, by turning the volume/channel control knob, you can adjust the volume up and down within the range from 0 to-90dB. And the current volume value will be displayed on the area 3 of the LCD panel.
The current volume value will be automatically saved when you shut it down. On being restarted, it will restore to the pre-shutdown settings.
When you restart Mini-i, the volume is designed to increase gradually until it reaches the pre-set value within about 1.5 seconds to prevent you from hearing damage.
While you adjusting the volume, all analog output volume will follow to change.
You can easily use the decoder as a PRE-AMP.

WORKING MODE

PRE MODE:

This is the default mode PRE-set by the factory. Working under this mode, volume control can be implemented while connected to any of the analog output ports. And it is also very convenient to use your headphone under the pre-mode.

DAC MODE:

Under this mode, all the analog output levels are of their standard value. To get the best sound performance, the headphone will be turned off under this mode.

SETUP MEOD:

Press the volume/channel control knob while power off, then switch the power on, at this time it will enter the set-up menu for you to choose a working mode. The menu will be shown as the picture below:

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VOL&HP  ON <
VOL&HP OFF
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1 PRE-mode   **3** Cursor

2 DAC mode
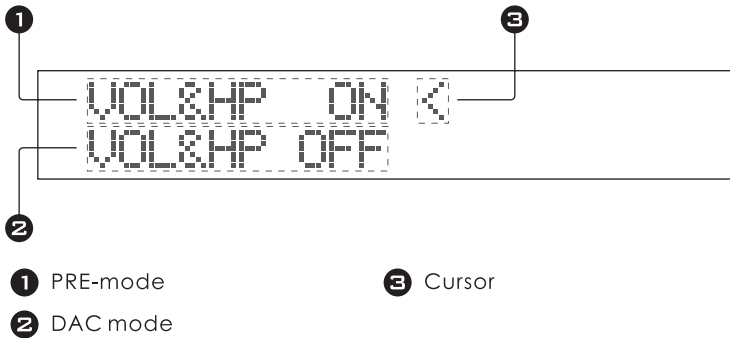
Turn the volume/channel control knob to switch the cursor to the working mode you need, then press it, so that MINI-i will save the settings automatically, and work under that mode.
Once the mode you set up has been saved, it will automatically enter that mode next time you turn on the audio processor.

PLAY MESSAGE DISPLAY

When Mini-i is connected to a CD player, it will automatically detect the input signals for Q-SUB CODE, and display the track information and time duration of the current play in area 4 and 5 on the LCD Panel. When Mini-i fails to obtain the Q-SUB CODE, information will be automatically hidden.
When connected to a computer by USB or through the sound card, it will not perform this function, because digital signals processed by the computer software will no longer output Q-SUB CODE information.

HEADPHONE OUTPUT

The standard 1/4" stereo headphone jack of high-quality on the front panel can drive any headphone of 300 ohms and below, which makes it very convenient to use your headphone by connecting to it.

COAXIAL OUTPUT

Mini-i possesses a digital coaxial output. The output state depends on the condition of the output channel. This channel directly outputs current digital signals. It also supports the original code output such as AC-3, DTS and so on. Mini-i cannot play-

back signals of the non-PCM format. It is very easy to connect it with other digital audio equipments or AC-3, DTS decoders.

REMOTE CONTROL

Mini-i can be operated with its remote controller.Make sure that nothing between Mini-i and the remote controller blocks thesignals . One CR1220 battery is required for the remote controller.When Mini-i does not respond well to the controls, please unscrew the remote controller on the back and replace the battery.

● CONNECTIONS

AES/EBU input

SIGNAL | GND
GND

XLR analog output

GND | HOT
COLD

● TROUBLESHOOTING

Check the following before calling for service:
● Whether all the connections have been done correctly or not
● Whether you operate Mini-i properly or not

If your problems cannot be solved by the remedies listed in the following table, it might due to the malfunction of Mini-i's internal circuitry. In that case, please immediately unplug the power cable and contact the MATRIX distributor.

SYMPTOMS	CAUSES	REMEDIES
Off power	● It might be not plugged into a proper AC or turned off ● Power switch is turned on	● Make sure the power cable is connected to a proper AC
NO SAMPE shown all the time	● Digital input cable disconnected or no input signal ● Digital signal outputs abnormally	● Make sure the digital input cable is linked up correctly ● Check the digital signal input
No analog output	● Analog port disconnected ● Volume has been turned to minimuml	● Connect the audio cable correctly ● Adjust the volume
No Headphone output	● It might be working under the DAC Mode	● Switch to the PRE-mode

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GENERAL MALFUNCTION:

Common breakdowns might be caused by an interrupted AC power. Or the device is troubled by static electricity. Under these circumstances, turn it off and unplug the main power at least for a minute, then reconnect and restart it.

● TECHNICAL SPECIFICATIONS

DIGITAL INTERFACE:
INPUT:
    OPTICAL: Shielded/enclosed optical input   32kHz~192kHz   16bit~24bit
    BNC :   BNC 75 ohm   32kHz~192kHz   16bit~24bit
    USB r: USB-B connector   32kHz~48kHz   16bit~24bit
    AES/EBU: XLR interface 110 ohm   32kHz~192kHz   16bit~24bit
OUTPUT:
    Coaxial Output: Supports AC-3, DTS data output
        32kHz~192kHz 16bit~24bit
    Output Level: 0.5Vp-p (75 ohm)
ANALOG INTERFACE:
    RCA Output Level: 2.0Vrms adjustable
    XLR Output Level: 2.0Vrms adjustable (XLR : 1=GND, 2=HOT, 3=COLD)
    Frequency response: 20Hz~20KHz
    SNR: 105 dB A-weighting
    Dynamic Range: 108 dB
    Distortion :   <0.0012% (1KHz)
POWER REQUIREMENT:
    Power: AC 220V 50/60Hz (AC 110V 50/60Hz)
    Standby Mode: <2W
    Working Mode: <15W
OTHER SPECIFICATIONS:
    Operating temperature :   0~+40℃
    Weight :   1.2kg
    Dimension : (L×W×H)   155×205×48mm

NOTE: Specifications subject to changes without prior notice.

● CUSTOMER SERVICE

From the date of purchase, MATRIX provides you a one-year-limited warranty.
This warranty is limited to the malfunction of our products only caused by the quality problems of the original components or manufacturing issues.
Any failure and losses result from ignoring the cautions mentioned in this instruction or misusing as follows are not covered by the warranty and any liability:

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