MATRIX

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User Guide
用户手册

QUATTRO AUDIO SYSTEM

QUATTRO 桌面音频系统

ASRC 192KHz 24bit

Class A

Thank you for becoming a member of **MΛTRIX** users.

Please take a few minutes to read this manual booklet carefully before installing and using the product.

And enjoy the infinite auditory pleasure brought to you by the superb performance of **MΛTRIX** QUATTRO.

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.

MΛTRIX QUATTRO is a set of high-quality desktop audio playback system through the meticulously designed.
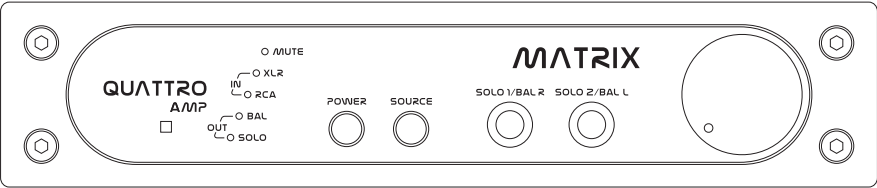
QUATTRO audio system includes a QUATTRO DAC and a QUATTRO AMP with the same exterior design and dimensions, both can simultaneously combination worked and also be used independently.

QUATTRO DAC is a multi-functional D/A converter, equipped with high-speed digital signal processing technology and a variety of input and output ports, which fit different kinds of devices.

QUATTRO AMP is a balanced / unbalanced headphone amplifier with four fully independent channel amplifiers. It has the function of headphone detection peculiar to **MΛTRIX** products, which is designed for balanced drive, but also compatible with non-equilibrium headphones.

Elaborate circuit design and high-quality components elevate QUATTRO audio system's professional playback effect to a new level.

QUATTRO AMP

CONTENTS

● FEATURES

MATRIX QUATTRO AMP has a fully balanced structure and is equipped inside with high quality independent four-channel broadband amplifier. With **MATRIX**'s unique Headphone auto-detection feature and professional analog audio signal PCB routing, QUATTRO AMP will explore every detail of the music, and provide you with a tactile sensation of its sound performance to fully meet your demands for a high-quality Hi-Fi:

● The balanced and unbalanced analog outputs can be connected to different interfaces;

● Automatic headphone detection and automatic output mode switching;

● It can drive two pairs of non-balanced headphones or one balanced headset;

● Ultra-low distortion operational amplifiers dedicated to get the best signal playback;

● High-quality toroidal power transformer for NORATEL audio;

● An independent multi-level power supply for each circuit unit;

● Superb NEUTRIK audio connectors;

● Outstanding ALPS volume potentiometer;

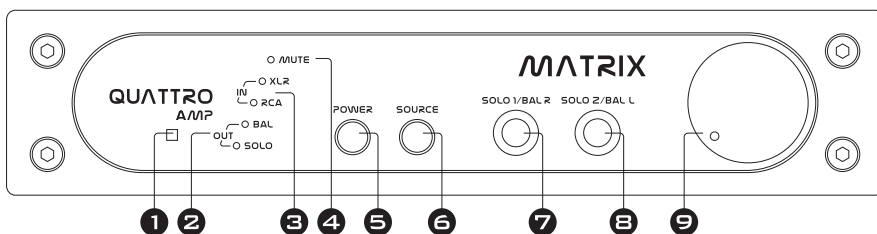● Infrared remote-control.

● INTRODUCTION

Please put **MATRIX** QUATTRO 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 QUATTRO according to the following requirements:

● At least 5cm on both sides and its back.
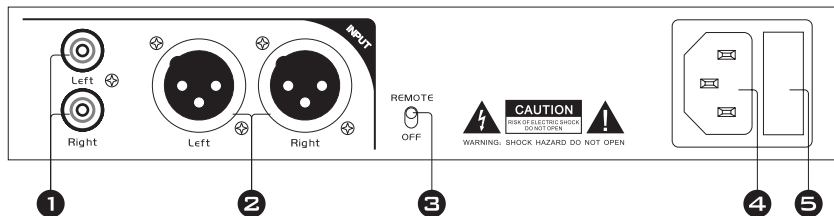
● At least 10cm from its top.

Do not stack QUATTRO with other equipments which generate lots of heat, otherwise it may lead to the decline of QUATTRO's working stability. It may even damage QUATTRO, or cause other serious accidents.
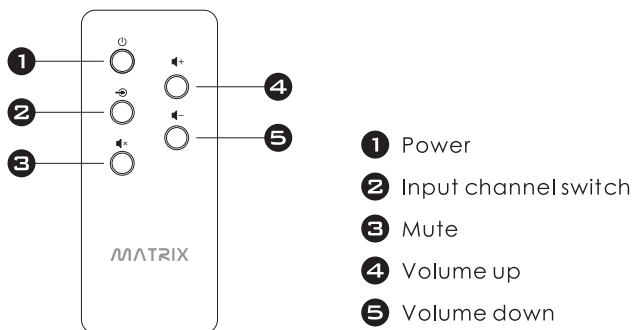
● FRONT PANEL

1 Remote control receiver   6 Input channel indicator

2 Headphone mode indicator   7 Headphone jack 1 (balanced r-channel jack)

3 Input channel switching button   8 Headphone jack 2 (balanced l-channel jack)

4 Mute indicator   9 Volume

5 Power on/off

● BACK PANEL

1 RCA Analog input   4 Power

2 XLR Analog input   5 Fuse

3 Remote controller switch

● REMOTE CONTROLLER (OPTIONAL)

1 Power

2 Input channel switch

3 Mute

4 Volume up

5 Volume down

●SETTINGS & USAGE

ON/OFF

Connect AC power into the power socket on the back panel of QUATTRO AMP, and it will enter the standby mode.

Press the power ON/OFF button on the front panel or on the remote controller to

turn on QUATTRO AMP.

When the currently selected input channel indicator flashes, press the power button again to enter standby mode (standby power consumption is less than 2W).

If you do not use QUATTRO AMP for a long time, please unplug it to reduce power consumption.

INPUT CHANNELS

Press the input channel switching button on the front panel to switch between XLR input and RCA input, and the corresponding indicator will light up while switching.

VOLUME CONTROL

By turning the volume knob on the front panel of QUATTRO AMP, you can adjust the headset volume level in real time.

HEADPHONE AUTO-DETECTION AND OUTPUT

QUATTRO AMP is capable of headphone auto-detection. There are two standard 1/4" headphone output ports on the front panel. Plug a balanced headset, each port of left and right channels is in use. When single-ended headphones are plugged in, two interface definitions are the same, and two pairs of headphones can be connected.

Plug in your headphone, and the system will start auto-detection at the same time.

When a single-ended headset is detected, the corresponding indicator on the front panel lights up, showing that the current mode is 'single-ended headphone output'; when a balanced headset is detected, the corresponding indicator on the front panel lights up, showing that the current mode is 'balanced headphone output'; if the two indicators flash at the same time, which means headphone connection error occurred, the system will output nothing.

To avoid damage done to your headphones and QUATTRO AMP, please check whether:

The headphone plug is inserted fully and properly; a single-ended headphone and one of the channels of a balanced headphone is connected at the same time;Your headphone has any defects.

After identifying the problems, you can resort to the TROUBLESHOOTING part. Re-insert the headset plug; or you may turn off QUATTRO AMP and insert the headset plug properly then re-boot,the system will auto-detect the headphone

again.
Due to different impedances of headphones, auto-detection failure may occur under some circumstances. Auto-detection failure may cause headphone output malfunction. The headphone may output through a single channel. So please check whether the detected state is in line with the actual headphone settings. If not, please turn off the main power then restart, it will auto-detect the headphone again, by this way impact on playback effect can be avoided.

REMOTE-CONTROL ENABLING SWITCH

When QUATTRO AMP and QUATTRO DAC are in use simultaneously, you may shift the remote-control enabling switch OFF on the back panel to prevent the two devices from responding to the remote control at the same time.
For using the remote controller to operate QUATTRO AMP, please shift the remote-control enabling switch REMOTE.

REMOTE CONTROLLER (OPTIONAL)

QUATTRO AMP can be operated with ᴍᴧᴛʀɪx RM-1 remote controller to adjust volume, channels and so on.
Make sure that nothing blocks the signals between QUATTRO and the remote controller within 5m.
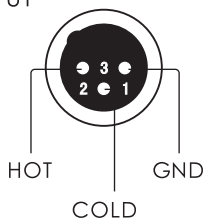When the remote controller is not in use, please put it away in order to prevent the buttons from being pressed by mistake, which results in unnecessary battery consumption.
When QUATTRO AMP does not respond well, please unscrew the remote controller on the back and replace the CR2032 button battery with a new one. Please watch the battery polarity.
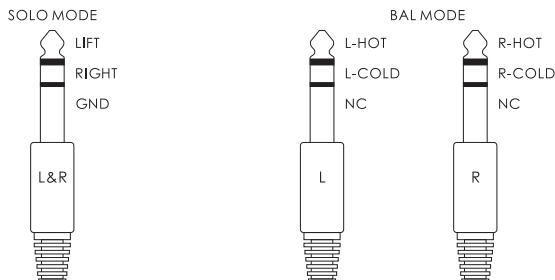
NOTE: The standard package of QUATTRO AMP does not contain RM-1 remote controller. You buy one at the ᴍᴧᴛʀɪx retailer if necessary.

● INTERFACES

BALANCED ANALOG INPUT

HOT   GND
COLD

HEADPHONE OUTPUT CONNECTOR

SOLO MODE

LIFT
RIGHT
GND

L&R

BAL MODE

L-HOT
L-COLD
NC

L

R-HOT
R-COLD
NC

R

NOTE: Make sure to connect your headphone, if not manufactured by **MATRIX**, as the picture showed above.

Connection error may cause damage to both your headphone and QUATTRO AMP.

MATRIX is not responsible for the damage of QUATTRO AMP, headphones or other devices caused by connection error.

● TROUBLESHOOTING

Check the following before calling for repair:
● Whether all the connections have been done correctly.
● Whether you operate QUATTRO according to this manual.

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 AC power for at least a minute, then reconnect and restart it.

PROBLEMS	POSSIBLE CAUSES	RESTORATION
Power off	● Power cable is disconnected from AC outlet ● Power is turned off	● Plug power cable into a proper AC outlet ● Check the fuse
No headphone output	● Signal input cable is disconnected ● Volume is turned to minimum ● It is muted, and the mute indicator is on ● Headphone auto-detection failure. headphone mode indicator is flashing	● Connect the audio cables appropriately ● Turn up the volume ● Press the mute button again on the remote controller, and the indicator is turned off ● Turn off the main power then restart, it will auto-detect the headphone again
Remote control failure	● Signal receiver is blocked ● Battery is running out ● Remote controller switch on the back panel is switched off	● Remove the block ● Replace the battery with a new one ● Switch the Remote controller REMOTE

If your problems cannot be solved by the remedies listed in the table above, it might due to the malfunction of QUATTRO's internal circuitry. In that case, please immediately unplug the power cable and contact **MATRIX** Customer Service.

● TECHNICAL SPECIFICATION

ANALOG INPUT:

    XRL interface

    Frequency response: 10Hz (-0.3dB) to 35 kHz (-1dB)

    SNR: 98dB A-Weighting

    Distortion: <0.001% at 6mW/300 Ω

    Gain Bandwidth: > 500kHz

    RCA interface

    Frequency response: 10Hz (-0.3dB) to 35 kHz (-1dB)

    SNR: 95dB A-Weighting

    Distortion: <0.001% at 6mW/300 Ω

    Gain Bandwidth: > 500kHz

HEADPHONE OUTPUT:

    Balanced mode

    Maximum output current: 1000mA

    Output power: 400mW/300 Ω, 800mW/60 Ω

    Unbalanced mode

    Maximum output current: 500mA

    Output power: 200mW/300 Ω, 400mW/60 Ω

POWER REQUIREMENTS:

    Power :   AC 220V~240V 50/60Hz

        (AC 110V~120V 50/60Hz)

    Working power consumption: < 25W

    Stand-by power consumption: < 2W

OTHER SPECIFICATIONS:

    Working temperature: 0~+40℃

    Weight: 1.6kg

    Dimensions: 205×245×44mm (L×W×H)

    Fuse: 5×20mm 250V 0.5A

NOTE: Specifications subject to changes without prior notice.

● CUSTOMER SERVICE

From the date of purchase, **MATRIX** provides you with a one-year-limited warranty.

This warranty is confined to the malfunction of our products which is due to 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:

● Inappropriate connection to the power.
● Attempts to disassemble the product.
● Circuit modification done by customer.
● Unauthorized replacement of the original components.
● Other unauthorized changes done by customer.
● Damage of the accessories.

● ACCESSORIES

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