

USER MANUAL



Thank you for purchasing the WADAX Reference DAC.
Please take some time to read this manual.
It will provide you with useful information to make your pleasure of listening even higher.



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INTRODUCTION

REFERENCE DAC - Digital to Analogue Converter

Reference DAC is an extremely high-quality universal Digital to Analogue converter. Equipped with modular digital inputs and analog outputs, Reference DAC is for any user seeking a unique, immersive, playback experience - it can be integrated into any system or can become part of the Wadax System concept.

Reference DAC accepts inputs for streaming applications – USB - and hi-fi equipment –AES-EBU, SPDIF RCA, SPDIF BNC, AES-EBU. It can also be connected to any amplifier through its balanced outputs. Internal design follows a true-balanced topology, and it has digital inputs in order to connect Reference DAC with Atlantis Transport for a lossless connection.

WARNING!

No connection or manipulation may be made before reading these instructions and observing all safety warnings. This extremely high quality DAC possesses new technical features which are or will become necessary for accurate amplification of high quality sources.

Observe general electrical safety precautions particularly with regard to avoiding water, moisture and heat. To reduce the risk of electric shock do not remove the covers and refer servicing to qualified personnel. The installation instructions must be carried out in full and the mentioned precautions taken to provide the satisfaction Reference DAC is designed to provide and to avoid jeopardizing personal and equipment safety or impairing performance.

Nevertheless, in Reference DAC, Wadax engineering excellence delivers extreme performance in a simple and convenient format that we hope you will enjoy for many years to come.



SETUP AND INSTALLATION

PRELIMINARIES

For exacting technicians, musicians, and all high-fidelity music purists who demand the very best in reproduction, we strongly recommend the use of top quality Pre-amplifier and Power amplifiers. The connection between the analog sources and the preamplifier as well as between the preamplifier and the power amplifiers are also critical. Ultra low reflection interconnect cables are absolutely mandatory to retain the time integrity that the preamplifier is designed to provide.

UNPACKING

You will find within the WADAX Reference DAC transit boxes:

- Reference DAC Head unit
- 2 x Reference DAC Power Source
- 2 Umbilical powercords.
- This manual.

Please keep the dual flightcases in case you need to transport Reference DAC any time in the future. This packaging has been designed specifically to protect Reference DAC in transit.

Use of alternative packaging is likely to result in damage, invalidating warranty cover.

SETUP AND INSTALLATION

CHOICE OF DAC LOCATION

The Wadax Reference DAC has been especially designed to minimize vibration effects on the audio-circuits. The DAC has been designed with adjustable conical feet. These are used to ensure proper vibration transmission to the DAC support in order to evacuate all detrimental vibrations inside the unit, following Wadax Mechalock fundamentals.

WARNING!

If the line voltage provided is not appropriate as supplied, please consult your dealer.

ATTENTION: At the 220V setting, the Wadax Reference DAC will function properly for main line voltages between 200V and 240V. At the 110V position, the main line must deliver between 105 and 125V. If your main supply operates out of these tolerances, please consult your Wadax dealer.

This fuse is located on the power cord receptacle and can be accessed by raising the cover using a small screwdriver when the power cord has been removed (ensuring power is disconnected before handling). Use a 2.5A slowblow fuse. Always ensure that the fuse cover is fitted.



SETUP AND INSTALLATION GUIDE

1



The first step is to connect the two umbilical cords provided between the Power Sources and Reference DAC. To insert the connector, set the slide lock to 12am.

2



Then push the connector toward the unit and rotate clockwise until a locking sound is heard.

SETUP AND INSTALLATION GUIDE

3



Apply the same process as in 1 and 2

4



Then do the same on the Power Supply and finally connect IEC power cable to the . The FLOAT/EARTH switch on each Power Supply should be down (EARTH). Press the power switch on both power supplies to power on.

SETUP AND INSTALLATION GUIDE

5



You can select the input should by pressing the corresponding input button.
Settings: they can be accessed pressing the wrench icon.

6

SETTINGS MENU

ABSOLUTE PHASE 0° / 180°

SERVICE INFO

OUTPUT IMPEDANCE:

0 / 7.4 / 7.5 / 8.2 / 8.3 / 8.7 /
8.82 / 9.8 / 10 / 28 / 30 / 46 /
50 / 66 / 75 / 600 OHMS



OUTPUT VOLTAGE 1V / 2V / 4V

RESTORE DEFAULTS

DSD FILTER: 1 / 2 / 3 / 4

DISPLAY BRIGHTNESS

RETURN TO MAIN MENU

SETUP AND INSTALLATION

CONNECTIONS

Warning! Always remember that a plug with bared connectors is dangerous if in contact with a live socket. This appliance must be earthed. Connect the non-rewireable power cord to the back of the power supply and plug it into the nearest wall plug. Use only a 3 lugs grounded plug, for safety and noise reasons. To get the best sound of the DAC, avoid any multiple plugs or extension cords.



Warning! Take care to always handle the cable by the connectors. Never twist the cable excessively or attempt to connect or disconnect the connector by handling the cable body in place of the connector. Connect the cabling from the power supply output to the DAC input point labeled “Power”.

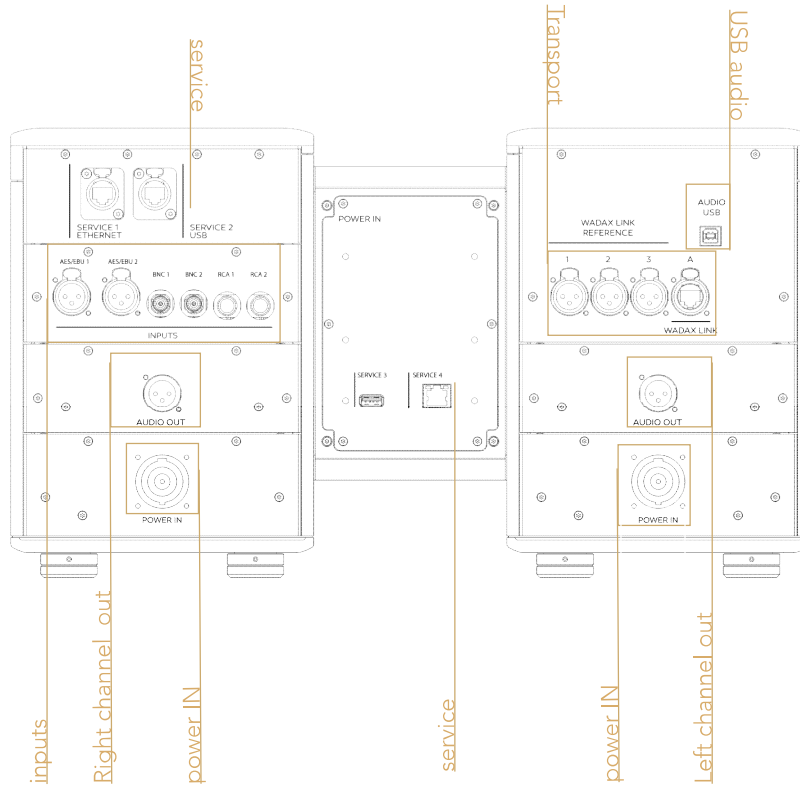


Warning! The next stage in setting up your Reference DAC to connect your sources, power amplifiers and other peripheral devices. All devices should be disconnected from mains power until safe.



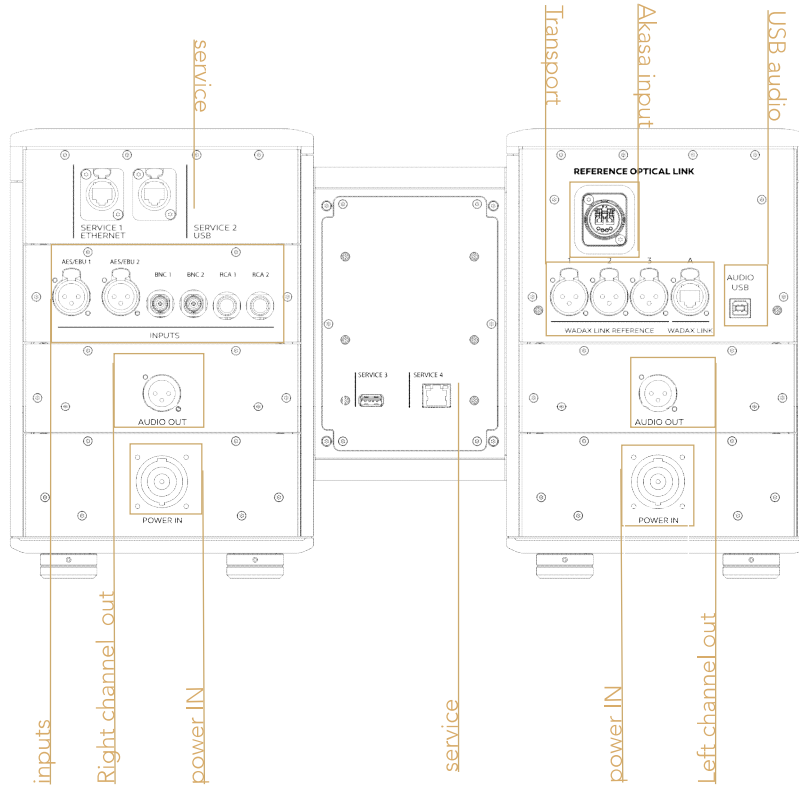
SETUP AND INSTALLATION

CONNECTIONS



SETUP AND INSTALLATION

CONNECTIONS - OPTICAL MODULE OPTION



CONNECTIONS

SETUP AND INSTALLATION

BUTTONS



RECOMMENDATIONS TO OBTAIN THE BEST RESULTS

1. Warm-up Sonic Effect:

If Reference DAC has been left un-powered for some time, the optimum sound quality may only be attained after 6 TO 24 hours. Sometimes this can extend to a few days. The critical circuits have to warm up to around +55 degrees Celsius (+131 degrees Fahrenheit) before achieving their optimal performances. This is why WADAX recommends that Reference DAC is always powered on.

2. Preferred input sources:

Transport is the recommended source for the ultimate musical experience.

Atlantis / Reference Server is the recommended source for High Resolution PCM / DSD content.

4. Earthing post:

It is recommended to try results using earthing products. They can potentially improve final results.

CLEANING

Use a soft, dry cloth to wipe dust off the music system. Do not use liquid cleaners or aerosol cleaners. Wipe dust off the surfaces using a dry, soft cloth. To remove stains or dirt, use a soft, damp cloth and a solution of water and mild detergent, such as washing-up liquid.

Waste Electrical and Electronic Equipment (WEEE) Environmental protection

The European Parliament and the Council of the European Union have issued the Waste Electrical and Electronic Equipment Directive. The purpose of the Directive is the prevention of waste of electrical and electronic equipment, and to promote the reuse and recycling and other forms of recovery of such waste. As such the Directive concerns producers, distributors and consumers.



The WEEE directive requires that both manufacturers and end-consumers dispose of electrical and electronic equipment and parts in an environmentally safe manner, and that equipment and waste are reused or recovered for their materials or energy. Electrical and electronic equipment and parts must not be disposed of with ordinary household refuse; all electrical and electronic equipment and parts must be collected and disposed of separately. Products and equipment which must be collected for reuse, recycling and other forms of recovery are marked with the pictogram shown.

When disposing of electrical and electronic equipment by use of the collection systems available in your country, you protect the environment, human health and contribute to the prudent and rational use of natural resources. Collecting electrical and electronic equipment and waste prevents the potential contamination of nature with the hazardous substances which maybe present in electrical and electronic products and equipment.

Your Wadax retailer will assist with and advise you of the correct way of disposal in your country.

SPECIFICATIONS:

Reference DAC

Power consumption ON/Stand-by: 50W/<7W

Inputs:

USB (32-384KHz, 16-24-32 bits, DSD64, DSD128, DSD256, MQA)

2 x SPDIF RCA (32-192KHz)

2 x SPDIF BNC(32-192KHz)

2 x AES-EBU XLR(32KHz-192KHz)

Native Wadax Reference Link (native PCM, DSD) for Transport: dual AES-EBU and

Phono Wadax Link: to connect to Trio Phono.

User interface: 5 inch capacitive touch full-colour display 800x480.

Max output voltage XLR per leg: 1V / 2V / 4Vrms. Selectable by touch screen.

Output impedance: 0.15 ohms/10 ohms /50 ohms /75 ohms /600 ohms. Selectable by touch screen.

Weight: 42Kg / 93 Lbs (main unit), 17Kg / 37 Lbs (each PSU).

Dimensions:

Main unit: 480mm / 18.89 inches (Width) x 435mm / 17.12 inches (Depth) x 265mm / 10.43 inches (Height).

PSU unit: 182mm / 7.16 inches (Width) x 380mm / 14.96 inches (Depth) x 265mm / 10.43 inches (Height).

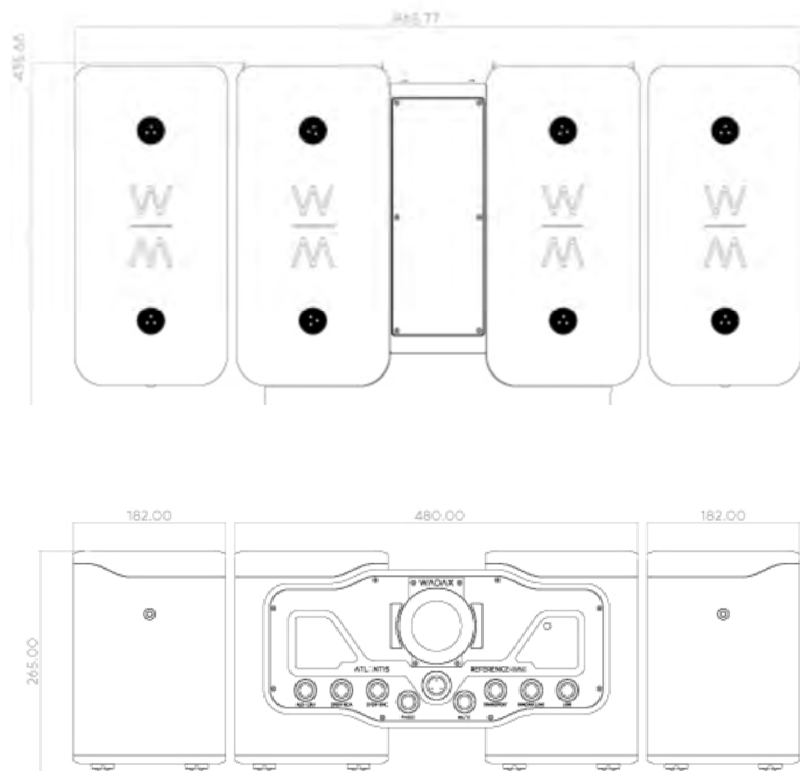
Power: 100V/110V/220V, switchable by service.

Service ports: Ethernet and USB.



This product is in conformity with the provisions of the Directives 1999/5/EC and 2006/95/EC.

[DIMENSIONS]



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