Heed

digital to analogue converter

OBELISK DA

Users Manual

Thank you for choosing our product!

The Obelisk DA is our multiple input, remote-controllable flagship Digital-to-Analogue converter. Using totally separate regulated power supplies and individual toroidal transformers for the analogue and digital sections with plug in cards for the DAC and USB circuits, we ensure the highest levels of performance and future proof upgradability.

We have designed the Obelisk DA with music lovers in mind, creating a sophisticated Digital-to-Analogue converter for people in search of a truly musical component, even by the highest analogue standards to deliver the highest level of performance by avoiding compromise wherever possible. We sincerely hope that you will agree and that your Obelisk DA will provide you with many years of impeccable, trouble free operation.

Happy Listening!

This detailed guide contains advice specifically concerned with using this component as well as more general advice about the use of domestic high quality audio components.

PLEASE READ IT CAREFULLY

Precautions

Instructions — All safety and operating instructions should be read and adhered to exactly as written here or as depicted on the unit. Please retain for future reference.

Water and Moisture — The unit should not be used near water — that is, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or swimming pool, etc.

Heat — The unit should be situated away from heat sources such as radiators, stoves, etc..

Power Sources — The unit should be connected to a power supply only of the type described in the operating instructions or as marked on the unit.

Power-Cord Protection — Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the unit.

Lightning — For added protection during a lightning storm, or when left unattended and unused for long periods of time, unplug the unit from the wall outlet. This will prevent damage to the product due to lightning and power-line surges.

Object and Liquid Entry — Care should be taken so that objects do not fall into and liquids are not spilled into the inside of the unit. For this reason, no objects filled with liquid, such as vases or drinking glasses should be placed on the equipment.

Damage Requiring Service — The unit should be serviced by qualified service personnel when:

- ▽ The power-supply cord or the plug has been damaged;
- ▽ Objects have fallen, or liquid has been spilled into the unit; or the unit has been exposed to rain respectively;
- ▽ The unit does not appear to operate normally or exhibits a change in performance;
- ▽ The unit has been dropped, or the cabinet damaged.

The Obelisk DA converter does not have any user serviceable parts inside. It is essential that repairs and updates are only carried out by our authorised trade partners — distributors and dealers — , or at the factory by Heed Audio itself. Many components are custom made, tested or matched and appropriate replacements are often unobtainable from other sources.

⚠ **Therefore, users should not attempt to service the units beyond those means described in the operating instructions, or under any circumstances allow anyone to modify them.**
Unauthorised repairs or modifications will invalidate the guarantee of the units.

Grounding or Polarisation — Precautions should be taken so that the grounding or polarisation is not defeated.

Radio interference — All Heed components are designed to provide reasonable protection against harmful interference in a domestic installation. However, there is no guarantee that interference will not occur in a particular installation. If your Obelisk does cause harmful interference to radio or television reception, which can be determined by turning off and on, you are encouraged to try to correct the interference by one or more of the following measures:

- ▽ Reorient or relocate the receiving antenna;
- ▽ Increase the separation between amplifier and receiver (radio tuner, television set, etc.);
- ▽ Connect the equipment into a power outlet on a circuit different from that to which the receiver is connected;
- ▽ Contact your Heed dealer or an experienced radio/TV technician for help.

Maintenance / Cleaning — It is recommended to dust the equipment from time to time with a soft dry cloth.

⚠ **Do not use cleaning solvents or abrasives for cleaning!**
Always switch off and unplug the unit from the power supply when cleaning!

front panel

1. Display of selected input	**2. Display dimming**
3. Input selector "down"	**4. Input selector "up"**

The input control buttons are duplicated on the remote control handset except for the display function (2).

rear panel

5. Power on/off switch	**6. Mains connector and fuse socket**
7. Audio line outputs	**8. TOSLINK optical digital inputs 3 & 4**
9. S/PDIF co-axial digital inputs 1 & 2	**10. USB digital input 5**

Installation

We believe that a Heed Audio component should, optimally, be installed by an approved Heed dealer. Nevertheless, the procedure is straight-forward enough to enable you to install your new **Obelisk DA** yourself by following these instructions. Should any problems be experienced which are not covered here, contact your local dealer. If you are unable to do so, or problems persist, do not hesitate to contact our distributor/trade partner in your country, (see our website < *www.heedaudio.com* > - "*Worldwide distributors*" - for details), or us directly at Heed Audio .... **we're here for you!**

Unpacking

When opening the box and unpacking the unit, you will find following items supplied:

∇   1 x **Heed Obelisk DA** digital to analogue converter
∇   1 x OBELISK remote control handset
∇   1 x IEC-norm mains power cord
∇   1 x Users Manual

Placement

In common with all high-quality audiophile equipment, the **Obelisk DA** performs optimally when positioned on its own individual mounting surface, ideally a light rigid structure. There are many purpose-built stands readily available from all better dealers.

Avoid placing the unit on soft surfaces, for example, carpets or soft fabrics. Keep it away from strong magnetic fields.

Connection to the mains supply

⚠   **Before performing any connections or disconnections, ensure that the unit's power on/ off switch (5) is in "off" position.**

⚠   **Always check that the voltage and frequency of the mains supply corresponds to the specifications as labelled on the unit!**

∇   Insert the power cord's IEC-type plug into the power inlet connector [6] of the **Obelisk DA**.
∇   Connect the power cord's mains plug to your power outlet.

Input connections

The **Obelisk DA** has five dedicated digital (co-axial / optical fibre and USB) inputs that can be selected either by the front panel up/down selectors [3] & [4] or via the remote control handset. Inputs 1 & 2 are true digital co-axial S/PDIF connectors. Inputs 3 & 4 are true digital optical fibre TOSLINK S/PDIF connectors. Input 5 is a digital USB input for devices that only have USB connectivity.

The **Obelisk DA** is not only the ideal compliment to our **Obelisk DT** compact disc transport, it will also extract the very best from any digital source: computers, media servers, DAB tuners, satellite boxes, etc. Its modular DAC card and USB interface upgradeability assure future-proof enjoyment for many years to come.

At the DA's heart lies the new **Heed Dactil 1.2** DAC module, based on a Wolfson D/A chip and a new Cirrus receiver, it's capable of 24bit/192 kHz high resolution signal processing. A deceptively simple module with excellent musical qualities, the **Dactil 1.2** manages to scale new heights in the realisation of the **Obelisk DA's** 'no compromise' approach, featuring entirely independent supply rails for its analogue and digital sections.

The **Obelisk DA** is also fitted with a USB to S/PDIF module that allows USB connection from computers, touch pads, smart phones and similar devices. Refer to the specifications section for the specific data of the inputs and modules.

Cables, connector selection and general advice

S/PDIF connection — The standard S/PDIF (Sony/Philips Digital Interface Format) digital connection was originally designed for test and measurements. It has become the default standard across the industry and requires no special drivers.

Theoretically, there are no differences between the signals transmitted via optical TOSLINK or coaxial S/PDIF connectors — both carry exactly the same information. Selection of one over the other rests mainly on the availability of appropriate connectors on the chosen equipment and the preference and convenience of the user. In practice, there are pros and cons with both. TOSLINK cables do not work well (and may even suffer permanent damage) if tightly bent, and their high (light) signal attenuation limits their effective cable length to approx. 6 metres (20 ft). On the other hand, TOSLINK cables are not susceptible to ground loops and RF interference, like coaxial cables.

In terms of sonic performance, however, we are convinced that coaxial connections have the edge over optical ones. As always, please use Premium grade cables for optimum performance, do not use cheap low grade cables.

USB connection — This is a computer and OS industry standard with the following features.
- ∇ Extremely wide hardware support.
- ∇ Native drivers in all major operating systems (Windows, Mac, Linux).
- ∇ Allows the use of any music player software and requires no custom device drivers.
- ∇ Native support for USB Audio 2.0 on Mac, Linux and Unix, Windows driver is available at www.heedaudio.com
- ∇ Technically, this an excellent low jitter solution.

However, care must be exercised when using USB connection.
- ∇ Do not use the same USB output port on your computer which you have any hard drives connected as it can cause considerable noise, jitter and interference, it is better to keep the USB bus free and use FireWire or e-SATA for external drives.
- ∇ RAM — Run the maximum your computer will allow. 4GB for Windows 32 bit and 8GB for 64 bit. For Mac, visit http://www.mactracker.ca.
- ∇ Use Premium cables. Do not use cheap printer grade cables.
- ∇ Use a separate Line Conditioner / supply for all your computer equipment, keep it separate from you Hi-Fi equipment mains supply.

Output connections

LINE OUT: The **Obelisk DA** has two Line Out (RCA) connections [7] available, one with 1.25V output voltage as a direct connection from the converter, while the other one is boosted to 2.5V by a dedicated preamp section (similar to the analogue circuit of the Obelisk Pre) making it an ideal source for fans of passive pre-amps.

When connecting the Obelisk DA to the pre-amplifier, ensure that the "L" (left) and "R" (right) channels are connected correctly.

If you have problems, contact your Heed dealer and seek advice.

It is strongly recommended to use the highest quality interconnect cables between your digital source devices and the Obelisk DA and also from the Obelisk DA to the pre-amplifier and your other hi-fi components.

- The best quality interconnects significantly enhance the performance of your system.

Your HEED dealer will certainly help you to choose the right connections for your particular set-up.

Operation

⚠️ **Once the Obelisk DA is connected to the mains supply, as well as to source components and pre-amplifiers, remove the protective film from the front panel. You can detach it by grabbing the film at any of the corners and peeling it off.**

NOTE! - This only concerns the units appearance, it has no electrical or mechanical influence on the functionality.

Powering up the Obelisk DA

When all the installation steps have been completed correctly, your unit is ready for use.

Switch the unit on by using the mains switch at the back [5]. After switch-on the unit automatically activates input number 1.

- ▽ The input can be selected using the up and down arrow buttons △▽ on the unit [3] & [4], or the remote controller. The number of the selected input can be seen on the display (**0** through to **5**).
- ▽ Input **0** is the mute function, it does not select a physical input.
- ▽ Inputs **1** & **2** are the co-axial S/PDIF inputs.
- ▽ Inputs **3** & **4** are the optical TOSLINK S/PDIF inputs.
- ▽ Input **5** is the USB input.

Note: *Pushing the **D** (display) button [2] the Automatic mode will change back to Static mode again.**Note:** The data connection between the USB source and the Obelisk DA is always on after a USB cable is connected to the Obelisk DA, regardless of the selected input and whether the Obelisk DA is switched on. The connected computer may select the Obelisk DA as the default sound output, in this case the standard sound output of the computer may be inactive.*

Display operation

The display mode can be modified using the **D** (display) button [2]. It has two mode of operation: Static and Automatic.

- ▽ After switch-on the display is in Static mode. The display shows the selected input all the time .
- ▽ The Automatic mode can be selected by pushing the **D** (display) button [2]. Then the display switches off, but the small dot (**.**) still shows that the unit is switched on.
- ▽ In Automatic mode, after any button is pressed, the display is switched on and the function will be performed. Approximately 7 seconds after the last button press (except the **D** (display) button [2]) the display will switch off automatically.

Note: *Although you can use your Obelisk DT within seconds of switching it on, as with all audio equipment the best sound quality will be reached after a period of warm-up time, preferably 10-15 minutes. We recommend keeping the unit switched on continually for optimum performance. However, your Obelisk DT should be switched off if left unattended for extended periods, or in the event of thunderstorm. As mentioned previously, it is also necessary to switch the unit off when connecting or disconnecting cables.*

Troubleshooting

Basic problem-solving with the Obelisk DT is similar to troubleshooting other hi-fi components. Always check the most obvious possible causes first, such as the following:

Problem	Probable cause	Remedy
Display doesn't light.	Display is in Automatic (dim) mode.	Push any button on the unit or on the RC handset. If the unit is switched on, and pushing the buttons doesn't activate the display, switch the unit off and switch on again after one minute. If the display is still not working, please contact your Heed dealer.
Display shows characters not described in this manual.		Switch off the unit and switch it on again after one minute. If the display is still not working, please contact your Heed dealer.
Unit is not functioning and no display when switched on.	No power.	Check the fuse in the Mains Socket fuse carrier [6]. Check the fuse in the Mains plug (if fitted). Always replace blown fuses with the correct type and value. If unit is still not functional, please contact your Heed dealer.

WARNING!

SHOCK HAZARD!
DO NOT OPEN
There are no user serviceable parts inside the unit.
Servicing should only be carried out by authorised service centres.
Unauthorised repairs will invalidate all warranties.

SPECIFICATIONS

Input connections (x5):	**75 ohms RCA (x1) & BNC (x1), TOSLINK optical (x2) and USB (x1)**
Input signal (RCA & BNC co-axial):	**max. 192 kHz / 24 bit stereo S/PDIF signal**
Input signal (TOSLINK optical):	**max. 192 kHz / 24 bit stereo S/PDIF signal**
Input signal (USB):	**asynchronous, max. 192kHz / 24 bit, USB Audio 2.0-compatible**
Output signal level (direct):	**1.25 Vrms (depends on installed DAC card)**
Output signal level (buffered):	**2.5 Vrms (depends on installed DAC card)**
Output impedance :	**35 ohms**
Frequency response (3Hz-21kHz):	**+/- 0.2 dB (depends on connected DAC card)**
THD (0 dB, 1 kHz):	**< 0.005 % (depends on connected DAC card)**
S/N (A-weighting):	**97 dB (depends on connected DAC card)**
Weight:	**4 kg**
Fuse type/value:	**20 x 5mm cartridge - 500mA.T.**
Power consumption:	**15 W maximum**

WARRANTY

If within three years of the purchase date your **Heed Obelisk DA** prove to be defective for any reason other than accident, misuse, neglect, unauthorised modification or fair wear and tear, Heed Audio Ltd. will, at its discretion, replace the faulty parts without charge and for labour. This factory warranty is valid only for units sold into countries with no appointed Heed distributor.

NOTE: Service enquiries in countries with an appointed distributor should be addressed first to the supplying dealer and/or Heed distributor. Warranties granted in these countries are entirely at the discretion of the distributor.

DISTRIBUTOR CONTACT

Visit www.heedaudio.com > Distributors... for a complete list of Heed distributors.

FACTORY CONTACT

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