



Heritage DAC *MP2*

User manual



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1.Introduction

1.1 Contact

ORPHEUS MEDIA SARL
Avenue des Sciences 3
1400 Yverdon-les-Bains

Phone : +41 24 423 9088

Fax : +41 24 424 9089

E-mail: info@orpheuslab.com

Web: www.orpheuslab.com

1.2 Document overview

This document is the user manual for the Orpheus Media Heritage digital to analog converter.

2. Definitions



Figure 1

2.1 LEDs Definition

Led x (1-7) **OFF:** Input x not selected
 ON: Input x selected & locked signal on
 Blink: Input x selected but unlocked or no signal.

Led 1 = Digital Input 1 (AES1)

Led 2 = Digital Input 2 (RCA1)

Led 3 = Digital Input 3 (BNC1)

Led 4 = Digital Input 4 (BNC2)

Led 5 = Digital Input 5 (RCA2)

Led 6 = Digital Input 6 (AES2)

Led 7 = USB MODE

Led 8 **OFF:** No phase inversion (phase offset 0°)
 ON: Phase inversion (Phase offset 180°)

Led 9 **OFF:** Power supply OFF
 ON: Power supply ON
 Blink: Power supply ON with problem



Figure 2

2.2 Buttons Definition

Input <	Switch input selection from the right hand side to left hand side input (from input 1 to input 2,3,4,5,6,USB,1,...). Also used to activate standby mode(see § 5)
Input >	Switch input selection from the left hand side to right hand side input (from USB port to input 6,4,3,2,1,USB port,). Also used to switch user interface mode (see § 4).
φ 0/180°	Toggle switch for phase inversion. Also used to switch user interface or activate standby mode (see § 4 and 5)
Power Switch	Switch ON/OFF power supply.



Figure 3

2.3 Input/Output Definition

Digital Inputs:

AES1 & AES2 Balanced XLR input (SPDIF & AES format)

RCA1 & RCA2 Unbalanced RCA input (SPDIF format)

BNC1 & BNC2 Unbalanced BNC input (SPDIF format)


USB Input:

USB port USB port enables to play music from a PC or MAC like a sound card .

Analog Outputs:

Bal.R & Bal.L Balanced XLR output (R= Right / L=Left)

Unbal.R & Unbal.L Unbalanced RCA output (R= Right / L=Left)

Note	
	<p><i>Please ensure that the power connector on either side of units is connected together between the Audio unit and Control/PSU (Red cable on the figure 3). On the other hand, the central connectors (one on each unit) have to be connected together as well (Blue cable on the figure 3).</i></p>

3.Initialization

When the Heritage DAC is turned ON or released from Standby mode, all LEDs blink for about 10 to 15 seconds. This is the time needed to stabilize all power supplies.

4.User Interface

There are three user interface modes with two levels of led brightness. In order to switch between the modes, the button 3 has to be held pressed while the button 2 toggles the configuration. The modes are defined as follow:

Mode 1: All LEDs are enabled. The brightness is high. The logo backlight is ON. (Default mode)

Mode 2: All LEDs are enabled. The brightness is low. The logo backlight is ON.

Mode 3: Only one led among LED1 to LED7 is ON. The brightness is low. The remaining LEDs, namely LED8 to LED9 are disabled all the time. The logo backlight is OFF as well.

Note that the logo backlight has only one brightness level.

5.Standby mode

The appliance can be turned in Standby mode. It consists of a low power mode where part of the components are disabled while the Heritage DAC is not switched OFF. During this mode, the logo and all LEDs, except LED9, are OFF.

To activate the Standby mode, the button 3 has to be held pressed while the button 1 is pressed. To release the Heritage DAC from standby mode, one of the three buttons has to be pressed.

The Heritage DAC will go in Standby mode automatically if the input is not locked or the audio signal remains at zero for about 60 min.

The whole configuration of the appliance is recorded in flash memory and thus preserved when Heritage DAC is turned OFF or in standby mode.

6.USB mode

The USB mode is activated when the USB port is selected (LED7 is ON).

It enables to use your DAC to play music from your PC/MAC like a sound card.

7.Recommendations

It is highly recommended to:

1. Turn the unit completely OFF (Power switch) after use. As the Heritage DAC is a high current design, this will save components life time and your budget as well.
2. Allow about 15 – 30 min of warm up time to get the best audio performance.
3. Use the balanced analogue output, as long as possible. The Heritage DAC is a full symmetrical design thus the best performance is achieved in balanced analog configuration.

8. Technical Data

Digital Inputs:	2 x RCA, 2 x BNC, 2 x XLR 44.1, 48, 88.2, 96, 176.4 and 192 kHz 16 to 24 bits
USB port:	24 bits, 96kHz
Analog output:	Unbalanced stereo: 2.2V (@ 0dBFS) Balanced stereo: 4.8V (@ 0dBFS)
Conversion:	High speed (768 kHz) asynchronous using 4 DACs per channel in crossed differential mode with exclusive DAC scrambling technology. High precision master clock.
Output stage:	Full differential pure class A.
Frequency response:	Set for optimal transient response.
Distortion (THD+N):	Better than 0.001%
Noise floor:	-140 dB
Weight:	Control/PSU Unit: 18 [kg] Audio Unit: 9 [kg]
Size:	Control/PSU Unit: 42 x 44 x 7.5 [cm] Audio Unit: 42 x 44 x 5 [cm]