

Phone: 607-723-3539 Fax: 607-724-0549 www.wadia.com



### di122 digital audio decoder

Owner's Manual





The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

WARNING - TO REDUCE RISK OF FIRE OR ELECTRICAL SHOCK, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.



AVIS RISQUE DE CHOC ELECTRIQUE - NE PAS OUVRIR.

### NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

To prevent the risk of electric shock, do not remove cover or back. No user-serviceable parts inside.

# IMPORTANT SAFETY INSTRUCTIONS!

# PLEASE READ THEM BEFORE OPERATING THIS EQUIPMENT.

- 1 Read these instructions
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with a dry cloth.
- 7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for

replacement of the obsolete outlet.

- 10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11. Only use attachments/accessories specified by the manufacturer.
- 12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 13. Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15. Do not expose this equipment to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the equipment.

- 16. To completely disconnect this equipment from the a.c. mains, disconnect the AC / DC Adapter from the a.c. receptacle.
- 17. The mains plug of the power supply cord shall remain readily operable. If the AC /DC Adapter is provided with a mains power supply cord attachment, the plug of this power supply cord shall remain readily operable.
- 18. Do not expose batteries to excessive heat such as sunshine, fire or the like.
- 19. Connect mains power supply cord only to a mains socket outlet with a protective earthing connection.

## $\triangle$ w

#### WARNING

#### DO NOT INGEST BATTERY, CHEMICAL BURN HAZARD

The remote control supplied with this product contains a coin/button cell battery. If the coin/button cell battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death. Keep new and used batteries away from children. If the battery compartment does not close securely, stop using the product and keep it away from children. If you think batteries might have been swallowed or placed inside of the body, seek immediate medical attention.

#### **CAUTION:**

Danger of explosion if the battery is incorrectly installed. Only install one of the approved Lithium Batteries listed below.

#### **Battery Installation**

The Wadia di122 Remote Control uses a long life Lithium Coin Cell type battery. The di122 may be supplied with a battery depending on the country where the di122 is purchased. When purchasing a battery for use in the di122 refer to the following list:

Approved Lithium Batteries			
Brand	IEC No.	ANSI/NEDA No.	
Energizer	CR20di <sup>122</sup>	5004LC <sup>1</sup>	
Panasonic	CR2032(PA/1B) <sup>1</sup>	5004LC1	

<sup>1</sup>CR Lithium Coin Cells contain Perchlorate Material - special handling may apply. For additional information go to www.dtsc.ca.gov/hazaedous waste/perchlorate/index.cfm

Access to the recessed battery compartment is located on the Rear of the Remote Control.

Refer to figure 1.

Perform the following steps to install the battery:

1. Press the tab towards the bottom edge of the Remote Control and lift up on the Battery Cover and temporarily place it aside. Refer to figures 2 and 3.



LIFT UP Figure 3

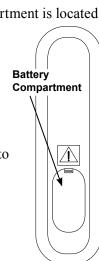


Figure 1

- 2. Remove the CR2032 Battery from its packaging.
- 3. Orient the battery so the + symbol (engraved into one side of the battery) is facing up.



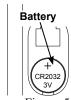


Figure 5

- 4. Referring to figures 4 and 5, insert the battery into the socket. Make sure the battery is touching both contact points and is seated in the socket.
- 5. Reinstall the Battery Cover.
- 6. The Remote Control is now ready for operation.

#### **Battery Removal**

The life of the Lithium Battery used in the Wadia Remote Control is dependent on the actual amount of use. It is advisable to remove the battery from the Remote Control when it is not to be used for an extended period of time. This will help to extend battery life and avoid possible damage to the Remote Control. Perform the following steps to remove the battery from the Remote Control:

1. Press the tab and lift up on the Battery Cover and temporarily place it aside. Refer to figures 2 and 3.

Figure 6

2. Referring to figure 6, press on the bottom edge of the battery to release the battery from the molded battery socket. Then remove the battery from inside of the Remote Control.



4. Store the battery in a cool dry place for future use or dispose of the battery in accordance with the local regulations for lithium battery disposal. Batteries should never be thrown away or incinerated.



#### DO NOT INGEST BATTERY, CHEMICAL BURN HAZARD

The remote control supplied with this product contains a coin/button cell battery. If the coin/button cell battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death. Keep new and used batteries away from children. If the battery compartment does not close securely, stop using the product and keep it away from children. If you think batteries might have been swallowed or placed inside of the body, seek immediate medical attention.



#### Thank You

All of us at Wadia Digital would like to say thank you, and congratulations for deciding to own this Wadia di122 digital audio decoder. We sincerely believe this Wadia product will bring you many years of musical enjoyment and satisfaction.

Please take a short time to read the information in this manual. We want you to be as familiar as possible with all the features and functions of your new Wadia Product.

#### About Wadia ....

Wadia Digital, founded in 1988, is one of the original companies dedicated to high performance digital audio reproduction. Wadia is based on the philosophy of applying advanced technology to improve the performance of digital audio components.

Wadia has consistently raised the standard for performance of Digital Audio playback. Some of the technological innovations pioneered by Wadia include:

- DigiMaster<sup>TM</sup> patented algorithm (filter optimized for reproducing music)
- ClockLink<sup>TM</sup> proprietary jitter reduction technology
- SwiftCurrent<sup>TM</sup> current to voltage conversion technology
- First outboard Digital-to-Analog converter
- First to apply glass fiber-optics to home audio Our designs are born of a delicate balance of technology shaped by a passion for music. Wadia continues to re-define the limits of digital music playback.

#### **Please Take A Moment**

The serial number, purchase date and Wadia Dealer name are important to you for possible insurance claim or future service. The spaces below have been provided for you to record that information:

Serial Number: \_\_\_\_\_\_

Purchase Date: \_\_\_\_\_\_

Dealer Name:

#### **Technical Assistance**

If at any time you have questions about your Wadia product, contact your Wadia Dealer who is familiar with your Wadia equipment and any other brands that may be part of your system. If you or your Dealer wish additional help concerning a suspected problem, you can receive technical assistance for all Wadia products at:

Wadia Digital, LLC. 2 Chambers Street Binghamton, New York 13903 Phone: 607-723-3539

Fax: 607-724-0549

#### **Customer Service**

If it is determined that your Wadia product is in need of repair, you can return it to your Dealer. You can also return it to the Wadia Service Department. For assistance on factory repair return procedure, contact the Wadia Service Department at:

Wadia Digital, LLC. 2 Chambers Street Binghamton, New York 13903

Phone: 607-723-3539 Fax: 607-724-0549

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#### **General Information**

- 1. For additional connection information, refer to the owner's manual(s) for any component(s) connected to the di122 Digital Audio Decoder.
- 2. The Main AC Power going to the di122 and any other Wadia Component(s) should not be applied until all the system components are connected together. Failure to do so could result in malfunctioning of some or all of the system's normal operations. When the di122 and other Wadia Components are in their Standby Power Off Mode, the Microprocessor's Circuitry inside each component is active.
- 3. The Unbalanced Outputs and Balanced Outputs can be used simultaneously.
- 4. The di122's internal Digital to Analog Converter Circuitry is designed to decode 2-channel PCM (Pulse Code Modulation) Digital Signal present at the Coaxial, Optical and USB Digital Inputs. Other Digital Audio Signal Format Types will cause the Audio Outputs of the di122 to be muted.
- 5. When discarding the unit, comply with local rules or regulations. Batteries should never be thrown away or incinerated but disposed of in accordance with the local regulations concerning battery disposal.
- 6. For additional information on the dil22 and other Wadia Products please visit the Wadia Web Site at www.wadia.com.

#### **Connector and Cable Information**

#### XLR Connectors

Below is the Pin configuration for the XLR Balanced Output Connectors on the dil22. Refer to the diagram for connections:

PIN 1: Shield/Ground

PIN 2: + Output

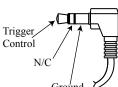
PIN 3: - Output

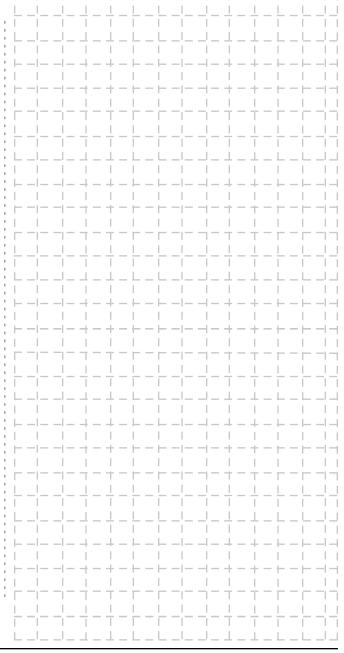


#### **Trigger Control Connectors**

The Wadia di122 Trigger Input receives an On/Off signal from +5 to +12 volts.

The Trigger Output will in turn provide a +12 volt Output Signal with a total current up to 25mA.







#### Introduction

The Wadia di122 Digital Audio Decoder is one of the finest Digital to Analog Processors ever created with connections for digital sources including USB. The di122 Outputs have the ability to drive multiple components. The di122 reproduction is sonically transparent and absolutely accurate. The Wadia Sound is "The Sound of the Music Itself."

#### **Performance Features**

#### • Dual Function

Use the Wadia di122 as the Digital Preamplifer together with Digital Source Components and Power Amplifier¹ to form a complete Audio System. Connect the Wadia di122 to an exisiting Analog Audio System to provide the latest in Digital-to-Analog Conversion from digital audio sources.

#### • Electronic Input Switching

Electronic Input Switching on all Inputs provides reliable, noiseless, distortion free switching.

#### • Balanced Outputs

The Balanced Outputs allow the connection of long cable lengths without a loss in sound quality.

#### • Digital Audio Inputs

The di122 has Coaxial, Optical and USB Digital Inputs to Decode PCM Signals from an external source. The Coaxial and Optical Inputs process Digital Signals up to 192kHz with 24Bit resolution. The USB Input process PCM Digital Signals up to 192kHz with

<sup>1</sup>Note: The Wadia di122 is designed to be compatible with the majority of Audio Power Amplifiers. However, due to a wide range of Power Amplifier Designs it is important the input sensitivity of the amplifier be at least 2 Volts. This will assure the playback of most music recordings are reproduced with adequate dynamic range.

32Bit resolution, decodes DSD128 Digital Signals and DXD 24Bit with a sampling rate of 352.8 (or 384).

#### • ESS Digital to Analog Converter

The patented SABRE<sup>32</sup> Hyperstream<sup>TM</sup> DAC architecture and time Domain Jitter Eliminator is a 8 channel 32-bit, 192kHz Digital to Analog Converter. This assures the music is reproduced with a wide dynamic range and extremely low distortion for all Input Sources.

#### • Precision Tracking Volume Control

Volume levels are controlled by a Digitally Controlled Attenuator System.

#### • Alphanumeric Fluorescent Display

The Front Panel Information Display indicates the Source Selection, Bit Rate/Sampling Frequency and Volume Level. The display intensity is adjustable.

#### Remote Control

The Remote Control provides control of the di122 operating functions.

#### Gold Plated Connectors

The Output Connectors Contacts are gold plated for superior corrosion resistance and high electrical conductivity.

#### • LED Front Panel Indicators

Long life Light Emitting Diode (LED) is used to indicate when the di122 is in the Standby Mode.

#### Die Cast Aluminium Chasiss

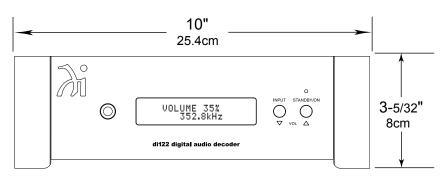
Ensures the durability and functional design of the dil22 will be retained for many years.

SABRE<sup>32</sup> and Hyperstream are registerted trademarks of ESS Technology

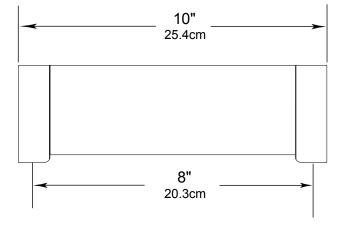
#### **Dimensions**

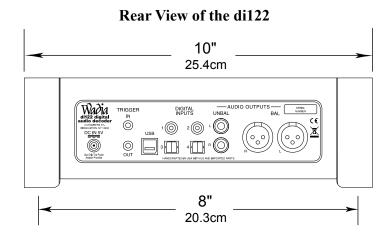
The following dimensions can assist in determining the best location for your dil22. There is additional information on the next page pertaining to installing the dil22 into cabinets.

#### Front View of the di122



#### Side View of the di122



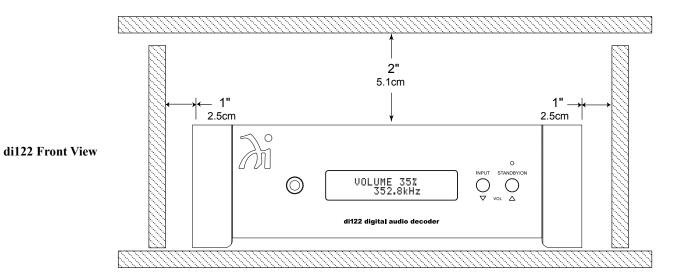




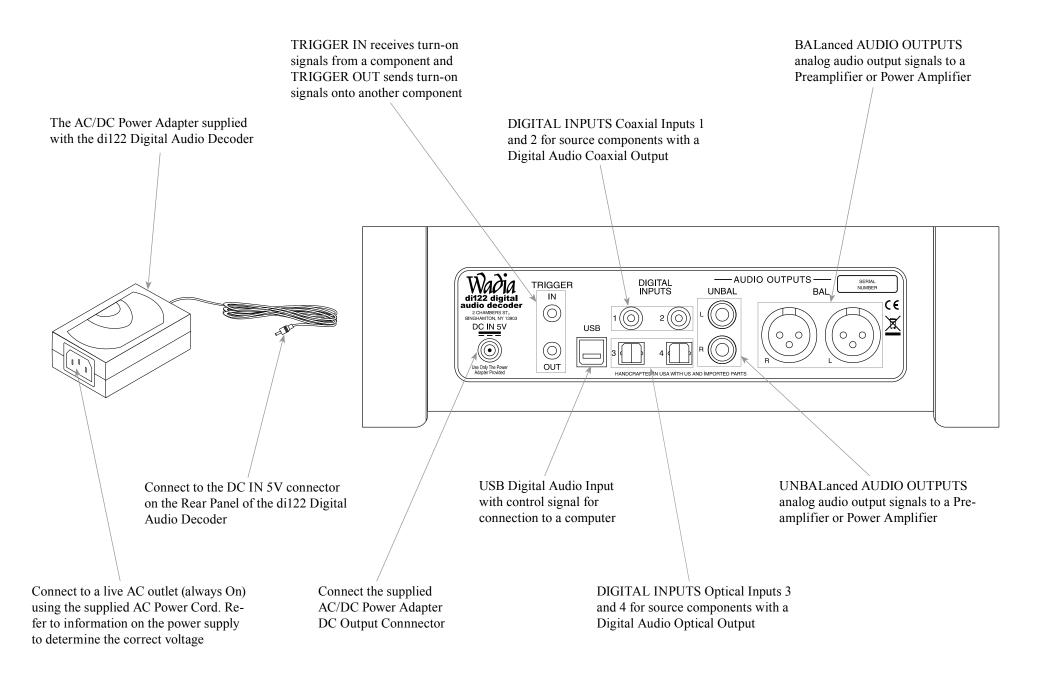
#### Installation

The di122 is designed to be placed upright on a table or shelf, standing on its feet. The required ventilation requirements are shown.

Always provide adequate ventilation for your di122. Cool operation ensures the longest possible operating life for any electronic instrument. Do not install the di122 directly above a heat generating device, such as a Power Amplifier. Allow at least 2 inches (5.1cm) above the top, 5/8 inches (1.6cm) below the bottom and 1 inch (2.5cm) on each side of the di122, so that airflow is not obstructed. Allow 20 inches (50.8cm) of depth for airflow and cable connections.



di122 Side View





#### Connecting to a Preamplifier

There are two different ways the dil22 may be operated in an audio system. The first way is as a Digital to Analog Converter with Input Switching. The Audio Output of the Wadia dil22 is connected to an Analog Input on the Preamplifier (Integrated Amplifier or Receiver). The second way is as the Main Audio Preamplifier connected directly to a Power Amplifier; follow instructions on the next page.

On this page is an example of a typical audio system. Your system may vary from this, however the actual components would be connected in a similar manner. For additional information refer to "Connector and Cable Information" on page 5.

Note: 1. The Output Connection Balanced or Unbalanced may be used simultaneously.

#### **Analog Audio Connections:**

1. Connect audio cables from the di122 UNBALanced AUDIO OUTPUTS R & L (Right and Left) connectors to the unbalanced Aux Input Connectors on the Preamplifier (A/V Control Center, Integrated Amplifier or Receiver).

Note: 1. The Balanced Outputs may be used instead of the Unbalanced Outputs.

#### **Digital Audio Connections:**

- 2. Connect a Digital Optical Cable from the dil22 DIGITAL INPUTS OPTICAL 3 connector to the CD Player Digital Optical Output connector.
- 3. Connect a Digital Coaxial Cable from the dil22 DIGITAL INPUTS COAXIAL 1 connector to the Server Digital Coaxial Output connector.
- 4. Connect a USB cable with (type A to type B) connectors from the di122 DIGITAL AUDIO INPUT USB connector to the Computer USB connector.

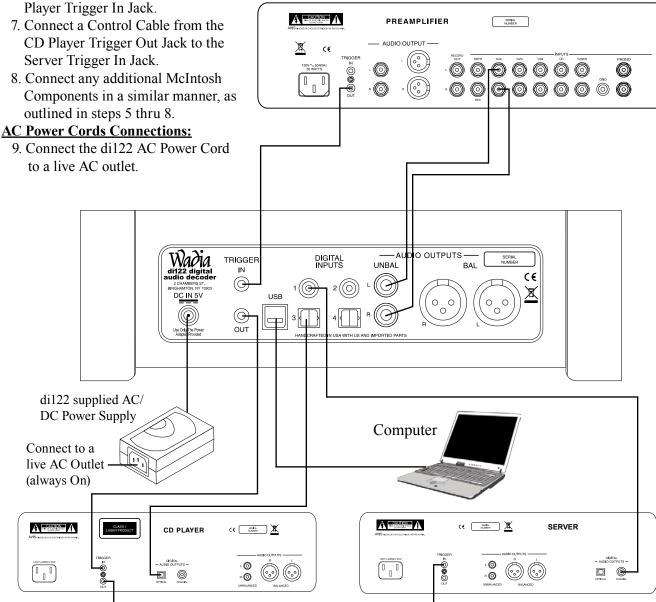
#### **Trigger Control Connections:**

5. Connect a Control Cable from the Preamplifier Trigger Out Jack to the TRIGGER IN Jack on the Wadia di122.

6 Connect a Control Cable from the Wadia di122 TRIGGER OUT Jack to the CD

- 7. Connect a Control Cable from the CD Player Trigger Out Jack to the Server Trigger In Jack.
- Components in a similar manner, as outlined in steps 5 thru 8.

9. Connect the di122 AC Power Cord



#### **Connecting to a Power Amplifer**

The di122 may also be used as the Main Audio Preamplifier connected directly to a Power Amplifier. Follow the connection instructions below and diagram on this page.

This is an example of a typical audio system. Your system may vary from this, however the actual components would be connected in a similar manner. For additional information refer to "Connector and Cable Information" on page 5.

Notes: 1. The Output Connection Balanced or Unbalanced may be used simultaneously.

2. For additional information on Power Amplifier requirements when the Wadia di122 is connected directly to a Power Amplifier, refer to page 6, <sup>1</sup>Note.

#### **Audio Connections:**

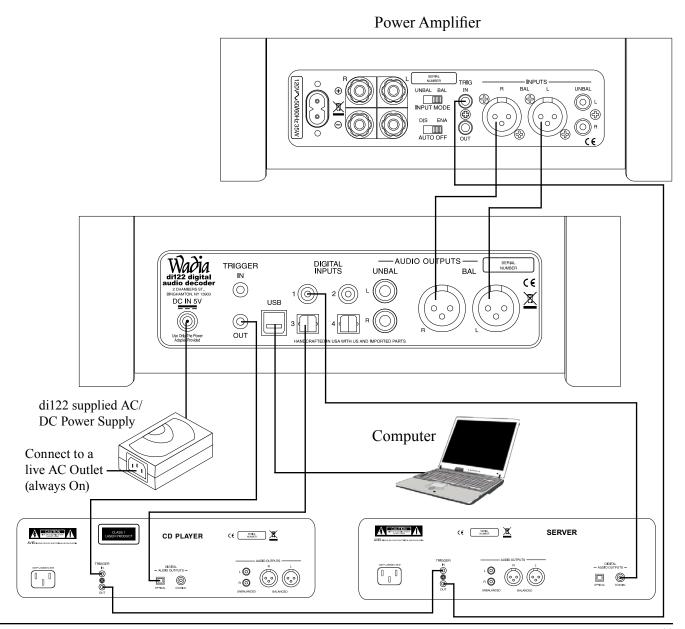
1. Connect balanced audio cables from the di122 AU-DIO OUTPUTS (Right and Left) connectors to the balanced Input connectors on the Power Amplifier. Note: If two Power Amplifiers are used, connect the unbalanced AUDIO OUTPUTS (L&R) to the unbalanced Inputs on the second Amplifier.

#### **Digital Audio Connections:**

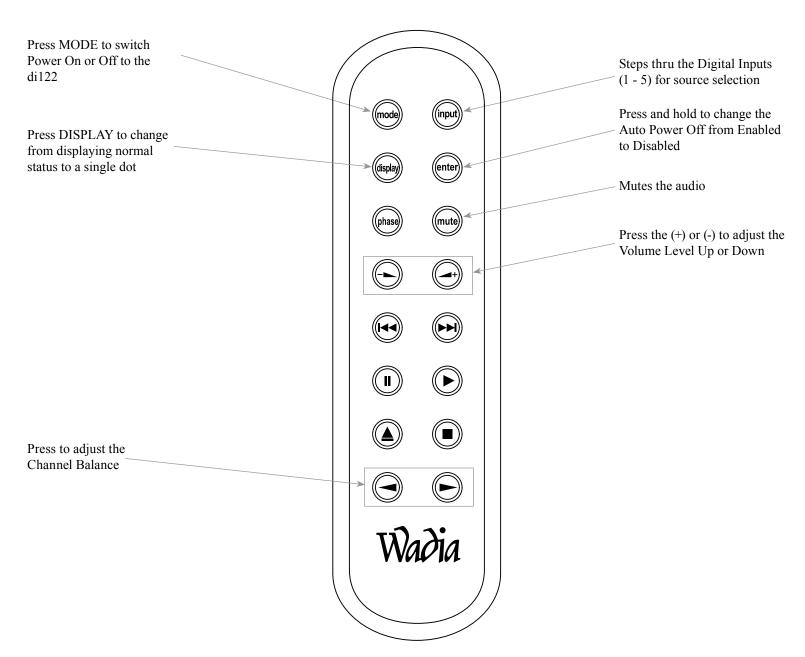
- 2. Connect a Digital Optical Cable from the di122 DIGITAL AUDIO INPUTS OPTICAL 1 connector to the CD Player Digital Optical Output connector.
- 3. Connect a Digital Coaxial Cable from the di122 DIGITAL AUDIO INPUTS COAXIAL 1 connector to the Server Digital Coaxial Output connector.
- 4. Connect a USB cable with (type A to type B) connectors from the di122 DIGITAL AUDIO INPUT USB connector to the Computer USB connector.

#### **AC Power Cords Connections:**

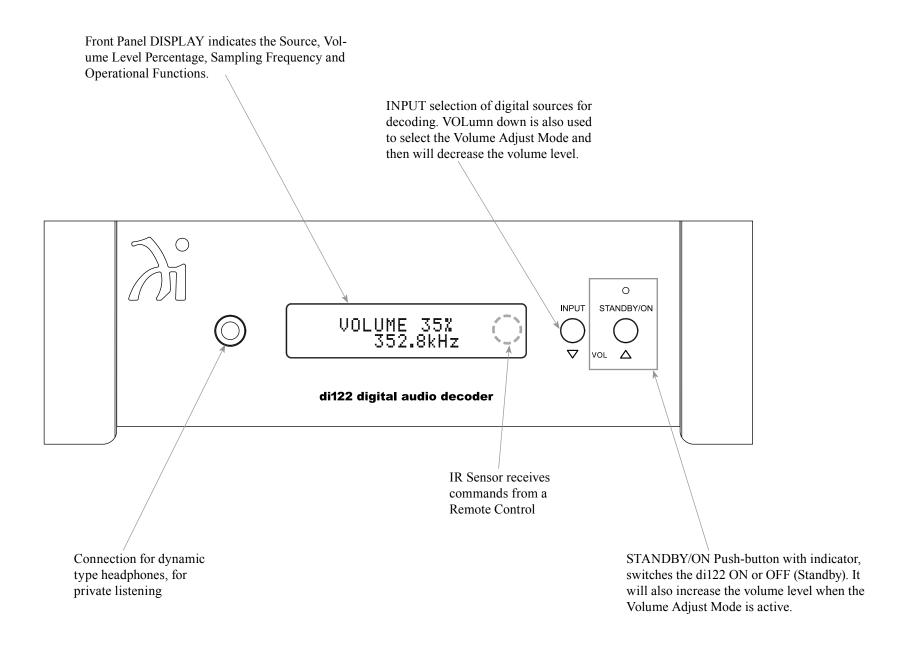
5. Connect the di122 AC Power Cord to a live AC outlet.







Note: Push-buttons whose function is not identified above are for use with other Wadia Products.





#### **How to Operate the di122**

#### Power On and Off

The Red LED above the STANDBY/ON Push-button lights to indicate the di122 is connected to AC Power. To switch ON the di122, press the STANDBY/ON Push-button on the Front Panel or the MODE (Power On) Push-button on the Remote Control. The di122 will go through a brief startup initialization and with the Front Panel Display indicating the last used Volume Level Setting. Refer to figures 50, 51, 52 and 58. To switch OFF the di122 press the STANDBY/ON Push-button on the Front Panel or the MODE (Power Off) Push-button on the Remote Control.

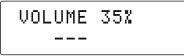


Figure 50

#### **Source Selection**

Press the INPUT Push-button on the Front Panel or on the Remote Control to select the desired source. Refer to figures 51, 52 and 58.

Figure 51

#### Volume Level

To change the Volume Level of the Wadia di122, use the — (Volume Down) Push-button or the — + (Volume Up) Push-button on the Remote Control for the desired listening level. The Volume Level may also be changed by using the Volume Adjust Mode and the Front Panel INPUT /  $\nabla$  VOL and STANDBY/ON /  $\triangle$  VOL Push-buttons. To activate Volume Adjust Mode press and hold in the INPUT /  $\nabla$  VOL Push-button. The Front Panel Display will now show arrows on either side of the current volume setting. Refer to figure 53. Then press the  $\nabla$  VOL or  $\triangle$  VOL Push-buttons to either increase or decrease the Volume to the desired level. When the arrows disappear from the Front Panel Display, the Volume Adjust Mode will be deactivated. Refer to figures 51, 53 and 58.

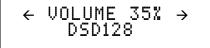


Figure 53

#### Mute

Press the Remote Control MUTE Push-button to mute the Audio Outputs. Refer to figure 58. When the Wadia di122 is muted, the Front Panel Display will indicate "VOLUME MUTE". Refer to figure 54. Pressing the MUTE Push-button a second time or adjust the Volume Level to un-mute the di122.

#### VOLUME MUTE 384kHz

Figure 54

#### **Balance**

Listening balance varies with different program sources, room acoustics and listening positions relative to the Loudspeakers. Use Balance as needed to achieve approximately equal listening volume levels in each Loudspeaker. To adjust the Balance perform the following:

1. Press and release the ◀Push-button on the Remote Control to decrease the volume level of the Right Channel in one decibel increments (up to -30dB) "BAL-ANCE, L:0dB R:-30dB" appears on the Front Panel Display. Refer to figures 54, 55 and 58.



Figure 58

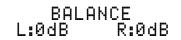
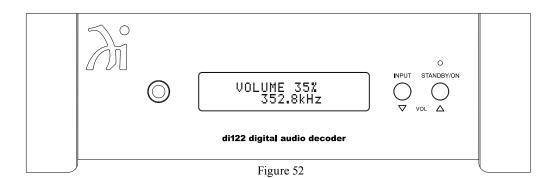


Figure 55

BALANCE L:0dB R:-30dB

Figure 56



Press and release the 

Push-button on the
Remote Control to decrease the volume level of
the Left Channel in one decibel increments (up to
-30dB) "BALANCE, L:-30dB R:0dB" appears
on the Front Panel Display. Refer to figures 57
and 58.

Figure 57

After approximately 3 seconds, the Display returns to indicate the Volume Level and Sampling Rate.

Note: The di122 will retain any changes made to the Channel Balance until it is changed again.

#### **Display of Sampling Rate**

The Wadia di122 indicates the digital sampling rate for all of the Input Sources connected to the Digital Audio Decoder. Referring to figure 53, the second line of the Front Panel Display is indicating the di122 is receiving a DSD128 Digital Signal, via the USB Input. When there is no digital signal present for the selected Input Source the Front panel Display will indicate "---". Refer to figure 50.

#### **Auto Power Off**

The di122 incorporates an Auto Power Off Feature, which can automatically place the Digital Audio Decoder into the Power Saving Standby/Off Mode. This occurs approximately 2 hours after there has been an absence of user activity. User activity includes changes to any of the Operation Functions such as source selection, volume adjustment, etc. If it is desirable to disable the Auto Off Power Save Feature perform the following steps:

1. Press and hold the ENTER Push-button on the

Remote Control until the Front Panel Display will indicate "AUTO POWER OFF, : ENABLE". Refer to figure 59.

#### AUTO POWER OFF : ENABLE

Figure 59

2. Then press and hold the ENTER Push-button a second time and the display will then indicate "AUTO POWER OFF, : DISABLE". Refer to figure 60.

# AUTO POWER OFF : DISABLE

Figure 60

3. The Auto Power Off feature is now disabled. To re-activate the Auto Power Off feature repeat steps 1 and 2.

#### **USB Input Operation and Driver Installation**

The di122 USB Input provides the capability to play back music from a computer when the di122 Rear Panel USB Connector is connected to a computer USB Connector. Refer to figure 61.

# INPUT: USB

Figure 61

Note: The USB Input is for direct connection to a computer only. To playback music from a USB Drive, connect the USB Drive to another USB Port on the computer and select the USB Drive with the Media Playback Program.

The di122 USB Input is compatible with PC Computers using Microsoft® Windows® Vista (SP2), Windows 7 (SP1) and Windows 8 (SP1). It is also compatible with Apple® Macintosh® Computers using OS-10.9 Mavericks or later.

When using a PC Computer with Windows, a special Wadia USB Audio Software Driver needs to be installed on the PC Computer. The driver needs to be installed before connecting the dil22 USB Input to the USB Port on the computer.

Note: If an Apple Macintosh computer is used with the di122, no additional driver is required.

The Wadia USB Audio Windows Driver is available for download from the Wadia Web Site:

http://www.Wadia.com/en-us/products/di122
Under "Products" select "Wadia di122" then
scroll down to the bottom of the Wadia di122 to the
"DOWNLOAD AREA". Select the "WADIA di122
PC DRIVER SETUP" and download the PC Windows
Driver. Follow the instructions below to install the

**Purpose:** To Install the Wadia USB Audio Windows Driver for use with Wadia Products with an USB-Digital Audio Input.

Wadia di122 Driver:

**Requirements:** 1. A functioning Wadia Product with an USB-Digital Audio Input.

- 2. A PC Computer with a **genuine Intel** Main Processor and a functioning USB Port.
- 3. Windows Vista (SP2), Windows 7 (SP1 or greater) or Windows8.1 (SP1 or greater) Operating System.
- 4. An USB Cable with Type A to Type B Connectors.



#### How to Operate the di122, con't

#### **Installing the Software**

It is important to first install the downloaded software on your computer before connecting the Wadia Product to the computer. The USB Driver is included in the downloaded software package.

Note: Before installing this software, please check to see if the Wadia Product(s) with the USB-Digital Audio Input has the latest firmware version, if not update the firmware first.

- 1. Unzip the downloaded Wadia Windows USB Driver Software Package.
- 2. Run "Wadia USB driver . .exe". Refer to figure 1.
- 3. Referring to figure 2, check the *Always trust soft*ware from "Amanero SRK" box and then the Install button





Figure 1

4. When the Driver has been installed click on the "Finish" button. Refer to figures 3 and 4.





Figure 3

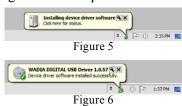
Figure 4

#### **USB** Connection

Connect the USB Cable with Type A to Type B con-

nectors between the PC Computer and the Wadia Product with the USB-Digital Audio Input. An Icon

will appear On-Screen indicating Windows has found new hardware. Refer to figure 5. When the driver has been successfully installed figure 6 will appear.



**Windows Sound Settings** 

For proper operation of the Wadia Product via the Computer USB Connection, it is required to make changes to Windows Sound Settings:

1. Click on the "Sound" (located in the Windows Control Panel), then select the Digital Output "WADIA DIGITAL USB Driver . . " icon. Using the "Set Default" button to set the just selected Wadia Icon as the default. Refer to figures 7. 8 and 9.

Notes: 1. When the Wadia USB Audio Product is not connected to your computer, the previous default Audio Device will be selected.

> 2. If other Wadia Products with USB Audio Connections are also connected to the







Figure 8

computer, an additional "Wadia USB Audio" playback device will appear in the listing. Make sure to select the "Wadia Digital USB Driver 1.0.57" from



Figure 9

available playback devices listed when using this Wadia Product for USB Audio.

#### **USB Music Playback**

When the USB Input is selected on the Wadia di122, the Front Panel Display indicates the Sampling Rate (refer to figures 10 and 11 for PCM Signals). Figures

> INPUT: USB 192kHz

Figure 10

VOLUME 35% 352.8kHz

Figure 11

12 and 13 indicate a Sampling Rate of 64 or 128 times the Sampling Rate of a CD Disc for the incoming Digital Audio Signal.

> VOLUME 35% DSD64

Figure 12

#### VOLUME 35% DSD128

Figure 13

The Sampling Rate and the Bit Rate is determined by the original recording and/or the Windows Application Settings for Output Format (when available).

Note: In general, when the original music is recorded at a higher Sampling Rate, the result is usually more detail in the music. However, this higher rate results in consuming larger amounts of storage space. The Sample Rate usually should be set to match the Sample Rate of the music recording being played back.

There are many third party Windows Applications (besides Windows Media Player) for steaming music from the computer to Wadia di122 USB Input. An example of just one of the available applications is "JRiver Media Center".







#### **Audio Specifications**

#### **Frequency Response**

+/-0.5dB from 20Hz to 20,000Hz

#### **Total Harmonic Distortion**

0.005%

#### Variable Output level

0 - 4.0Vrms Unbalanced 0- 8.0Vrms Balanced

#### Signal To Noise Ratio (A-Weighted)

105dB

#### **Dynamic Range**

98dB

#### **Output Impedance**

Less than 100 ohms (Unbalanced and Balanced)

#### **Digital Audio Specifications**

#### **Digital Input Signal Format**

Coaxial and Optical Inputs - SPDIF (PCM<sup>1</sup>) USB Input - PCM<sup>1</sup>, DSD

#### **Digital Input Sample Rate**

Coaxial and Optical: 44.1kHz to 192kHz, 24-Bit USB: 44.1kHz to 384kHz, 32-Bit (PCM) DSD64, DSD128, DXD352.8kHz, DXD384kHz

#### **Digital Inputs**

Coaxial 1 and 2: 0.5V p-p/75 ohms Optical 1 and 2: - 15dbm to -21dbm (TOS Link) USB: USB Type B Connector

<sup>1</sup> PCM (Pulse Code Modulation) Digital Signal type used for CD Discs, etc.

#### **Trigger Specifications**

#### **Trigger Input**

5-15VDC, less than 1mA

#### **Trigger Output**

12VDC, 25mA maximum total

#### **General Specifications**

#### **Power Requirements**

100-240 Volts, 50/60Hz at 10 Watts

Standby: Less than 0.5 watt

Note: Only use the AC/DC Power Adapter supplied with the Wadia dil22.

#### **Overall Dimensions**

Width is 10 inches (25.4cm)
Height is 3-5/32 inches (8cm) including feet
Depth is 14 inches (35.6cm) including the Front Panel,
and Cables

#### Weight

7 pounds (3.2 kg) net, 8.5 pounds (3.8 kg) in shipping carton

#### **Shipping Carton Dimensions**

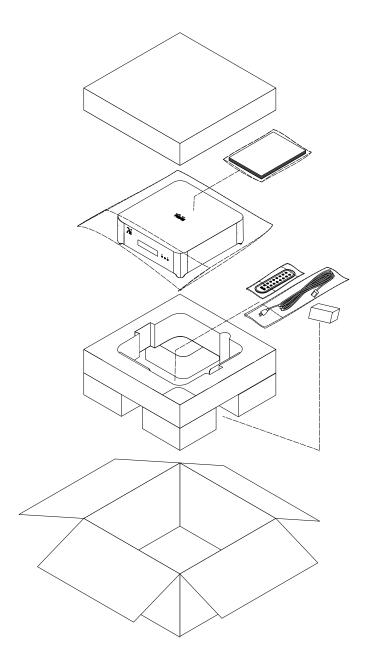
Width is 14-1/8 inches (35.9cm) Height is 8 inches (20.3cm) Depth is 14-1/8 inches (35.9cm)

#### **Packing Instructions**

In the event it is necessary to repack the equipment for shipment, the equipment must be packed exactly as shown below. It is very important to ensure the proper equipment location between the bottom and top foam pads. Failure to do this will result in shipping damage.

Use the original shipping carton and interior parts only if they are all in good serviceable condition. If a shipping carton or any of the interior part(s) are needed, please call or write Customer Service Department of Wadia. Refer to page 4. Please see the Part List for the correct part numbers.

Quantity 1	Part Number 03456100	<u>Description</u> Shipping carton only
1	03456200 03456000	Top foam pad Bottom foam pad





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