STEWARTAUDIO

The Difference is Hear

NetAV I/O 2x2

Owner's Manual

November 2016

www.stewartaudio.com

Rev C

Important Safety Instructions

Before using your Stewart Audio Inc. Dante I/O Interface device, please read this **Owner's Manual** carefully to ensure optimum trouble-free performance.

WARNING: TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT EXPOSE THIS AMPLIFIER TO RAIN OR MOISTURE. DANGEROUS HIGH VOLTAGES ARE PRESENT INSIDE THE ENCLOSURE. DO NOT OPEN THE CABINET. REFER SERVICING TO QUALIFIED PERSONNEL ONLY.

CAUTION
RISK OF ELECTRIC SHOCK DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lighting bolt within arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of un-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electrical shock to person.

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

Important Safety Instruction – Please Read Prior to Product Installation.

1. Installation should be performed by a trained and licensed professional to insure safe and lasting operation.

2. All of the safety and operating instructions should be read before the amplifier is installed or operated. Retain these instructions for future reference. All instructions should be followed; all warnings on the device and in the operating instructions should be adhered to.

3. The device should be situated so that its location and position does not interfere with its proper ventilation. For example, the device must not be placed on a rug, bed, sofa or similar surface that impedes airflow across the chassis. Airflow through the ventilation openings should be unobstructed.

4. This device should not be used near water, for example, near a bathtub, in a wet basement, near a swimming pool, etc. This device is intended to be operated in a controlled indoor environment.

5. Do not place the device near heat sources such as radiators, heat registers, stoves, or other appliances that produce heat.

6. The device should only be connected to 120 VAC, 60 Hz power supply. Do not defeat the ground or polarization of the power plug. Use only the power supply provided with the device.

7. Route power cord and other cables so that they are not likely to be walked on, tripped over or stressed. Pay particular attention to condition of cords and cables at plugs and at the point where they exit the device. To prevent risk of fire or injury, damaged cords and cables should be replaced immediately.

8. Clean the device with a clean, damp cloth. Do not use solvents or abrasive cleaners. Never pour any liquid on the device.

9. When left unused for a long period of time, the power cord should be unplugged form the outlet.

10. Damaged devices requiring service should be repaired by a qualified service technician when:

    a. The power cord or AC plug has been damaged.
    b. Objects have fallen, or liquid has spilled into the unit.
    c. The device has been exposed to rain or other moisture.
    d. The device does not appear to operate normally or exhibits a marked change in performance.
    e. The device has been dropped or the enclosure damaged.

11. The user should not attempt to service the device beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

Table of Contents

Important Safety Instructions 2
Table of Contents 4
1 Welcome 5
1.1 Features 5
1.2 Using this Manual 5
2 Setup 6
2.1 Setup Precautions 6
2.2 Product Installation 6
2.3 Input Connections 8
2.4 Output Connections 11
3 Operation 12
3.1 Operation Precautions 12
3.2 Controls, Indicators, and Connectors 13
3.3 Dante 15
4 Troubleshooting 18
5 Technical Specifications 19
6 Warranty Information 20
6.1 Warranty Summary 20
6.2 Return Procedure 20
7 Accessories 23

1 Welcome

Congratulations on the purchase of your new Stewart Audio NetAV I/O 2x2. This unit has been designed and built to provide you with years of high-quality audio performance and trouble-free operation. If after reading this manual you should have any questions concerning the installation and operation of the device, please contact your Authorized Stewart Dealer, or you may contact us directly using the contact information provided on the back of this manual.

1.1 Features

Your Stewart Audio NetAV I/O 2x2 is the result of years of experience in the design and manufacture of quality audio products. As such it provides a combination of performance and operational benefits that simply cannot be found in conventional amplifiers.

- Sub Compact 1/4 rack package
- Two mic/line inputs with selectable pre-gain and phantom power
- Two analog outputs from a Dante™Network
- Configurable via Control Center Software
- External inline power supply
- Made in the USA

1.2 Using this Manual

In order to obtain maximum performance from your NetAV I/O 2x2, please take time to read this brief owner's manual and carefully follow the guidelines for connection and operation.

This manual provides you with the information necessary to safely install and operate your new NetAV I/O 2x2 in the most common scenarios. If you find yourself requiring additional assistance, please feel free to contact your Authorized Dealer, or you may contact us directly using the contact information provided on the back of this manual.

2 Setup

2.1 Setup Precautions

CAUTION: Before installing your NetAV I/O 2x2, make sure that you have read the Important Safety Precautions at the beginning of this manual.

2.2 Product Installation

The NetAV I/O 2x2 incorporates a number of different mounting options in order to fit your installation needs.

2.2.1 Pole-Mounting

The NetAV I/O 2x2 has mount holes on the top of the unit which can be used with the AV-Pole bracket available from Stewart Audio.

Part Number: AV-Pole

2.2.1 Universal-Mount Installation

The NetAV I/O 2x2 also has a universal bracket available which allows the unit to be mounted against a wall or under a table. Two screws are included in the kit which will affix the bracket to the top of the unit. Once this is done, two holes are available for mounting the unit where desired.

Part Number: AV-Bracket

CAUTION: Use only the screws provided in mounting brackets to the amplifier. Do not over tighten.

2.2.3 Product Dimensions

Front

Side

2.3 Input Connections

Your NetAV I/O 2x2 is provided with a 3-pin Euroblock style connector for each input. This connector will accept both balanced or unbalanced connections, however some modifications must be made for an unbalanced connection. See the next two sections for instructions on connecting the NetAV I/O 2x2 to its input source.

2.3.1 Balanced Connections

When using a balanced input source and connector, you must ensure that the hot, cold, and ground pins of the connector are matched up to the +, -, and ground pins of the NetAV I/O 2x2's Euroblock style connector respectively. Diagrams have been provided for standard XLR and TRS connectors. Please refer to the manual of your input source in case it does not follow the standard pin-out.

(Connector enlarged to show detail)

2.3.2 Unbalanced Input Connections

When using an unbalanced input source and connector, a jumper must be added between the negative (-) terminals and the ground terminals. Once this has been done, the unbalanced source can be connected to the positive (+) and ground terminals. Please refer to the manual of your input source in case it does not follow the standard pin-out. For your convenience, pre-wired connectors are available for purchase, see the next page for details.

NOTE: A jumper is *required* for connecting an unbalanced input.

Pre-wired unbalanced connectors are available for purchase from Stewart Audio. The summing adapters will properly sum a stereo source for use with the mono input on the rear of the NetAV I/O 2x2 without causing sound cancellation. Part numbers are found below the diagrams.

ADPT-RCA
Mono
Female RCA

ADPT-SUMRCA
Stereo
Female RCA

ADPT-SUM35
Stereo
Female 3.5mm

2.4 Output Connections

Your NetAV I/O 2x2 is provided with a 3-pin Euroblock style connector for each output. This connector offers a balanced output to interface with the input of another device.

Connection methods for balanced and unbalanced outputs are identical as the methods for inputs as referenced in **section 2.3**.

3 Operation

3.1 Operating Precautions

1. Before use, your device must be configured for proper operation, including input and output wiring hookup. Improper wiring can result in damage to equipment or potentially harm to the operator. Consult section 2 for setup instructions.
2. Tampering with the circuitry, or making unauthorized changes is not only dangerous but may also violate local regulations.
3. Use care when making connections between the device and the input or output equipment. Using equipment that is not capable of handling the output wattage may lead to permanent damage.

NOTE: Stewart Audio will not be held responsible for damage to your NetAV I/O 2x2 or connected equipment if the instructions in this manual are not followed.

NOTE: For additional operating precautions, please refer to "Important Safety Instructions" located on Page 2.

3.2 Controls, Indicators, and Connectors

1. Power Connector
2. Output Connectors
3. Input Connectors
4. Network Connector
5. Gain & Phantom Power Switches

3.2.1 Controls

All of the NetAV I/O 2x2 controls are located on the rear of the unit. There is no power switch so the NetAV I/O 2x2 will turn on whenever power is supplied to the unit.

The rear panel contains one set of 8 DIP switches. These DIP switches will adjust the input gain level as well as enable or disable the phantom power on the designated channel.

DIP Switch # 1	Gain	Both On	Low Gain
DIP Switch # 2	Input 2	Both Off	High Gain
DIP Switch # 3	Phantom Pwr	Both On	Power On
DIP Switch # 4	Input 2	Both Off	Power Off
DIP Switch # 5	Gain	Both On	Low Gain
DIP Switch # 6	Input 1	Both Off	High Gain
DIP Switch # 7	Phantom Pwr	Both On	Power On
DIP Switch # 8	Input 1	Both Off	Power Off

3.3 Dante

If you have selected the Dante version of the NetAV I/O, configuration is done using the Dante Controller software from Audinate.

Dante Controller Software can be found on Audinate's website at www.audinate.com.

From there you can select Dante Controller under the Products section. This will require registration for Audinate's portal and also includes access to the Dante Controller User Manual which should be read for complete configuration instructions.

3.3.1 Using Audinate's Dante Controller Software

Once Dante Controller has been installed following the instructions in the Dante Controller Software User Manual (found at www.audinate.com), launch the application to see the connection matrix.

All Stewart Audio products will ship from the factory as being named Ultimo-<MAC>. This can be renamed within the device configuration in the Dante Controller.

Transmitters are shown on the top of the matrix while Receivers are shown on the left-hand side. The NetAV I/O includes 2 transmitter and 2 receive channels. In order to make a connection, click on the matrix node between the appropriate transmitter and receiver. If a connection is successful, it will display a green checkmark.

3.3.2 Dante FAQ

Q: I am having problems installing or using the Dante Controller Software

A: Please refer to the official documentation available in the Audinate portal where you downloaded the Controller Software.

Q: I do not see the NetAV I/O showing up on the network?

A: All Stewart Audio products are tagged as Ultimo-<MAC_ADDRESS> from the factory. You can find the correct Ultimo device by choosing the correct MAC address from the list. You can rename this using the device configuration.

4 Troubleshooting

Problem: No output on one or both channels; Power indicator is lit.

Procedure: Check **section 3.3** to ensure that the Dante network has been properly configured.

Problem: Input on NetAV I/O not sent to another network device or sound is distorted

Procedure: Check **section 3.3** to ensure that the Dante network has been properly configured. Check **section 2.3** to ensure that the inputs are properly configured. If the input source requires pre-amplification or phantom power, please check **section 3.2.1** for instructions

5 Technical Specifications

Input Connectors	RJ45, Euro Block
Output Connectors	RJ45, Euro Block
Power Supply	External In-Line 5VDC
Cooling	Convection-Cooling
Construction	Aluminum Chassis
Mic / Line Input Type	Balanced & RF Filtered Euro Block
Phantom Power	+24V, selectable via DIP Switch
Mic / Line Gain	0dB, +28dB switch selectable
Input Impedance	20K balanced, 10K unbalanced, 1.2K when Phantom Power is on
Equivalent Input Noise	-110dBu
Maximum Input Levels	+6dBu @ 0dB Gain
Output Type	Balanced line level
Output Gain	0dB nominal
Output S/N	>100dB
Maximum Output Level	+6dBu
System THD	<.05% at any gain, input signal 3dB below maximum
Operating Temperatures	0°C - 40°C
Dimensions	
Height	1.30in (3.3cm)
Width	4.80in (12.2cm)
Depth	3.30in (8.4cm)
Weight	0.57lbs (0.26kg)

Stewart Audio reserves the rate to change features and specifications without notice.

6 Warranty Information

6.1 Warranty Summary

All Stewart Audio amplifiers and accessories, unless excluded in this summary, are covered by a 3-year limited warranty on parts and labor from the data of purchase. In order to be eligible for warranty repairs, the amplifiers and accessories must have been purchased through an authorized Stewart Audio dealer and submitted by the original purchaser. This warranty is only valid in the country in which the amplifier was purchased.

6.1.1 Eligibility Requirements.

Stewart Audio warrants against all malfunctions which come as a result of component or manufacturer defect. The amplifier is also covered from all failures which arise during the warranty period (3 years from date of purchase) that are not a result of misuse. The following actions will void your warranty:

- The power cord or AC plug has been damaged through misuse.
- The amplifier has been exposed to moisture or extreme temperatures.
- The amplifier has been dropped, items have been dropped on the amplifier, or the enclosure has been damaged.
- The amplifier has been opened by the operator.
- The amplifier was improperly packaged when sending to the factory for repair, resulting in damage.
- Any of the precautions or instructions found in this manual were not followed.

Damages resulting to the amplifier which are not covered under this warranty can be factory-repaired at cost to the customer. Use the contact information below to initiate the repair process.

6.2 Return Procedure

This section includes the return procedures which must be followed in order to prevent processing delay or cost to the customer. Please read the entire section before contacting Stewart Audio for returns.

6.2.1 Return Authorization Number

All returns to the factory for service or credit must be accompanied by a Return Authorization (RA) number. All Product(s) included on the Return Authorization (RA) must be received by Stewart Audio within 30 days of issuance of the Return Authorization (RA) number. Product(s) not received within the 30 day window void the Return Authorization (RA). Customers may re-apply for a Return Authorization (RA) number which may be subject to administrative fees. Return Authorization (RA) numbers are obtained by contacting Stewart Audio at 209-588-8111 or via e-mail at support@stewartaudio.com.

NOTE: Any defective products received without an RA number will be returned to sender at their expense.

If Stewart Audio is unable to contact the sender in 14 days, the merchandise will be considered scrap and may be disposed of.

6.2.2 Shipment Instructions

If Stewart Audio requests that you ship the defective product back to their service center, please refer to the guide below. To ensure prompt warranty service, be sure to follow all instructions.

1. Return Authorization (RA) is required for product being sent to the factory for service.
2. See packing instructions in **Section 6.2.3.**
3. Ship the defective product using a method which provides for order tracking or order confirmation. The service center is located at the following address:

   Stewart Audio
   14335 Cuesta Court Suite C
   Sonora, CA 95370

4. Use a bold black marker and write the RA number on three sides of the box.
5. Record the RMA number for future reference. The RA number can be used to check the repair status.

6.2.3 Packaging Instructions

Should Stewart Audio request that you ship your product to their service center, these instructions must be followed in order to ensure safe delivery. If they are not followed, Stewart Audio assumes no responsibility for damaged goods and/or accessories that are sent with your unit.

1. Please write the RA number on three sides of the box. Include the Stewart Audio RA number inside the box and a brief description of the problem.
2. You will be advised during the RA process what accessories should be included with the amplifier (Power supplies, connectors, cords, etc.). This is dependent on the failure assessment.
3. When shipping your amplifier, it is important that it has adequate protection. We recommend you use the original packing material when returning the product for repair. If you do not have the original box, see number 4.
4. If you provide your own shipping pack, use materials adequate to prevent damage during transit.
    a. Securely seal the package with an adequate carton sealing tape.
    b. Make certain that the returned product(s) is (are) **not** free to move within the shipping container.
    c. Do not use light boxes or "peanuts".

NOTE: Damage caused by poor packaging will not be covered under warranty.

6.2.4 Estimate Approval

An estimate for all non-warranty repairs will be provided to the customer once the unit has been shipped to the factory. The customer is responsible to approve this estimate within 7 days. If the repairs are not approved within 14 days, Stewart Audio reserves the right to consider the unit scrap and may discard it.

6.2.5 Payment of Non-Warranty Repairs

Payment for non-warranty repairs must be submitted to Stewart Audio before the product will be returned to the customer.

7 Accessories

The following accessories are available from Stewart Audio for your amplifier.

All part numbers shown are Stewart Audio Part Numbers.

Mounting Brackets

AV-POLE	Pole-mount bracket for AV Series amplifiers
AV-BRACKET	Universal mounting bracket for AV Series amplifiers

Connection Adapters

ADPT-RCA	Mono Female RCA to male Euroblock.
ADPT-SUMRCA	Stereo Female RCA to male Euroblock.
ADPT-SUM35	Stereo Female 3.5mm to male Euroblock

To purchase these accessories or to see the full Stewart Audio product lineup, visit us at:

www.stewartaudio.com

STEWARTAUDIO

The Difference is Hear

14335 Cuesta Court
Suite C
Sonora, Ca. 95370

Phone: 209-588-8111
Fax: 209-588-8113

www.stewartaudio.com

Rev C