

ACKNOWLEDGMENTS

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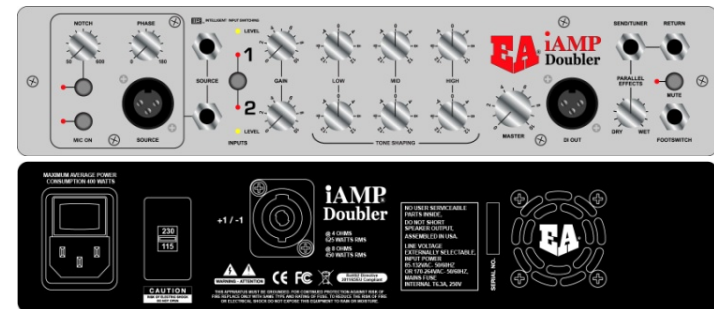
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EUPHONIC AUDIO, INC.

TOLL-FREE (888) 894-3790

18 Newton Blvd • Robbinsville, NJ • 08691
Fax: (609) 336-0002 • Email: info@eaamps.com

www.eaamps.com



**iAMP® DOUBLER 2
OPERATION MANUAL**

IMPORTANT SAFETY PRECAUTIONS

WARNING: When electrical products are used, basic precautions should be followed, including:

- Read all instructions before using this product.
- Do not use this product near water, for example, near a bathtub, sink, in a wet basement, near a swimming pool or the like. Prevent the unit from getting wet from rain, snow, etc...
- Care should be taken so that objects do not fall, and liquids are not spilled into, the enclosure through the openings.
- This product should be located so that its position or location does not interfere with its proper ventilation. It is important that the vents on the top, bottom, and sides of the unit are allowed “to breathe.”
- The iAMP® should be located away from heat sources such as radiators, heat registers, or other products that produce heat.
- Do not leave the unit in an extremely hot environment (such as inside a car) for extended periods of time.
- The product should be serviced by qualified personnel when:
 - The power supply cord or the plug has been damaged; or
 - Objects have fallen, or liquid has been spilled into the product; or
 - The product has been exposed to rain or moisture; or
 - The product does not appear to operate normally or exhibits a marked change in performance; or
 - The product has been dropped, or the enclosure damaged.
- The product should be connected to a power supply of the type described in the operating instructions or as marked.
- If you live in area prone to frequent lightning strikes (e.g., Florida), as a precautionary measure, unplug the iAMP® from the AC power source, especially during severe thunderstorms.
- Do not attempt to service the product yourself. All servicing should be referred to qualified service personnel at Euphonic Audio, Inc.
- Use of the iAMP® may cause permanent hearing loss. Do not operate for long periods of time at a high volume level or at a volume level that is uncomfortable, particularly in a small, enclosed area. If you experience any ringing in the ears or any suspected hearing loss you should consult an audiologist.

The notch filter on channel 2 is useful in eliminating feedback, especially when using a microphone. A notch filter attenuates a very narrow frequency range (typically not wider than one note). To use it, raise the volume on channel 2 until feedback begins to occur. Then turn on the notch switch and rotate the knob until the feedback is eliminated.

TONE SHAPING

The iAMP® Doubler 2 features a simple yet extremely musical, 3 Band EQ. The elegant design and pristine sound of the 3 band tone shaping of the Doubler allows for a totally neutral sound when set flat. Each band can add +/- 12dB of gain on each channel. The low and high are shelving and the mid control is centered around 600hz on Channel 1 and 800hz on Channel 2.

OUTPUT SECTION

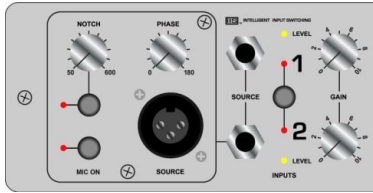
Main Control: Adjusts the level going into the power amplifier section. The iAMP® Doubler 2 was designed to be exceptionally clean, accurate and versatile. If you want a “dirtier” overdriven-type sound, it is best to use an effects device through the Effects loop.

Post/Pre EQ: The DI EQ can be set to send either a clean (PRE) or colored (POST) signal created in the Tone Shaping section. See “A Look Inside” for specific jumper settings.

Mute Switch: The Mute Switch can be configured to mute the DI and/or the Effects/Tuner Send in addition to the speaker out. The Mute Switch can be accessed via the front panel switch or with an optional footswitch. The red mute LED will illuminate if the Doubler is muted. Please note the amp is muted at power on.

DI Output Jack: Balanced DI output for sending a balanced signal directly to low noise studio equipment. The DI can be configured to either Pre (default) or Post EQ.

DOUBLER 2 FEATURES



The Doubler 2 provides some specific features designed for the upright/acoustic player.

Notch Filter: To help with feedback, the Doubler has a variable Notch Filter. The

Notch Filter attenuates the signal 15db from 50 to 600K at .05 octaves. **THE NOTCH FILTER IS ONLY AVAILABLE ON CHANNEL 2.**

Microphone Input with Phantom Power: The Doubler has a Low Impedance Microphone input with a phantom power option. The phantom power ON/OFF option is controlled by a slide switch on the back of the preamp board (see photo). The phantom power is ON with the switch in the left position, and OFF with the switch in the right position. This switch is intended to be a set and forget feature. The MIC ON switch on the front panel will turn a microphone ON and OFF and tell the ISS circuitry that a microphone is in use.

Phase Control: The Doubler features an innovative 180 degree sweep able phase control to adjust the phase between Channel 1 and Channel 2. This control only works when BOTH Channel 1 and Channel2 inputs are being used.

PLEASE NOTE: If you want to use a single input and switch between 2 different EQ settings (i.e. clean/solo) you MUST use Channel 2 as your “Master” channel (DOUBLER ONLY).

Unique Features of the iAMP® Doubler 2

The phase control can be useful when combining a pickup and a microphone or two pickups. Anytime two different pickups or a pickup and a microphone are combined there are phase interactions between the two. This can result with degrees of cancellation at different frequencies. Typical phase controls can only reverse the phase at one position. (180 degrees) The variable phase control on the Doubler offers the flexibility to alter the phase from 0 degrees (fully counterclockwise) to 180 degrees (fully clockwise). Experimentation is necessary to find the best sound. No two pickup or microphone sources react the same when combined, but for the first time one is able to fine tune the “sweet spot”. Please note that changes in the eq settings can alter the phase relationships also. Bottom-line—experiment with the eq and phase settings to find the best sound.

The Doubler offers a high quality microphone input. This can accommodate any low impedance dynamic microphone or a condenser microphone that requires phantom power. (48 volts). The phantom power switch should be in the “off” position unless using a microphone requiring phantom power.

WARRANTY SERVICE FORM

1. Complete this form.
2. Include a copy of your Bill of Sale
3. Pack unit, this form and copy of original bill of sale and ship, insured to:
Euphonic Audio Inc.
10 Brampton Way
Hamilton Square NJ 08690

Name: _____

Address: _____

Telephone Number: _____ Email: _____

Purchased at: _____ Date of Purchase: _____

Model/Serial Number: _____

Brief Description of Problem: _____

Return Shipping: COD: _____ Prepaid Credit Card _____

Credit Card Number: _____

Expiration Date: _____

If the billing address is not the same as the shipping address, please provide billing address:

Billing Address: _____

EA'S QUALITY CONTROL

To ensure your iAMP® meets its rigid design specifications:

- Every board is pre-tested before it is installed into the amp.
- Post assembly, each iAMP® is bench-tested before its burn-in phase.
- Each unit is burned-in (turned on and allowed to sit “in idle”).
- Each unit is individually tested with a bass and speaker cabinets.

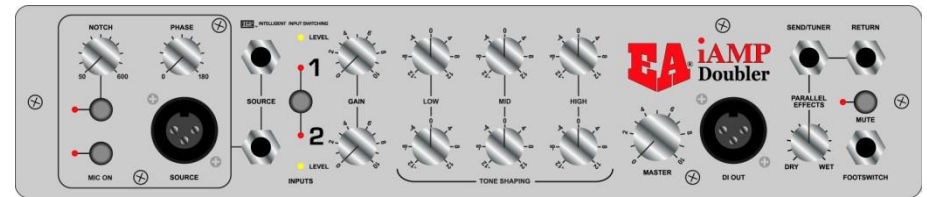
Additionally, the preamplifier section uses state-of-the-art surface mount components and construction techniques for lower noise and better reliability. These extensive and time consuming procedures guarantee that EA's production units are of a consistently high quality. Careful packaging helps ensure safe transport to the customer.

WARRANTY SERVICE INFORMATION

There is no need to register your product at time of purchase. However, you may register your product at www.eaamps.com. For warranty service you will need to have your original bill of sale.

Please follow these steps if your Amplifier or Speaker Cabinet requires repair:

1. Locate your original Bill of Sale which should include date and place of purchase.
2. Call, FAX, write or email Euphonic Audio describing the problem. Many issues can be handled without having to return the unit.
3. Pack the unit carefully, preferably in its original shipping carton, enclose the attached warranty service form, and a copy of the Bill of Sale. Ship the unit, prepaid, to the factory. Please be sure to properly insure the unit when shipping it.
4. It is the responsibility of the purchaser to pay shipping to and from the Euphonic Audio repair facility.
5. If it is determined that the unit is under warranty, we will repair the unit as deemed appropriate (repair or replacement parts) free of charge. The unit will be returned by either COD or by prepaid credit card for actual shipping charges.
6. If it is determined that the unit is not under warranty, EA will notify you of the repair cost. Upon your approval we will return the repaired unit COD for the cost of repair, shipping and insurance.



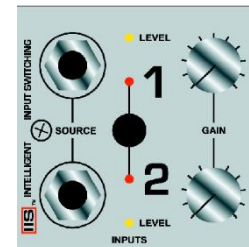
INPUT SECTION

Source: Two, 1 MEG Ohm, instrument inputs designed for maximum flexibility for all musical instrument applications. On channel 2, one optional low impedance Microphone input with phantom power may be used in place of the 1/4" instrument input.

IIS or Intelligent Input Switching, which can be actuated from the front panel or with an optional footswitch, is a microprocessor controlled CIRCUIT that senses which channel is activated and allows for different combinations of channel control. With your bass plugged into channel 1, the switch will let you access the EQ on channel 1 or channel 2 (i.e. clean/solo). With basses plugged into channels 1 and 2, the IIS will toggle between Channel 1, Channel 2, or both Channels 1 and 2.

Level Indicator Yellow LED: The Level Indicator LED is a visual representation of your input level. The LED should illuminate moderately under normal playing conditions. Input gain can be adjusted with the Gain control knob.

Gain Knobs: The Gain knobs allow for maximum signal level and headroom. Gain for each channel can be adjusted by the Gain knob located on top of the amp.



Using the Gain Knobs: The yellow LED for each channel should illuminate moderately under normal playing conditions with the gain knob about half way up

EFFECTS SECTION

The default setting for the Effects/Tuner Send and Return makes it available on Channels 1 and 2 (see “A Look Inside”). Via jumper settings the Effects/Tuner Send and Return can be available on both channels. This can be changed as a custom configuration only.



Parallel Effects/Tuner Send Jack: Connect the cord going to the effects box, pedal or tuner here.

Dry/Wet Control: Use this control to adjust the level of the signal returning from the effects chain.

Footswitch: An optional mono or dual momentary footswitch can be plugged into the footswitch jack. When using a mono footswitch you will be able to control the IIS channel switching function as you would with the front panel switch. When using a dual momentary footswitch (with a stereo plug) you can additionally control the mute function as you would with the front panel switch. The footswitch does not disable the front panel controls; rather they continue to work in parallel and picks up where one leaves off. With a dual footswitch the “tip” controls the IIS while the “ring” controls muting functions. The configuration of the Footswitch is handled by S7. See “A Look Inside” for specific jumper settings. The factory default setting is for a mono footswitch.

REAR PANEL FUNCTIONS

Power Switch: Turns unit on/off.

A/C Input: Use appropriately grounded, three-prong A/C plug.

Speaker Output: One Speakon connectors, wired 1+, 1-.

Cooling Vents: The vents on the top and sides of your Micro or Doubler need to be kept clear.

WARNINGS USED ON THE EQUIPMENT

WARNING—ATTENTION OUTLETS WITH A THIRD PRONG GROUND ARE REQUIRED. DO NOT USE WITHOUT A GROUNDING PLUG.

WARNING TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.



The lightning flash symbol is intended to alert the user to the presence of uninsulated “dangerous voltage” within this product’s enclosure that may be of sufficient magnitude to constitute risk of electric shock.

The unit contains no user serviceable components, under no circumstances should the unit be turned on or plugged in with the top cover removed.



The exclamation point is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying this product.

GROUNDING INSTRUCTIONS This product must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for electric current to travel, which will reduce the risk of electric shock. The product is equipped with a power cord having an equipment grounding conductor and a grounding plug. It must be plugged into an appropriate outlet that is properly installed and grounded in accordance with local codes and ordinances.

DANGER Improper connection, lack of connection, or modification of the equipment grounding conductor can result in a risk of electric shock. Check with a qualified electrician or serviceperson if you are in doubt as to when the product is properly grounded. Do not modify the plug provided with the product if it will not fit an outlet; instead, have a proper outlet installed.

Make sure that the speaker connections and AC power connections are both properly made before powering on the amplifier. Likewise, power off the amplifier before disconnecting the speaker connections and before removing the AC power cord from the rear connecto

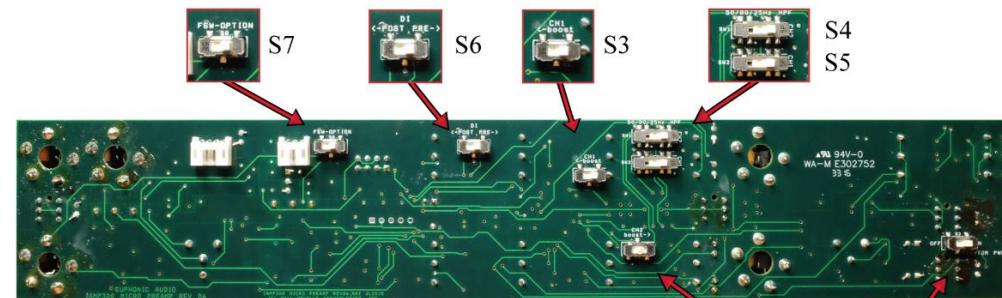
A NOTE FROM
EUPHONIC AUDIO

Thank you for purchasing the EA® iAMP® Integrated Musical Instrument Amplifier. We're extremely proud of our iAMP® and pleased that you have chosen it.

You will receive many years of satisfaction from your iAMP®, which has been carefully designed to create accurate and exceptional sound from any musical instrument.

Our confidence is the result of an extensive research and development program, our innovative design philosophy, the use of the finest quality components and state of the art manufacturing. Every EA product incorporates the input from the many talented and respected musicians who use EA's other products, from the critically acclaimed Wizzy 12 to the "classic" iAMP 800 and our one-of-a-kind RUMBLE SEAT™.

The Doubler II provides seven internal slide switches and one jumper to enhance or change functionality (if desired):



- S1** Turns phantom power on and off. In the right position, the phantom power is ON. In the left position the phantom power is OFF. This factory setting for this switch is ON.
- S2** Boost On/Off switch for channel 2. Right is ON, left is OFF. Factory setting is OFF.
- S3** Boost On/Off switch for channel 1. Right is OFF, left is ON. Factory setting is OFF.
- S4** High pass filters for both channels. S4 is channel 1 and S5 is channel 2. Each switch **S5** has 3 positions. The right position is the 25Hz filter, the middle position is the 80Hz filter, and the left position is the 50Hz filter. The factory setting for S4 and S5 is 25Hz.
- S6** DI PRE/POST. The right position is PRE and the left position is POST. Factory setting is PRE.
- S7** Determines the foot switch option. The foot switch jack provides functionality for both single and dual foot switch pedals. The foot switch jack, when used with a stereo plug, will provide channel change and mute control assuming you have 2 foot switches. However, if the user has a single footswitch with a mono plug (which is the most common), this will only operate the channel change control. But, when this is used, you have to disconnect the sleeve of the jack or it will short out the mute control. This switch connects or disconnects the sleeve of the jack. So, if you have just the single foot switch with the mono plug, this switch has to be in the LEFT position. If you have 2 foot switches and a stereo plug, this footswitch has to be in the RIGHT position. The factory setting is LEFT.

Specifications

Model iAMP®Doubler 2

Type: Solid State, Integrated Musical Instrument Amplifier with Class D Power Amp and Switching Power Supply

Power: 450 watts RMS@8 ohms, 625 watts RMS@4 ohms,

Line Voltage: 85-132; 170-264 selectable

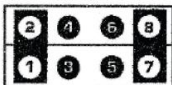
Weight: Doubler 4 pounds

Country of Manufacture: United States of America

Euphonic Audio, Inc. reserves the right to modify design or specifications when deemed necessary, or when materials or procedures dictate.

A LOOK INSIDE

JP2 Configures the Mute switch (located on the "top" side of the PC board almost opposite S7). The Mute Switch always mutes the speaker out. Additionally:



Jumper on JP4 pins 1 & 2 = Tuner/Send is ON
Jumper on JP4 pins 7 & 8 = DI is OFF
(DEFAULT)



Jumper on JP4 pins 3 & 4 = Tuner/Send is OFF
Jumper on JP4 pins 5 & 6 = DI is ON

LIMITED WARRANTY

The warranty for Euphonic Audio Amplifiers and Speaker Cabinets is THREE YEARS from the date of purchase. This covers defects in material and workmanship for the ORIGINAL owner.

The warranty is void under the following conditions:

- If the unit has been damaged due to accident, improper handling, installation or operation
- If the unit has been damaged in shipping
- Abuse or misuse. This includes exceeding the physical limitations of amplifier or speaker cabinet, i.e. using excessive bass boost in the Wizzy 10.
- Unauthorized repair or attempted repair
- If the serial number has been defaced or removed

Euphonic Audio, Inc. reserves the right to make such determination of the above on the basis of factory inspection.

All liability for any incidental or consequential damage for breach or any expressed or implied warranties is disclaimed and excluded here from.

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental and/or consequential damages, so that the above limitation or exclusion may not apply to you. This warranty gives specific legal rights and you may also have other rights, which vary from state to state.

Changing Line Voltage: Changing the line voltage can easily be done by the user via the line voltage switch on the back of the amp. The unit must be powered OFF when changing the switch position. Similarly, plugging the unit into 240VAC with the line voltage switch at 120VAC will cause irreparable damage to the unit.

DESIGN PHILOSOPHY / OVERVIEW

Our goal was to create extremely small yet powerful, state of the art, fully featured integrated musical instrument amplifiers whose exceptional sound and volume belies their size and weight. The 4 pound, 625 watts, dual channel iAMP@Doublers 2 might just be the perfect amps for doublers, teachers, players' riding mass transit or those that are just tired of hauling gear.

With a revolutionary new ultra-lightweight, switching power supply and power amplifier, Intelligent Input Switching, 3 levels of configuration, a balanced DI, effects loop, variable high pass filter and more, in a compact footprint, the Micro is the most technically advanced, best sounding musical instrument amplifier on the market today.

Although perfect for all bass players the unique set of features of the Doublers 2 such as Mic In, Phantom Power, variable 180° Phase Control, and variable Notch Filter, makes it particularly well-suited to tailoring the sound of the electric or upright bass, making it the perfect doubling amp. The Doublers 2 is the perfect amp for those who use a mic with a magnetic/piezo or the electric/upright player.

Intelligent Input Switching (IIS): The Intelligent Input Switching feature of the Micro and Doublers is a microprocessor controlled input section that automatically senses how many instruments are plugged in and changes the way the amp functions. If you have one instrument and want a "normal" and "solo" option, the IIS will switch between the EQ on Channels 1 and 2. If you switch back and forth between two instruments the IIS will allow you to access either instrument or both.

The Doublers 2 has 3 levels of configuration. The first level represents those controls that the player uses on a daily basis. These are input level, Intelligent Input Switching, EQ, Master Volume, Wet/Dry control of the effects loop, and Muting. Additionally, on the Doublers, the Notch Filter, Phantom Power and Phase Control can be accessed via the front panel.

The second level of control, are those things that are adjusted very infrequently. Via switches on the back of the preamplifier circuit board, players can adjust the input gain for each channel and the DI level as well as the variable High Pass Filter.

Finally, EA or an EA dealer can further configure the amp via internal jumpers. These adjustments are usually one-time changes that reflect the way in which you use the amp. The DI can be configured to be pre or post EQ. The Mute Switch, which mutes the speaker, can also be configured to mute the DI out and/or Tuner/Effects send. The Effects/Tuner send can be configured to be active on either channel 1 or on both channel 1 and channel 2.