THANK YOU!

Thank you for purchasing the Warm Audio WA12 microphone preamplifier and DI. We feel this product offers the best in terms of the sound, function, and vibe from the classic era of analog recording. We don’t cut corners when it comes to what goes into our products, and the WA12 is no exception. The WA12 uses the highest quality custom input and output transformers made by Cinemag Transformers USA, and employs an all discrete, class A signal path using only large through-hole components on PCBs that are assembled by hand.

Welcome Back To the World Of Analog
Though digital technology and software have made great strides in performance in recent years; we still feel that nothing compares to the level of articulation, depth, realism, and responsiveness of a well-built piece of analog gear. When you hear the bottom end presence and top end detail of quality analog gear, the difference can be astounding. The cost of most boutique analog equipment is financially out of reach for many recording artists. Our mission is to change this, and introduce as many people as we can to recording and mixing with real hardware. Whether this is the first mic preamp or piece of outboard gear you’ve ever purchased outside of a recording interface, or merely the first in a long time; we thank you, and welcome you back to the world of analog.

Bryce Young
President
Warm Audio
Liberty Hill, Texas USA
CHAPTER 1: WARRANTY STATEMENT

Warm Audio warranties this product to be free from defect in materials and workmanship for one year from the date of purchase, for the original purchaser to whom this equipment is registered. This warranty is non-transferrable.

This warranty is void in the event of damage incurred from unauthorized service to this unit, or from electrical or mechanical modification to this unit. This warranty does not cover damage resulting from abuse, accidental damage, misuse, improper electrical conditions such as mis-wiring, incorrect voltage or frequency, unstable power, disconnection from earth ground (for products requiring a 3 pin, grounded power cable), or from exposure to hostile environmental conditions such as moisture, humidity, smoke, fire, sand or other debris, and extreme temperatures.

Warm Audio will, at its sole discretion, repair or replace this product in a timely manner. This limited warranty extends only to products determined to be defective and does not cover incidental costs such as equipment rental, loss of revenue, etc. Please visit us at www.warmaudio.com for more information on your warranty, or to request warranty service.

This warranty applies to products sold in the United States of America. For warranty information in any other country, please refer to your local Warm Audio distributor. This warranty provides specific legal rights, which may vary from state to state. Depending on the state in which you live, you may have rights in addition to those covered in this statement. Please refer to your state laws or see your local Warm Audio retailer for more information.

NON-WARRANTY SERVICE

If you have a defective unit that is outside of our warranty period or conditions; we are still here for you and can get your unit working again for a modest service fee. Please visit us at www.warmaudio.com to contact us about setting up a repair or for more information.

With the proper care, your Warm Audio gear should last a lifetime and provide a lifetime of enjoyment. We believe the best advertisement we can have is a properly working unit being put to great use. Let’s work together to make it happen.
CHAPTER 2: NOW LET’S GET STARTED!

The WA12 works great with all types of microphones, including dynamic, ribbon, and condenser microphones. Dynamic microphones and ribbon microphones are generally lower output devices and require no external power source. Condenser microphones are generally more sensitive than dynamic and ribbon microphones and typically require external +48V phantom power.

The WA12 also works well with a variety of instruments, via the onboard active instrument DI.

OPERATION

The WA12 is a completely discrete, high voltage, dual-transformer microphone preamplifier designed for high gain (+71dB), high headroom, low noise, and an exciting sonic performance – great for all types of recording applications. A high quality mic preamp is one of the most critical pieces needed in achieving the elusive ‘larger than life’ sound on with real-world budget; and the WA12 is more than capable of delivering.

The WA12 features both a large, high-headroom custom-wound microphone input transformer, and output transformer by Cinemag Transformers USA. The WA12 is based around a discrete op-amp, the X731, which is our own reproduction of the vintage classic Melcor 1731, considered by some to be the warmer predecessor to the modern 2520-style op-amp. The X731 can achieve vibrant, clean and lifelike tones; but can also be driven into mild saturation at much higher gain levels. The effects can be subtle, but very pleasing to the ear.

CHAPTER 4: HOOKUP DIAGRAMS

In this example, a microphone is feeding into a WA12, which feeds into the WA-2A via a balanced XLR patch cable, which feeds into the LINE LEVEL input of your recording interface/recorder.

Note: it is important to use a line level input on your recording device as opposed to a microphone or instrument level input.
CHAPTER 3: TECHNICAL SPECS

FRONT PANEL

9. Tone Switch
When engaged the input impedance of the preamp is 150 ohms. When disengaged the input impedance of the preamp is 600 ohms. The 150 ohm (switched-in) setting increases the gain of the preamp by +6db changing the maximum gain from +65db to +71db. This feature will make a noticeable tone change to most microphones and instruments. The back panel XLR input and front panel Hi-Z input are both altered by this feature. The 600 ohms impedance setting is recommended for condenser and dynamic microphones, and 150 ohms is recommended for ribbons. This button is labeled “TONE” for a reason though, we strongly suggest you experiment with both settings on all sources to find the best possible tone for your mixes.

10. Gain Knob
The gain control is variable and adjusts the WA12’s gain from +29db to +65db or from +35db to +71db when the “TONE” switch is engaged. The “PAD” feature lowers the minimum and maximum ranges by 20db when engaged.

11. Power Button
The power button is used to power the unit on and off. To extend the life of the electronics please turn unit off when not in use.

CHAPTER 3: TECHNICAL SPECS

HARDWARE CONTROLS - FRONT PANEL

Power Switch
+48 Volt Phantom Power

The WA12 has +48V phantom power available. This assures optimum performance of your condenser microphones that require phantom power.

Tone Switch
The control switches the input transformer configuration from a 1:4 (step up) turns ratio to a steeper 1:8 (step up) turns ratio, drawing out a greater degree of coloration and impact from both the input transformer as well as the discrete op-amp. When engaged, the input impedance of the Tone Beast is 150 ohms. When disengaged, the input impedance of the Tone Beast is 600 ohms. The 150 ohm (switched-in) setting will increase the gain of the Tone Beast by +6db, changing the maximum gain from +65 to +71db. This feature will make a noticeable tone change to most microphones and instruments. The Microphone, Line and Hi-Z inputs are all altered by this feature; as every input source ultimately will pass through the affected components. The 600 ohms impedance setting is recommended for condenser and dynamic microphones, and 150 ohms is recommended for ribbons. This switch is labeled “Tone” for a reason though, most listeners will find the normal setting to be more open and natural, with the engaged setting to be more punchy, aggressive, or thick. The engaged setting is very much akin to how vintage console preamps such as those that inspired the TB12 have always been wired; however the disengaged setting is more akin to how many other modern types of solid-state preamps are normally wired. We strongly suggest you experiment with both settings on all sources to find the best possible tone for your recordings. As with all things, let your ear be the final judge on which setting to use for any given situation.

Balanced Output
Output is provided via an XLR and TRS ¼ jack. We recommend to only use one output at a time. For unbalanced connection, use the ¼ output with an unbalanced ¼ TS cable.
CHAPTER 3: TECHNICAL SPECS

BACK PANEL

1. XLR & TRS Balanced Output
Output is provided by an XLR and ¼ TRS output connector. For unbalanced operation, use an unbalanced ¼ TS cable. We recommend for best results to use only one output at a time.

2. Microphone Input
Microphones and mic-level signals may be connected via the rear XLR/TRS combo connector.

3. AC Power
The WA12 is designed to use a 24V AC power supply. Warm Audio recommends that you use the 24V AC supplied in the original box or another of identical spec.

CHAPTER 3: TECHNICAL SPECS

FRONT PANEL

4. Hi-Z Input
The front panel 1/4” input provides an active class A, discrete DI circuit, which boosts and then sends the instrument’s signal through the entire preamp circuit, including the input transformer, discrete opamp (operational amplifier) and output transformer. The thorough layout of the HiZ’s signal path ensures that instruments are subject to the same tone-shaping options as with microphones. You can connect a variety of instruments via the Hi-Z input on the front panel of the WA12, including: acoustic (with pickup) guitars and electric guitars, bass guitar, as well as keyboards, samplers, synth modules, and drum machines.

5. Hi-Z Switch
This feature engages the front panel 1/4” input and turns off the back panel XLR/TRS combo input.

6. +48V Switch
The 48 volts feature provides power for condenser mics and any other devices requiring continuous phantom power through the XLR input. This power is supplied at a constant level to prevent any degradation of audio quality.

7. -20dB PAD Switch
Engaging this feature applies -20db to the incoming signal. This is a very useful feature for reducing the level coming into the WA12 and thus preventing the signal from clipping or distorting. This may occur due to high output level from a microphone or other device. Padding the input serves to provide increased “headroom” for the operator while lessening the likelihood of signal overload.

8. POL Switch
This feature inverts the polarity of the microphone input signal. This can be useful in aligning the phase of ‘opposing’ microphones in some recording scenarios, such as microphones placed on the top and bottom of a snare drum, microphones in front of and behind the speaker in an open-back guitar cabinet, etc.
CHAPTER 3: TECHNICAL SPECS

BACK PANEL

1. XLR & TRS Balanced Output
Output is provided by an XLR and ¼ TRS output connector. For unbalanced operation, use an unbalanced ¼ TS cable. We recommend for best results to use only one output at a time.

2. Microphone Input
Microphones and mic-level signals may be connected via the rear XLR/TRS combo connector.

3. AC Power
The WA12 is designed to use a 24V AC power supply. Warm Audio recommends that you use the 24V AC supplied in the original box or another of identical spec.

CHAPTER 3: TECHNICAL SPECS

FRONT PANEL

4. Hi-Z Input
The front panel 1/4" input provides an active class A, discrete DI circuit, which boosts and then sends the instrument’s signal through the entire preamp circuit, including the input transformer, discrete opamp (operational amplifier) and output transformer. The thorough layout of the HI-Z’s signal path ensures that instruments are subject to the same tone-shaping options as with microphones. You can connect a variety of instruments via the Hi-Z input on the front panel of the WA12, including: acoustic (with pickup) guitars and electric guitars, bass guitar, as well as keyboards, samplers, synth modules, and drum machines.

5. Hi-Z Switch
This feature engages the front panel 1/4" input and turns off the back panel XLR/TRS combo input.

6. +48V Switch
The 48 volts feature provides power for condenser mics and any other devices requiring continuous phantom power through the XLR input. This power is supplied at a constant level to prevent any degradation of audio quality.

7. -20dB PAD Switch
Engaging this feature applies -20db to the incoming signal. This is a very useful feature for reducing the level coming into the WA12 and thus preventing the signal from clipping or distorting. This may occur due to high output level from a microphone or other device. Padding the input serves to provide increased “headroom” for the operator while lessening the likelihood of signal overload.

8. POL Switch
This feature inverts the polarity of the microphone input signal. This can be useful in aligning the phase of opposing microphones in some recording scenarios, such as microphones placed on the top and bottom of a snare drum, microphones in front of and behind the speaker in an open-back guitar cabinet, etc.
CHAPTER 3: TECHNICAL SPECS

FRONT PANEL

9. Tone Switch
When engaged the input impedance of the preamp is 150 ohms. When disengaged the input impedance of the preamp is 600 ohms. The 150 ohm (switched-in) setting increases the gain of the preamp by +6db changing the maximum gain from +65db to +71db. This feature will make a noticeable tone change to most microphones and instruments. The back panel XLR input and front panel Hi-Z input are both altered by this feature. The 600 ohms impedance setting is recommended for condenser and dynamic microphones, and 150 ohms is recommended for ribbons. This button is labeled “TONE” for a reason though, we strongly suggest you experiment with both settings on all sources to find the best possible tone for your mixes.

10. Gain Knob
The gain control is variable and adjusts the WA12’s gain from +29db to +65db or from +35db to +71db when the “TONE” switch is engaged. The “PAD” feature lowers the minimum and maximum ranges by -20db when engaged.

11. Power Button
The power button is used to power the unit on and off. To extend the life of the electronics please turn unit off when not in use.

CHAPTER 3: TECHNICAL SPECS

HARDWARE CONTROLS - FRONT PANEL

Power Switch
+48 Volt Phantom Power

The WA12 has +48V phantom power available. This assures optimum performance of your condenser microphones that require phantom power.

Tone Switch
The control switches the input transformer configuration from a 1:4 (step up) turns ratio to a steeper 1:8 (step up) turns ratio, drawing out a greater degree of coloration and impact from both the input transformer as well as the discrete op-amp. When engaged, the input impedance of the Tone Beast is 150 ohms. When disengaged, the input impedance of the Tone Beast is 600 ohms. The 150 ohm (switched-in) setting will increase the gain of the Tone Beast by +6db, changing the maximum gain from +65 to +71db. This feature will make a noticeable tone change to most microphones and instruments. The Microphone, Line and Hi-Z inputs are all altered by this feature; as every input source ultimately will pass through the affected components. The 600 ohms impedance setting is recommended for condenser and dynamic microphones, and 150 ohms is recommended for ribbons. This switch is labeled “Tone” for a reason though, most listeners will find the normal setting to be more open and natural, with the engaged setting to be more punchy, aggressive, or thick. The engaged setting is very much akin to how vintage console preamps such as those that inspired the TB12 have always been wired; however the disengaged setting is more akin to how many other modern types of solid-state preamps are normally wired. We strongly suggest you experiment with both settings on all sources to find the best possible tone for your recordings. As with all things, let your ear be the final judge on which setting to use for any given situation.

Balanced Output
Output is provided via an XLR and TRS ¼ jack. We recommend to only use one output at a time. For unbalanced connection, use the ¼ output with an unbalanced ¼ TS cable.
CHAPTER 2: NOW LET’S GET STARTED!

The WA12 works great with all types of microphones, including dynamic, ribbon, and condenser microphones. Dynamic microphones and ribbon microphones are generally lower output devices and require no external power source. Condenser microphones are generally more sensitive than dynamic and ribbon microphones and typically require external +48V phantom power.

The WA12 also works well with a variety of instruments, via the onboard active instrument DI.

OPERATION

The WA12 is a completely discrete, high voltage, dual-transformer microphone preamplifier designed for high gain (+71dB), high headroom, low noise, and an exciting sonic performance – great for all types of recording applications. A high quality mic preamp is one of the most critical pieces needed in achieving the elusive ‘larger than life’ sound on with real-world budget; and the WA12 is more than capable of delivering.

The WA12 features both a large, high-headroom custom-wound microphone input transformer, and output transformer by Cinemag Transformers USA. The WA12 is based around a discrete op-amp, the X731, which is our own reproduction of the vintage classic Melcor 1731, considered by some to be the warmer predecessor to the modern 2520-style op-amp. The X731 can achieve vibrant, clean and lifelike tones; but can also be driven into mild saturation at much higher gain levels. The effects can be subtle, but very pleasing to the ear.

CHAPTER 4: HOOKUP DIAGRAMS

In this example, a microphone is feeding into a WA12, which feeds into the WA-2A via a balanced XLR patch cable, which feeds in the LINE LEVEL input of your recording interface/ recorder.

Note: it is important to use a line level input on your recording device as opposed to a microphone or instrument level input.
CHAPTER 1: WARRANTY STATEMENT

Warm Audio warranties this product to be free from defect in materials and workmanship for one year from the date of purchase, for the original purchaser to whom this equipment is registered. This warranty is non-transferrable.

This warranty is void in the event of damage incurred from unauthorized service to this unit, or from electrical or mechanical modification to this unit. This warranty does not cover damage resulting from abuse, accidental damage, misuse, improper electrical conditions such as mis-wiring, incorrect voltage or frequency, unstable power, disconnection from earth ground (for products requiring a 3 pin, grounded power cable), or from exposure to hostile environmental conditions such as moisture, humidity, smoke, fire, sand or other debris, and extreme temperatures.

Warm Audio will, at its sole discretion, repair or replace this product in a timely manner. This limited warranty extends only to products determined to be defective and does not cover incidental costs such as equipment rental, loss of revenue, etc. Please visit us at www.warmaudio.com for more information on your warranty, or to request warranty service.

This warranty applies to products sold in the United States of America. For warranty information in any other country, please refer to your local Warm Audio distributor. This warranty provides specific legal rights, which may vary from state to state. Depending on the state in which you live, you may have rights in addition to those covered in this statement. Please refer to your state laws or see your local Warm Audio retailer for more information.

NON-WARRANTY SERVICE

If you have a defective unit that is outside of our warranty period or conditions; we are still here for you and can get your unit working again for a modest service fee. Please visit us at www.warmaudio.com to contact us about setting up a repair or for more information.

With the proper care, your Warm Audio gear should last a lifetime and provide a lifetime of enjoyment. We believe the best advertisement we can have is a properly working unit being put to great use. Let’s work together to make it happen.
THANK YOU!

Thank you for purchasing the Warm Audio WA12 microphone preamplifier and DI. We feel this product offers the best in terms of the sound, function, and vibe from the classic era of analog recording. We don’t cut corners when it comes to what goes into our products, and the WA12 is no exception. The WA12 uses the highest quality custom input and output transformers made by Cinemag Transformers USA, and employs an all discrete, class A signal path using only large through-hole components on PCBs that are assembled by hand.

Welcome Back To the World Of Analog
Though digital technology and software have made great strides in performance in recent years; we still feel that nothing compares to the level of articulation, depth, realism, and responsiveness of a well-built piece of analog gear. When you hear the bottom end presence and top end detail of quality analog gear, the difference can be astounding. The cost of most boutique analog equipment is financially out of reach for many recording artists. Our mission is to change this, and introduce as many people as we can to recording and mixing with real hardware. Whether this is the first mic preamp or piece of outboard gear you’ve ever purchased outside of a recording interface, or merely the first in a long time; we thank you, and welcome you back to the world of analog.

Bryce Young
President
Warm Audio
Liberty Hill, Texas USA

CHAPTER 5: RECALL SHEETS
WA12
MICROPHONE PREAMP