



A M P L I F I C A T I O N

Congratulations on your purchase of a Baer Amplification product. This product was designed and manufactured to exacting standards and should provide you with many years of trouble free service. The information contained in this manual is designed to help you get the most out of your new amplification system and help get you on the road to better tone.

The Basics....

At Baer Amplification, we believe that it's the countless hours of practice, the touch of your fingers upon your instrument and your passion for playing that truly makes up your signature sound. Our products are specifically designed and crafted to bring out the true voice of your instrument and provide you with all the power and versatility you need to handle any situation. Plug in and play!



The heart and soul of the VALKYRIE™ was designed around our amazing **Trans-Hybrid Preamp™** which gives you the option of playing with the punch and precision of a studio quality, all solid state bass amplifier, or the color and rich overtones of a tube hybrid bass amplifier. Freedom of choice at the touch of a button!

Our solid state preamp was specifically designed to sound warm, and round while remaining full of upper end clarity and definition. While many companies design preamps with “flat” EQ settings that actually employ dramatic built in EQ curves to give their amplifiers a certain sonic signature, we took a different approach and designed our preamp with very little coloration. After all, our philosophy is to deliver the sound in *your* head...not ours! We believe that the key to providing a strong, supportive foundation for your music lies in the ability of your amplifier to precisely reproduce the low end of your instrument with power and authority, while providing you with accurate midrange response and a smooth, natural top end free from hype. What you hear is the natural sound of your bass...only bigger!

Engaging the VALKYRIE's **Split/Drive™** tube drive circuit routes the all solid state signal coming from the preamp through our innovative variable tube drive section. This unique design is the result of many months of research and development with one clear goal in mind. Deliver all the dynamics, harmonic overtones and growl that only genuine tubes can bring to your sound, while preserving maximum clarity in the low end. This is not the typical single 12AX7 design found in most tube hybrid bass preamps. Our **Split/Drive™** circuit utilizes a separate dual tube, push-pull amplifier circuit complete with an output transformer and a few tricks up its sleeves. The result is a tube section that combines the lively response you expect from real tubes with a tight, punchy low end that never loses focus and definition, even at extreme volumes.

The flexibility to choose between a solid state or tube preamp, combined with the brute strength of our massive 850watt (2 ohm), class A/B power section, means that the VALKYRIE is equally at home whether your gig is an intimate little jazz club, or a stadium packed with 50,000 of your closest friends.



- WARNING -



For safe operation, do not attempt to use this equipment until you have read and thoroughly understand all the information contained within this manual. If you are unsure as to the safe operation of this equipment, contact Baer Amplification before using this product.

- ▶ *Do not expose the unit to water, rain, moisture, or extreme humidity. Do not place liquids on top of the amplifier. Do not use this equipment when there is lightning present in your location.*
- ▶ *Insure that the amplifier has been set to work with the correct voltage for your location and verify that the electrical outlet you are plugging the unit into is properly grounded before using the amplifier. Never use this amplifier plugged into a non-grounded receptacle.*
- ▶ *When installing the amplifier in a rack, you must maintain space for proper ventilation around **all** sides of the unit. Do not block, or restrict any ventilation openings in the unit. Do not let the bottom of the amplifier rest directly upon other equipment, or surfaces.*
- ▶ **Caution!** *The amplifier can become very hot during operation. Use care when handling.*
- ▶ *Do not use the amplifier near sources of heat, in areas of high ambient temperatures, or direct sunlight.*
- ▶ *It is good practice to always make sure that the amplifier is connected to your speaker cabinet(s) before powering on the unit.*
- ▶ *Replace fuses only with fuses of the same type and rating. Always unplug unit before replacing fuses.*
- ▶ *Do not operate your amplifier if it has been dropped, or damaged in any way. If the amplifier is not acting normal for any reason, turn off the unit and refer the amp to qualified service personnel.*
- ▶ *Your amplification system is capable of producing extreme sound levels. Always use adequate hearing protection to prevent against hearing loss.*
- ▶ ***To prevent the risk of electrical shock and possible serious injury, do not open your amplifier for any reason. There are no use serviceable parts inside. Refer service to qualified personnel only!***



- WARNING -



As a musician, your hearing is your most precious resource. Your amplification system is capable of producing extremely high sound levels and should be used only while wearing adequate hearing protection. Repeated exposure to the sound levels typically present while performing live music, without the use of hearing protection, can result in permanent hearing loss!

AMPLIFIER OPERATION

FRONT PANEL CONTROLS



INPUT SECTION

- **POWER SWITCH** - *To prevent possible damage to your speaker cabinets, it's good practice to always be sure that both the GAIN and MASTER controls are set to their minimum positions before powering the amp either on or off, or when connecting or disconnecting your instrument cable.*
- **INPUT JACKS** - While the ACTIVE input jack was designed with a -10dB pad for use with very high output active basses, we suggest you first try the PASSIVE input jack with your instrument. If you find you are too easily overloading (clipping) the preamp with your instrument plugged into the PASSIVE jack, switch to the ACTIVE jack.
- **GAIN** - Learning to properly set the GAIN control is essential for getting the best performance out of your amplifier. To optimally set the input gain, first set the GAIN and MASTER VOLUME to their minimum positions. Begin playing your bass while raising the GAIN control to the level where the CLIP indicator LED flashes briefly only during your very loudest playing. The CLIP indicator is designed to begin flashing about 6dB before actual clipping occurs. Use this as an indicator that you are running out of headroom. If your GAIN has been set correctly, the CLIP indicator should only flash occasionally when you are hitting your very loudest notes. If the Clip indicator is staying lit for most of the time, or you hear any clipping occurring, lower the GAIN control until the clipping is no longer heard and the CLIP indicator remains off for all but your hardest playing.

EQUALIZATION SECTION

**Note: This amplifier was designed to reproduce the true sound of your instrument accurately. We recommend that before adjusting any of the VALKYRIE's tone controls, you give your ears time to get accustomed to the natural sound of the amp with the tone controls totally flat. Set in this manner, the amplifier is very sensitive to slight changes in playing technique and many players find that the VALKYRIE delivers all the tone they need with little to no EQ. When you do make adjustments, make them in small increments and give your ears time to get used to the effect that those changes have made upon your tone, as well as to the overall sound of your music before making any further changes. Remember to listen to how your tone affects the overall feel of the music and be willing to adapt your tone to what works best for the song, not your ego. Mastering this will make you a much better bassist!*

Another thing to keep in mind is that while many bass amplifiers have EQ sections that can provide upwards of +/-18dB of EQ control, the VALKYRIE's EQ filters were designed with +/-10dB of boost or cut (+/-6dB in the case of our DEEP control). It's our experience as players, that EQ works best when used in moderation. While it may take getting used to turning an EQ knob further than you are used to on other amps, we feel that our tone controls give you much more precise control over your EQ changes.

- **DEEP** - This control provides +/-6dB @ 45Hz. Use this control to add a deep, rich voice to your tone. This can be especially useful for fattening up your tone at lower volumes or when playing with a pick. Remember that a little here goes a long way. ***In general, it is a good rule of thumb to decrease the amount of DEEP boost as you increase your overall volume, as boosting these frequencies at high volumes can place a tremendous demand on your speakers.*** In situations where you find your low end "muddy" or unfocused due to less than friendly room acoustics, try rolling off the DEEP frequencies a bit, and instead add low end by using the BASS control.
- **BASS** - Unlike typical bass shelving controls, this peak filter centered at 80Hz allows you to add bottom end without boosting your instruments lowest fundamental frequencies. Simply put, we feel this gives you a tighter, rounder bass tone that is full of punch and definition.
- **LOW MID** - Adjusting frequencies in the low midrange can have a dramatic effect on your tone. For example: A slight boost around 200Hz can add a bit of punch to a thin sounding instrument. Boosting in the 400Hz - 500Hz range can be great for bringing out back pickup midrange "bark." This control can also be useful for removing upper midrange "honk" by cutting between 600Hz - 800Hz.
- **HIGH MID** - While useful for removing upper midrange around 800Hz - 1kHz to dial in that perfect slap tone, this control can also be great for adding some serious bite to your tone. Try a small boost between 1.5kHz and 3kHz to lend an aggressive edge and increased definition to your playing. This can work especially great for pick style rock.
- **TREBLE** - Like our BASS control, this is a peak filter and not the typical shelving control found on most bass amps. Centered at 4.5kHz, this control is perfect for dialing in just the right amount of top end definition and bite without adding too much overall brightness and hiss to your tone.
- **BRIGHT** - The BRIGHT circuit adds 6dB of boost centered at 7.5kHz. Engage this circuit to add top end sparkle and an overall sheen to your sound. This feature is perfect for sizzling, slap style playing.



TUBE DRIVE SECTION

Engaging the **Split/Drive™** tube circuit routes the solid state preamp signal through our innovative dual tube, push/pull tube amplifier circuit. **Split/Drive™** delivers that lively, rich tone that you've come to expect from a tube preamp, while keeping your low end from losing focus due to too much tube saturation of your instrument's lowest frequencies. The result is a variable tube drive circuit that always remains quick and coherent at all levels of tube saturation, with no loss of low end punch and definition!

- **TUBE SWITCH** - Depressing the TUBE switch engages the tube amplifier circuit and lights the indicator LED. Be sure that the TUBE GAIN knob is set to the MIN position before engaging this switch, as this is a true gain stage that is accompanied by an increase in overall volume.
- **TUBE GAIN** - At lower levels this circuit is capable of producing a very clean, studio quality tube sound. Increasing the tube gain increases the level of tube distortion, overtones and harmonics present in your signal.

**It is important to note that the setting of the INPUT GAIN will have a dramatic effect on the sound of the TUBE DRIVE circuit. Try experimenting here. If you find that the TUBE DRIVE circuit is too overdriven for your taste, you can reduce the gain available to the tube section by simply turning down the INPUT GAIN control a bit, or by switching to the ACTIVE input. Likewise, using the PASSIVE input and/or increasing the INPUT GAIN, will increase the gain available to the TUBE DRIVE circuit for a more aggressive distortion.*

MASTER OUTPUT SECTION

- **MASTER VOLUME** - This control adjust the output volume of the amplifier to the speaker system. To protect your speakers, always set the MASTER VOLUME to the minimum position before turning the amplifier on or off and before plugging in or unplugging your instrument.

CAUTION! Remember that high powered amplifiers, such as the the VALKYRIE are more than capable of damaging even the most robust speaker cabinets, not to mention your most precious asset...your hearing! Use of restraint and hearing protection at higher volumes settings is highly recommended.

- **MUTE SWITCH** - Depressing this switch lights the MUTE indicator LED and mutes all outputs except for the TUNER output jack. Use this feature to tune silently on stage without sending a signal to either your speakers or the front of house via your direct out jack. This feature is also available via the FS-1 remote foot switch, which will light when the MUTE function is engaged. ***Please note that the MUTE function will not mute the direct out signal, when the direct out has been set to the PRE EQ position.**
- **TUNER OUTPUT JACK** - Use this 1/4" jack to connect to your instrument tuner

PROTECTION CIRCUITS

The VALKYRIE is equipped with several protection features to prevent damage to the amplifier in cases where the amplifier is subjected to conditions for which it was not designed.

• OUTPUT LIMITER

If the MASTER VOLUME is turned up high enough to push the output section into clipping, the LIMIT indicator LED will light and the output limiting circuit will engage to prevent the amplifier from introducing any harsh clipping artifacts into your playing. While this will not harm the amplifier in any way, it is an indication that you are pushing the amp to its maximum volume capability and that you should reduce your overall volume level.

• THERMAL LIMITER

While the VALKYRIE is rated to handle a 2 ohm load, it is still possible that the amp can shut down due to thermal overload under certain conditions while running at 2 ohms. Should the VALKYRIE exceed its thermal limit, the power output section will shut down to protect the amp from damage, while the fan will continue to operate until the output section cools down and resets. If the situation persists, you should turn down the MASTER volume, or reduce the speaker load on the amplifier.

**** Running 2 ohm loads is very demanding of your amplifier. To prevent overheating, avoid 2 ohm loads when the amplifier will be used in areas with high ambient temperatures (such as outdoors on a hot summer day with the amp in direct sunlight). Do not install in racks close to other high powered equipment and do not block, or restrict airflow around any of the amps ventilation openings.***

• SHORT CIRCUIT PROTECTION

The VALKYRIE is equipped with short circuit protection to prevent damage to the amplifier should the output section ever see a dead short, or a minimum speaker load below 1ohm (1 Ω). In either of these situations, the output section will be shut down to protect the amp from serious damage. If this occurs, the amplifier will not automatically reset itself. **To reset the amplifier, you will need to first turn the power switch to the off position and then back to the on position.**

**** Before resetting the amplifier, you should first determine and correct the situation that caused the amplifier's short circuit protection to activate. The most likely causes would be a minimum speaker load below 1ohm, or a damaged speaker cabinet, or speaker cable.***

REAR PANEL CONTROLS



FOOT SWITCH - Connect the FS-1 foot switch for remote control of the MUTE function.

SERIAL EFFECTS LOOP - Connect the SEND jack on your amplifier to the input jack on your effects unit. Connect the output jack of your effects unit to the RETURN jack on your amplifier.

LINE OUT - Use this output to connect the VALKYRIE's preamp signal to an external amplifier, or console.

DIRECT OUTPUT SECTION

- **GROUND LIFT** - Should you encounter any hum, or noise in your direct signal, try flipping the ground lift switch. Use the switch position that gives you the quietest signal.
- **PRE EQ** - In this position, the raw sound of your bass is routed straight from the initial preamp gain stage directly to the XLR output jack, so changes to the amp's EQ and TUBE sections will have no effect on this signal. ***Please note that the MUTE function will have no effect on the direct out in the PRE EQ position.** It is our opinion that you should always send your signal POST EQ, as this delivers the truest character of your amp and "your sound" to the front of house mix.
- **POST EQ** - In this position, your signal is routed through the solid state preamp and through the EQ section, before going to the direct out XLR jack. The POST EQ signal will always reflect the position of the TUBE GAIN button. If you have engaged the tube drive circuit, it will be present at the XLR jack.
- **DI LEVEL** - This knob controls the level present at the XLR out jack.
- **XLR JACK** - The XLR jack is wired pin #1 is ground, pin #2 is positive (+), pin #3 is negative (-).

**The direct output section on the Valkyrie uses a ground compensated output circuit where pin #2 is hot and returns on pin #3 which is connected to ground via a resistor. Because the amplifier is not isolated in the same manner as transformer balanced output, you should avoid sending 48v phantom power to the DI. While unlikely, the possibility exist that there is sound equipment out there that could be damaged from this.*

POWER CORD CONNECTION - This amp comes supplied with a high quality, 14ga power cord. Should the cord be lost or damaged, do not replace it with a lighter gauge cord. Please contact Baer Amplification for a replacement. **CAUTION! Never use a cord with a broken or missing ground pin.**

Fuses and 120V/240V OPERATION - Use 5 x 20mm, slow-blow fuse only. 120V - 8A, 240V - 4A

To switch the operating voltage, remove the fuse holder and slide the voltage selector tab sideways. Flip the tab for the correct voltage and re-install. Do not alter or modify the fuse holder under any circumstances!

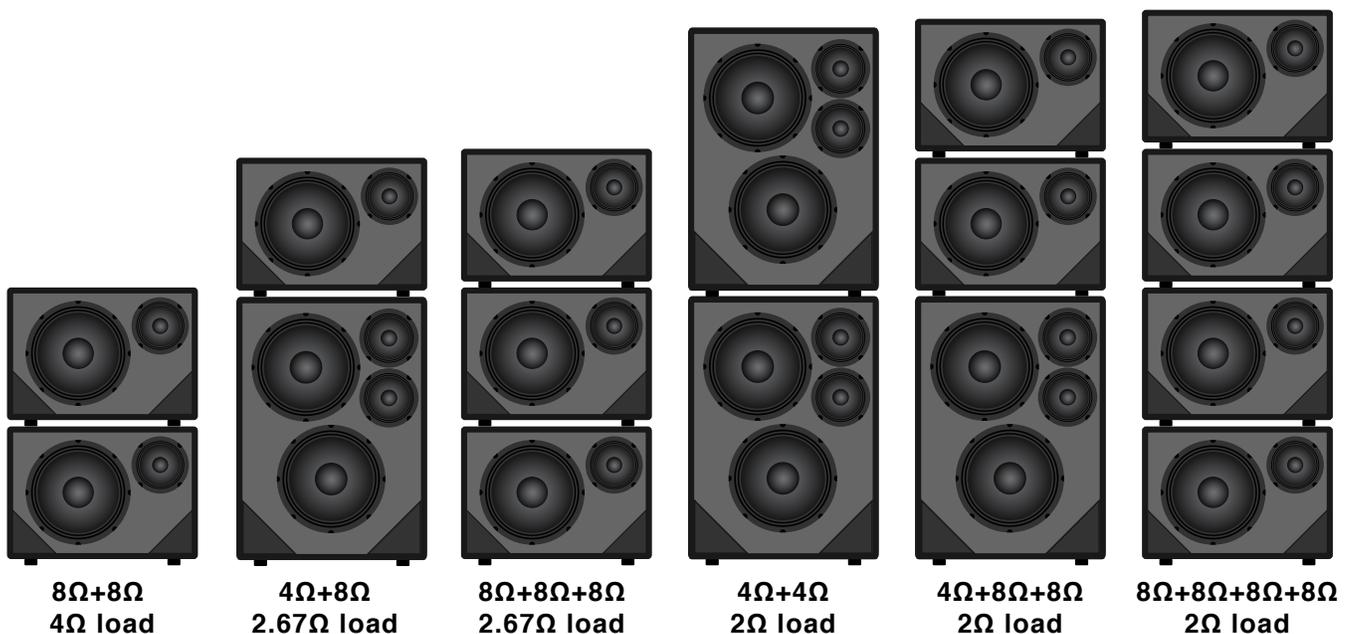
CAUTION! Be sure this switch is in the proper position for the voltage in your location before plugging in the amplifier. Using the amplifier with the switch in the incorrect position will cause serious damage to the amplifier and void your warranty!



- WARNING -



Be sure that you fully understand the total impedance load of the speaker system that you will be using before connecting any speaker cabinets to your amplifier. Exceeding the minimum load limit can cause severe damage to the amplifier and void your warranty!



SPEAKER OUTPUT - The minimum speaker load for the VALKYRIE is 2 ohms. The above chart helps explain the impedance loads your amplifier will see when connecting various cabinet configurations together. Any of the above cabinet configurations can safely be used with the Valkyrie's output section.

Speaker output is provided via speakOn type connectors only. 1/4" jacks were originally invented in the late 1800's to handle low voltage telephone switchboard signals and were never designed to handle high powered amplification signals. We do not use 1/4" jacks for our speaker outputs because they provide a vastly inferior connection when compared with the modern speakON type connectors that we use.

Remember, friends don't let friends use 1/4" speaker cables!

CARE OF YOUR AMPLIFIER

Under normal playing situations, your amplifier will need very little in the way of care, but here are a few general suggestions that should keep your amplifier operating in peak condition.

CLEANING YOUR AMPLIFIER - Be sure the power switch has been turned off and simply wipe the amplifier with a clean dry cloth. If the chassis has dirt or a stain that can't be removed with a dry cloth, try using this method. Take a small cotton washcloth and wet with water. Wring as much water as possible from the cloth and then pat the washcloth with a dry towel. You can then use this slightly moistened cloth to clean your amplifier. Allow sufficient drying time before powering on the amplifier.

CAUTION! Do not use any type of harsh cleaning solvents, alcohol, window cleaner, etc.. to clean your amplifier. Use of these types of chemicals could cause permanent damage to your amplifiers finish and will not be covered under warranty service.

MAINTENANCE - While your amplifier generally needs very little in the way of maintenance, the fact that the amplifier is forced air cooled means that dust will be inevitably be sucked into the amplifier and will accumulate inside. This dust will eventually work it's way into the potentiometers and other sensitive areas of the amplifier and is usually evident by problems such as noise, static, or "scratchy" pots. The evil dust bunnies are also notorious for hiding out in your amplifier's fan and heat sink and can wreak havoc with your amplifiers cooling system.

To prevent little problems from becoming big problems, we recommend that you periodically take your amplifier to a qualified service technician for routine maintenance. Maintenance will vary depending on use, but Baer Amplification recommends that you have your unit serviced once a year under heavy touring use and every three years under normal playing conditions.

RACK MOUNTING - For the best protection of your amplifier, we recommend that the VALKYRIE be mounted in a rack, or head case at all times. The Valkyrie is equipped with a large and heavy transformer mounted towards the rear of the amplifier. ***Supporting the back of the unit is highly recommended!*** Depending on the rack used, this can usually be accomplished with something as simple as stick on rubber feet attached to the bottom of the amp at the back. When mounting in a rack with other equipment, install the VALKYRIE in the bottom location. Amplifiers subjected to heavy touring use should be mounted in a shock mount type rack enclosure for maximum protection. ***CAUTION! Be careful to maintain proper airflow around all sides of the amplifier at all times.*** Do not block, or restrict any ventilation openings in the chassis. Do not let the bottom of the unit rest directly on other equipment, or surfaces. We do not recommend the use of soft rack type bags, as these types of racks can often restrict airflow around the unit.

Please keep in mind that the VALKYRIE is a high powered amplifier capable of generating considerable heat during operation. For this reason, we do not recommend that the VALKYRIE be installed in a large multi-space racks along with other high heat generating equipment such as power amplifiers, or any other equipment sensitive to higher operating temperatures.

SPECIFICATIONS:

Amplifier Topology: Class A/B

Power Output:

- 335W @ 8 ohms
- 625W @ 4 ohms
- 850W @ 2 ohms

Instrument Inputs:

- Passive 1/4" mono input jack.
- Active 1/4" mono input jack w/ -10dB pad
-

Preamp Topology: Solid State

EQ Section:

- Deep +/-6dB @ 45 Hz - peak
- Bass +/- 10dB @ 80Hz - peak
- Low Mid +/- 10dB @ 100Hz - 800Hz
- High Mid +/- 10dB @ 800Hz - 3.5kHz
- Treble +/- 10dB @ 4.5kHz - peak
- Bright switch +4dB @ 7.5kHz - peak

Switchable Tube Section: 1 - 12AX7, 1 - 12AU7 push/pull tube amplifier, with output transformer

Fuses:

- 120V - 5 x 20mm 8A slow-blow
- 240V - 5 x 20mm 4A slow-blow

Speaker Outputs: Two Neutrik speakON connectors (minimum load - 2 ohms)

Direct Output: XLR w/ level control, pre EQ/Tube or post EQ/Tube switch

Effects Loop: 1/4" Series effects send and return jacks

Line Out: Unbalanced 1k Ω , +4dBu nominal

Cooling: Thermostatically controlled fan speed circuit

Dimensions: Standard 2U rack unit, 19" x 3.5" x 14" deep

Weight: 26.2 lbs

BAER AMPLIFICATION LIMITED WARRANTY

Baer Amplification products are covered under this limited warranty policy against defects in materials and workmanship. This policy shall apply only to products purchased in the USA and Canada. For products purchased outside the USA or Canada, please contact the dealer in your country for information about the warranty and obtaining service. Warranty period begins on the date listed on the original sales receipt.

Warranty policies vary by product and are listed below:

- **Amplifiers** - Amplification products are covered under warranty for a period of three (3) years.
- **Tubes** - Tubes are covered under warranty for a period of six (6) months.
- **Speaker Cabinets** - Speaker cabinets are covered under warranty for a period of two (2) years.
- **Accessories** - Accessory products are covered under warranty for a period of ninety (90) days.

Warranty Coverage - Baer Amplification LLC reserves the right to repair or replace defective products or components at their own discretion. Warranty does not cover normal wear and tear to product coverings or finishes. Warranty shall not apply to products in need of repair deemed by Baer Amplification LLC to be the direct result of misuse, or neglect by the user. Warranty is considered void on any product that has been serviced, altered or modified in any way by personnel not authorized by Baer Amplification LLC. Baer Amplification LLC assumes no liability for any property damage that may occur as a result of failure of this product. This warranty gives you specific legal rights which may vary from state to state.

To Obtain Warranty Service - Please contact Baer Amplification before sending any equipment to us for repairs. ***You must be able to provide proof of purchase by providing us with a copy of your original sales receipt, or invoice.*** You will then receive a return authorization number which must be included with the product being return. All shipping charges shall be paid by the purchaser. Whenever possible, please return equipment packed in the original shipping materials. Baer Amplification LLC is not responsible for any damage that may occur during shipping. Any claim for damages that happen as a result of shipping, must be filed by the purchaser directly with your shipping carrier.

90 DAY LIMITED WARRANTY TRANSFER POLICY

Baer Amplification offers a 90 day limited warranty transfer policy. This limited warranty is fully transferable for the first ninety (90) days from the date listed on the original sales receipt or invoice, provided that the original sales receipt or invoice is transferred to the new owner and the transfer of ownership is registered with Baer Amplification. Please contact Baer Amplification for a copy of the Warranty Transfer Authorization Form. ***You must register the transfer of ownership with Baer Amplification for the warranty to be transferred to the new owner.***

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