# FRIEDMAN

# AMPLIFICATION

**BE-100** 

**INSTRUCTION MANUAL** 

Congratulations on purchasing this incredible new guitar amplifier designed by one of the most well known amp modders and designers in the LA Music scene for the past 20 years, Dave Friedman.

Dave Friedman has been designing and building guitar rigs for the stars since the early nineties. After many years of modding amplifiers and consulting for other well-known amplifier companies, Dave has finally brought his talent to a new line of production amps under his name, Friedman Amplification.

Dave's first production amplifier, the BE-100, is criticality acclaimed and one of the most in-demand British high gain, meets vintage amps on the market today.

The BE100 is a 100-watt EL34 powered multichannel fire breather that is also capable of producing many styles of music from blues to classic rock and heavy rock to metal by just adjusting the gain and master controls on the BE channel. Switching to the HBE boosts the BE channel giving even more gain and saturation. Of course we can't forget the rich cleans found within the 2<sup>nd</sup> channel on the BE100.

A lot of people don't believe an EL-34 100 watt amp can sound great even at bedroom volume levels. We beg to differ!

Dave completely designed the Master volume to sound fantastic at any level.

You will notice instantly, the tight bottom end and rich harmonically detailed chords and single notes. This amp cleans up remarkably well with the guitar's volume control, even with the amp on higher gain settings.

The BE100 takes pedals very well and loves boosts, OD's, phasers, flangers, tremolos, wahs, etc. The BE100 also has an ultra transparent tube Series FX loop that takes time based FX pedals and rack units equally well.

- Incredibly versatile multi-channel amp
- 100-Watt EL34 Power Tubes
- Four 12AX7 Preamp Tubes
- Dirty Channel has Vol, Gain, Treble, Middle, Bass
- Clean Channel has Vol, Treble, Bass and 3 position Bright Switch
- Global Presence Control
- Series Effects Loop with Return Level on rear
- Custom Transformers and Capacitors
- BE100 Voicing Switches include: Fat, C45, Sat and front panel voice switch
- Line Out with Level Control on rear panel
- Gain Structure Switch

### **PLUGGING IN**

We recommend starting the amp on the BE channel with the Bass on 10, the Mids at around 6, the Treble at 5 and the Presence at 5. Set the Gain around 8 and then bring the master up to taste. After plugging in, you will notice instantly, the tight bottom end and rich harmonically detailed chords and single notes, that's the Friedman sound. This amp cleans up remarkably well with the guitar's volume control even with the amp on higher gain settings. For even more gain switch to HBE mode. Switch to the Clean channel and set the Treble and Bass at 5 and turn the Volume up to taste and experiment with the Bright Switch.

We know you will love your new BE100. If you have any questions or help don't hesitate to email us at friedmanamps@gmail.com.

### **INSTRUCTIONS**

Please keep this instruction manual for future reference and for the duration of owning this Friedman Amplifier. Please carefully read and understand the instructions inside this user's manual before attempting to operate your new amp. This instruction manual includes essential safety information regarding the use and maintenance of the amplifier. Take special care to heed all warning symbols and signs inside this manual and those printed on the amplifier itself.



WARNING!

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THE AMPLIFIER TO WATER OR MOISTURE. DO NOT OPERATE NEAR ANY WATER SOURCE



WHAT'S THE MEANING OF THIS?

The lightning flash with an arrow triangular symbol is intended to alert the user to the presence of non-insulated "dangerous voltage" within the products enclosure, and may be of sufficient magnitude to constitute a risk of electric shock

WHAT'S THE MEANING OF THIS?

The exclamation point triangular symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the user manual accompanying this amplifier!

- 1. Read Instructions All the safety and operating instructions should be read before this product is operated.
- 2. Retain Instructions The safety and operating instructions should be retained for future reference.
- 3. Heed Warnings All warnings on the amplifier and in the operating instructions should be adhered to.

- 4. Follow Instructions All operating and use instructions should be followed.
- 5. Water and Moisture The amplifier should not be used near water for example, a bathtub, washbowl, kitchen sink, laundry tub, wet basement, or near a swimming pool, and the like
- 6. Heat Amplifier should be situated away from heat sources such as radiators, heat registers, stoves, or other amplifier (including amplifiers) that produce heat.
- 7. Power Sources This product should be operated only from the type of power source indicated on the rating label.

If you are not sure of the type of power supply to your home, consult your product dealer or local power company.

- 8. Grounding or Polarization
- This product may be equipped with a polarized alternation-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
- 9. Power-Cord Protection
- Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to the cord in correspondence of plugs, convenience receptacles, and the point where they exit from the amplifier.
- 10. Cleaning The amplifier should be cleaned only as recommended by the manufacturer. Clean by wiping with a cloth slightly damp with water. Avoid getting water inside the amplifier.
- 11. Non-use Periods The power cord of the amplifier should be unplugged from the outlet when left unused for a long period of time.
- 12. Object and Liquid Entry
- Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
- 13. Damage Requiring Service

- The amplifier should be serviced by qualified service personnel when:
- A. The power-supply cord or the plug has been damaged; or
- B. Objects have fallen, or liquid has been spilled into the amplifier; or
- C. The amplifier has been exposed to rain; or
- D. The amplifier does not appear to operate normally or exhibits a marked change in performance; or
- E. The amplifier has been dropped, or the enclosure damaged.
- F. The amplifier needs tube replacement or biasing
- 14. Servicing The user should not attempt any service to the amplifier beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.
- 15. Ventilation Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered.
- 16. Attachments do not use attachments not recommended by the product manufacturer as they may cause hazards.
- 17. Accessories Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product.
- 18. Lightning For added protection for this product before a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage to the product due to lightning and power line surges.
- 19. Replacement Parts When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

- 20. Safety Check Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.
- 21. FUSES Always use the correct rating and type of fuse as indicated on the rear panel. Note the proper rating fuse is determined by the AC line voltage in the country this unit is being operated.



**POWER SWITCH**: Turn this ON for about one minute before taking the amp out of Standby for maximum tube life. ALWAYS MAKE SURE THERE IS A SPEAKER LOAD CONNECTED TO YOUR AMP BEFORE TURNING ON.

**STANDBY SWITCH:** Wait about a minute before placing this switch in the ON position. This will put your amp into PLAY mode.

**POWER INDICATOR LAMP:** This is a gentle reminder that your amp is powered up.

**PRESENCE CONTROL:** Adjusts the upper mids and highs in the power amp section. Global on all channels. Start at about 4-5 and adjust to taste.

**Note:** This pot will sound scratchy when adjusted – this is normal.

**BASS CONTROL:** This adds or takes away bass or bottom end. As the amp gets louder you may want to back this off a bit. Start at 7-10 for bedroom volumes.

**MIDDLE CONTROL**: Adds or takes away midrange. Start at 5 or 6, lower settings will scoop the mids, higher levels will allow your audience to actually hear the guitar in the mix.

**TREBLE CONTROL:** This adds or takes away treble. Start at 5 and adjust to taste.

**MASTER CONTROL:** This is the BE/HBE VOLUME.

**GAIN CONTROL:** This adds gain/distortion. Adjust to taste. Don't be afraid.

**CLEAN VOLUME:** Adjusts the clean channel's volume.

**BRIGHT SWITCH:** 3 position switch that varies the overall brightness of the Clean Channel ONLY.

**TREBLE CONTROL:** Adjusts the treble on the clean channel. Start at 5 and adjust to taste.

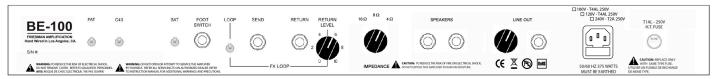
**BASS CONTROL:** Adjusts the bass on the clean channel. Start at 5 and adjust to taste.

**VOICE SWITCH:** This is a subtle yet effective tonal variance for the BE/HBE channel. Left position is slightly darker with more mids, right position is slightly brighter with a bigger bass.

**CHANNEL SELECTOR SWITCH:** Switches between Clean, BE and HBE channels when Footwitch is not connected.

**S:** Gain structure switch provides three choices of overall gain of the BE-100.

**INPUT:** Just like it says. This is the BE100's Guitar Input Jack.



**FAT SWITCH:** Like it says, makes the BE100 sound fatter. Great for single coil pickups.

**C45 SWITCH:** This is a custom-voicing switch for the BE/HBE channel. Turn it on, if you like leave it on. It's kinda cool.

**SAT SWITCH:** Primarily designed to be used in the BE or C45 mode to add gain, compression and saturation. It is normal for the volume level to drop with this switch engaged. Compensate with the amp's Master volume.

**FOOTSWITCH JACK:** This is where you plug in the footswitch.

**EFFECTS LOOP SWITCH:** This engages the series FX LOOP.

**SEND JACK:** This is where you plug the INPUT of your Effect(s). Use a high quality shielded guitar cable.

**RETURN JACK:** This is where you plug the OUT of your Effect(s). Use a high quality shielded guitar cable.

**RETURN LEVEL:** When the FX LOOP is engaged, this controls the overall volume of your amp. Set at 8 to start.

**LINE OUT LEVEL CONTROL:** This controls the overall level of the line out.

**LINE OUT JACK:** Connect a high quality ¼" guitar cable to send signal to external devices such as additional power amps, FX, etc. This is not speaker emulated.

**SPEAKER OUT JACKS (2):** Plug speaker cabinets here. Set Impedance selector to appropriate position.

MAINS INPUT: Plug the supplied IEC power cord here and into a 115v wall outlet to power the beast.

**MAIN FUSE:** This fuse is in the compartment found below the AC receptacle. Replace only with type indicated on rear panel. This is also most likely the result of a bad tube. Constant blowing of this fuse (even when using new tubes) is an indication that something could be seriously wrong with your amp. STOP and call us so we may help you diagnose.

**HT FUSE:** Only replace with Type indicated on rear panel. If this blows, don't freak out too much. It's most likely a bad power tube. We recommend you carry a few spare fuses and a spare set of tubes when gigging.

## FRIEDMAN LIMITED LIFETIME WARRANTY

Thank you for choosing Friedman. Friedman manufactures some of the world's most reliable hand-wired, all-tube amplifiers and speaker cabinets. Friedman takes great pride in an extremely thorough testing procedure, which is implemented on each product prior to shipment. In the unlikely event that you have a problem with your amplifier, please refer to warranty below. Friedman stands behind our products like no other and we're here to help you!

**AMPLIFIERS:** Friedman offers a limited lifetime warranty to the original purchaser that a Friedman amplifier will be free from defects in material and workmanship. A dated sales receipt will establish coverage under this warranty, PLEASE KEEP YOUR PROOF OF PURCHASE TO USE YOUR WARRANTY. This warranty does not cover service or parts to repair damage caused by accident, neglect, abuse, normal wear, disaster, misuse, abuse, overpowering, negligence, inadequate packing or shipping procedures and service, repair or any modifications to the product which have not been authorized or approved by Friedman in writing. ANY MODIFICATION TO THE AMPLIFIER WILL **VOID YOUR WARRANTY**. If this product is defective in materials or workmanship as warranted above, your sole remedy shall be repair or replacement by Friedman as provided below.

CAUTION: Do NOT attempt to repair, modify or service your amplifier by yourself!!! Please read the instruction manual for all safety notifications, warnings and instructions. Friedman, like all tube amplifiers, has extremely high voltages that can cause serious injury or death. Do not remove the chassis from the amplifier. All repair and service work <u>must</u> be performed by Friedman or an authorized service center of Friedman. ANY UNAUTHORIZED REPAIRS WILL VOID YOUR WARRANTY.

**TUBES:** Friedman warrants the original purchaser that the specific tubes used in Friedman will be free from defects in material and workmanship for a period of 90 days from the original date of purchase. A dated sales receipt will establish coverage under this warranty. This tube warranty will automatically terminate 90 days after the original retail sales date. This tube warranty is in lieu of all other expressed warranties. If tubes fail within the 90 day warranty period your sole remedy shall be replacement of tubes as provided below.

RETURN PROCEDURES: In the unlikely event that a defect occurs please email us at friedmanamps@gmail.com. In most cases we can help you diagnose the problem. If a product must be sent to us, please follow the procedure outlined below.

- Defective products must be shipped, together with proof of purchase, freight pre-paid and insured to the Authorized Friedman Service Center or directly to Friedman.
- If a product must be returned to Friedman for warranty replacement/repair, a Return Authorization Number must be obtained from our Customer Service Department prior to shipping the product.
- Please contact Friedman Customer Service
   Department for the Authorized Friedman
   Service Center nearest you.
- Products must be shipped in their original packaging or its equivalent; in any case, the risk of loss or damage in transit is to be borne by the purchaser.
- The Return Authorization Number must appear in large print directly below the shipping address.
- Always include a brief description of the defect, along with your correct return address and telephone number.
- When calling to inquire about a returned product, always refer to the Return

Authorization Number

If Friedman determines that the unit was defective in materials or workmanship at any time during the warranty period, Friedman has the option of repairing or replacing the product at no additional charge, except as set forth below.

- All replaced parts become a property of Friedman. Products replaced or repaired under this warranty will be returned via ground shipping within the United States or Canada - freight prepaid.
- Friedman is not responsible for costs associated with expedited shipping, either to Friedman or the return of the product to the customer.

All warranty repairs outside the United States and Canada must be directed to the dealer or distributor from which you purchased the product.

INCIDENTAL OR CONSEQUENTIAL DAMAGE: In no event will Friedman be liable for any incidental or consequential damages arising out of the use or inability to use of any Friedman product, even if a Friedman dealer has been advised of the possibility of such damages, or any other claim by any other party. Some states do not allow the exclusion or limitation of consequential damages, so the above limitation and exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights, which may vary from state to state.

FOR YOUR PROTECTION: Please complete and send in the completed warranty registration card to: Friedman Amplification, care of Boutique Amps Distribution, 3383 Gage Ave., Huntington Park, CA 90255. Please send within (10) ten days of the date of purchase so that we may contact you directly in the event a safety notification issued in accordance with the 1972 Consumer

**CUSTOMER SUPPORT:** Our dedicated and friendly staff is ready to help you with any warranty or product questions you may have. Please email us at friedmanamps@gmail.com.

Thank you again for choosing Friedman and we look forward to a long relationship!



www.FriedmanAmplification.com