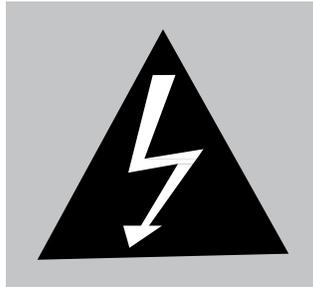


**SYNERGY<sup>®</sup>**

**SYN-1**

**SINGLE MODULE  
TUBE PREAMP**

**INSTRUCTION MANUAL**



# **IMPORTANT SAFETY WARNING DANGEROUS VOLTAGE PRESENT**

- 1) The Synergy modular products must never be operated without modules installed in all slots without covering the unused slots.
- 2) Slots without modules must be covered with a blank cover panel, available from Synergy Amps.
- 3) Never place your hand or any other object inside an open module slot for any reason!
- 4) If a foreign object does accidentally fall inside an open slot, immediately turn the main power off and UNPLUG THE AC POWER CORD. Tip the unit forward to get the object to fall forward and out of the slot. Do not stick your fingers into the slot to reach it.
- 5) If the foreign object has fallen inside and you cannot see the object, do not stick your hand into the slot to search for it. Take the unit to a qualified service technician to safely remove it.

**Failure to heed the above warnings can result in personal injury or death.**

## **INSTRUCTIONS**

Please keep this instruction manual for future reference and for the duration of owning this SYNERGY PREAMP. 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 PREAMP. Take special care to heed all warning symbols and signs inside this manual and those printed on the PREAMP itself.



### **WARNING!**

**TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THE PREAMP 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 PREAMP!

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 PREAMP 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 PREAMP 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. **Carts and Stands** – The PREAMP should be used only with a cart or stand that is recommended by the manufacturer.

A PREAMP and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the PREAMP and cart combination to overturn.

7. **Wall or Ceiling Mounting**

– The product should never be mounted to a wall or ceiling.

8. **Heat** – PREAMP should be situated away from heat sources such as radiators, heat registers, stoves, or other PREAMP (including PREAMPs) that produce heat.

9. **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.

10. **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.

11. **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 PREAMP.

12. **Cleaning** – The PREAMP should be cleaned only as recommended by the manufacturer. Clean by wiping with a cloth slightly damp with water. Avoid getting water inside the PREAMP.

14. **Non-use Periods** – The power cord of the PREAMP should be unplugged from the outlet when left unused for a long period of time.

## 15. Object and Liquid Entry

– Care should be taken so that objects do not fall, and liquids are not spilled into the enclosure through openings.

## 16. Damage Requiring Service

– The PREAMP 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 PREAMP; or

C. The PREAMP has been exposed to rain, or

D. The PREAMP does not appear to operate normally or exhibits a marked change in performance; or

E. The PREAMP has been dropped, or the enclosure damaged.

F. The PREAMP needs tube replacement or biasing

## 17. Servicing

– The user should not attempt any service to the PREAMP beyond that described in the operating instructions.

All other servicing should be referred to qualified service personnel.

## 18. 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. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack.

## 19. Attachments

– do not use attachments not recommended by the product manufacturer as they may cause hazards.

## 20. 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.

## 21. 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 powerline surges.

## 22. 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.

## 23. 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.

## 24. 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.

## 25. AC SELECT SWITCH:

This switch must be set to match the AC line voltage in the country this unit is being operated.

To change the setting, loosen (do not remove) the two screws above and below the slide switch.

Temporarily move the protective cover strip and slide the actuator to match the voltage in your country. Place the protective cover strip back over the switch and tighten the two screws.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: - Reorient or relocate the receiving antenna. - Increase the separation between the equipment and receiver. - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. - Consult the dealer or an experienced radio/ TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Congratulations on your purchase of the SYN1 preamp. The SYN1 is the culmination of many years refining and fine tuning our modular preamp concept. Please familiarize yourself with the many possibilities to get the best performance out of your preamp.

The SYN-1 can be used in three primary applications:

1. The SYN-1 can be used to add channels to an existing head or combo. With this setup, you can use the SYN-1 to add the module as another channel to your amp and footswitch between the channels in your amp and the SYN1. **\*\*\* Your amp MUST have a series effects loop \*\*\***
  - a. **IMPORTANT** - if placing the SYN-1 on top of a head cabinet or combo, you **MUST** place the SYN-1 on the opposite side of your amp's main transformer (usually the input side). Placing the SYN-1 over the mains transformer may cause noise to enter the signal chain.
2. With a power amp and cabinet. To use the SYN1 in a "normal" live rig using guitar type speakers, connect the MAIN OUT to the input of your power amp or into a powered speaker specifically voiced for guitar. Alternately, you can connect the MAIN out into the effects return of most amps and use the head or combo as just a power amp and the SYN1 becomes the preamp.
  - a. In a live setting, you can also use the cab simulated DI output to go straight to your board or active flat response monitor.
3. Recording - use the SYN1 as a standalone preamp to record directly into your computer or direct to a PA live, simply use the DI XLR balanced output to send the signal to the desired location.
  - a. Use the DI output to connect to an external mic preamp and then directly to your software.
  - b. The cab sim can be bypassed if you wish to use your own IRs.

These different methods will be explained in detail later in this manual. Please read the entire manual to get a true understanding of all the possibilities.

## **SPECIFICATIONS:**

### **POWER CONSUMPTION:**

20 WATTS 50/60Hz

### **FUSE**

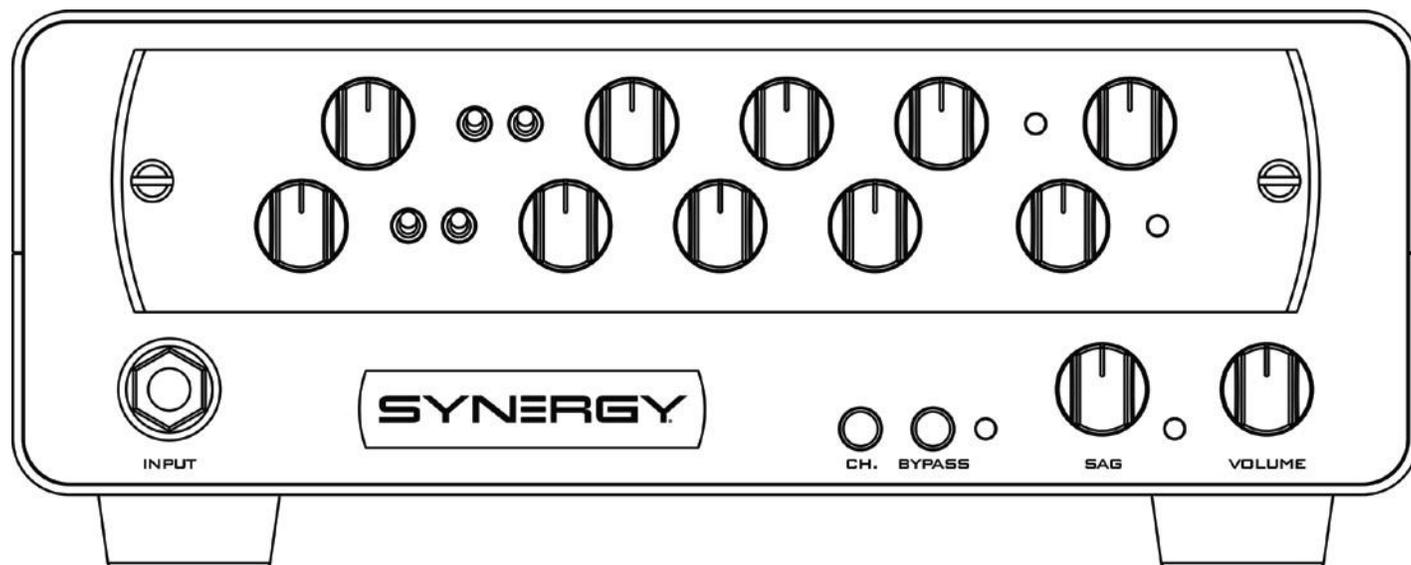
T300mA/250V @ 110-118VAC 50/60Hz - NORTH AMERICA

T150mA/250V @ 220-240VAC 50/60Hz - EUROPE

### **TUBES**

ONE 12AX7

## FRONT PANEL



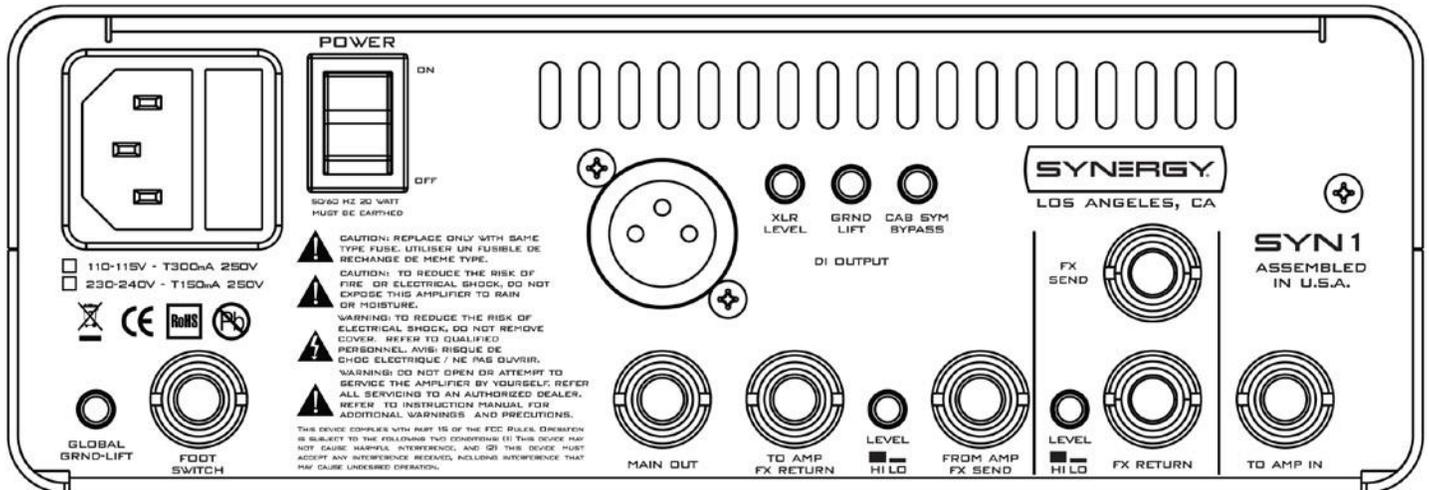
**REPLACING MODULES:** When inserting or removing modules, simply turn both thumbscrews to the left until they fall loose. Do not remove the screw completely. Remove the module by pulling out on the thumbscrews. Slide in a new module and push in on the center knobs until flush with the front panel. Tighten the thumbscrews, by turning to the right until snug.

It is HIGHLY recommended that you turn the SYN-1 OFF before swapping modules. If, however you "hot swap" a module, you may find that at times the switching logic is not working correctly. To re-set this, simply turn the SYN-1 OFF and then back ON after one second.

1. **INPUT JACK:** Connects directly to your instrument
2. **CH.** - Selects the desired channel on your module.
3. **BYPASS** – This switch bypasses the SYN1 when using it in the “add channel to your amp” mode.
4. **SAG** - Under license from Steven Fryette Designs, the SAG knob mimics the voltage sag of a tube PREAMP. This effect is subtle and is really a “feel” thing. It is recommended that you adjust the knob to level where the LED just comes on with heavy guitar pick attack.
5. **VOLUME** - Depending on how the SYN-1 is connected, this knob either controls the overall volume of the SYN1 or the level of the main output.

**IMPORTANT** - When using the SYN-1 to add channels to your head or combo, the VOLUME control will not\*\*\* be active. In this scheme, the VOLUME will adjust the level of your MAIN OUTPUT ONLY.

## REAR PANEL



1. **AC MAINS INPUT** – Connect to a grounded outlet in accordance with the voltage and frequency specified on the rear panel of your PREAMP.



*Use only the factory supplied cord or a UL approved equivalent type.*

2. **MAINS FUSE** – Protects the unit from electrical faults.



*Warning! Replace only with same fuse type and rating.*

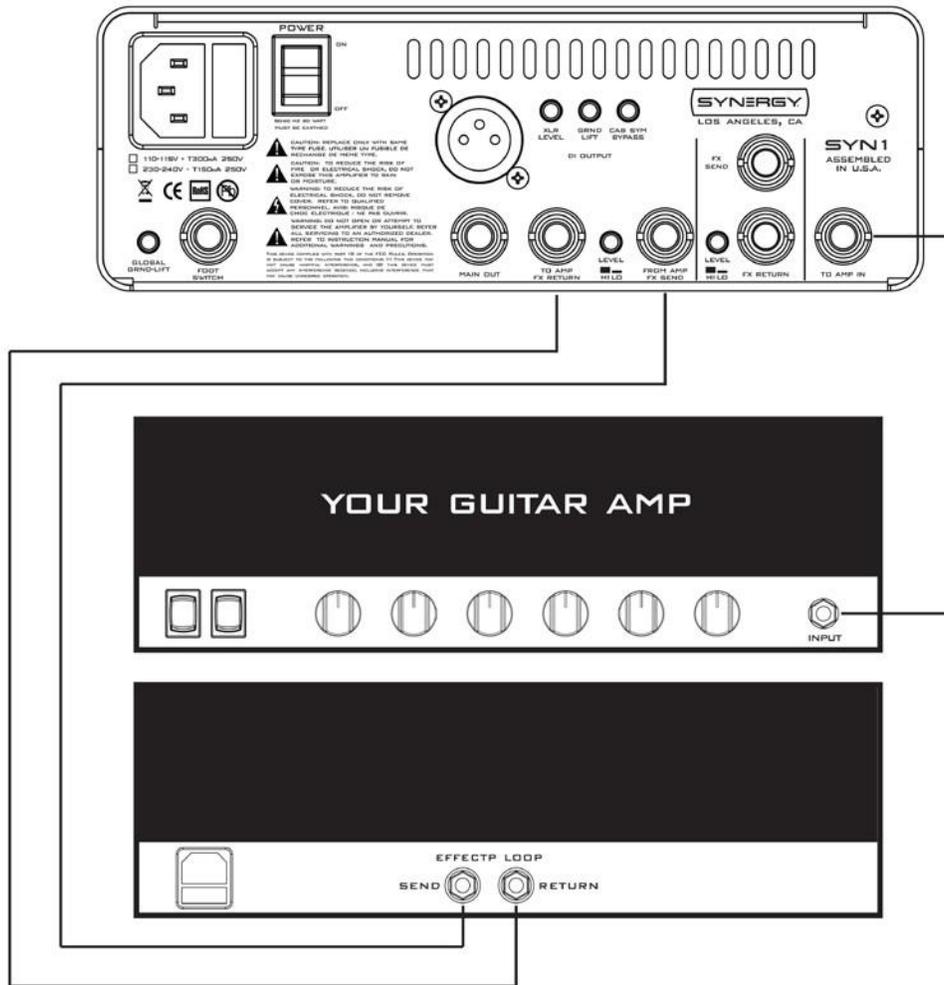
3. **GLOBAL GROUND LIFT SWITCH**- This switch is used to minimize ground noise or ground loops that can be caused when interconnecting different pieces of audio equipment. Simply set the switch for the least amount of hum. If you do not hear any difference, leave the switch in the out position.
4. **FOOTSWITCH** - Use the supplied 1/4" stereo (TRS) cable to connect to included 2-button footswitch
5. **BALANCED OUTPUT** - XLR output used to send your SYN-1 tone straight to the mixing board or active cabinet
  - XLR LEVEL - A level pad for the XLR output. Use the setting that best matches your mixer.
  - GROUND LIFT - Lifts ground to prevent ground loops. Set for the lowest hum level.
  - CAB SIM BYPASS - Removes the cabinet simulation circuitry to become a balanced full range output.
6. **MAIN OUT** – A full range output to connect to external devices such as power amps, FX, etc.  
Note: This is not a speaker emulated output.
7. **SEND JACK**: This output connects to the input of your effects unit. Use a shielded cable.
8. **RETURN JACK**: Connect the output of your effects unit using a shielded cable.
9. **EFFECTS LOOP LEVEL SWITCH** - Selects between line level and pedal level of the effects loop. Use the setting that sounds best and does not cause excessive noise or distortion/loss of volume.
10. **POWER** - Switches the main AC power on or off.

## CONNECTING SYN-1 TO YOUR HEAD OR COMBO

The SYN-1 can be used to ADD channels to your existing head or combo. You will need three high-quality, shielded instrument cables in addition to your guitar cable.

- 1) Connect your guitar to the INPUT of the SYN-1 (SYN-1 front panel)
  - 2) Connect an instrument cable from "TO AMP IN" on the rear of the SYN-1 to the INPUT of your AMP.
  - 3) Connect an instrument cable from "FROM AMP FX SEND" to the FX LOOP SEND of your AMP
  - 4) Connect an instrument cable from "TO AMP FX RETURN" to the FX LOOP RETURN of your AMP
  - 5) The LEVEL switch between the "FROM AMP FX SEND" and "TO AMP FX RETURN" jacks is used to set the level of the SYN-1 to help match your effects loop. Because there can widely varying levels between different effects loops, a little bit of experimentation may be needed to find the optimum setting for this switch.
  - 6) Connect the included 2 button FOOT SWITCH to the SYN-1. The CHANNEL switch selects between the channels within the module. The BYPASS selects either the SYN1 as your preamp channels or bypasses the SYN1 and your amp will operate as normal. You have just magically added two new channels to your amp.
- \* **IMPORTANT** - if placing the SYN-1 on top of a head cabinet or combo, you MUST place the SYN-1 on the opposite side of your amp's main transformer (usually the input side). Placing the SYN-1 over the mains transformer may cause noise to enter the signal chain.

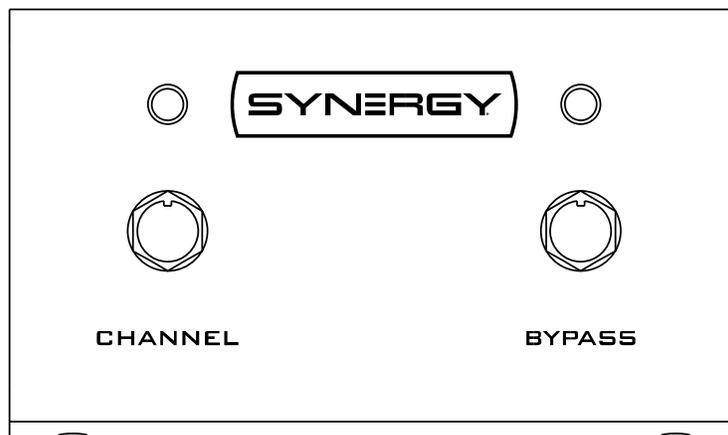
There are some special requirements and/or caveats when using the SYN to add channels to your amp. The loop on your amp MUST be a 100% series loop. The SYN1 will not work in a parallel loop. If in doubt, consult the manufacturer of your amp to determine this. One known issue is with the Mesa Dual and Triple Rectifier, Road King and Roadster amps that prevents the SYN1 from working properly in the loop. By design, the Boogie loops always have a small amount of dry signal mixed in with the loop which will wreak havoc with many rack effects as well as the SYN1. There may be other amps that we are not aware of with loops that are not compatible. We will make this information available as we discover these issues.



### SYN-1 FOOTSWITCH (INCLUDED)

The CHANNEL button toggles between the channels on your SYNERGY modules.

Depending on how you connect the SYN-1 the BYPASS switch will function as either a MUTE or will select between the SYN1 module channels and the channels in your amp.



## Using the SYN1 With a MIDI Controller

The SYN1 doesn't have MIDI capability of its own, but you can use a MIDI function switcher to interface your SYN1 to a MIDI controller. The SYN1 has a standard ¼-inch TRS footswitch jack, which is compatible with most function switchers that have one or more ¼-inch switching outputs. The Switch Gizmo by RJM Music Technology is one example that works with the SYN1.

To hook it up, connect the SYN1's footswitch jack to one of the switcher's output jacks using a ¼-inch TRS cable. The switcher then connects to your MIDI controller using a MIDI cable. The switcher will then be able to control the SYN1's channel and bypass. Consult your switcher manual for further setup instructions.

### **SYNERGY LIMITED TWO (2) YEAR WARRANTY**

**Thank you for choosing SYNERGY. SYNERGY 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 Synergy product, please refer to warranty below.**

**PREAMP:** SYNERGY offers a limited Two (2) Year warranty to the original purchaser that this SYNERGY product 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, over-powering, negligence, inadequate packing or shipping procedures and service, repair or any modifications to the product which have not been authorized or approved by SYNERGY in writing. **ANY MODIFICATION TO THE PREAMP 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 SYNERGY as provided below.

**CAUTION: Do NOT attempt to repair, modify, or service this Synergy product by yourself!!! Please read the instruction manual for all safety notifications, warnings, and instructions.**

SYNERGY utilizes tubes with extremely high voltages that can cause serious injury or death. Do not remove the chassis cover from the PREAMP. All repair and service work must be performed by SYNERGY or an authorized service center of SYNERGY. ANY UNAUTHORIZED REPAIRS WILL VOID YOUR WARRANTY.

**TUBES:** SYNERGY warrants the original purchaser that the specific tubes used in this SYNERGY product 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 support@SynergyAmps.com. A member of our staff will email you a response in a timely manner. Please include your phone number in case our customer service department needs to reach you. In most cases we can help you diagnose the problem over the phone. 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 SYNERGY Service Center or directly to SYNERGY.
- If a product must be returned to SYNERGY for warranty replacement/repair, a Return Authorization Number must be obtained from our Customer Service Department prior to shipping the product.
- Please contact SYNERGY Customer Service Department for the Authorized SYNERGY 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.

- Please send to:  
SYNERGY  
5300 Harbor St  
Commerce, CA 90040
- 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 emailing to inquire about a returned product, always refer to the Return Authorization Number.

If SYNERGY determines that the unit was defective in materials or workmanship at any time during the warranty period, SYNERGY 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 SYNERGY. Products replaced or repaired under this warranty will be returned via ground shipping within the United States or Canada - freight prepaid.
- SYNERGY is not responsible for costs associated with expedited shipping, either to SYNERGY 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 SYNERGY be liable for any incidental or consequential damages arising out of the use or inability to use of any SYNERGY product, even if a SYNERGY 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 the warranty registration card 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 Product Safety Act.

**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 [Support@SynergyAmps.com](mailto:Support@SynergyAmps.com)

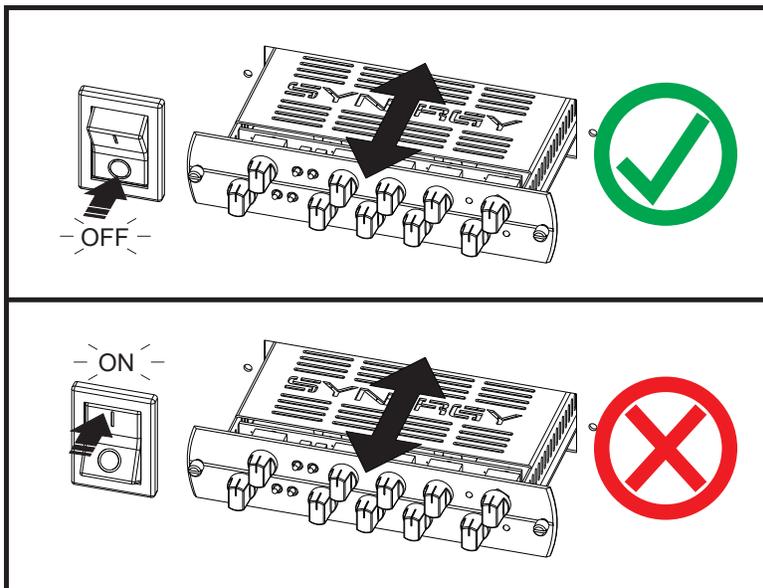
Thank you again for choosing SYNERGY and we look forward to a long relationship!



[www.SynergyAmps.com](http://www.SynergyAmps.com)



## WARNING! TURN OFF FIRST



You should always turn OFF your amplifier or pre-amplifier before installing or removing a module. Failure to do so can cause damage to your preamp module or amplifier.



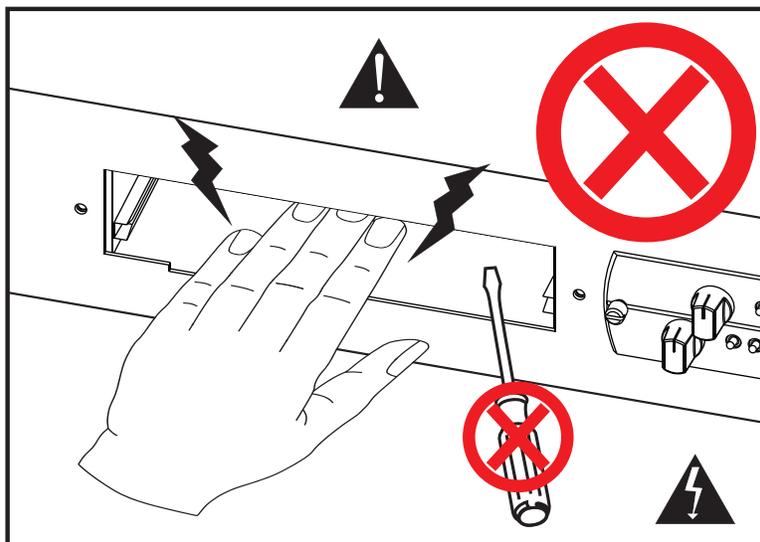
## WARNING! HIGH VOLTAGE PRESENT



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**Please read your amp/preamp's instruction manual for all safety notifications, warnings and instructions.**