Egnater™
CUSTOM AMPLIFICATION

TWEAKER

Owner's Manual

TWEAKER HEAD
TWEAKER-112

Egnater™ CUSTOM AMPLIFICATION TWEAKER

Greetings…….
I would like to personally thank you for choosing Egnater as your "Tone Partner". Our goal is to provide you with the best tools we can to help you express yourself to the fullest. Your amplifier is an integral piece in your never ending "Tone Quest". Our commitment to helping you achieve that goal is our passion. Our hope is that you will take advantage of the years of innovative tube amp designs we offer and use it to find the sound that is "in your head".

Thank you for putting your trust in Egnater.

Best Regards,

Bruce Egnater

Bruce Egnater

INSIDE THIS OWNER'S MANUAL

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YOU'RE OFFICIALLY A TWEAKER!!

The Tweaker is an ultra compact and amazingly versatile all-tube amp that offers a unique and sophisticated tone with seemingly endless tonal variations via the on-board "Tweaker" selector switches. Powered by a pair of 6V6 power tubes, the TWEAKER will set the new standard for gigging micro amps. The gain, EQ and master sections each have a Tweaker switch providing a wide-range of tones from the ultra smooth and satisfying to fully over-saturated lead tones.

Hidden inside the TWEAKER is a vast array of tones not usually found in amps this compact. Each of the five toggle switches on the front change the character of the amp. The TIGHT and BRIGHT switches shape the low and high end from soft and smooth to punchy and aggressive. The GAIN switch goes from sparkly clean to an all out high-gain assault. The EQ switch lets you select from pristine American to classic Brit and even the illusive VX AC sound. The CLASSIC/MODERN voicing switch allows you to select either soft and smooth or hard and edgy power tube tone. It's all in there to satisfy the ultimate "Tweaker".

Egnater™ CUSTOM AMPLIFICATION TWEAKER

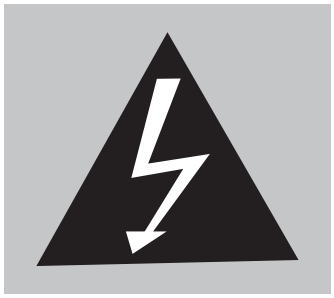
IMPORTANT INFORMATION

Please keep this instruction manual for future reference and for the duration of owning this Egnater Tweaker. 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 Tweaker. 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?

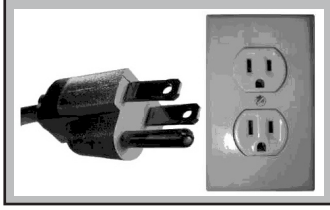
The lightning flash with an arrow triangular symbol is intended to alert the user to the presence of non-insulated "dangerous voltage" within the products enclosure, and may be of sufficient magnitude to constitute a risk of electric shock

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 these instructions.
2) Follow all instructions.
3) Keep these instructions.
4) Heed all warnings.
5) DO NOT turn on the amplifier before connecting all other external devices.
6) Do not use the amplifier near water. Be extra cautious when moving the amplifier during rain or while transporting it over wet surfaces as water might splash onto the unit.
6) Clean only with dry cloth.
7) Do not block any ventilation openings and operate in accordance with manufacturer's instructions.
8) Do not install near heat sources such as radiators, stoves or other devices that may produce heat.
9) Do not defeat the safety purpose of the polarization or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit your outlet, consult an electrician for replacement of the obsolete outlet.
10) Protect the power cord from being walked on or pinched, particularly at the plug and the point where it exits the amplifier.
11) Only use attachments / accessories specified by Egnater Amps.
12) Unplug the amplifier before lightning storms and when not in use.
13) Refer all servicing to qualified personnel. Servicing may be required when the unit has been damaged in any way such as when power-cord or plug is damaged, liquid has been spilled into the unit, the unit has been exposed to moisture or rain, does not operate normally, or has been dropped.
14) Moisture can damage the amplifier and can cause corrosion of electrical contacts.
15) Keep the unit out of extended or intense direct sun light. No containers filled with any type of liquid should be placed on or near the amplifier.
16) Do not attempt to replace tubes or bias the amplifier by yourself. Refer to authorized service center.
17) Do not remove rear metal grill. No user serviceable parts inside.

WARNING

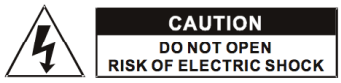


Handle the power supply cord with care. Do not damage or deform; it may cause electric shock or malfunction when used. Hold plug attachment when removing from wall outlet. Do not pull on the power cord.

FOLLOW THESE SAFETY PRECAUTIONS

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. CARTS AND STANDS – The amplifier should be used only with a cart or stand that is recommended by the manufacturer.

An amplifier and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the amplifier and cart combination to overturn.
7. WALL OR CEILING MOUNTING – The product should never be mounted to a wall or ceiling.
8. HEAT – Amplifier should be situated away from heat sources such as radiators, heat registers, stoves, or other amplifier (including amplifiers) 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 amplifier.
12. 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.
14. NON-USE PERIODS – The power cord of the amplifier 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 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
17. 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.
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 power-line 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.



CAUTION: To reduce the risk of electric shock, do not remove any cover. No user-serviceable parts inside. Refer servicing to qualified service personnel only.

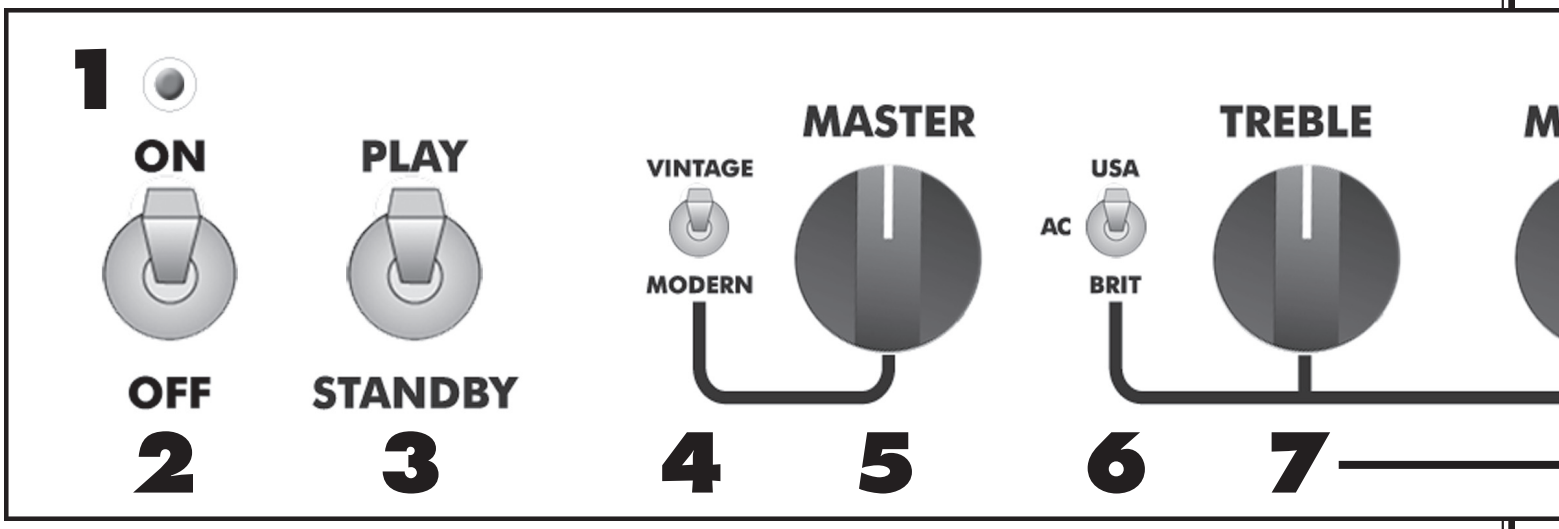
The lightning flash with arrowhead symbol within the equilateral triangle is intended to alert the use to the presence of un-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.

The exclamation point within the equilateral triangle is intended to alert the user to the presence of important operation and maintenance (servicing) instructions in the literature accompanying this amplifier.

CAUTION

To prevent electric shock, do not use this polarized plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.

Egnater™ CUSTOM AMPLIFICATION TWEAKER

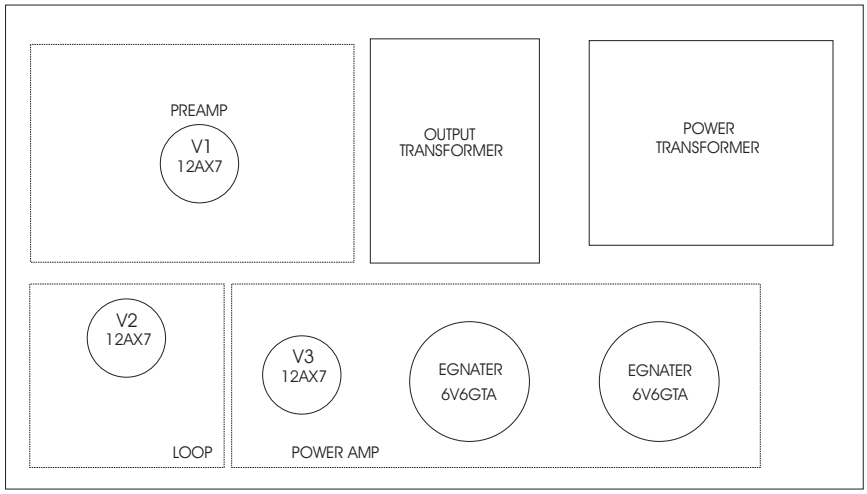


SPECIFICATIONS:

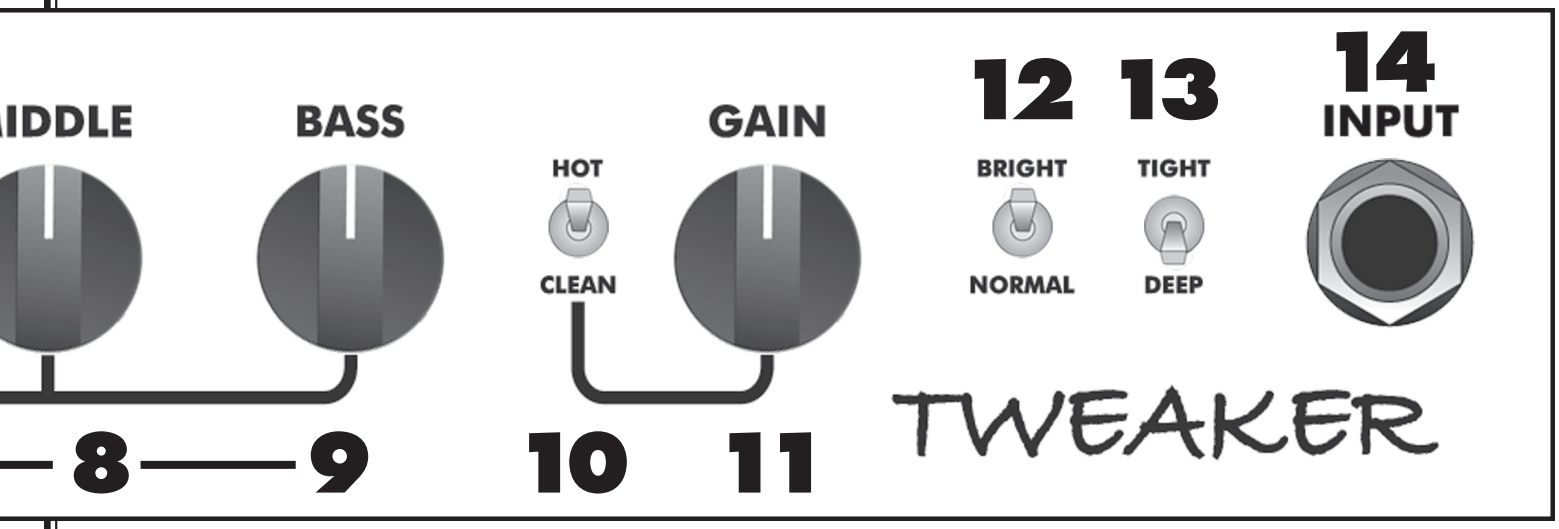
OUTPUT POWER:	15watts RMS CATHODE BIASED
INPUT IMPEDANCE:	1meg ohm
OUTPUT IMPEDANCE:	4 Ohms, 8 Ohms or 16 Ohms Switch Selectable
EFFECTS LOOP SEND IMPEDANCE:	600 Ohms
EFFECTS LOOP RETURN IMPEDANCE:	220K Ohms
THD:	5% At rated output
TUBES:	2 x 6V6 Power Tubes
	3 x 12AX7 Preamp Tubes
SWITCHES - VINTAGE/MODERN:	+4dB @ 120Hz
	+4dB @ 3.6KHz
USA/AC/BRIT:	Selects American, V-X, British TONE STACK
CLEAN/HOT SWITCH:	+9Db Gain Boost
TIGHT SWITCH:	-6dB @ 180Hz
BRIGHT SWITCH:	+8Db @ 4KHz MAX
DIMENSIONS:	14" (W) X 8" (D) X 7.5" (H)

TWEAKER TUBE LAYOUT

CHASSIS TOP VIEW



QUICK START GUIDE



1) COOL BLUE PILOT LIGHT

2) AC POWER SWITCH: Turns the TWEAKER ON or OFF.

3) STANDBY SWITCH: With the switch in the STANDBY position, the tubes remain warmed up. When the STANDBY switch is in the PLAY position, the TWEAKER is on and ready to play. DO NOT turn on the amp or have the STANDBY set to play without first connecting to a speaker. The correct power up sequence is to switch the POWER switch on while the STANDBY switch is in the standby position. Wait one minute for the circuits to stabilize and the switch the STANDBY to the PLAY position.

4) VINTAGE/MODERN SWITCH: This switch modifies the power amp circuit from a fairly "neutral" sort of response in the VINTAGE setting to a more aggressive tone and feel in the MODERN position by boosting the low and high end just the right amount.

5) MASTER: Overall volume after the preamp section.

6) USA/AC/BRIT SWITCH: This is a cool feature. Partly where the TWEAKER got it's name. This magical switch lets you instantly select any one of the three classic tone control circuits that are so familiar to all of us. The USA setting duplicates the classic American/California response so revered in those "Blackface" amps. The BRIT setting congers up the stronger lower midrange girth of the British amps. The AC setting creates the unique voice that lives in the world of alternate British amps whose three letter name starts with V and ends with X. Use this switch along with the tone control knobs to create a never ending pallette of classic and unique tones.

7,8 & 9) TONE CONTROLS: Pretty much self explanatory. The TWEAKER tone control circuits will respond like most amps you are already familiar with. The unique thing here is that the USA/AC/BRIT switch changes the tone controls to be just about any tone you could ever want.

10) CLEAN/HOT: Selects low gain lower (CLEAN) for really clean to moderate crunch. Hot unleashes the fury for super high gain rock, metal or singing solos.

11) GAIN: Adjusts the amount of gain (distortion) in the preamp. Set the GAIN knob low and the MASTER high for the cleanest sounds. Run the GAIN higher and the MASTER lower for more overdrive.

12) BRIGHT/NORMAL: The BRIGHT setting of this switch boosts the high end for more sparkle on clean sounds and more bite with distortion. A couple of things to note here. This switch works directly with the GAIN knob setting. The lower the GAIN knob is set, the more affect the BRIGHT switch has. Also, the BRIGHT switch will have little to no effect with the GAIN knob higher than about 3:00. This is normal and is, in fact, the way bright switches work on most guitar amps.

13) DEEP/TIGHT: This is another cool "TWEAKER"' feature. The TIGHT setting works by cutting the deep bass at the input stages of the preamp. This helps prevent your overdrive sound from getting too "muddy". The DEEP position creates a full, rich bass that sounds great for clean sounds and also help "fatten" up single coil pickups.

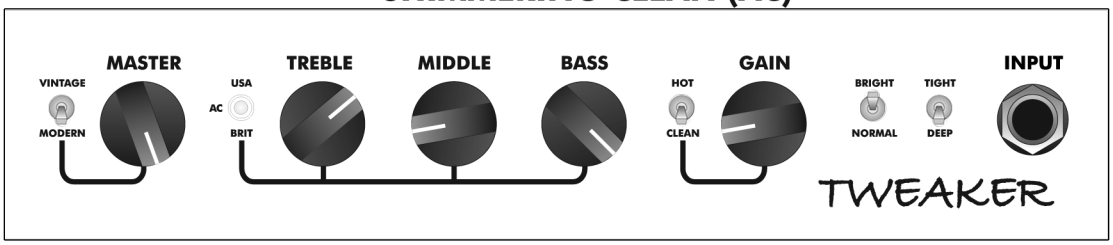
14) INPUT JACK: Plug your guitar in here using a high quality, shielded instrument cable.

Egnater™ CUSTOM AMPLIFICATION TWEAKER

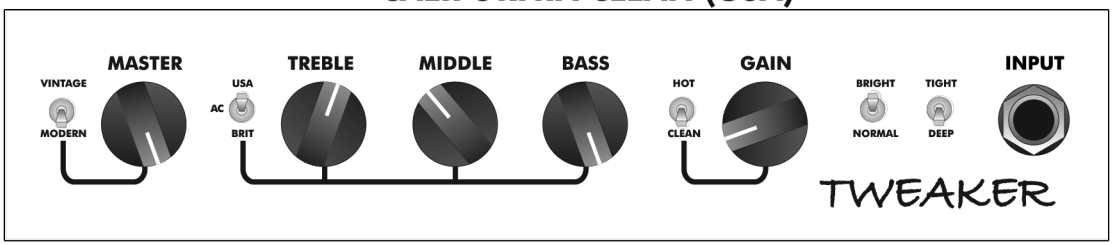
FINDING THE SOUND YOU WANT!

Below are some suggested knob settings to get you started. Keep in mind these are merely suggestions. You are encouraged to experiment to find "your tone".

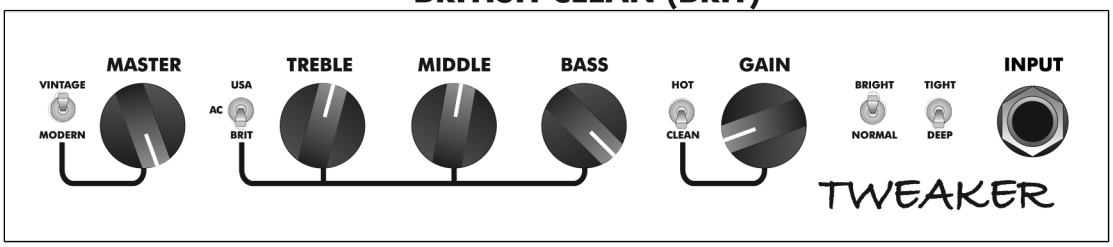
SHIMMERING CLEAN (AC)



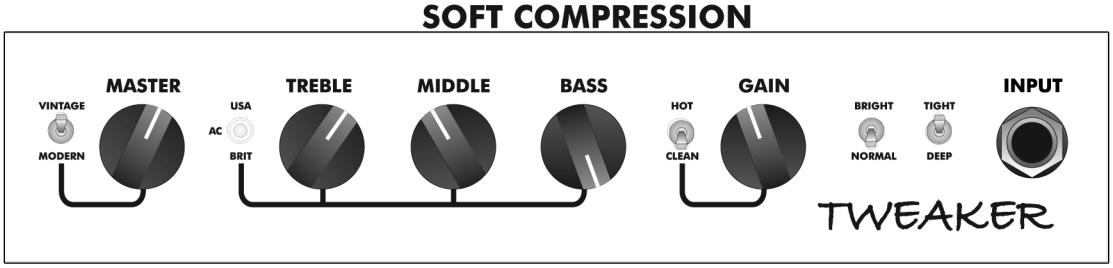
CALIFORNIA CLEAN (USA)



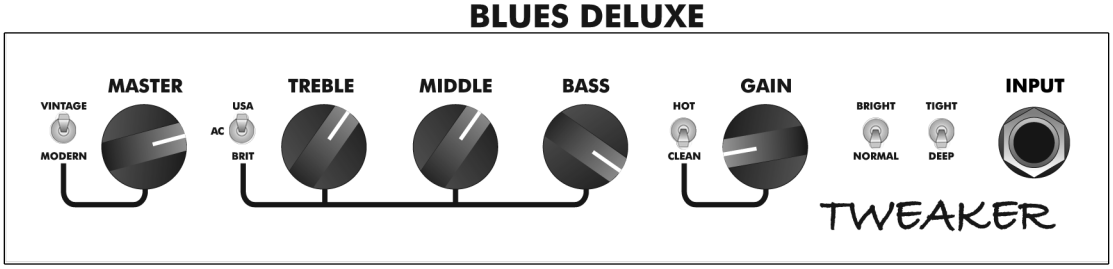
BRITISH CLEAN (BRIT)



SOFT COMPRESSION

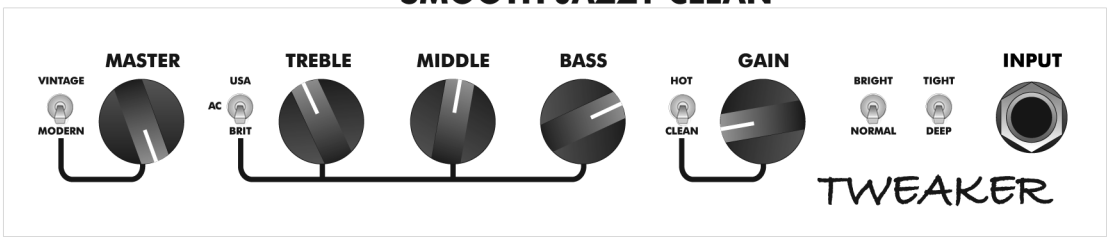


BLUES DELUXE

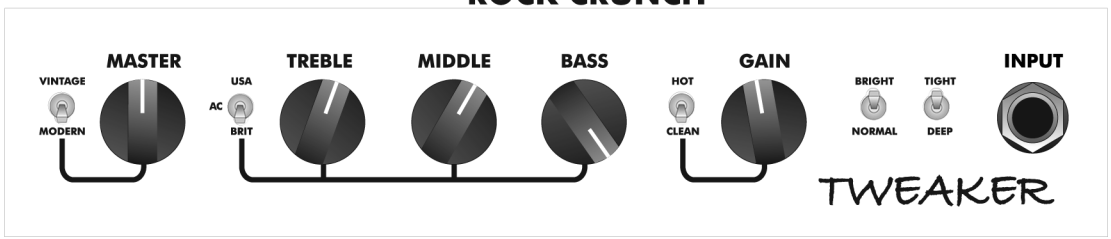


FINDING THE SOUND YOU WANT! con't

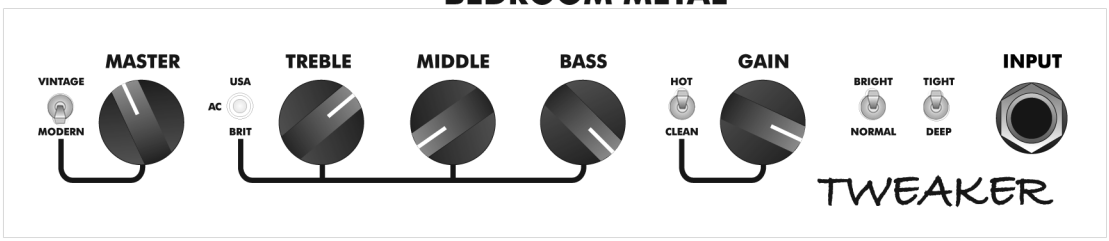
SMOOTH JAZZY CLEAN



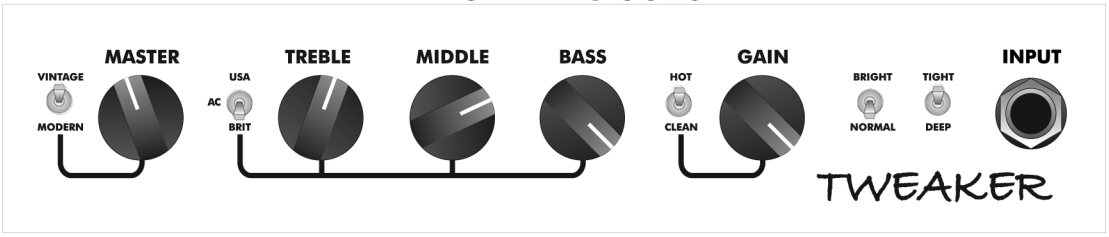
ROCK CRUNCH



BEDROOM METAL



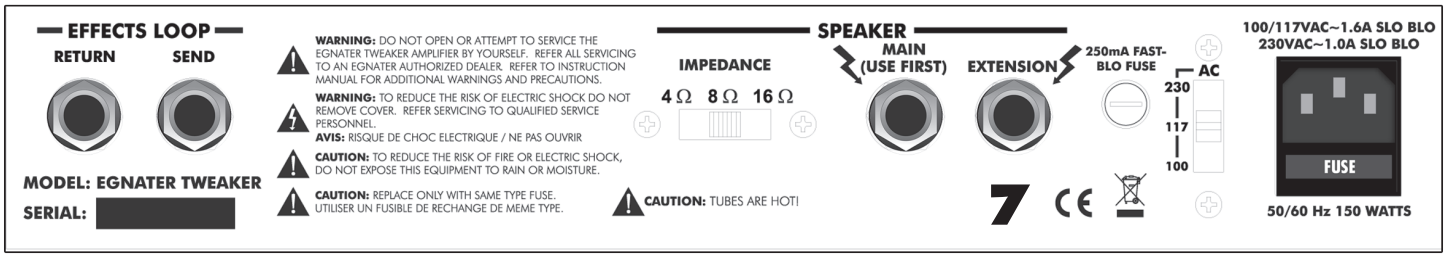
SEARING SOLO



TONE TIP: The less gain you use, the more defined your tone will be.

Egnater™ CUSTOM AMPLIFICATION TWEAKER

REAR PANEL



1&2) EFFECTS LOOP: Basically an insert patch point. When an external effect is patched into the series send and return jacks, the path is interrupted and 100% of the signal is routed through the effect. This puts some special demands on the effects unit itself. First, it must be essentially transparent meaning it should not mess with your tone. The input and output levels must be properly set for maximum headroom and lowest noise. Proper setting of the levels can be achieved using the following method. a) Set you amp GAIN and VOLUME controls for normal playing levels. Connect a high quality shielded cable from the send jack to the effect input. b) Adjust the effects unit input level control so that the indicator 'just peaks" when playing your most aggressive licks. c) Now connect another high quality shielded cable from the effect output to the return jack. Adjust the effect unit output level to match the volume you heard before connecting the return cable. You can check this by pulling the cable in/out of the return jack while playing to verify there is not substantial volume difference. This is called "unity gain". A cool techie term for "you get out what you put in". If your effects unit does not have level adjustments, it can be assumed you will get unity gain when plugged in. SPECIAL NOTE: Depending on how loud you play, the level at the loop may be higher than normal guitar levels. Though most pedal and rack type effects may work, some can be overloaded. You will know an effects gadget is no made for higher levels if, when you plug the effect into the loop, you notice distortion and/or a loss of volume. Most modern effects (including many pedals) can work just fine in an effects loop. We have gone to great lengths to make the Tweaker loop compatible with as many different effects units as possible.

3) SERIAL NUMBER INFORMATION

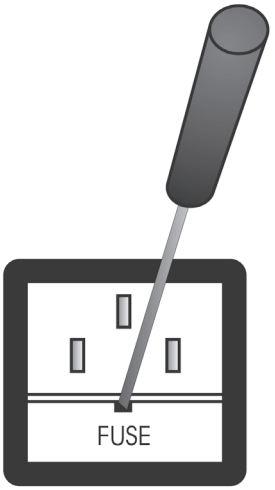
4) WARNINGS AND CAUTIONS

5) IMPEDANCE SWITCH: Set this switch to match the impedance of the speakers. The correct setting for the Tweaker 112 combo is 16 ohms. The proper setting for the Tweaker 112 extension cabinet is also 16 ohms. Otherwise, always match the setting of the tweaker switch to match the impedance of whatever speakers you are using.

6) MAIN SPEAKER OUTPUT: Labeled "USE FIRST" because you must..... use this jack first. There is a special circuit inside the Tweaker that helps protect the amplifier from damage in case you have a bad speaker cable of forget to plug the speaker in. as we all know, NEVER operate any tube amp without a proper speaker load connected.

7) EXTENSION SPEAKER: Used for connecting a second speaker cabinet. Since the MAIN speaker output is labeled "USE FIRST", you can assume the EXTENSION speaker output could be labeled "USE SECOND".

8) 250mA FAST-BLO FUSE: This fuse is there to protect the internal amplifier circuits against damage that can be caused by a shorted output tube. In case of a power tube failure, this fuse will open and there will be no sound. If the amp appears to be "lighting up" normally but there is no output, check this fuse. If the fuse is blown (open), this indicates that one of the 6V6 power tubes had likely failed and must be replaced. Use the following procedure to determine which tube is shorted. a) Turn off the POWER and STANDBY switches. b) Allow the tubes to cool and remove the two 6V6 power tubes. c) Install a new 250mAFast-Blo fuse. Turn on the POWER and STANDBY switches. If the fuse does not blow, one of the 6V6 tubes is definitely shorted. It is recommended the tubes always be replaced in matched pairs for best performance. Simply install the new pair and you should be "good to go". The Tweaker amp utilizes a circuit design called "cathode bias". This allows you to simply plug in the power tubes without regard for any bias or other adjustments. Basically PLUG and PLAY.



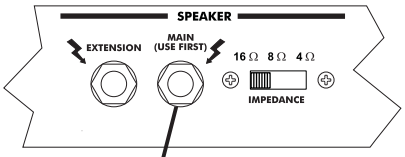
INSERT A SMALL SCREWDRIVER INTO THE SLOT TO SLIDE THE FUSE CAP OUT

9) AC VOLTAGE SELECTOR: Makes the Tweaker compatible with the line voltage in any country. Proper setting of the switch is absolutely critical. Be sure the switch position matches the line voltage in your country. Severe damage will result improperly setting this switch and will void your warranty, as well as destroy your amp.

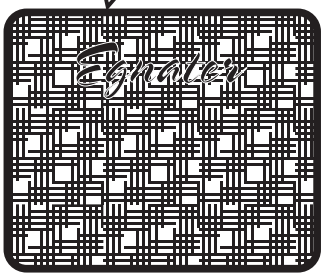
10) AC INLET AND FUSE: Connect a universal IEC type power cord. Be sure the proper value fuse is installed as indicated on the rear panel.

CONNECTING YOUR SPEAKERS

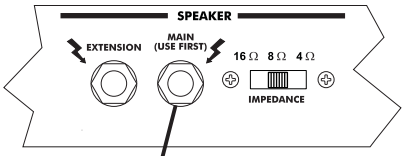
TWEAKER HEAD OR 112 COMBO



Set Impedance Switch to 16 ohms



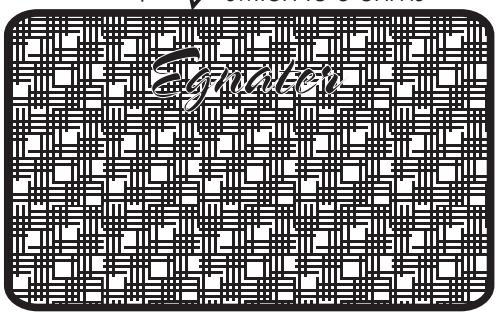
Tweaker 112X

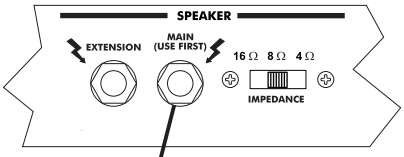


To 8 ohm mono input

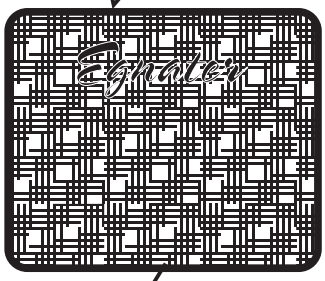
Set impedance switch to 8 ohms

Egnater 212X

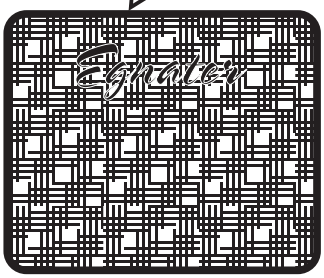




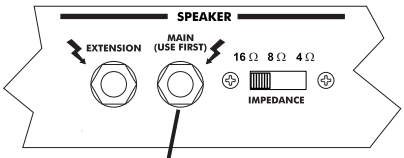
Set Impedance Switch to 8 ohms



Tweaker 112X



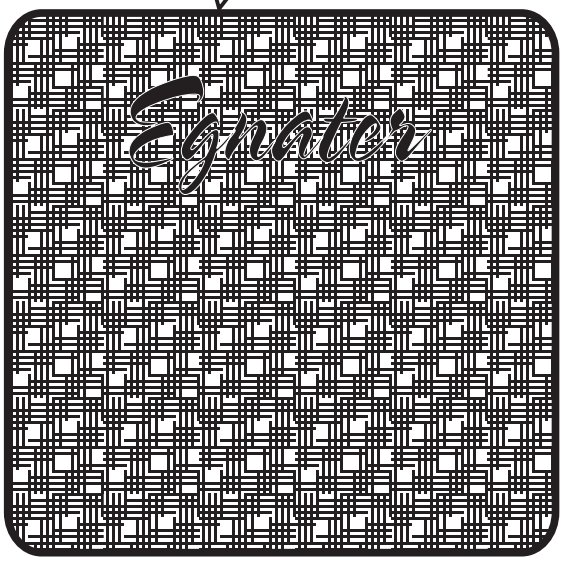
Tweaker 112X



To 16 ohm input jack

Set Impedance switch to 16 ohms

Egnater 4x12A/B



Always set the impedance switch to match the cabinet impedance. Here is some handy information. To determine the proper setting using multiple cabinets of the same impedance, simply take the impedance of one cab divided by the number of cabinets. For example, if you have two 16 ohm cabs, simply divide 16 by 2 for a total load of 8 ohms.

LIMITED WARRANTY

Thank you for choosing Egnater. Egnater manufactures some of the world's most innovative all-tube amplifier, combos and speaker cabinets. Egnater takes great pride in thoroughly testing each product prior to shipment.

AMPLIFIERS, COMBOS AND SPEAKER CABINETS: Egnater offers a three (3) year warranty to the original purchaser that an Egnater product will be free from defects in material and workmanship. A dated sales receipt will establish coverage under this 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 modifications to the product which have not been authorized or approved by Egnater. If this product is defective in materials or workmanship as warranted above, your sole remedy shall be repair or replacement as provided below.

TUBES: Egnater warrants the original purchaser that the tubes used in an Egnater amplifier/combo 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 warranty will automatically terminate 90 days after the original retail sales date. This warranty is in lieu of all other expressed warranties. If tubes fail within the 90 day warrant period your sole remedy shall be replacement of tubes as provided below.

RETURN PROCEDURES: In the unlikely event that a defect should occur, follow the procedure outlined below. Defective products must be shipped, together with proof of purchase, freight pre-paid and insured to the Authorized Egnater Service Center or directly to Egnater. If a product must be returned to Egnater for warranty replacement/repair, a Return Authorization Number must be obtained from our Customer Service Department prior to shipping the product.

Please contact our Customer Service Department for the Authorized Egnater 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 Egnater determines that the unit was defective in materials or workmanship at any time during the warranty period, Egnater 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 Egnater. Products replaced or repaired under this warranty will be returned via ground shipping within the United States-freight prepaid. Egnater is not responsible for costs associated with expedited shipping, either to Egnater or the return of the product to the customer.

INCIDENTAL OR CONSEQUENTIAL DAMAGE: In no event will Egnater be liable for any incidental or consequential damages arising out of the use or inability to use of any Egnater product, even if an Egnater 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 mail the Purchase Information 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 staff is ready to help you with any warranty or product questions you may have. Please call 1-877-EGNATER (9:00AM to 4:00PM Pacific Standard Time).

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