Egnater™

CUSTOM AMPLIFICATION

REBEL-30 HEAD

Owner's Manual

Egnater™ CUSTOM AMPLIFICATION REBEL-30 HEAD

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

REBEL-30 OVERVIEW

REBEL: *One who opposes or disobeys authority or control.*

REBEL-30: The Rebel-30 head is an extention of the award-winning Rebel-20 head, adding a whole new level of flexibility and tone-shaping power. These 30-watt all-tube, 2-channel heads feature Egnater's unique TUBE MIX knob, giving you access to an incredible variety of tones, from American to British and all points in between. Channel 1 delivers rich cleans with controls for volume, treble and bass. Channel 2 dishes out powerful, touch-responsive overdrive with treble, middle and bass EQ, as well as a wide-range gain knob that takes you from growl to scream. Both channels feature Egnater's signature BRIGHT and TIGHT switches and each channel has its own WATTS knob so you can access both low-wattage crunch and serious clean headroom, or any combination you choose.

The REBEL-30's specially designed and easily accessible back panel holds more welcome surprises, such as independent REVERB controls for each channel and a tone-preserving series effects loop. A speaker-emulated line out lets you go directly to the board live or in the studio. Set the standby switch to 'Silent Record' for great direct-recorded tones that spare both your ears and your neighbors. And the easy-access chassis makes swapping tubes quick and painless. The REBEL-30 is also available as a 1x12" combo with the same dimensions as the REBEL-112x cab and as a 2x12" combo. Both include a dual-function footswitch for channel selection and reverb on/off.

Egnater™ CUSTOM AMPLIFICATION REBEL-30 HEAD

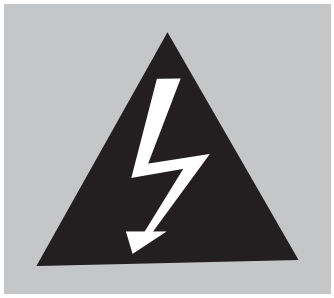
IMPORTANT INFORMATION

Please keep this instruction manual for future reference and for the duration of owning this Egnater Rebel-30. 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 Rebel-30. 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?

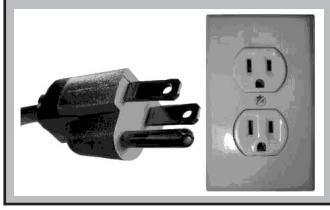
The lightning flash with an arrow triangular symbol is intended to alert the user to the presence of non-insulated "dangerous voltage" within the products enclosure, and may be of sufficient magnitude to constitute a risk of electric shock

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.

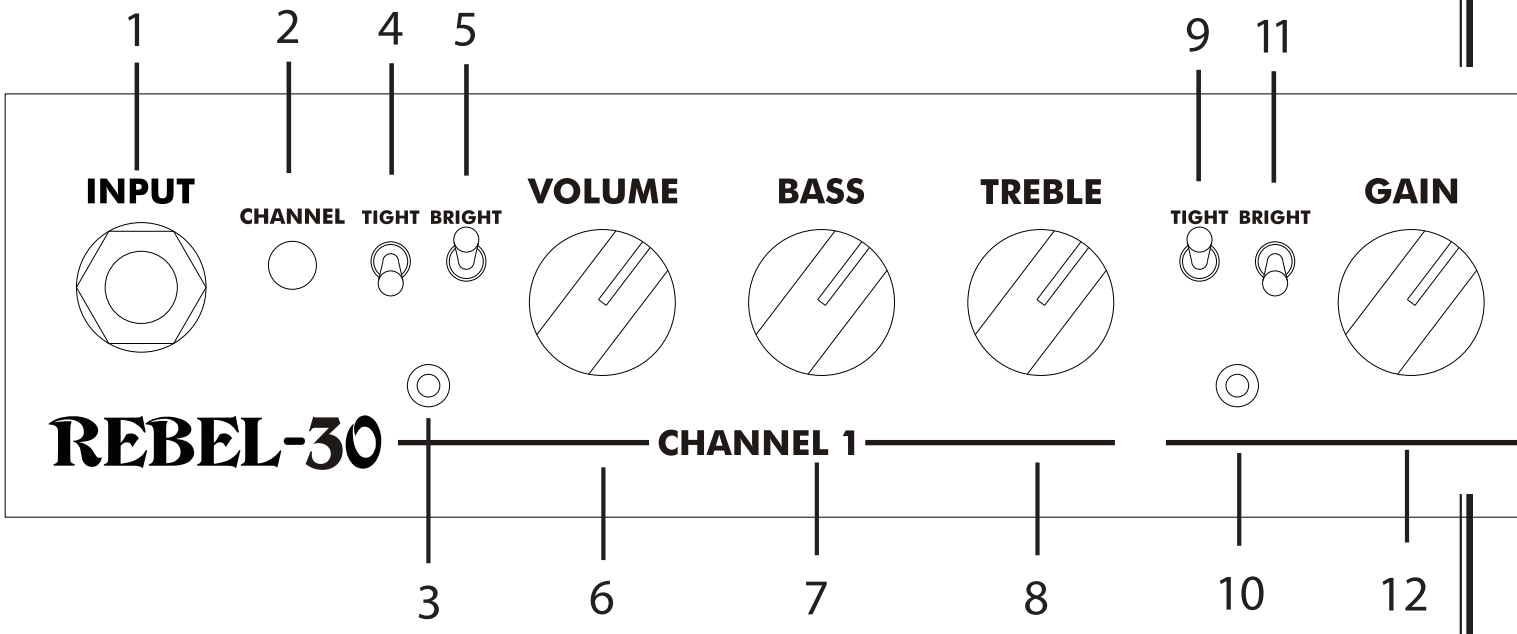
The lightning flash with arrowhead symbol within the equilateral triangle is intended to alert the use to the presence of un-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.

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 REBEL-30 HEAD



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

2) CHANNEL SELECT: A pushbutton switch to select CHANNEL 1 or CHANNEL 2. NOTE: This switch is disabled when using the footswitch.

3) CHANNEL 1 LED: ON indicates CHANNEL 1 is active.

4) CHANNEL 1 TIGHT: Same effect as CHANNEL 2. The tight (up) position cuts out the deep bass to better balance the tone with different guitars. TIGHT will also help clean up the low end if you are cranking the VOLUME knob up and overdriving the channel.

5) CHANNEL 1 BRIGHT: Same as CHANNEL 2. Adds high end sparkle. Experiment with different combinations of the TREBLE knob and the BRIGHT switch.

6) CHANNEL 1 VOLUME: Sets the overall loudness of CHANNEL 1. Remember what we said earlier about the interaction between the VOLUME control and the WATTS knob.

7 & 8) TONE CONTROLS FOR CHANNEL 1: Once again, the familiar passive tone control circuits from the classic amps we all love. This channel can be very warm and friendly, like a great old vintage combo, or crystal clear and glassy for a pristine clean sound. Just turn the knobs to find your tone, it's in there.

9) CHANNEL 2 TIGHT: This switch is really useful for tightening up the low end, especially when using a lot of gain. It works by cutting the deep bass at the beginning of the high gain preamp. Setting the TIGHT switch up will result on a clearer, less muddy distortion.

10) CHANNEL 2 LED: ON indicates CHANNEL 2 is active.

11) CHANNEL 2 BRIGHT: Just as you expect, the up (BRIGHT) setting of the switch boosts the high end. Do experiment with different combinations of the BRIGHT switch ON and TREBLE down compared to the TREBLE turned up and the BRIGHT switch off. You will find that with the BRIGHT ON and TREBLE down, the sound will be a little less midrangy compared to the BRIGHT OFF and TREBLE turned up.

12) GAIN CHANNEL 2: The gain control adjusts the amount of overdrive (distortion). You'll find the control "comes on" rather slowly to make it easy to zero in on just the right amount of moderate breakup. Past about 1:00, the gain really ramps up quickly and moves into serious high gain territory. As always, lower settings of the gain control will result in a tighter, more defined sound. Higher gain settings are more fun and make an amp easier to play but can get more compressed and muddy.

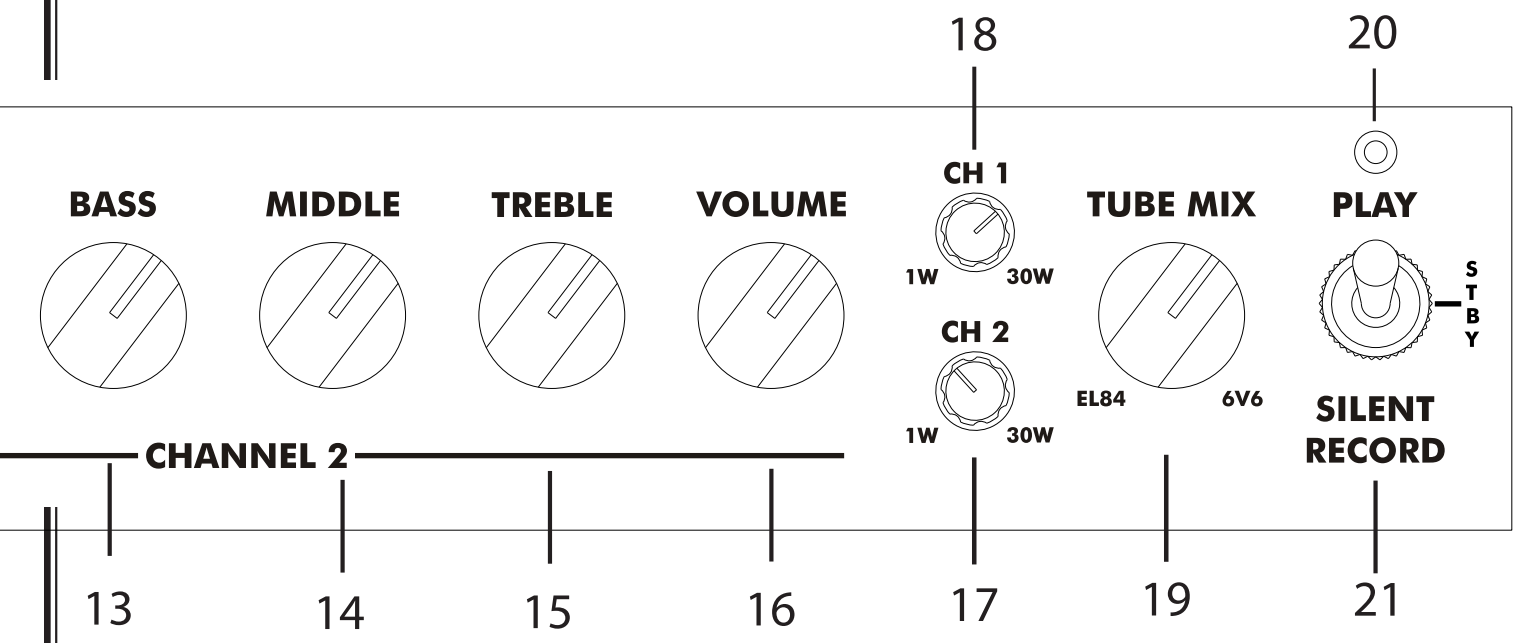
13,14 &15) TONE CONTROLS FOR CHANNEL 2: The Rebel overdrive channel features the passive tone control circuit similar in design to the one found in many classic British amps. The range and feel of these controls should be familiar to most players and makes it really easy to dial in great tones with minimal knob "twiddling".

16) VOLUME CHANNEL 2: Adjusts the overall loudness of the overdrive channel.

17) CHANNEL 2 WATTS: Same as CHANNEL 1 WATTS but only affects CHANNEL 2. How cool is that? You can set each channel's power individually! Try turning down the power on CHANNEL 1 for a bit of classic breakup when pushed and set CHANNEL 2 for maximum power and definition.

18) CHANNEL 1 WATTS: This knob lets you adjust the actual power output on CHANNEL 1 from 30 watts for maximum headroom all the way down to 1 watt for a lower volume, squishier feel. This is cool

QUICK START GUIDE



if you are looking for a little more power amp breakup.

NOTE: Keep in mind, especially when playing live with the band, your amp will only go as loud as your power setting will allow. If you find you need to be louder, be sure to increase the WATTS knob instead of the volume. If you have the WATTS knob too low, turning up the VOLUME control will only result in more distortion, not more volume.

19) TUBE MIX: This is one of the neatest features on the Rebel 30. Inside the amp you will find a pair of EL84 tubes AND a pair of 6V6 tubes. This unique knob allows you to select a tone with a more "British bark" by rotating the knob all the way to the EL84 side. Setting the knob all the way clockwise brings out the smoother, creamier tone of the 6V6 tubes. If that alone wasn't enough, you can also blend the tubes together for a unique combination of the two giving you a tonal range not found in other amps.

NOTE: When the knob is all the way to the EL84 or 6V6 end of the control, the maximum power output is about 20 watts. Setting the control around 12:00 creates a unique mix of the tubes and also ups the power to 30 watts.

20) PILOT LED: Cool blue color.

21) STANDBY SWITCH: In the center (STANDBY) position, the Rebel is warmed up and ready to go instantly when switched to PLAY or SILENT RECORD. Move the switch to the PLAY position for live performance. The SILENT RECORD mode is a great feature that allows you mute the speaker output(s) and automatically connect the internal load resistor. This lets you to record directly from the RECORD LINE OUT on the rear without having to listen to the speaker(s). Perfect for late night recording when the family is asleep.

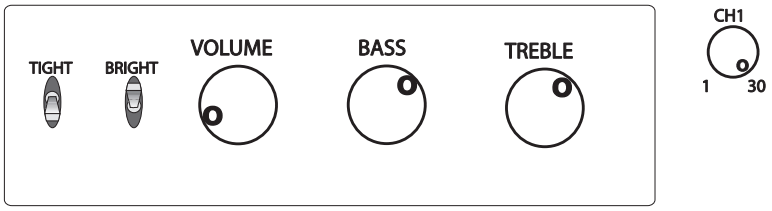
Egnater™ CUSTOM AMPLIFICATION

REBEL-30 HEAD

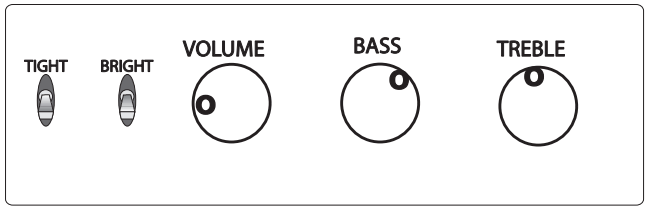
FINDING THE SOUND YOU WANT!

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".

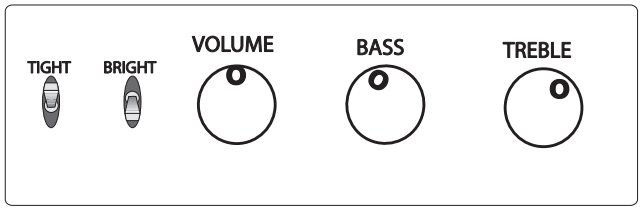
PRISTINE



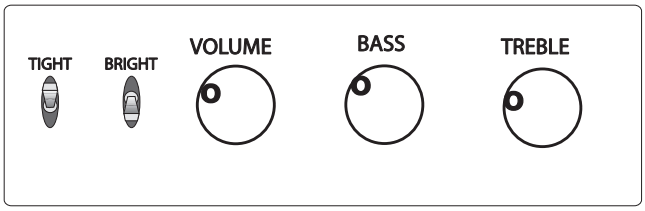
WARM JAZZ



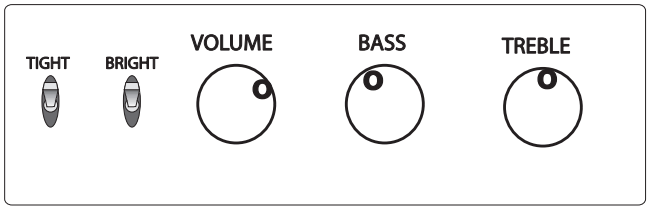
CLASSIC ROCK



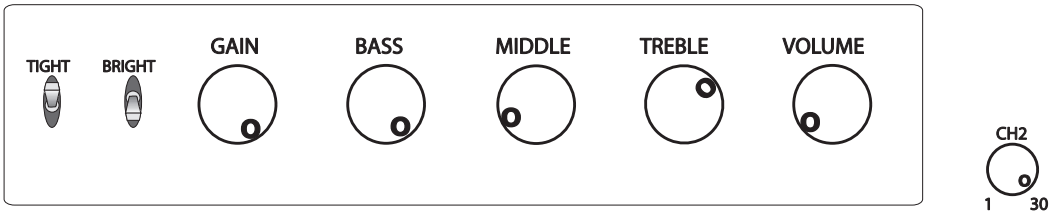
SMOOTH



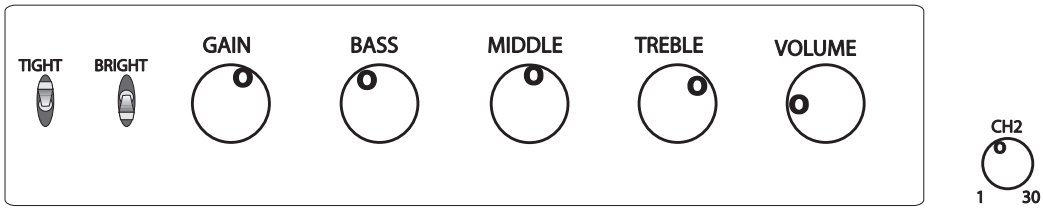
HEAVY CRUNCH



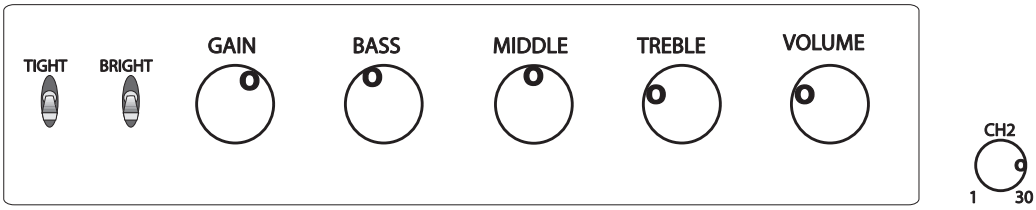
BEDROOM METAL



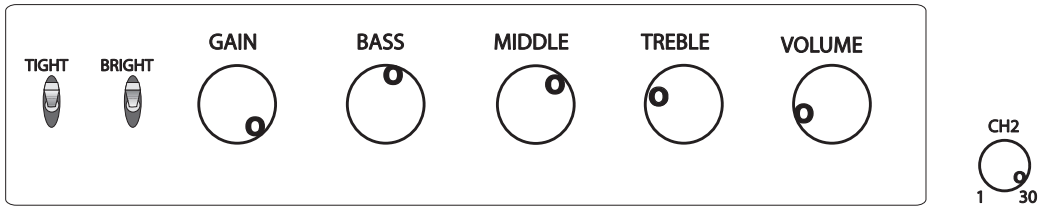
BLUES DELUXE



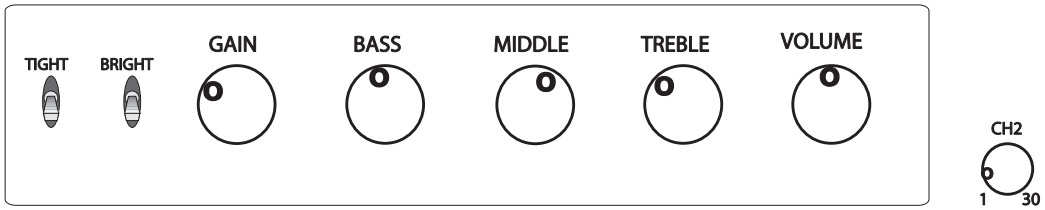
SOFT COMPRESSION



SEARING SOLO



CHUNKY

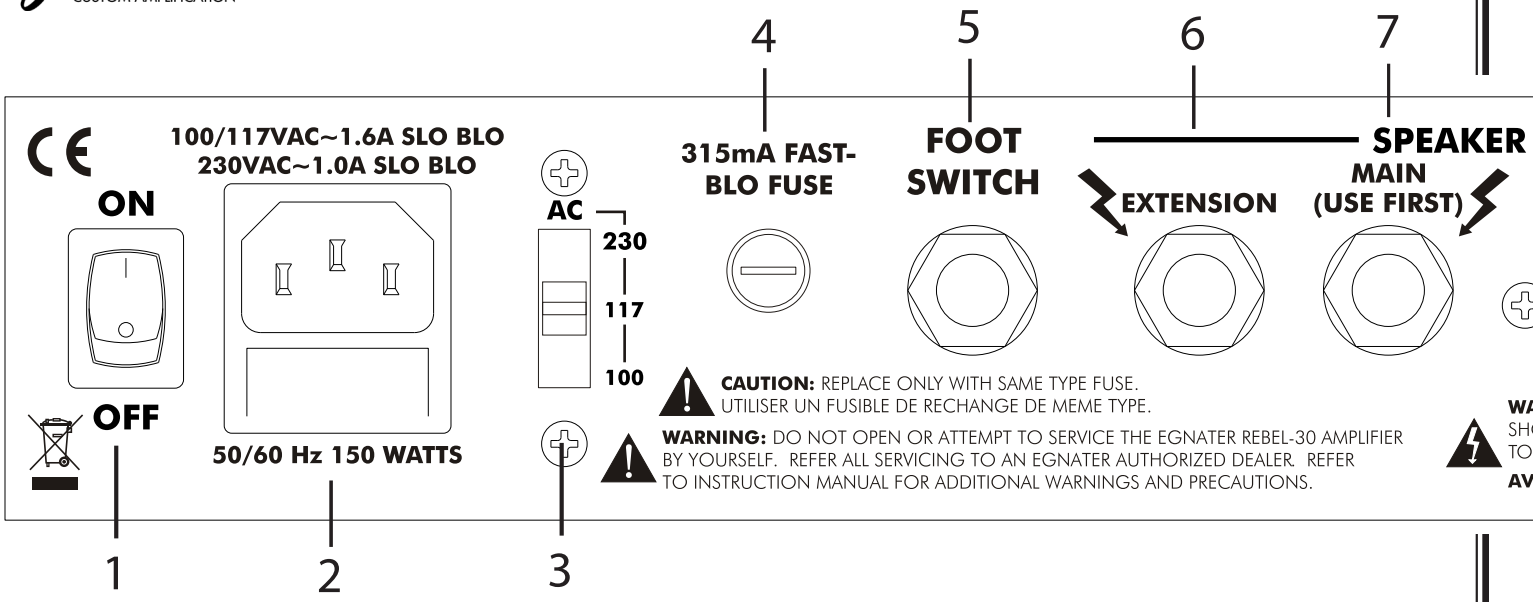


A TIP FOR GETTING THE MOST OUT OF YOUR REBEL-30 HEAD

The less gain you use, the tighter and more defined your low end will be.

TUBE MIX KNOB: We did not include suggested settings for the TUBE MIX because it is truly up to you as to what sounds best. Experiment with different TUBE MIX settings to find "your sweet spot". Keep in mind turning the knob more towards the EL84 will sound a bit more aggressive while the 6V6 setting will tend to be smoother.

Egnater™ REBEL-30 HEAD



1) AC POWER SWITCH: Turns the main power on/off.

2) AC INLET & FUSE: Connect a universal IEC type power cord. Be sure the proper value fuse is installed that matches the ratings for your country as indicated on the rear panel.

3) AC VOLTAGE SELECTOR: Makes the Rebel 30 compatible with the line voltage in any country. Proper setting of this switch is absolutely critical. Be sure the switch position matches the line voltage in your country. Severe damage will result from improperly setting this switch and will void your warranty, as well as destroying your amp.

4) 315mA FAST BLO FUSE: This fuse is 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 blow and there will be no sound. If the amp appears to be "lighting up" normally but there is not output, check this fuse. If it is blown (open), this indicates on or more output tubes has failed and must be replaced.

Use the troubleshooting method below to determine if a power tube has shorted.

a) Turn the power off.

b) Set the TUBE MIX control to the 12:00 position.

c) Allow the power tubes to cool and remove the two 6V6 tubes.

d) Install a new 315mA FAST BLO fuse in the holder.

e) Place the STANDBY switch in the standby (center) position

f) Move the STANDBY switch to the PLAY position.

g) If the amp makes sound and the tone is normal, this is a clue that one of the 6V6 tubes is bad.

h) If the 315mA fuse blows, one of the EL84 tubes is bad.

i) Next, turn the power OFF again and allow the tubes to cool.

j) Remove the EL84 tubes and reinstall the 6V6 tubes.

k) Turn the power back ON while in the STANDBY mode.

l) Move the Standby switch to the PLAY position.

m) If the 315mA fuse does not blow, the 6V6 tubes should be fine.

n) If the fuse does blow, one of the 6V6 tubes is shorted.

o) Replace the bad PAIR of tubes with a same rated pair from Egnater (1-877-EGNATER) and you will be fine.

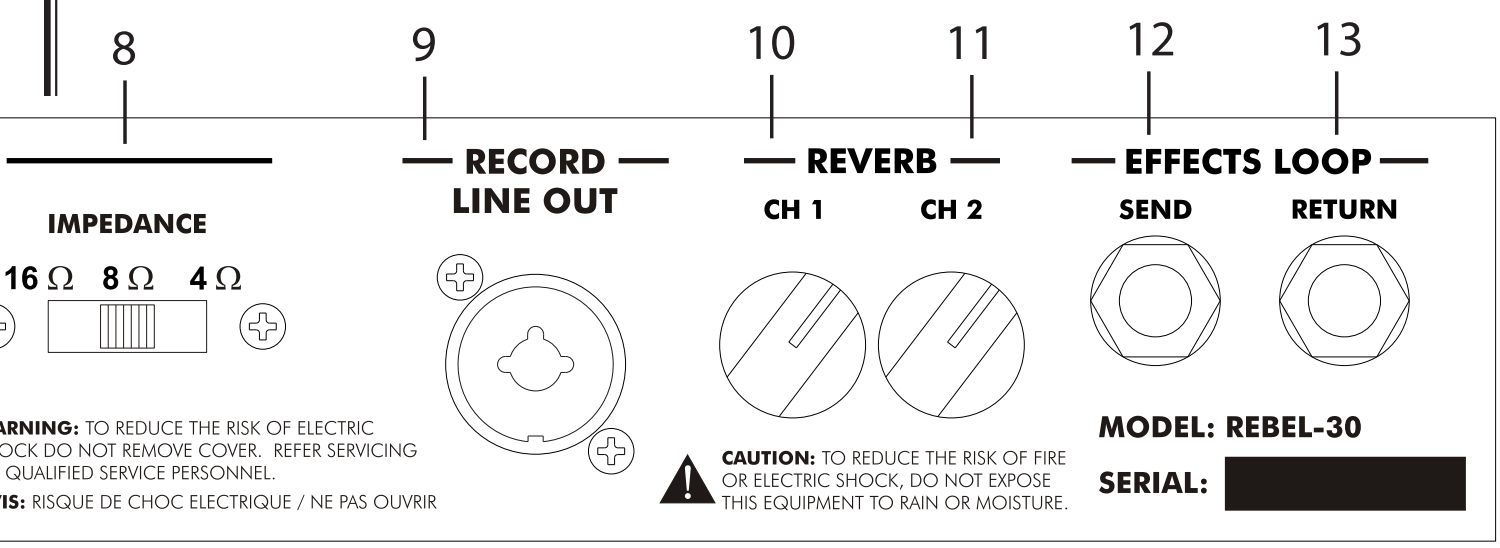
NOTE: This is a useful trouble shooting technique if you are on the job and your amp dies. Once you determine which pair of tubes is bad, you can safely operate the amp with only the remaining good pair until you can get the amp properly serviced. Obviously you must at least carry extra 315mA fuses in order to do this. Spare tubes would also be a really good idea.

5) FOOTSWITCH: Plug the supplied Rebel 30 pedal in here for remote control of the channel selection and reverb on/off functions.

6) EXTENSION SPEAKER: Used for connecting an external speaker along with the internal combo speaker(s). Since the MAIN speaker output is labeled "USE FIRST", you can assume the EXTENSION speaker output would be "use second". See the chart later in this manual for proper setting of the IMPEDANCE switch when using extension speakers.

7) MAIN SPEAKER OUTPUT: Labeled "USE FIRST" because you must….use this jack first. There is a special circuit in the Rebel 30 that helps protect the amplifier from damage in case you forget to plug in a speaker and try to play the amp. As we all know, NEVER operate any tube amp without a proper speaker load connected! The exception would be the Rebel 30 combo or head only when used in the SILENT RECORD mode. This would be the only instance where it is OK to use the amp with no speaker connected.

8) IMPEDANCE SWITCH: Set this switch to match the impedance of the speakers. The proper setting for the



Rebel 30-1x12 combo is 16 ohms. The setting for the Rebel 30-2x12 combo is 8 ohms.

The correct setting for the IMPEDANCE switch, when in the SILENT RECORD mode, is 16 ohms for the Rebel-30 1x12 and 8 ohms on the 2x12 to properly match the internal load impedance. These settings are the same as for the internal speakers.

The correct setting for the Rebel 30 Head when using only the Silent Record mode is 16 ohms.

9) RECORD LINE OUT: This is a balanced cabinet simulating output designed for silent direct recording or as an alternate to placing a microphone in front of the speaker for live sound or recording. The frequency response curve of this output very closely mimics the sound of a mic'd speaker cabinet. The RECORD LINE OUT is always on when the STANDBY switch is in the PLAY or SILENT RECORD mode. It is OFF in the standby (middle) position. With the STANDBY switch in the SILENT RECORD setting (down), an internal load is active along with the RECORD LINE OUT to allow the all tube power amp to be safely operated.

CAUTION: In the PLAY mode, you MUST always have a speaker connected to the MAIN speaker output jack.

10&11) REVERB LEVELS: These controls allow you to add any amount of reverb to each channel individually. The Rebel 30 reverb has a unique feature we call "spillover". Most amps with separate reverb knobs for each channel simply switch controls when changing channels often causing either an abrupt cutoff of the reverb tail or a swell in the reverb level before decaying away. The "spillover" feature allows the reverb to decay naturally even when switching channels.

12&13) 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. It must be essentially transparent, meaning it shouldn't "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 your amp/preamp volume levels for normal playing levels. Connect a high quality shielded cable from the series send jack to the effect input.

b) Adjust the effects unit input level to "just peak" while playing your most aggressive licks.

c) Now connect another high quality shielded cable from the effect output to the return jack.

d) Adjust the effects unit output level to the match the volume you heard before connecting the return cable. You can check this by pulling the cable in and out of the return jack while playing and verifying there is no substantial volume difference. This is called "unity gain". A cool "techie" phrase for "you get out what you put in". If your effects gadget does not have level controls, it can be assumed you will get unity gain when plugged in.

NOTE: Depending on how loud you play, the level at the loop may be higher than normal guitar level. Though many floor type and tabletop effects may work, some may tend to overload. You will know an effect is not made for higher levels if, when you plug it the effect into the loop, you notice distortion and/or a loss of volume. Most modern effects (including many pedals) can operate just fine in an effects loop. We have gone to great lengths to make the Rebel loop compatible with as many different effects gadgets as possible.

TECH NOTE #101 WATTS vs VOLUME and other stuff….

There is some confusion about the relationship between watts and volume (loudness). There is much discussion about how this many dB is twice as loud as that many and that many dB is double the power and blah blah…… lot's of techie rambling but no real world explanations. I'll try. Let's say you have a guitar amp with a knob to adjust the power (watts). Now say this amp is 20 watts at its maximum power setting and 1 watt at the lowest knob position. It would be reasonable to assume that 20 watts should be loud enough to play with the band and 1 watt would be whisper volume. Anyone who has had the opportunity to test this theory has found quite the contrary. 20 watts through a reasonably efficient speaker is quite loud. 1 watt through the same speaker is also quite loud. What's up with that? Have you ever seen the specs for a 12" speaker? A typical guitar speaker will produce about 95 to 100dB at 1 meter (about 3.3ft) with 1 watt of input power. Now put 2 or 4 of that same speaker in a cabinet and the output is even higher. What this is saying is that even with a mere 1 watt of power, that speaker will put out the volume about equal to a person yelling. Obviously not "TV watching" volume. To obtain that whisper volume, you might need as little as 1/10 of a watt but…….at that low a volume, most guitar speakers start to sound terrible. In addition, there is a phenomenon that occurs with human hearing that is documented by Fletcher and Munson (two really smart guys) that graphs the way we hear things at different volumes. Look it up on the internet. The Fletcher/Munson curves show how our ears, at lower volumes, are less responsive to low and high frequencies. That means the quieter you play, the more we tend to want to boost the bass and treble to compensate for our own hearing. Ever seen the "loudness" contour switch on a home stereo? That is what the switch does. It boosts the treble and bass to make it sound better quiet. On a guitar amp you often find knobs for boosting the low and high end in the power amp section. Typically these controls are called Presence for the high end boost and Resonance or Depth or Density (Egnater) for the low end. At low volumes you typically turn those controls up but the louder you play, the more you find you need to turn them down. Fletcher/Munson again.

Because we make guitar amps with variable power (Rebel) and switchable power (Tourmaster and Modular), we get inquires about this all the time. Often players will use one of our amps and it appears that the power cut feature doesn't do much. Please allow me to explain.

Let's say you are playing an amp at home or in a music store at relatively low volume. Recall what was said earlier about how little power it really takes to get a fairly loud volume. If you're playing quiet, you might be using even less than 1 watt to obtain the loudness you're at. If you have a chance, try this on a Rebel. Play fairly quiet and turn the WATTS knob from 20 watts to 1 watt. What do you hear? Very little change! Why? Because at that volume you probably are not even using up 1 watt let alone 20 watts. Sort of like driving a car at 5MPH. It doesn't matter if the engine is a 100HP or 500HP, you are still only going 5MPH and using very little HP to maintain that speed. Same with your amp. To cruise along at low volume requires very little power (watts). Having the extra horsepower (watts) doesn't make the amp louder when you play at low to medium volume.

Now try this with your Rebel. Set the power to 20 watts, turn the master full up and turn up the gain knob until you start to hear some distortion. It will be loud. While you're playing turn the WATTS knob down. You will clearly hear and feel the way less power creates a spongier, lower volume tone. Some players are saying the knob isn't really cutting the power but is reducing the headroom. Call it what you will, the result of reducing power is more of a "feel thing" than a volume thing. Ultimately the idea is to set it to where you like the sound and be happy…..play your guitar. While we're on the subject of the Rebel, there has been some talk about how, when panning from the 6V6 tubes to the EL84 tubes, the tone difference is not what some expected. It is believed that by simply changing power tubes you can make a Fender (6L6 power tubes) sound like a Marshall (EL34 power tubes) or a Vox (EL84 power tubes). What you are hearing in the Rebel when you go from 6V6 to EL84 is the real difference in the sound of those two types of tubes. It may not be quite as dramatic as many believe but that is the reality of it. The tonal difference between various types of tubes is more subtle than many believe. A few people have even been disappointed when using the TUBE MIX features because their expectations of what should happen were really not based in fact. The intangible characteristic is the change in "feel" between different types of tubes. These subtle differences do become more apparent at higher volume when the power tubes are "pushed" a little more into overloading. What you are hearing in the Rebel is "the truth" about power tubes.

TECH NOTE #102 Sound dispersion

Ever wonder why your 4x12 cabinet sounds better when you stand off to the side? Did you consider why the pros mic a speaker from the edge instead of in the center? Ever have people in the audience tell you your guitar tone is really loud and shrill but it sounds great to you on-stage? This is a result of the directionality of loudspeakers. Speakers inherently do not project all frequencies equally. As the frequency increases, the dispersion decreases. In non technical terms, this means the higher you play on your guitar neck, the more directional your sound will be. By nature, speakers tend to be somewhat non-directional at lower frequencies. This means you can stand off to the side of your cabinet and you will hear basically the same bass and lower mids as your audience is hearing right in front of your speakers. On the other hand, and this is where the trouble starts, higher frequencies tend to "beam" from the speaker. While you are standing off axis from your cabinet (not directly in front of it) you are hearing an even balance of lows, mids and highs and feeling pretty pumped about your awesome tone. Unfortunately, unbeknownst to you, the listeners directly in front of your cabinets are being killed by the high end that is "beaming". FYI, contrary to what one might deduce, having more speakers in a 2 by 2 arrangement, as in a 4x12 cabinet compounds the problem and makes the beaming even worse. Next time you play take a moment to walk from side to side and squat down in front of your speakers. You will be amazed at the difference between listening off axis (to the side) and listening on axis (directly in front). Have you ever seen a band in a small place where you are hearing the stage volume and wonder why the guitars sound so bright? Doesn't that guitar player hear that obnoxious high end? That knucklehead must be deaf!?!? More likely he is standing close to his cabinets and all that high end is just blowing past his/her legs so he/she doesn't even hear it.

OK..so now I've pointed out how we've all been playing for years believing everyone in the crowd thinks our tone is as awesome as we think……or is it? Great, so what can you do about it? The key is to place your speakers so you are hearing the same thing as everyone else. If you can get the cabinets far enough behind you, you probably will pretty much hear everything just fine. If that is not possible, try placing the cabinets pointing across the stage sideways instead of forward at the audience. At least then you will only be killing your other band members instead of the audience. Chances are you often want to kill the drummer or bass player anyway, right? The best thing you can do is to tilt your cabinets so that they are pointed at your head. I guarantee you will set your controls way different from what you normally do.

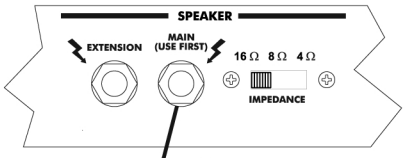
There are a number of possible options to combat the beaming problem. A few companies make a solid disc that you install in front of the speakers to help disperse or attenuate the high end. These discs have met with some success though they do introduce some phasing issues. Also, because there is a solid piece in front of the speaker, if one places a microphone in front of the disc (which happens quite often at shows), it can sound weird because the disc is altering the sound into the mic. There are some other smart people attempting to address the problem. Most involve using some form of foam piece in front of the speakers. The method we find works best for both live, and when placing a mic in front of the speakers, utilizes a sound absorbing 4" x 1" foam disc placed on the back side of the grill cloth directly in front of the speaker. The discs are made of an acoustical foam material that attenuates the beaming highs instead of blocking them.

I'm always surprised whenever this subject is discussed and many guitar players make the statement "I hate the way my guitar sounds when I stand in front of my speakers". The answer is not to simply stand off to the side so it only sounds good to you because everyone else is still hearing the sound that you hate. Remember why we play music? It is for others to enjoy. We should always make a conscious effort to think about what the audience is hearing, too.

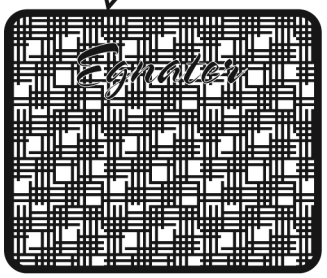
Egnater™ REBEL-30 HEAD

CUSTOM AMPLIFICATION

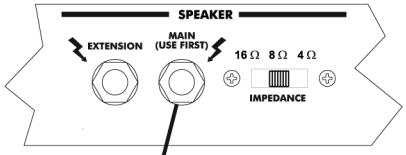
Speaker Hookup



Set Impedance Switch to 16 ohms



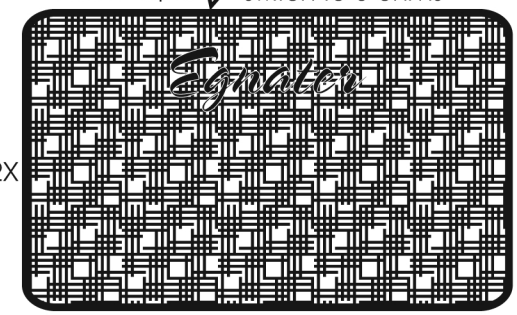
Rebel 112X

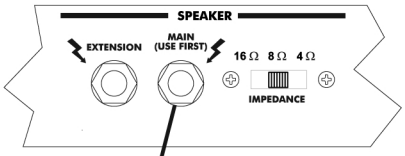


To 8 ohm mono input

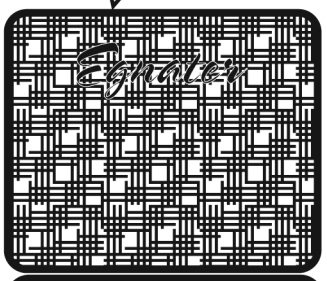
Set impedance switch to 8 ohms

Rebel 212X

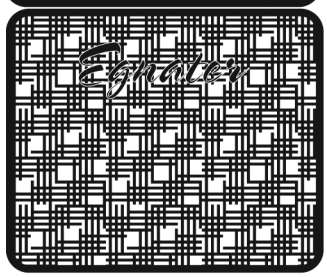




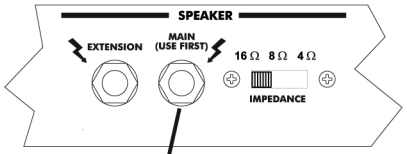
Set Impedance Switch to 8 ohms



Rebel 112X



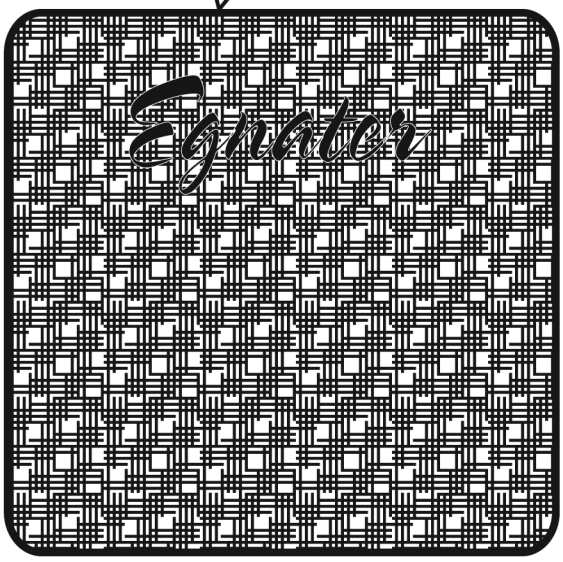
Rebel 112X



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).

Egnater™ CUSTOM AMPLIFICATION REBEL-30 HEAD

*SPECIFICATIONS**

Power Output: 30 watts maximum into 4, 8 or 16 ohms
Master TUBE MIX
Silent Mode with Direct Record Out
Buffered Effects Loop
4/8/16 ohm Impedance Selector Switch
International Voltage Selector
Rebel 30 1x12 speaker - One Egnater Elite 80
Rebel 30 2x12 speakers - One Egnater Elite 80 and One Celestion Vintage 30

Clean Channel:
Volume, Treble and Bass
Tight and Bright switches
1 to 30 Watts Control
Reverb Level with “spillover”.

Overdrive Channel:
Gain, Treble, Middle, Bass and Volume
Tight and Bright switches
1 to 30 Watts control
Reverb Level with “spillover”

Tubes:
Five 12AX7
Two EL84
Two 6V6

Dimensions:
W 17” x D 10.75” x H 8.5”

Weight:
10.5kg (23 lbs)

Egnater Custom Amplification
Boutique Amps Distribution
3402 Slauson Ave., Maywood, CA 90270
Phone: 323-277-4119
Fax: 323-277-4110
www.EgnaterAmps.com

*Features and specifications are subject to change without notice.