

acoustic®

**G10, G20, G35FX, G100FX,
G120 DSP, G120H DSP, G412A
USER'S MANUAL**



LEAD SERIES GUITAR AMPS

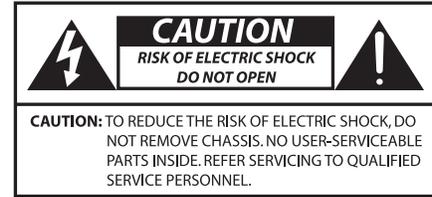
www.acousticamplification.com

IMPORTANT SAFETY INSTRUCTIONS

Exposure to high noise levels may cause permanent hearing loss. Individuals vary considerably to noise-induced hearing loss but nearly everyone will lose some hearing if exposed to sufficiently intense noise over time.

The U.S. Government's Occupational Safety and Health Administration (OSHA) has specified the following permissible noise level exposures:

DURATION PER DAY (HOURS)	8	6	4	3	2	1
SOUND LEVEL (dB)	90	93	95	97	100	103



According to OSHA, any exposure in the above permissible limits could result in some hearing loss. Hearing protection must be worn when operating this amplification system in order to prevent permanent hearing loss.



This symbol is intended to alert the user to the presence of non-insulated "dangerous voltage" within the products enclosure.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the unit.



Apparatus shall not be exposed to dripping or splashing. Objects filled with liquids, such as vases, shall not be placed on the apparatus.

- The apparatus shall not be exposed to dripping or splashing. Objects filled with liquids, such as vases, shall not be placed on the apparatus.
L'appareil ne doit pas être exposé aux écoulements ou aux éclaboussures et aucun objet ne contenant de liquide, tel qu'un vase, ne doit être placé sur l'objet.
- The main plug is used as disconnect device. The main plug of apparatus should not be obstructed OR should be easily accessed during intended use. To be completely disconnected from the power input, the main plug of apparatus shall be disconnected from the mains. La prise du secteur est utilisé pour déconnecter le système. La prise du secteur ne doit pas être obstruée ou doit être facilement accessible pendant son utilisation. Pour être complètement déconnecté de l'alimentation d'entrée, la prise doit être débranchée du secteur.
- An appliance with a protective earth terminal should be connected to a mains outlet with a protective earth connection. Un appareil avec la borne de terre de protection doit être connecté au secteur avec la connexion de terre de protection.
- **WARNING:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
Avertissement: pour réduire le risque d'incendie ou de choc électrique, ne pas exposer cet appareil sous la pluie et l'humidité.

1. Read all safety and operating instructions before using this product.
2. All safety and operating instructions should be kept for future reference.
3. Read and understand all warnings listed on the operating instructions.
4. Follow all operating instructions to operate this product.
5. This product should not be used near water, i.e., bathtub, sink, swimming pool, wet basement, etc.
6. Only use dry cloth to clean this product.
7. Do not block any ventilation openings, it should not be placed flat against a wall or placed in a built-in enclosure that will impede the flow of cooling air.
8. Do not install this product near any heat sources such as radiators, heat registers, stoves or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized 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 are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus. Do not break the ground pin of the power supply cord.
11. Only use attachments specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer or sold with the apparatus.
When a cart is used, exercise caution when moving.
13. Unplug this apparatus during lightning storms or when unused for a long period of time.
14. Care should be taken so that objects do not fall and liquids are not spilled into the unit through the ventilation ports or any other openings.
15. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way.
16. When a mains plug is used as the disconnect device, the disconnect device shall remain readily operable.



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acoustic®

G10, G20, G35FX, G100FX G120 DSP, G120H DSP, G412A USER'S MANUAL

WELCOME

Congratulations on your purchase of a new Acoustic electric guitar amplifier. Founded as the Acoustic Control Corporation in Van Nuys, California in 1969, Acoustic is the rig of choice for many legendary touring musicians. If you're new to Acoustic amps, we encourage you to get in tune with its rich heritage at www.acousticamplification.com/history.cfm.

Your comments are important. We constantly improve our products based on feedback from musicians like you. Please feel free to contact us at www.acousticamplification.com or send us an email at info@acousticamplification.com.

Welcome to Acoustic, the Pro's Tone™.

SPECIFICATIONS

Model	G10	G20	G35FX	G100FX	G120 DSP	G120H DSP	G412A
Power	10 Watts @ 8 Ohms	20 Watts @ 6 Ohms	35 Watts @ 8 Ohms	100 Watts @ 4 Ohms	120 Watts @ 4 Ohms	120 Watts @ 4 Ohms	120 Watts
Equalizer	3 Band EQ + Mid Shift	3 Band EQ + Mid Shift	3 Band EQ + Mid Shift	3 Band EQ + Mid Shift	3 Band EQ, Semi Parametric mid, Mid Shift	3 Band EQ, Semi Parametric mid, Mid Shift	N/A
Channels	2	2	2	2	2	2	N/A
Effects	N/A	N/A	Spring Reverb, Delay, Chorus	Spring Reverb, Delay, Chorus	16 Effect DSP	16 Effect DSP	N/A
Speaker	8", 10W @ 6 Ω	10", 20W @ 6 Ω	12", 35W @ 8 Ω	12", 60W @ 8 Ω	2x12", 60W @ 8 Ω	N/A	4x12"
Dimensions	13.7"x7.2"x13.5"	15.2"x7.8"x15.1"	17.5"x8.9"x19.2"	19.5"x9.7"x18"	26.2"x9.3"x19.9"	22.9"x9.4"x9.1"	27.4"x14"x28.11"
Weight	14.11 lbs.	15.92 lbs.	22.48 lbs.	31.39 lbs.	41.97 lbs.	24.42 lbs.	70.32 lbs.

3 **Three Year Limited Warranty:** Subject to the limitations set forth below, Acoustic® hereby represents and warrants that the components of this product shall be free from defects in workmanship and materials, including implied warranties of merchantability or fitness for a particular purpose, subject to normal use and service, for three (3) years to the original owner from the date of purchase.

Retailer and manufacturer shall not be liable for damages based upon inconvenience, loss of use of product, loss of time, interrupted operation

or commercial loss or any other incidental or consequential damages including but not limited to lost profits, downtime, goodwill, damage to or replacement of equipment and property, and any costs of recovering, reprogramming, or reproducing any program or data stored in equipment that is used with Acoustic® products. This guarantee gives you specific legal rights. You may have other legal rights which vary from state to state. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

FCC Statements

1. Caution: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
2. 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:

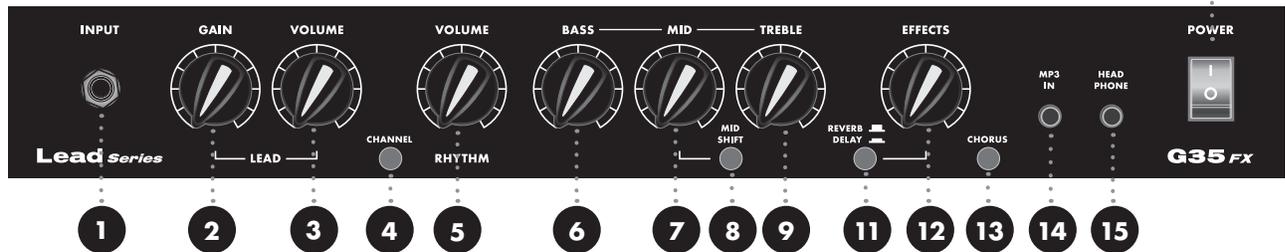
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Acoustic
P.O. Box 5111
Thousand Oaks, CA
91359-5111

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G10, G20, G35FX, G100FX, FRONT PANEL

10

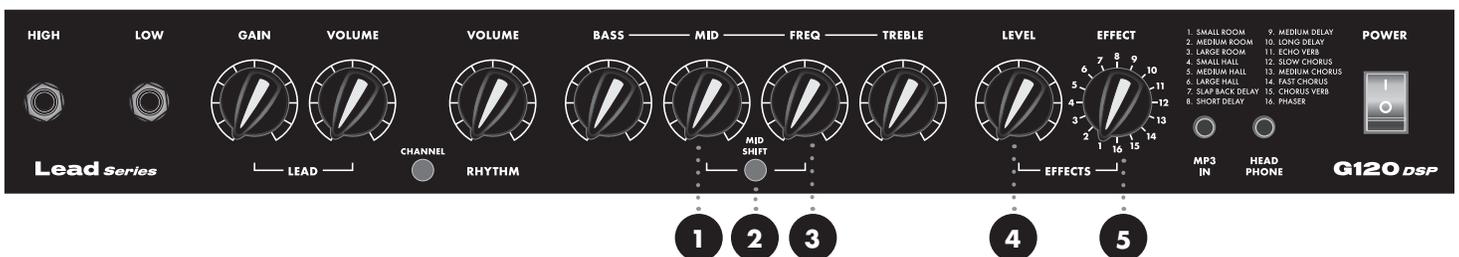


1. Guitar Input: 1/4" two-conductor jack.
2. Gain: Adjust this control to dial in the right amount of distortion. As you increase the gain (clockwise), the amount of distortion increases, ranging from "Classic Blues" distortion to heavy, modern distortion.
3. Volume (LEAD): Volume control for the LEAD channel.
4. Channel Select Switch: Selects LEAD or RHYTHM channel.
5. Volume (RHYTHM): Volume control for the RHYTHM channel.
6. Bass: This control increases or decreases bass frequencies for both channels.
7. Mid: This control increases or decreases mid range frequencies for both channels.
8. Mid-Shift: This button decreases the level of the mid frequencies by 15dB creating a "Scooped Mid" sound.
9. Treble: This control increases or decreases treble frequencies for both channels.
10. Power Indicator: When lit, the amplifier is on and ready for use.

G35FX AND G100FX ONLY

11. Reverb/Delay: This button selects the Spring Reverb when out, and Digital Delay when in.
12. Effects: This control increases or decreases the level of the Spring Reverb or Digital Delay effect depending on which is selected by the Reverb/Delay button.
13. Chorus: This button turns on the built-in analog chorus effect when engaged.
14. MP3 Input: This 3-conductor 1/8" media input jack will allow you to plug in a CD, MP3 player, or any other source so you can practice along. To control the volume of the source, adjust the output volume of the device. **Note:** Turn the volume all the way down before plugging in your guitar and adjust the volume according to your taste.
15. Headphone Output: 1/8" 3-conductor jack for plugging in headphones. When used, it will disconnect the internal speaker.

G120 DSP AND G120H DSP FRONT PANEL



The G120 DSP and G120H DSP share most of the same front panel controls with the G10, G20, G35FX and G100FX models but there are two key differences. The G120 DSP and G120H DSP both have semi-parametric mid range controls and a 16-effect DSP. Semi-parametric midrange gives you full control of the exact midrange frequency and the level of boost or cut of that frequency. The 16-effect DSP gives you the choice of 16 custom programmed digital effects that you can dial up to expand your sound.

1. Mid: This control increases or decreases mid range frequency level for both channels.
2. Mid-Shift: This button decreases the overall level of mid frequencies by 15dB creating a "Scooped Mid" sound.
3. Frequency: This control selects the mid range frequency from 500hz to 2Khz. Once the frequency is selected, use the Mid control to boost or cut.
4. Level: This control increases or decreases the level of the digital effect selected by the "Effect" control.
5. Effect: This control selects one of the 16 digital effects.

G10, G20, G35FX, G100FX, G120 DSP, G120H DSP, G412A USER'S MANUAL LEAD SERIES GUITAR AMPS

DIGITAL EFFECTS (G120 DSP & G120H DSP)

We have provided a variety of custom programmed guitar effects for you to use to help shape your sound.

Once you choose an effect, use the Level control to adjust the amount of the effect.

Small Room Reverb	Medium Hall Reverb	Medium Delay	Medium Chorus
Medium Room Reverb	Large Hall Reverb	Long Delay	Fast Chorus
Large Room Reverb	Slap Back Delay	Echo Verb	Chorus Verb
Small Hall Reverb	Short Delay	Slow Chorus	Phaser

G100FX BACK PANEL



1

1. AC Input: Attach the included AC power cable here.
2. External Speaker: Use this output to attach an external speaker cabinet (8 Ohms min load) via a speaker cable. Do not use an instrument cable, as this may damage the amplifier, the speaker, or both.
3. Return: Use this jack to return the signal from an external effects device.

2

3

4

5

4. Send: Use this jack to send the signal to an external effects device.
5. Footswitch: Attach a 2-button footswitch (not included) to choose Lead or Rhythm channels, and Chorus on or off.

G120 DSP BACK PANEL



1

1. AC Input: Attach the included AC power cable here.
2. Return: Use this jack to return the signal from an external effects device.
3. Send: Use this jack to send the signal to an external effects device.

2

3

4

4. Footswitch: Attach a 2-button footswitch (not included) to choose Lead or Rhythm channels and DSP Effects on or off.

G120H DSP BACK PANEL



1. AC Input: Attach the included AC power cable here.
2. External Speaker: Use these output jacks to attach external speaker cabinets (4 Ohms min load) via speaker cables. Do not use an instrument cable as this may damage the amplifier or the speakers or both. 1 x 8 Ohms cabinet, 1 x 4 Ohms cabinet or 2 x 8 Ohms cabinets may be used. We do not recommend mixing cabinet Ohm ratings (1 x 8 Ohms and 1 x 4 Ohms cabinet).
3. Return: Use this jack to return the signal from an external effects device.
4. Send: Use this jack to send the signal to an external effects device.
5. Footswitch: Attach a 2-button footswitch (not included) to choose Lead or Rhythm channels, and DSP Effects on or off.

G412A BACK PANEL



1. Speaker Input: Two-conductor, 1/4" speaker Input jack, 8 Ohms. Use this jack to plug in a speaker cable from the output on your amplifier.
2. Speaker Extension: Parallel wired speaker extension jack. You can use this jack to attach a second speaker in parallel wiring to your amp. Be careful not to go below a 4 Ohm minimum load when using more than one speaker cabinet with your amplifier. 2 x 8 Ohm cabinets wired in parallel equals a 4 Ohm load. Most guitar amplifiers will not handle an Ohm load below 4 Ohms. Running your amplifier at less than a 4 Ohm load may damage your amplifier and your speakers.

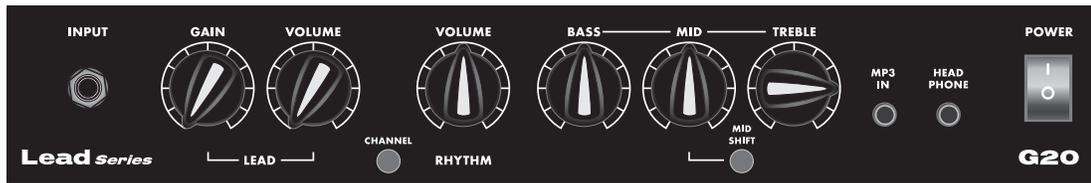
G10, G20, G35FX, G100FX, G120 DSP, G120H DSP, G412A USER'S MANUAL LEAD SERIES GUITAR AMPS

SUGGESTED TONE SETTINGS

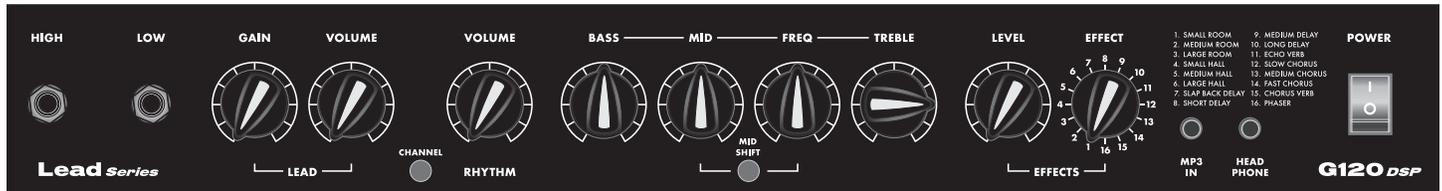
The following setting suggestions will help you find a variety of different tones. You will find that the tone controls on Acoustic amplifiers are extremely active. Small changes will give you a wide range of sounds.

Don't be afraid to experiment and "tweak" the controls to get the most out of your lead guitar amplifier. (If a particular control setting is not shown, then it doesn't apply to the sound setting.)

G10, G20, G35FX, G100FX



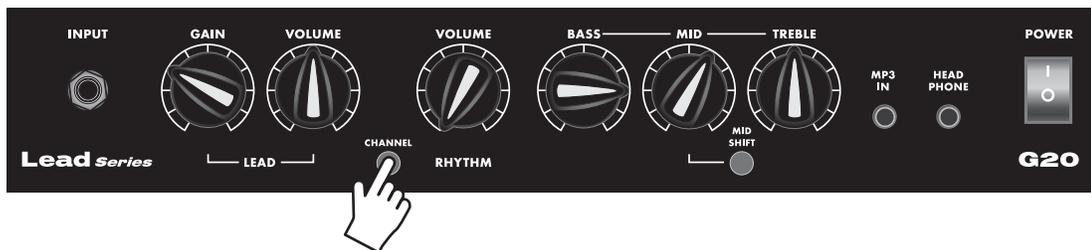
G120 DSP, G120H DSP



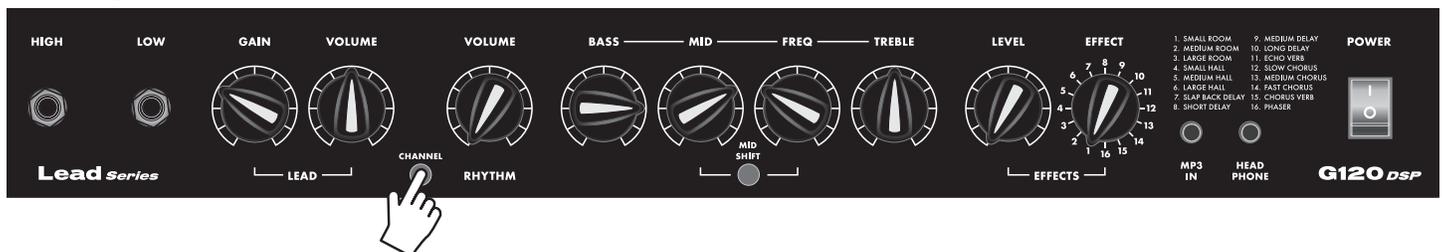
CLEAN RHYTHM / COUNTRY GUITAR: Rhythm Channel. These settings are good for clean sounds including rhythm guitar, country lead guitar, and funk rhythm sounds. Country and Funk sounds generally call for a brighter, more treble-edged setting. This setting sounds great with single

coil pickups. Rhythm guitar is commonly a clean, full sound, using a little less treble than the country or funk sound and a bit more midrange. Humbucking pickups will create a fatter sound. Engaging the Mid Shift button will achieve fuller, more rounded tone for either style.

G10, G20, G35FX, G100FX



G120 DSP, G120H DSP

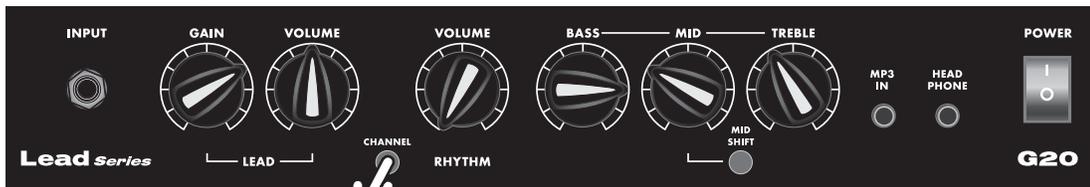


MEDIUM-GAIN ROCK & BLUES: Lead Channel. This setting is useful for blues or classic rock songs. Medium-gain works well for leads, rhythm parts, and power chords. The Lead channel must be selected to engage the gain control for distortion. Blues

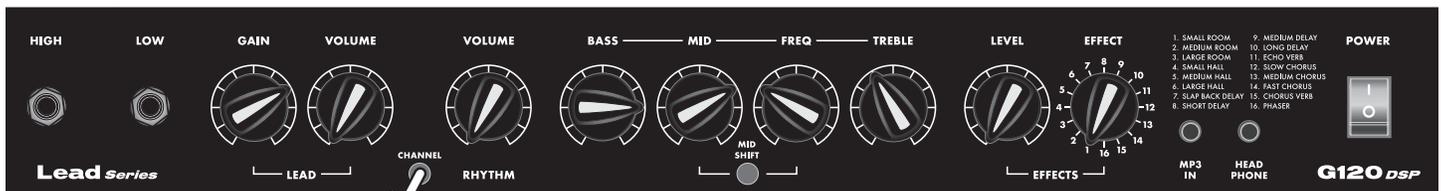
music calls for lower gain settings and a bit more treble. Classic rock uses more gain, bass and midrange. Adjust the gain dial to the amount of distortion you desire. Increasing the Treble will help you cut through the band.

SUGGESTED TONE SETTINGS (CONT'D)

G10, G20, G35FX, G100FX



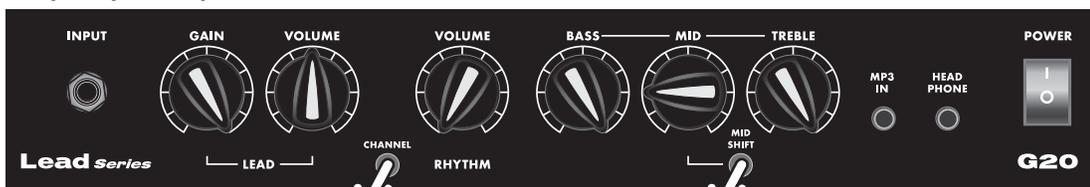
G120 DSP, G120H DSP



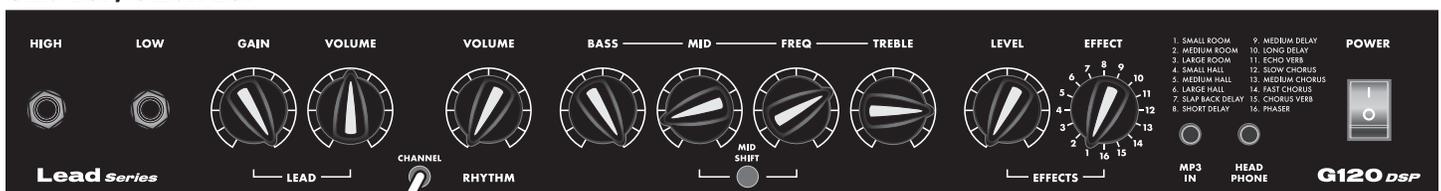
ALTERNATIVE / HARD ROCK: Lead Channel. For both rhythm and lead sounds, this setting will give you a fat distortion sound. If you need more "crunch", increase the gain control for more distortion. These styles of music

require a thick, harder edged tone that fills out the band's sound. Adding more gain will increase thickness and sustain. Increasing the bass and decreasing the mids will give you a slightly fatter low end.

G10, G20, G35FX, G100FX



G120 DSP, G120H DSP



HEAVY METAL / MAXIMUM GAIN: Lead Channel. Modern Heavy Metal is known for high gain distortion and a signature "scooped" midrange sound. Start with the Gain control at maximum and the "Mid Shift" button engaged. This gives you full distortion and lowers the mid frequency level. If you really want a more intense "scooped" sound, roll back the mid control and boost the bass and treble controls. Fine

adjustment of all three tone controls will give you access to a wide variety of heavy tones. Experimenting with the Frequency select control and the Mid level control on the G120 DSP and G120H DSP provides even more tonal variations. Increasing the midrange will make the guitar cut through better for leads while pulling out mid range will give you the full "swarm of bees" sound popular in the heaviest of heavy metal styles.