GH50R
GH100R
GH50R-212

USER MANUAL

www.laney.co.uk

British Engineering from the
Black Country United Kingdom

Dear Player,

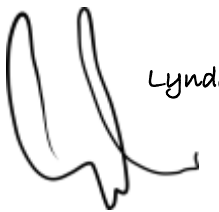
Thank you very much for purchasing your new Laney product and becoming part of the worldwide Laney family. Each and every Laney unit is designed and built with the utmost attention to care and detail, so I trust yours will give you many years of enjoyment.

Laney products have a heritage which stretches back to 1967 when I first began building valve amplifiers in my parents' garage.

Since then we have moved on from strength to strength developing an extensive range of guitar, bass, public address, multi instrument and keyboard amplification products along with a list of Laney endorsees that includes some of the world's most famous and respected musicians.

At the same time we believe we have not lost sight of the reason Laney was founded in the first place - a dedication to building great sounding amplification for working musicians.

Warm Regards,



Lyndon Laney Chairman & Founder

The infinite balance of power

The GHR range represents the most tonally versatile amplifiers we have ever heard. Unique construction allows direct control by the player over the balance between the amount of pre amp and power amp colour in the overall tone.

A balance between Red & Black.

As a direct descendant of the world-renowned GH range the GHR range builds on this critically acclaimed sonic platform and brings many new tonal options available for the player to discover.The GHR range has been a long time in its creation – we wanted to make sure it sounded as good as it possibly could, whatever it was called upon to do.

During the extensive design and testing period we invited many players of many different styles to listen to the amplifier and the opportunity to comment on it. All the players involved brought their unique aspects to the amplifier and in ever case the amplifier sounded amazing – whatever it was required to do, faithfully articulating all the nuances of a wide variety of styles and players – making it the serious tone hounds go to amp!

Visually the GHR amplifiers look as good as they sound. Finished in a striking ox blood red & black leather grain livery complete with black stringing, housing an stylish single height, twin channel control panel giving the player complete access to all the control they need to dial in a killer tone.

Each amplifier features a twin channel pre- amp consisting of Channel 1 and Channel 2, shared 3 band EQ, Master Tone, Master Output and Reverb. Sonically Channel one is warm and sparking and sweet on the high end whilst punchy on the bottom. It is capable of a wide variety of tonal colour and when pushed hard in conjunction with the Master Volume output produces some truly mouth-watering tones. Whilst Channel 2 gives you the same broad spectrum of tones and with the inclusion of a volume control on the channel allows you to run the output section wide open and control the listening volume via the Channel 2 volume.

The GHR's EL34 loaded output section delivers raw throaty power with plenty of grunt and growl when required and features a cabinet emulated DI out with comes post output section meaning that your feed to the PA is not missing any vital elements in the tone path, removing the need to mic your rig for performance or recording.

To get the most out of your GHR amplifier please read the manual carefully and remember the more time you spend experimenting with your GHR amp the more it will reward you with amazing tones.

The more you play it the more it delivers

Important Safety Instructions

WARNING: When using electrical products, basic cautions should always be followed, including the following:
1. Read these instructions.
2. Keep these instructions safe.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any of the ventilation openings. Install in accordance with manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus (including amplifiers) that produce heat.
9. An apparatus with Class I construction shall be connected to a mains socket outlet with a protective connection. 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 third prong is 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 they exit from the apparatus.
11. Only use attachments/accessories provided by the manufacturer.
12. Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. The mains plug or appliance coupler is used as the disconnect device and shall remain readily operable. The user should allow easy access to any mains plug, mains coupler and mains switch used in conjunction with this unit thus making it readily operable. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as when power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. Never break off the ground pin. Connect only to a power supply of the type marked on the unit adjacent to the power supply cord.
16. If this product is to be mounted in an equipment rack, rear support should be provided.
17. Note for UK only: If the colours of the wires in the mains lead of this unit do not correspond with the terminals in your plug, proceed as follows:
    a) The wire that is coloured green and yellow must be connected to the terminal that is marked by the letter E, the earth symbol, coloured green or coloured green and yellow.
    b) The wire that is coloured blue must be connected to the terminal that is marked with the letter N or the colour black.
    c) The wire that is coloured brown must be connected to the terminal that is marked with the letter L or the colour red.
18. This electrical apparatus should not be exposed to dripping or splashing and care should be taken not to place objects containing liquids, such as vases, upon the apparatus.
19. Exposure to extremely high noise levels may cause a permanent hearing loss. Individuals vary considerably in susceptibility to noise-induced hearing loss, but nearly everyone will lose some hearing if exposed to sufficiently intense noise for a sufficient time.

The U.S. Government's Occupational Safety and Health Administration (OSHA) has specified the following permissible noise level exposures: According to OSHA, any exposure in excess of the above permissible limits could result in some hearing loss. Earplugs or protectors to the ear canals or over the ears must be worn when operating this amplification system in order to prevent a permanent hearing loss, if exposure is in excess of the limits as set forth above. To ensure against potentially dangerous exposure to high sound pressure levels, it is recommended that all persons exposed to equipment capable of producing high sound pressure levels such as this amplification system be protected by hearing protectors while this unit is in operation.

Duration Per Day in Hours	Sound Level dBA, slow response
8	90
6	92
4	95
3	97
2	100
1 ½	102
1	105
½	110
¼ or less	115

Intended to alert the user to the presence of high 'Dangerous Voltage' within the products enclosure that may be sufficient to constitute a risk of electrical shock to persons.

Intended to alert the user of the presence of important operating and maintenance (Servicing) instructions in the literature accompanying the product.

CAUTION: Risk of electrical shock - DO NOT OPEN. To reduce the risk of electrical shock, do not remove the cover. No user serviceable parts inside. Refer servicing to qualified personnel.

WARNING: To prevent electrical shock or fire hazard, do not expose this appliance to rain or moisture. Before using this appliance please read the operating instructions.

If your appliance features a tilting mechanism, please use this design feature with caution. Due to the ease with which the amplifier can be moved between straight and tilted back positions, only use the amplifier on a level, stable surface. DO NOT operate the amplifier on a desk, table, shelf or otherwise unsuitable non-stable platform.

After unpacking your amplifier check that it is factory fitted with a three pin 'grounded' (or earthed) plug. Before plugging into the power supply ensure you are connecting to a grounded earth outlet.

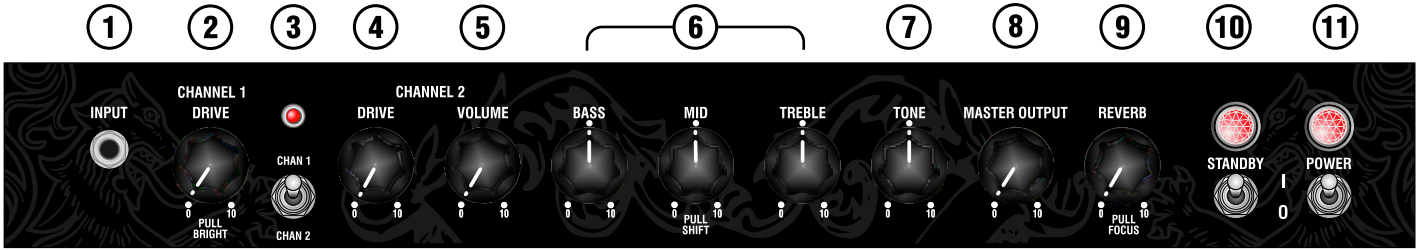
If you should wish to change the factory fitted plug yourself, ensure that the wiring convention applicable to the country where the amplifier is to be used is strictly conformed to. As an example in the United Kingdom the cable colour code for connections are as follows.

EARTH or GROUND GREEN/YELLOW
NEUTRAL - BLUE
LIVE - BROWN

NOTE

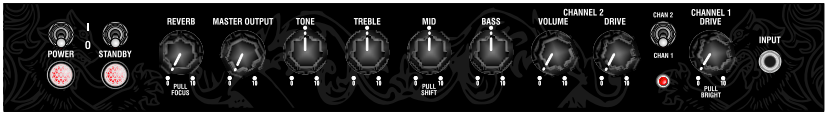
This manual has been written for easy access of information. The front and rear panels are graphically illustrated, with each control and feature numbered. For a description of the function of each control feature, simply check the number with the explanations adjacent to each panel.
Your Laney amplifier has undergone a thorough two stage, pre-delivery inspection, involving actual play testing.
When you first receive your Laney amplifier, follow these simple procedures:
(i) Ensure that the amplifier is the correct voltage for the country it is to be used in.
(ii) Connect your equipment with a high quality shielded cable. You have probably spent considerable money on your amplifier and equipment - don't use poor quality cable, it won't do your gear justice.
Please retain your original carton and packaging so in the unlikely event that some time in the future your amplifier should require servicing you will be able to return it to your dealer securely packed.
Care of your Laney amplifier will prolong it's life.....and yours!

Front Panel Controls



GH50R, GH100R

GH50R-212



1. INPUT: 1/4" mono jack socket. Connect your guitar here. Use only a good quality instrument cable.

2. CHANNEL 1 DRIVE: – this control determines the level of drive present in the channel 1 signal. This control should be set in conjunction with the level of the Master Output control in order to get the level of drive and overall volume you want. Channel 1 Drive is capable of providing significant levels of gain from sparking clean to soulful naturally compressed high-gain. When first setting Channel 1 up - start with the Drive level set low and the Master Output wound up to it's max and then as you bring the DRIVE up, dial the Master Output back and listen to the pleasing way the level of drive develops.

CHANNEL 1 PULL BRIGHT: *– The pull bright feature allows you to add a fixed amount of high-end sparkle to your tone. This can be used to compensate between the natural tonal characteristics of different guitars – or simply to add some more brilliance to your tone without the need to adjust your overall EQ. (This is more effective at lower drive settings).*

3. CHANNEL SWITCH: Switches between Channels 1 & 2,

4. CHANNEL 2 DRIVE: – The Drive control on channel 2 allows you to set the level of drive in your guitar tone but in contrast to the Channel 1 this has a volume control associated with it. This means that you have the opportunity to get even more tonal variations when you use both of these controls in conjunction with the Master Output control. Try experimenting with settings which have the Volume and Master Output in a variety of positions without changing the level of gain and listen to the subtle variations in tone. Set the Master Volume to the maximum whilst dialling back the Channel 2 volume control. Now try the controls in the opposite positions. These settings have subtle differences and understanding the way these controls interact is the key to getting the best tone out of your setup.

5. CHANNEL 2 VOLUME: – The Volume control lets you determine the amount of signal that progresses through to the power amp section. The Volume control should be used in conjunction with the Channel 2 Drive control and the Master Output control in order to get the desired tone out of the amp.

6. LEAD EQ CONTROLS: – These are a traditional set of passive tone controls. Passive controls have the advantage of always sounding musical at any of their settings, due to their unique interactive nature. This gives the player a more natural set of tools to shape their ideal sound. Set these to midway (12 O'clock) as a good starting point.

MID-SHIFT: Pulling on the MID control knob will shift the response of the control, this lowers the frequency range of the mid control to give a tighter sound.

7. TONE: – This Tone control works in a similar fashion to the Tone control you probably have on your guitar except that it uniquely works at the other end of the amplification chain. This has the ability to not only control the overall top end response but also reduce upper harmonics on the output stage and preamplifier overdrive sounds. This will give you bright cutting sounds at high settings and smooth rounded sounds at lower settings. Midway (12 O'clock) is a good starting point.

The Tone control depends greatly on the speaker cabinet connected to the amplifier.

8. MASTER OUTPUT: – The Master Output control determines how "open" the output section is allowed to run. Dial in a low setting and the output section is wound back and the overall listening level of the amplifier is reduced. Dial the Master Output fully open and the output section of the amp is now running at full tilt. Experiment with the Master Output and the Channel 2 volume controls set in different relationships. Experimenting with these controls is the key to getting the best tone out of your amp.

Try the sample settings on page 10 as a starting point to your ideal tone

9. REVERB: – Controls the level of the built in Laney-designed digital reverb.

PULL FOCUS: *–Focus more on the guitar tone as opposed to external influences, (room, fret noise etc)*

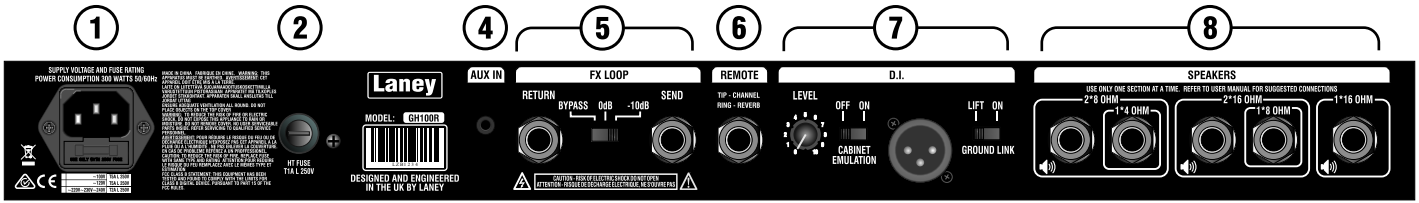
10. STANDBY SWITCH: – Disconnects the main HT voltage from the tubes but keeps the tubes warm so that they are ready to play instantly. Switch for short breaks when you don't want to wait for the tubes to warm up again. With the switch in the 1 position, the amp is in play mode, while 0 allows the amp to warm up.

STANDBY LAMP: *– This will illuminate when the amplifier is in play mode.*

11. POWER SWITCH: – Main power switch for the unit. Tube amplifiers take between 30 seconds to 2 minutes to warm up and be ready to play after switching on, this is normal. Use in conjunction with the standby switch to prolong tube life. To turn on, flip the switch to 1.

POWER LAMP: *– This will illuminate when the power switch is operated, indicating the presence of mains power within the amplifier.*

Rear Panel Controls



GH50R, GH100R

1. MAINS INLET SOCKET: – Connect to your power source. Make sure the voltage indicated on the rear panel is correct for your country!

MAINS FUSE: *– This drawer contains the main safety fuse for the unit. The fuse protects the amplifier from damage in the event of fault by disconnecting the mains power supply. USE ONLY THE CORRECT SIZE AND RATING SPECIFIED ON THE PANEL. If a fuse blows or fails and a replacement of the same size and rating is installed which in turn blows, the amplifier has suffered a malfunction and needs immediate service from a qualified technician. DO NOT TRY A FUSE OF HIGHER RATING - Using a fuse that is too large in current rating may cause serious, irreparable damage to the amplifier and presents a serious fire hazard. The mains fuse ratings are detailed in the Specifications section of this manual, as well as printed on the rear of the amplifier. There is a spare fuse located in the fuse drawer of the mains power inlet in the event of a failure.*

2. HT FUSE: – This fuse disconnects the high voltage DC power to the tubes within the amplifier in the event of a fault. USE ONLY THE CORRECT SIZE AND RATING FUSE AS SPECIFIED ON THE PANEL. If a fuse blows or fails and a replacement of the same size and rating is installed which in turn blows, the amplifier has suffered a malfunction. At this point check the output tubes, and replace faulty ones if required. Should the tubes not be the problem, refer the amplifier to a qualified service technician. DO NOT TRY A FUSE OF HIGHER RATING - Using a fuse that is too large in current rating may cause serious, irreparable damage to the amplifier. Fuses are designed to protect, do not take chances.

3.SERIAL NUMBER: – Information area relating to the amplifier: Model Code, Serial Number, Fuse Type & Rating etc

4.AUXILIARY INPUT: – This input allows the connection of backing tracks etc. to be mixed in post the FX loop.

5. FX LOOP:

FX RETURN: – 1/4" mono jack socket for the connection of the output of an external FX unit. This can also be used as a slave in for the power amp. As the FX Loop is an insert type, this will mute the preamp signal.

FX LOOP SWITCH: – Selects the FX Loop mode of operation:

- Bypass - Removes the FX Loop from the signal path.
- 0dBu - For connection of FX units with a 0dBu nominal output level.
- -10dBu - For connection of FX units with a -10dBu nominal output level. As this is intended for devices with a lower output level, this switch increases the gain of the FX Loop by 10dB.

FX SEND:– 1/4" mono jack socket for connection to the input of an external FX unit. This can also be used as a line out for connection to another power amp slave input or for recording.

6. REMOTE: – 1/4" stereo jack socket for the connection of the Included FS2 Foootswitch, allowing remote operation of the following functions: Channel & Reverb.

7. DI.: – Unlike most DI's fitted to ordinary amps which take their signal pre power amp the DI on the GHR comes directly after the output section meaning you do not miss any of the output sections contribution to your tone.

This output with dedicated level control provides a balanced direct feed for connection to an external device. Some examples include: house PA, recording setup, stage monitor system. In the unlikely event of ground hum when connecting to other equipment, simple dis-engadge the D.I ground link. Additionally 4*12 cabinet emulation can also be applied here with the cabinet emulation switch.

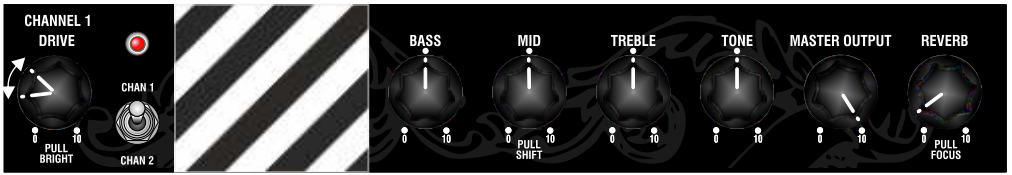
8. SPEAKERS: – Five 1/4" mono jack sockets are provided for the connection of a variety of speaker cabinets. Mismatching your speaker impedance will reduce the performance of your amplifier, and in extreme cases may damage the unit. Only use one impedance selection at a time.

Always operate this amplifier with a load connected. If not serious irreparable damage may occur.

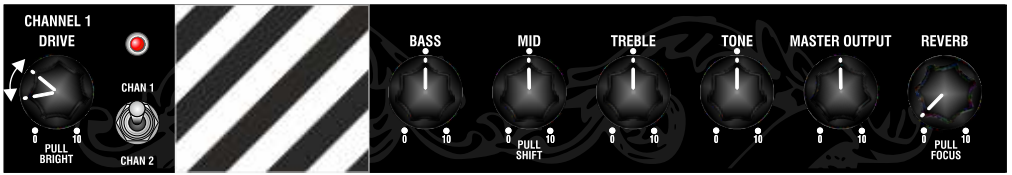
*The **GH50R-212** is equipped with 2*12" Celestion Vintage 30 16 ohm loudspeakers which should always be connected to the 8 ohm socket, (marked Internal) when used without an extension cabinet. When using the GS212VR, or any other 8 ohm cabinet in conjunction with the internal speakers, use the 2*8 ohm sockets as in the sample set diagrams.*

Channel 1 & 2 Sample Settings

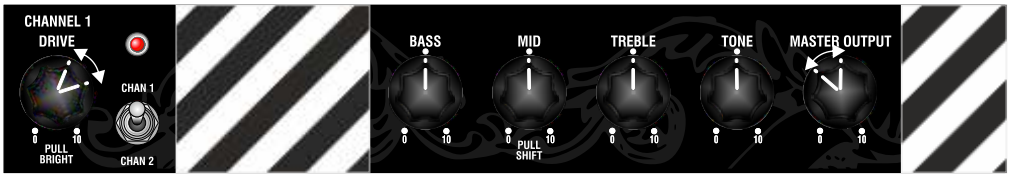
Sparkling clean - Single Coil



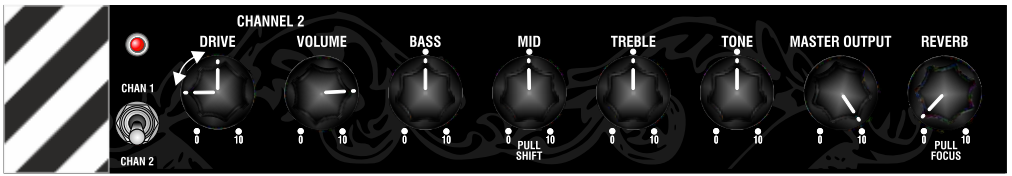
Pushed Clean - HB



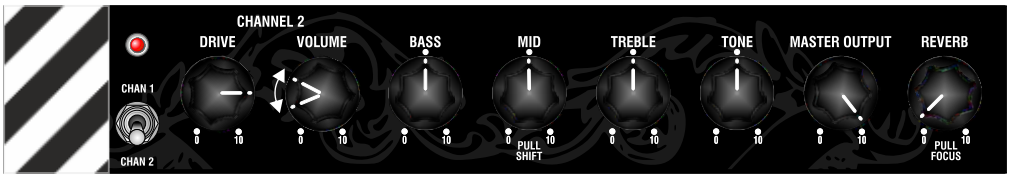
Spanked Crunch



Cool Clean Crunch - Dimed MO



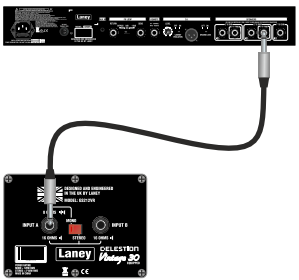
Lead - Dimed MO



Sample Mono Systems

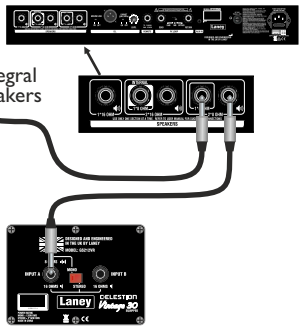
2 x12 System using
1x GH50R Head
1x GS212VR

Connected to the single
8 ohm socket.



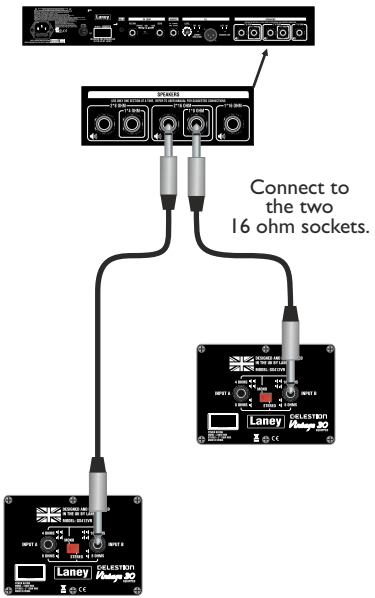
Connect to the two
8 ohm sockets.

Integral
speakers



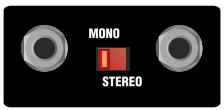
4 x12 System using
1x GH50R-212
1x GS212VR

Both the GS212VR & GH50R-212 are fitted with a Laney Tilting Mechanism so can be used upright or angled back!



Connect to
the two
16 ohm sockets.

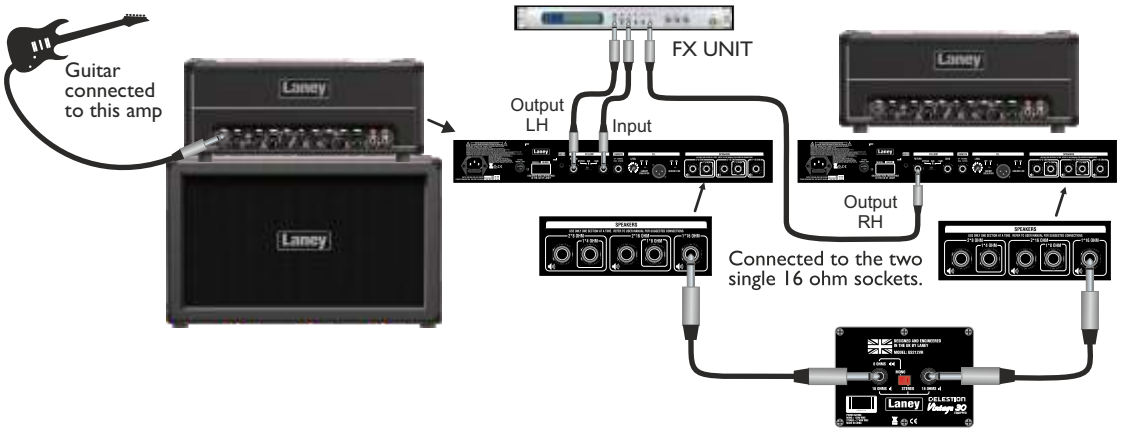
8 x12 System using
1x GH100R Head
2x GS412VR

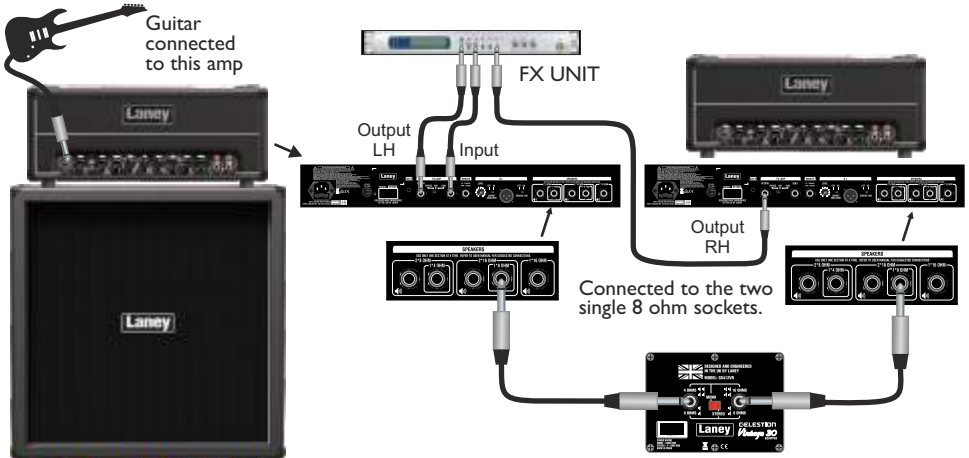


All cabinet mode selection switches on this page are set to Mono

Sample Stereo Systems

Stereo system using
2x GH50R Heads
1x GS212VR
& FX Unit

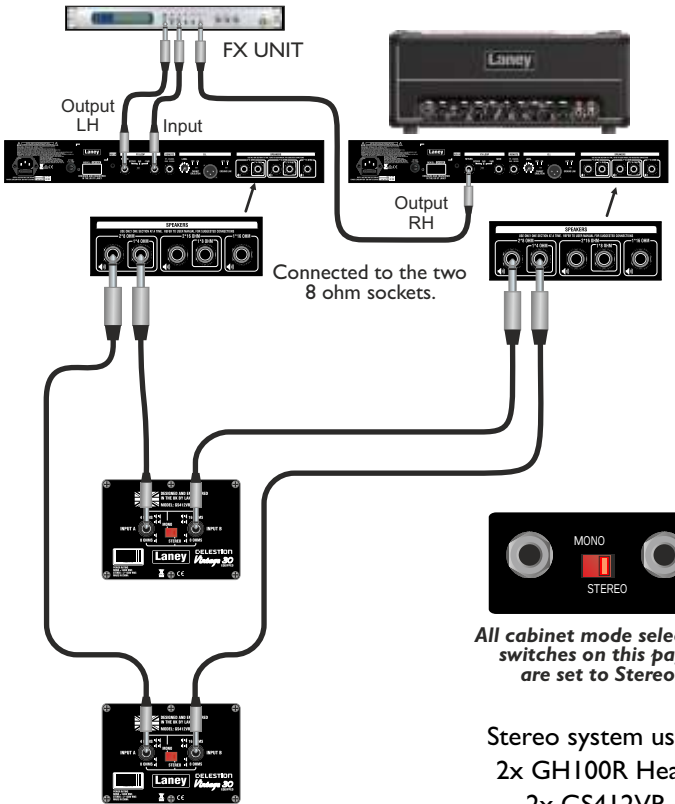




All cabinet mode selection switches on this page are set to Stereo

Stereo system using
2x GH100R Heads
1x GS412VR
& FX Unit

Guitar connected to this amp



All cabinet mode selection switches on this page are set to Stereo

Stereo system using
2x GH100R Heads
2x GS412VR
& FX Unit

Tube Amplifier Survival Tips

- **Tube amplifiers** generally sound much warmer/sweeter than solid state transistor amplifiers, but they also need a little more respect due to the fragile glass tubes themselves. The GHR range uses top quality tubes, which should give you years of trouble free service. However like all tube amps, it is important to treat it with a certain amount of care.

- **Tubes are fragile glass components** and can easily be damaged if not treated with respect.

- **Make sure the impedance** of your cabinets matches your amplifier. Improper impedance matching will result in reduced output power output and compromised sound at best, with amplifier failure/premature tube failure at worst.

- **Allow the amplifier to warm up** to room temperature before switching it on. If you don't the sudden thermal shock can crack the cold glass tube housing plus any moisture is bad news around high voltage electronics.

- **Allow the amplifier to cool down** before moving it. Hot tubes are more susceptible to damage than cool ones. A tubes life expectancy is based upon a number of factors which include operating temperature, how hard and how often it is played, vibration due to travel etc. Although there isn't a specific interval for replacement, tubes should be changed if you notice any degradation of performance.

- **Typical problems** with pre-amp tubes can be a crackly noise, hiss, hum and microphony. Other symptoms include sound lacking in punch, extreme highs or lows and low level hum. Internal failure of the tube can also blow the HT fuse. See the diagram on page 17 to see how to check the tube grade fitted. Exact replacement pre-amp and output tubes are available from Laney via your dealer.

- **To change a tube** switch off the unit and unplug from the mains supply. Wait for the tubes to cool down. Lay amplifier down on its front face and remove the protective grille held in place with screws. You should now be able to access the amplifier chassis. Pre-amp tubes are protected with a screen can. To remove, push down & gently twist the screen can anti clockwise and then pull up. The tube can then be gently pulled out. Take care when pushing the new tube in to make sure the pins are all aligned properly. Output tubes have a spring retainer which must be pulled away before the tube will come out.
- **Amplifier connection:** In order to avoid damage, it is advisable to establish and follow a pattern for turning on and off your equipment. Connect and power up all system parts, (effects processors, FX pedals etc.) **BEFORE** turning on your guitar amplifier. Many products have large transient surges at turn on and off which can cause damage to your speakers. By turning on your guitar amplifier **LAST** and making sure its Volume controls are set to minimum any transients from other equipment will not reach your loudspeakers.

Similarly when turning off your system always turn down the Volume controls on your guitar amplifier and then turn off its power before turning off other equipment.

Cables: never use shielded or microphone cable for any speaker connections as this will not be substantial enough to handle the amplifier load and could cause damage to your amplifier system.

Caution: Professional loudspeaker systems are capable of generating very high sound pressure levels. Use care with placement and operation to avoid exposure to excessive levels that can cause permanent hearing damage.

Servicing: The user should not attempt to service this product. Refer all servicing to qualified service personnel.

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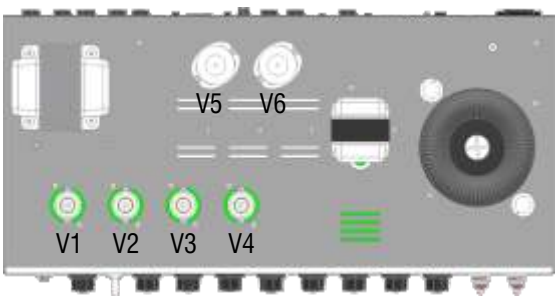
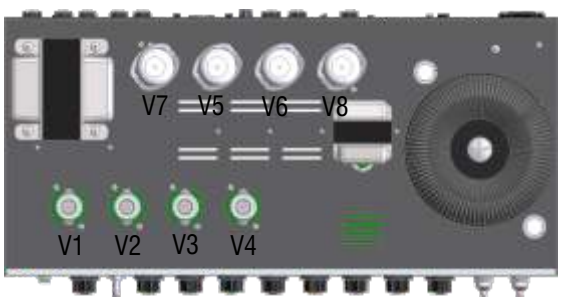
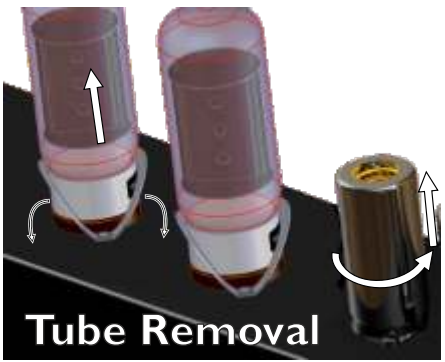


GH100R

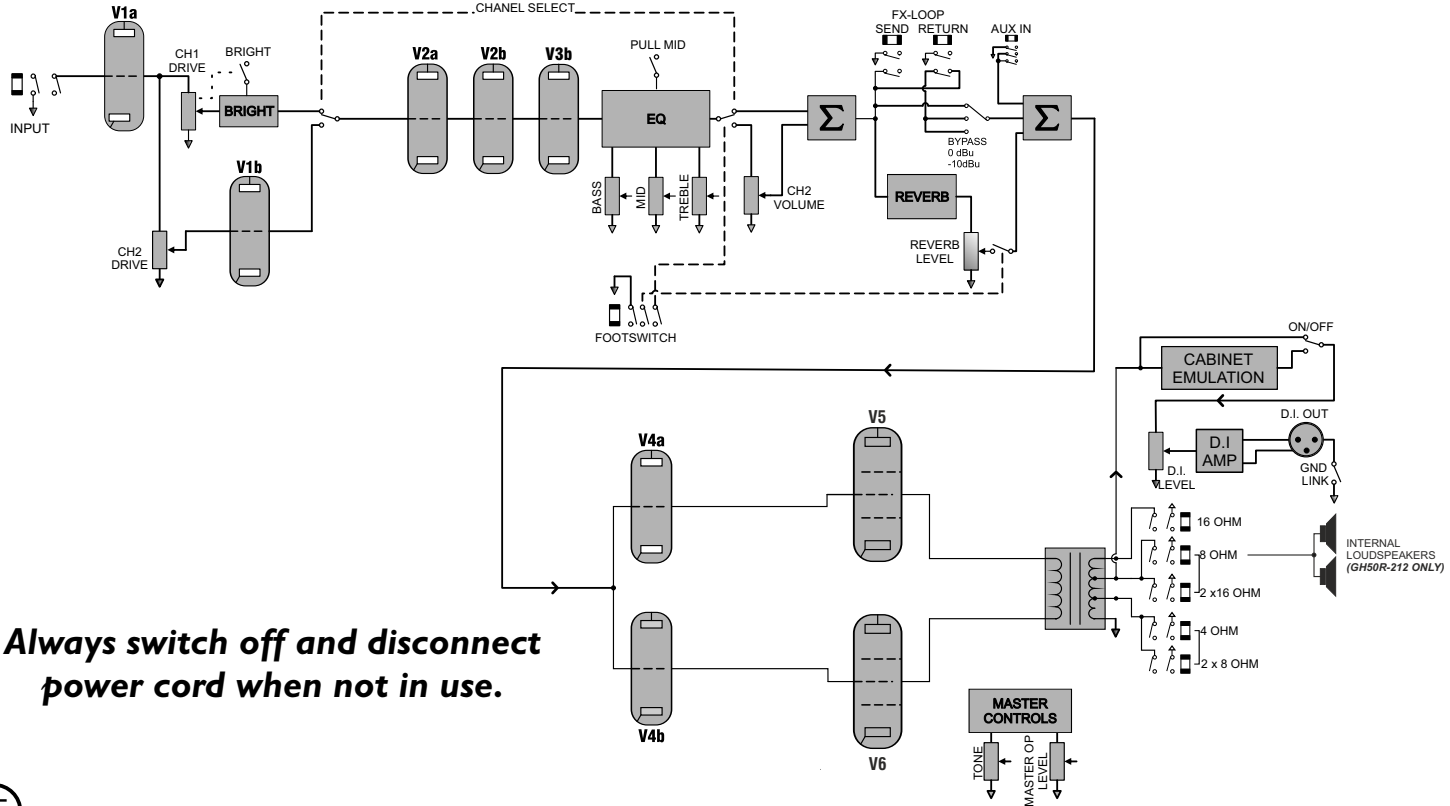




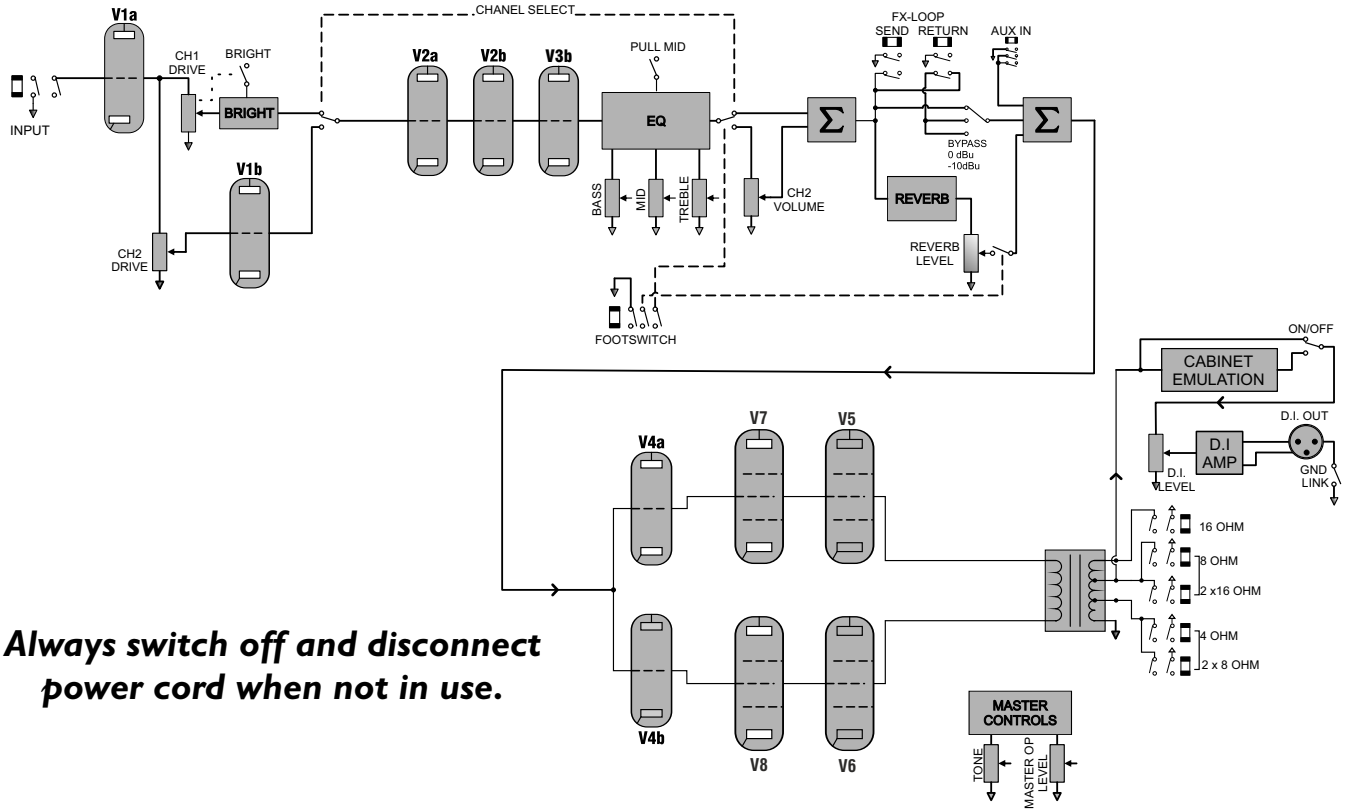
V1	ECC83 - HiGrade	005570
V2-V4	ECC83 - Ruby	005550
V5-V8	EL34-BHT Matched Set	007942

Signal Path Block Diagrams

GH50R, GH50R-212



Always switch off and disconnect power cord when not in use.



Always switch off and disconnect power cord when not in use.

Specifications

Supply Voltage	~100V, ~120V, ~220V, ~230V, ~240V 50/60Hz Factory Option
Mains Fuse	(~220V>240V = T2A L 250V) (~100>120V = T5A L 250V)
HT Fuse	GH100R - T1A L, GH50R/GH50R-212 - T500mA L
Power Consumption (Max)	GH100R - 300W, GH50R/GH50R-212 - 200W
Output Power Rating	GH100R - 100W, GH50R/GH50R-212 - 50W
Loudspeaker Outputs	1*16 Ohm 1*8 Ohm 2*16 Ohm 1*4 Ohm 2*8 Ohm
GH50R-212	As above plus 2 x Celestion Vintage 30 16 Ohm
Features	2 Channel Bass, Middle & Treble Controls (MID with Pull-Shift) Tone Control Reverb with Pull Focus FX Loop with Mode switch Footswitchable Channel & Reverb, FS2 Footswitch Included (all models) Aux In (3.5mm Stereo Jack) D.I. with Level Control, Cabinet Emulation & Ground Link Switch Rugged Plywood Carcass with 2 Colour Covering Slip Cover Included (all models) Tilt Mechanism Fitted to the GH50R-212
Dimensions	
GH50R-100R (H*W*D)(mm)	235 (250 Over Feet)*675*285
GH50R-212 (H*W*D)(mm)	515 (535 Over Feet)*712*285
Weights	
GH50R	Unit 17.5Kg, Packed 19.5Kg
GH100R	Unit 21.5Kg, Packed 23Kg
GH50R-212	Unit 30Kg, Packed 32.5Kg

FCC Compliancy Statement

This device complies with Part 15 of the FCC rules.
Operation is subject to the following two conditions:

1) This device may not cause harmful interference
2) This device must accept any interference received, that may cause undesired operation.

Warning: Changes or modification to the equipment not approved by Laney can void the user's authority to use the equipment.

Note: This equipment has been tested and found to comply with the limits for 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 and 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

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This product conforms to the requirements of the following European Regulations, Directives & Rules:
CE Mark (93/68/EEC), Low Voltage 2006/95/EC, EMC (2004/108/EEC),
RoHS (EU2002/95/EC), WEEE (EU2002/96/EC)

In order to reduce environmental damage, at the end of its useful life, this product must not be disposed of along with normal household waste to landfill sites. It must be taken to an approved recycling centre according to the recommendations of the WEEE (Waste Electrical and Electronic Equipment) directive applicable in your country.

Model number:	
Serial number:	
Place of purchase:	
Date of purchase:	

Please complete for future reference.

www.laney.co.uk