IRONHEART

- FOUNDRY -

IRF60-112

USER MANUAL

Laney™

EN

TABLE OF CONTENTS

INTRODUCTION 2
- KEY FEATURES 2

CONTROLS 3
- FRONT 3
- REAR 5

CONNECTIONS 7
- EXTERNAL FX 7
- FOOTSWITCH CONNECTION 8
- AUX AND HEADPHONES 8
- DI OUT 9
- USB 9

THE LA·IR APP 11
- DOWNLOAD & INSTALLATION 11
- FIRMWARE UPDATE 11
- USING THE APP 12
- SETTINGS PANEL 14

SPECIFICATIONS 15
- DIMENSIONS 16

SAFETY AND WARNINGS 17

INTRODUCTION

The Laney IRF60-112 is a 60 Watt solid-state combo amplifier featuring two fully independent channels, a custom HH1260 12" driver, LA·IR-equipped XLR direct out, and USB app control. It is the natural step up from the IRF60-110 for players who need channel switching, direct recording capability, and app integration in an analogue-signal-path combo.

The IRF60-112 combines the dynamic feel and picking-sensitive response that players associate with quality tube amplification, with the reliability, weight, and maintenance advantages of solid-state engineering.

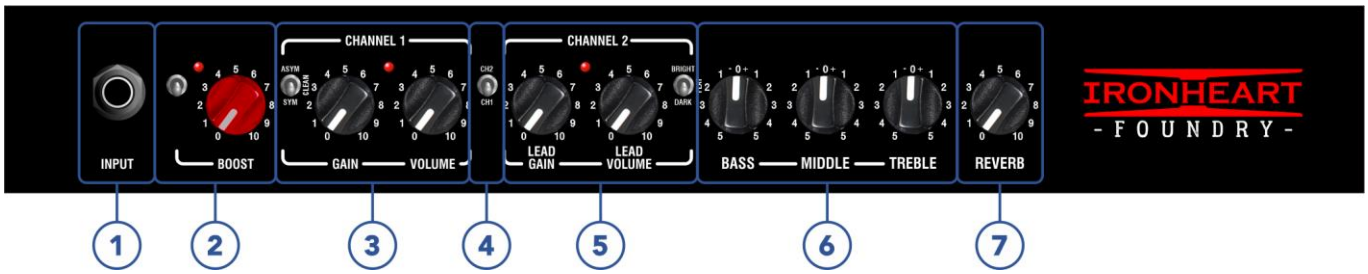
KEY FEATURES

The IRF60-112 is built around the Foundry philosophy: “everything you need, nothing you don't”.

- 60 Watts RMS through a custom HH1260 12" driver
- Two fully independent channels - each with its own gain structure and voicing
- CHANNEL 1: ASYM, CLEAN, and SYM gain/clipping modes
- CHANNEL 2: BRIGHT, NORMAL, and DARK voicing options
- 3-band passive tone stack, BASS, MIDDLE & TREBLE (shared)
- Pre-BOOST with footswitch jack
- LA·IR equipped XLR DI OUT - load your own impulse responses via the app
- USB connectivity for app control, preset management and audio in/out
- POWER scaling to under 1 Watt - full-character tone at any volume
- Onboard digital springline REVERB
- EFFECTS LOOP (series SEND/RETURN)
- HEADPHONE output for silent practice or recording
- AUX IN for backing tracks

CONTROLS

FRONT



1. INPUT

Connect your guitar here using a high-quality instrument cable.

2. BOOST

The switchable BOOST control is an additional pre-channel drive setting to increase the input signal. This is like placing a boost pedal in the front of your amplifier.

Control the amount of gain the BOOST delivers with the BOOST control knob and enable / disable the BOOST with the ON / OFF switch. The LED will illuminate to indicate the Boost is active.

Note: The BOOST switch needs to be in the up position to allow for footswitch control.

3. CHANNEL 1 - RHYTHM

GAIN and VOLUME settings to set drive and level for CHANNEL 1. Use the dedicated GAIN control in conjunction with the BOOST control to achieve the desired overdrive/distortion. With three settings, the GAIN CHARACTER switch (GCS) can produce either clean, asymmetrical or symmetrical clipping, allowing for refined control over the channel distortion characteristics.

ASYM – provides asymmetrical wave clipping rich in secondary harmonics adding more distortion whilst retaining some clarity and dynamics.

CLEAN – least amount of compression with this setting, more open tone with softer clipping.

SYM – symmetrical wave clipping giving a more aggressive distortion for a high gain compressed sound with additional sustain.

4. CHANNEL SWITCH

Switch between the two channels. Ensure CHANNEL 2 is selected (toggle switch up) when remote switching, though the use of a footswitch is required. A Laney FS2-MINI is recommended but not included.

CHANNEL's 1 and 2 both have status LEDs (above the GAIN controls) which illuminate when the channel is active.

5. CHANNEL 2 - LEAD

A high gain symmetrically clipped channel producing a compressed sound with more sustain. Controls include GAIN, VOLUME and a three-position TONE CHARACTER switch providing additional tonal enhancements:

BRIGHT – extends the high frequencies giving a brighter tonal character.

FLAT – this is a standard tone-stack setting gives no particular emphasis on high or low frequencies.

DARK – boosts the low-end frequencies adding some warmth to the tone whilst reducing the power of the high frequencies.

6. EQ

The Ironheart Foundry features a typical British voiced three-band EQ tone stack for full control of the BASS, MIDDLE and TREBLE frequency bands.

BASS – adjusts the strength of the low-end response of your output, for a deeper sound when turned clockwise.

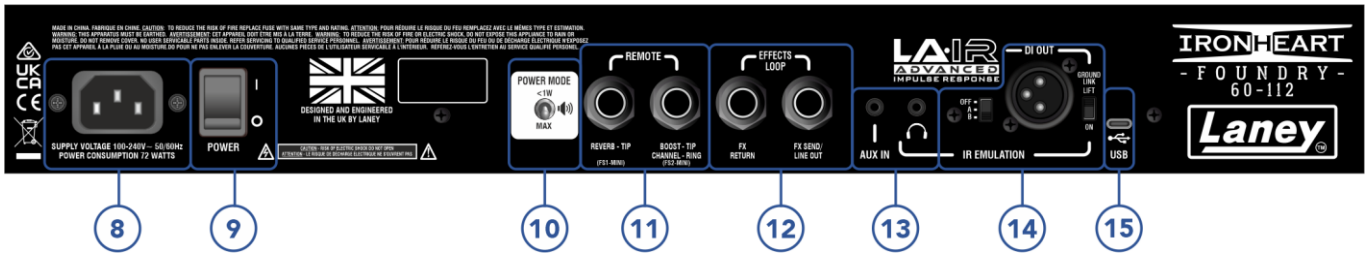
MIDDLE – adjusts the strength of the mid-range response of your output, that when turned clockwise gives a fuller sound.

TREBLE – a adjusts the strength of the top-end response of your output. Turning clockwise will boost the brighter, higher notes.

7. REVERB

Our built-in studio quality spring line REVERB effect based on our Secret Path pedal.
Turn the knob clockwise to increase the strength of the effect. At 0, no reverb will be heard.
Remote On/Off control is available via footswitch remote. A Laney FS1-MINI is recommended but not included.

REAR



8. POWER SOCKET

IEC C14 mains inlet socket to connect the provided mains cable. The universal power input accepts a wide voltage range -100-240V~50/60Hz without voltage selection or adjustment required.

9. POWER SWITCH

Main POWER switch for the unit. Set the switch to '0' when the amp is not in use.

10. POWER MODE

Switch the power output of the amplifier between full power and <1W for quiet playing.

11. REMOTE

Two 6.3mm footswitch sockets to allow for remote switching of BOOST, CHANNEL & REVERB. A single footswitch is required for REVERB and a dual footswitch for BOOST and CHANNEL. For the footswitches to work, the BOOST toggle switch (on the front panel) must be in the 'up' position and the CHANNEL toggle set to CH2. Laney FS1-MINI (for reverb) and FS2-MINI (for channel and boost) footswitches (not included) are recommended, but most latching footswitches should work.

12. EFFECTS LOOP

FX SEND and RETURN are used to connect external effects pedals or rack equipment. The FX SEND can also be used as a standard line level output. Both FX SEND and RETURN are post VOLUME and EQ, but pre-REVERB.

13. AUX IN AND HEADPHONES

A 3.5mm AUX input to add a backing track to your mix. The AUX IN is internally routed post-VOLUME, EQ and REVERB.

A 3.5mm HEADPHONES output for silent playing. The onboard loudspeaker will mute if headphones are connected.

NOTE: The HEADPHONES output will follow whatever the LA·IR switch is set to.

14. DI OUT

A line-level, balanced XLR DI OUT that can be used to connect the IRF60-112 to external equipment such as a mixing console or DAW. The DI OUT is equipped with LA·IR functionality, controllable via the LA·IR desktop application.

GROUND LINK

When multiple pieces of mains powered equipment are used in conjunction, earth loops and hum can sometimes be a problem. The GROUND LINK will connect/disconnect the XLR DI OUT ground pin (Pin1) to the chassis earth. In the lift position a ground loop can be eradicated, potentially removing the problem of mains hum.

LA·IR

A three-position switch providing a choice of two different LA·IR's (Laney Impulse Responses) preset on the unit. IR A emulates a Laney GS112 and IR B a Laney GS412. Set to OFF to disable the IR's for both the DI OUT and the HEADPHONES.
The high-quality preloaded LA·IR's can be swapped using the LA·IR desktop app.
See the USING THE APP section for more information.

15. USB

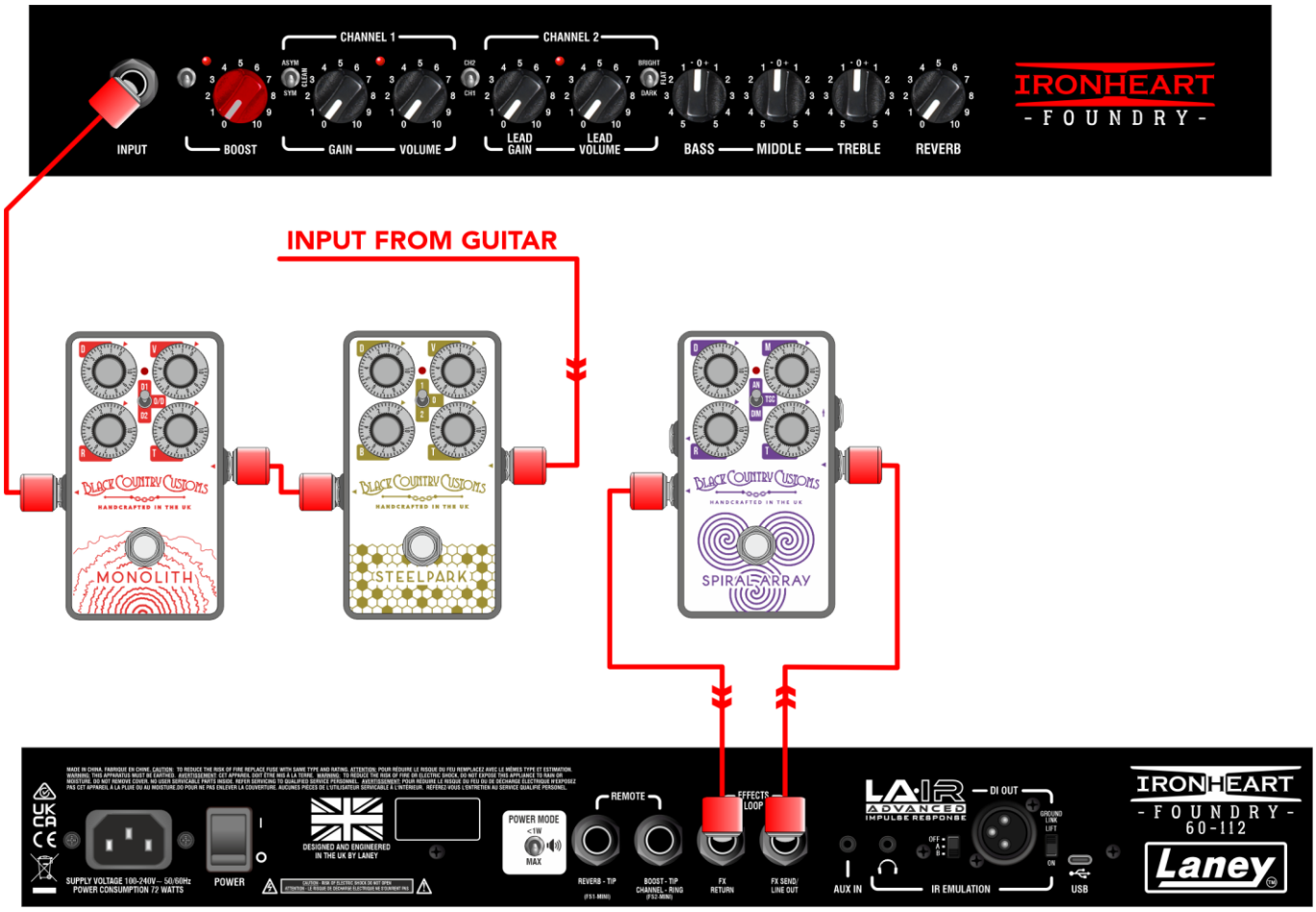
Connect a USB Type C cable to a computer to access the LA·IR app to modify the EQ and LA·IR's. The onboard USB is also a class compliant audio send/receive. Audio to the desktop is a stereo feed with the right channel post-LA·IR emulation and the left channel pre-LA·IR emulation. USB IN (left & right) sums with the AUX IN signal, post reverb and EFFECTS LOOP.

NOTE: To avoid loopback scenarios, the USB IN (left & right) is not routed to the USB OUT (left & right).

CONNECTIONS

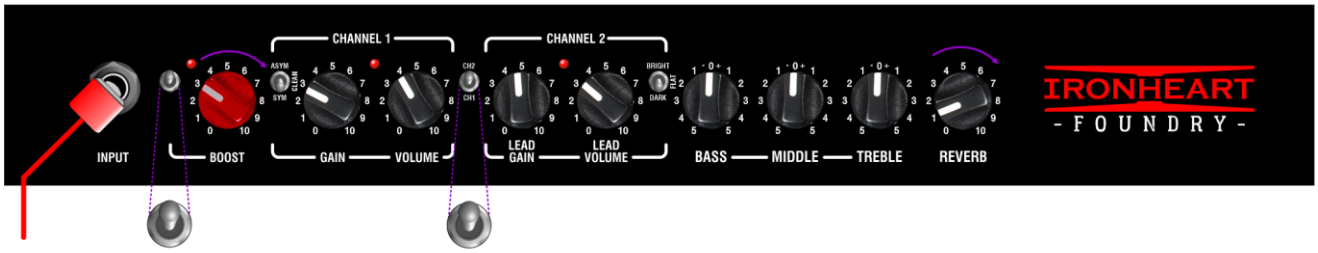
EXTERNAL FX

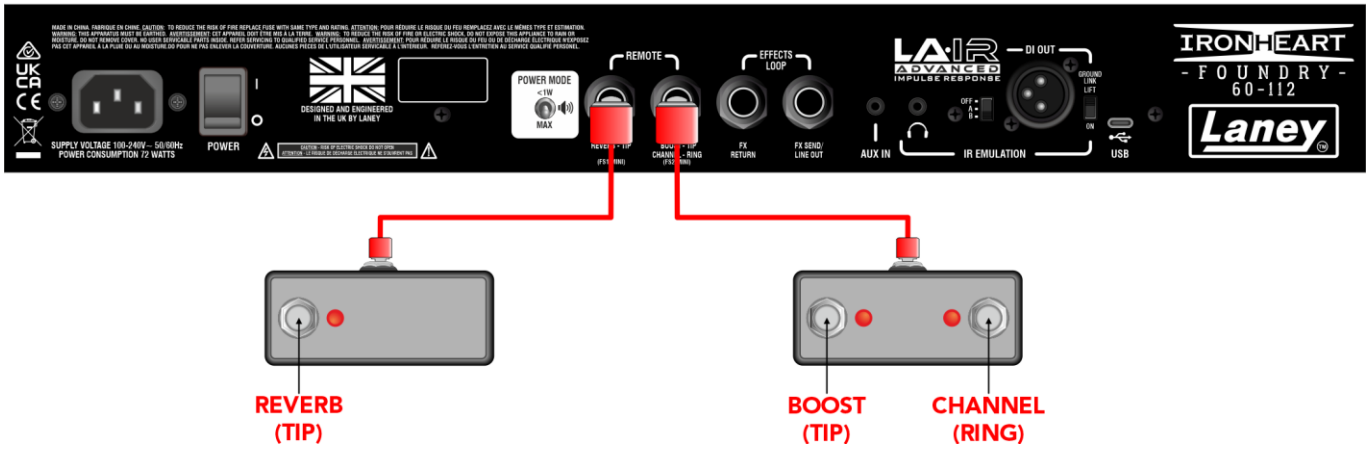
Add you desired FX pedals before amp's INPUT and/or in the EFFECTS LOOP to customise the IRF60-112 tone.



FOOTSWITCH CONNECTION

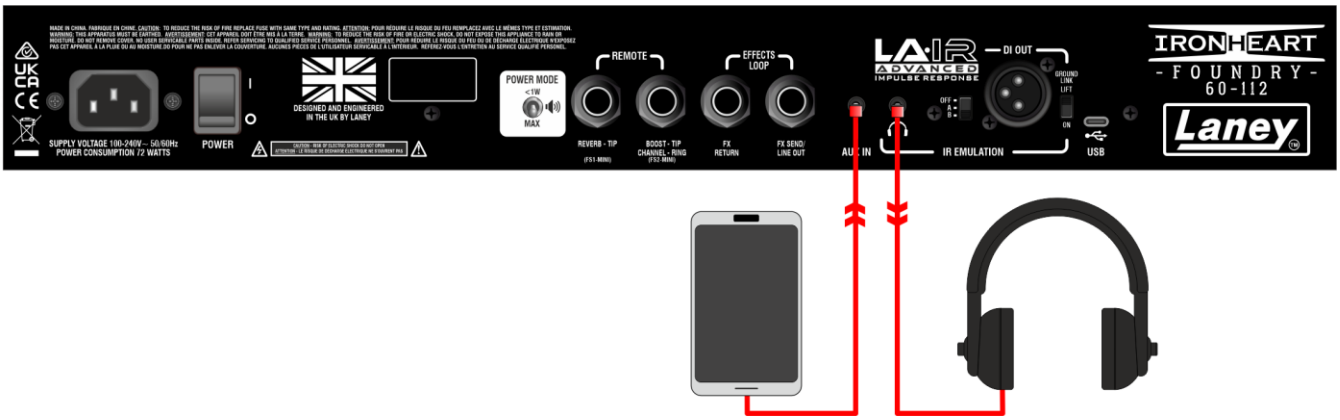
Remote switching the BOOST, CHANNEL and REVERB functions is possible via the REMOTE jacks on the rear panel. BOOST and CHANNEL toggle switches must be in the 'up' position for their respective footswitch controls to work. Laney FS1-MINI and FS2-MINI footswitches (recommended but not included) are shown in the example below:





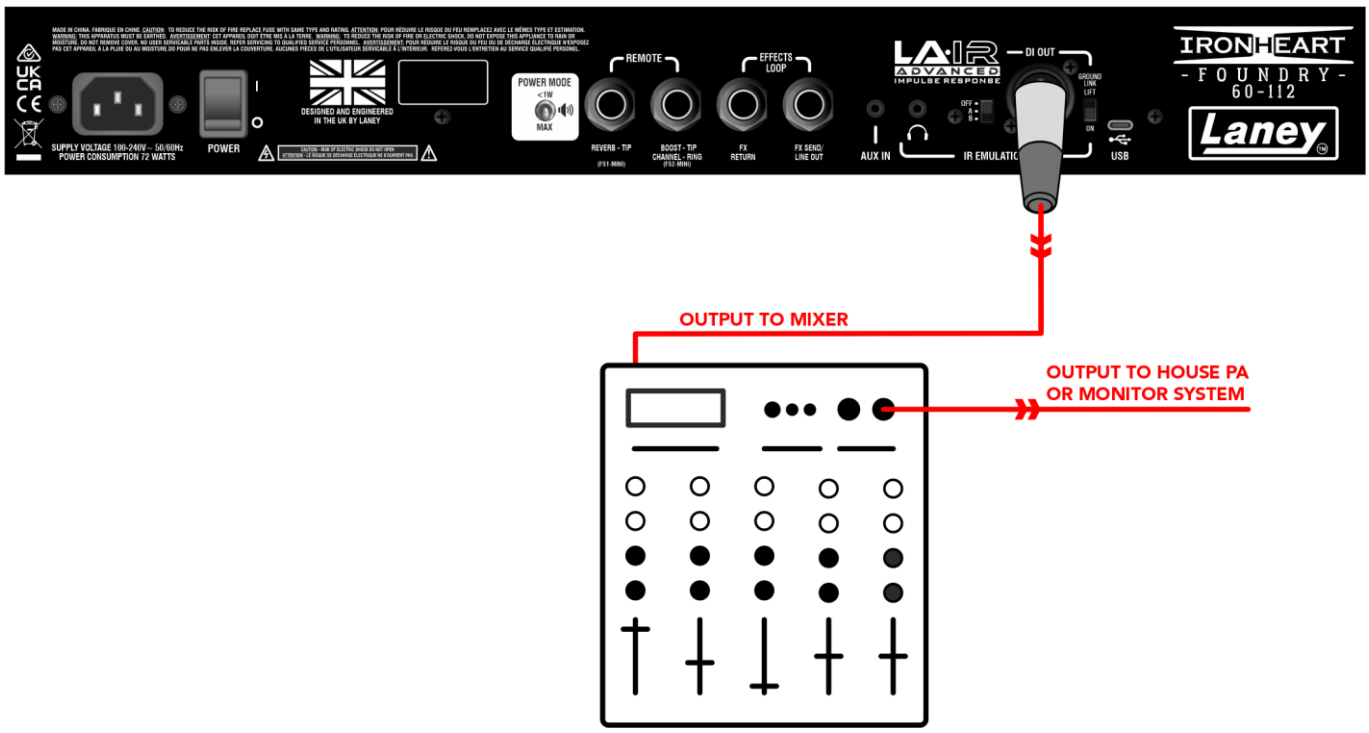
AUX AND HEADPHONES

Add a backing track using the AUX IN and listen with headphones for a private practice session.



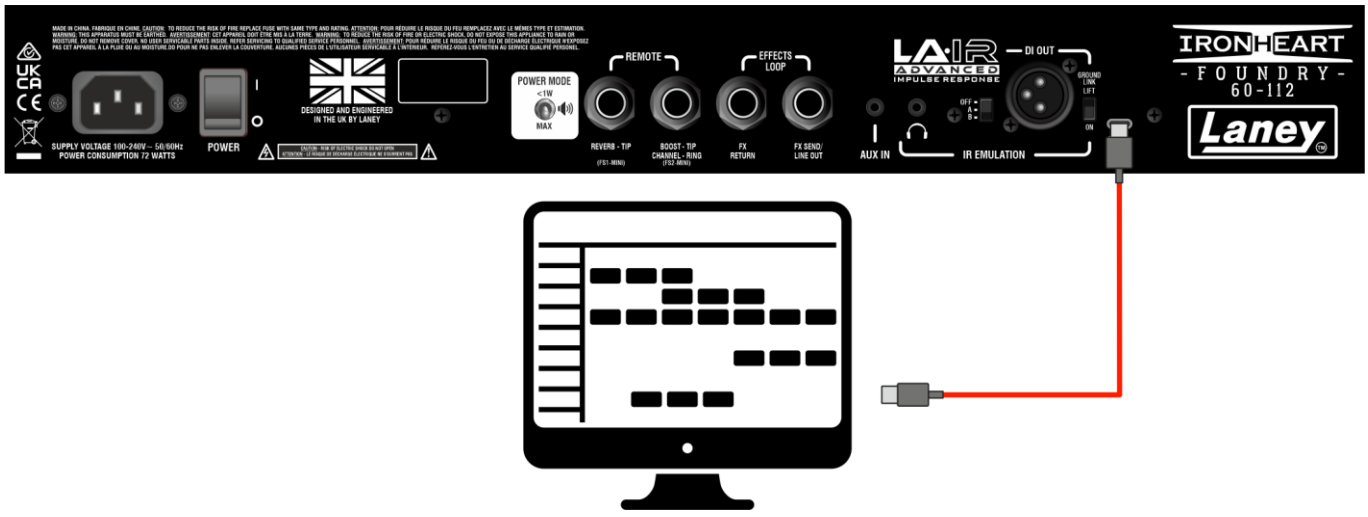
DI OUT

The IRF60-112 has a high-quality speaker emulated DI output that can be connected to a balanced/unbalanced line level input device such as a PA or audio interface to DAW.

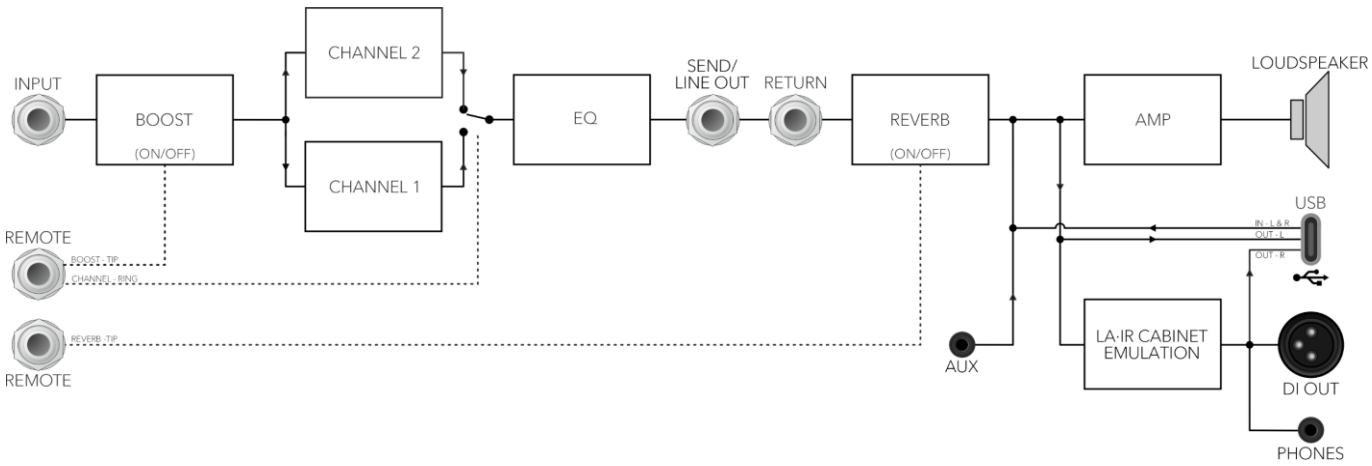


USB

Alternatively, digital audio can be routed via USB to and from a computer.



BLOCK DIAGRAM



THE LA·IR APP

The IRF60-112 is designed to support the free Laney LA·IR app. The app allows you to switch out the loaded IRs with your own, edit their gain as well as offering two 8-band parametric EQs - one for each cab.

All this can be done on the fly during practice, so you can hear the change in your sound as you make edits.

The app runs on Windows® 10/11 and macOS®.

Windows is a trademark of the Microsoft group of companies. macOS is a trademark of Apple Inc.

DOWNLOAD & INSTALLATION

The installers for Windows and macOS can be downloaded from the IRF60-112 product page at the bottom in the downloads section. Click this link to be directed.

WINDOWS

Once downloaded, run the Setup-LAIR_x64.exe found in the downloads folder in file explorer. Follow the installer instructions, accepting the EULA and choosing a suitable location for the install, then press Install to complete.

MAC

Once the .dmg file has been downloaded, drag this into the applications folder to complete the install. Launch the LA·IR app from this folder location from now on.

LA·IR UPDATE

Upon opening, the app will automatically prompt you for an update should a new version be released. We recommend accepting any updates as they may include new features or bug fixes.

FIRMWARE UPDATE

When connecting the IRF60-112 to the LA·IR app, you will be notified if any major firmware updates are available. Some updates may be necessary to gain access to the LA·IR app. We recommend updating so as to improve your user experience.

Minor updates may not show as a pop-up so be sure to check the UPDATE panel in the app from time to time.

USING THE APP

CONNECTING THE IRF60-112

Connecting the IRF60-112 is easily done via the USB Type C cable. Plug one end into the USB Type C socket located on the rear panel and the other into your computer that has the app downloaded.

With the LA·IR app open, power up and connect your IRF60-112 and press the CONNECT button on the app when it shows.

CHANGING THE IRs

Select the LA·IR panel via the sidebar menu on the left (should be the default view when opening the app).

In addition to the two preloaded IRs, the app can be used to swap in your own instead. To load your User IR, click the drop-down box under either Cabinet A/B and select “Import IR” – only .wav files can be used. The app will convert your IR into the required .Lair file format. Do not worry, your original .wav file will not be deleted! The default GS112 & GS412 system IRs will always be available on the app and cannot be deleted.

It is possible to edit the name of User IRs as well as delete them from both the amp and the app. To do so, right click on any IRs under the “User” section and press “EDIT” or “DELETE”.

WARNING: Deleting a User IR is permanent and cannot be reversed.

CHANGING THE GAIN

The gain of each cab IR can also be changed individually via the radial control on the right-hand side, should they be too loud/quiet. This gain will be saved to the IR’s .Lair file automatically so any changes will remain when using the amp without the app.

Simply drag the slider or alternatively use your mouse scroll wheel or double click and manually type the gain you want (in dB). Ranges from -40dB to +6dB.

CHANGING THE EQ

The LA·IR app also comes with an 8-band parametric EQ for each cab. 5 different filters are available, paired with easy-to-use controls allowing you to change the gain, frequency and Q factor depending on the filter applied.

Switch to the TONE panel via the menu sidebar on the left.

WARNING: Any EQ changes will be permanently lost if the app is closed/disconnected without saving!

1. EQ TOGGLE

Turn on and off the EQ for the whole unit (A and B), can be useful for dry/wet testing.

2. DI A+B LINK

Link the DI A and DI B EQs to be the same. This will override DI B to follow DI A when pressed. Unlinking will revert DI B to its previous state.

3. DI CAB SELECT

Choose which cab you want to edit the EQ for. Selected cab is highlighted in black. Only “DI A + B” is selectable when linked.

4. BAND CONTROLS

The main controls for each band are found here. Turn the band on and off and change the filter type you want to apply from the drop-down menu. Choose from peak, high/low pass, and high/low shelf.

Additionally, 3 radial sliders are available to change the gain, centre frequency and Q factor of the filter. The value of each slider can be changed by dragging, using your mouse scroll wheel, or double clicking the number and manually typing in your desired value. Certain filter types won’t have all controls available.

5. FREQUENCY RESPONSE GRAPH

This graph displays the resultant frequency response of all the EQ bands. View your changes live to see how your sound will be affected. Additionally, each band is colour coded so you can see which filter is doing what.

6. BAND NODE

The graph also shows a node corresponding to each band that is currently active. Filter frequency and gain can be modified by dragging the node for the band number you want to change.

For more precise changes we recommend using the BAND CONTROLS (4).

7. SAVE BUTTON

Press to save any unsaved changes to the EQs (both A and B), storing them on the amp to be used without the app. Closing the app (or disconnecting the amp) will lose any changes made since the last save.

SETTINGS PANEL

LANGUAGE

Change the language of the LA·IR app to your preferred language.

RESET DEVICE

This will reset all EQ and gain changes as well as return the IRs back to the factory defaults. This cannot be undone and all user changes will be lost.

ERASING THE USER IRS

Delete all user IRs from the app and amp. These are impossible to get back unless you have the original .wav file to import again so be sure you want to do this. A pop-up warning will show before deleting.

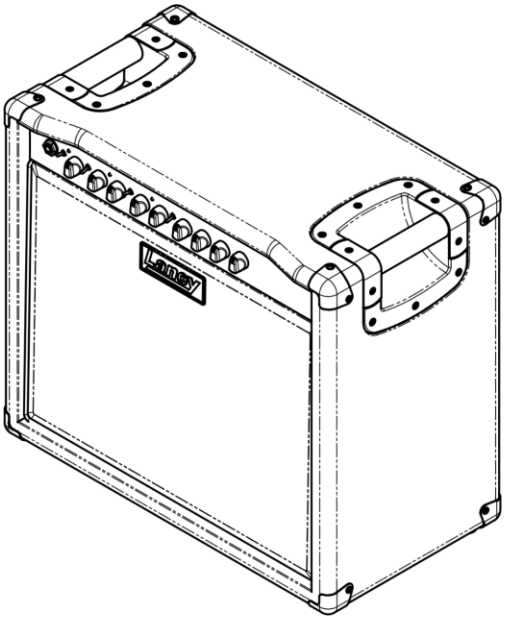
OPEN USER IR FOLDER

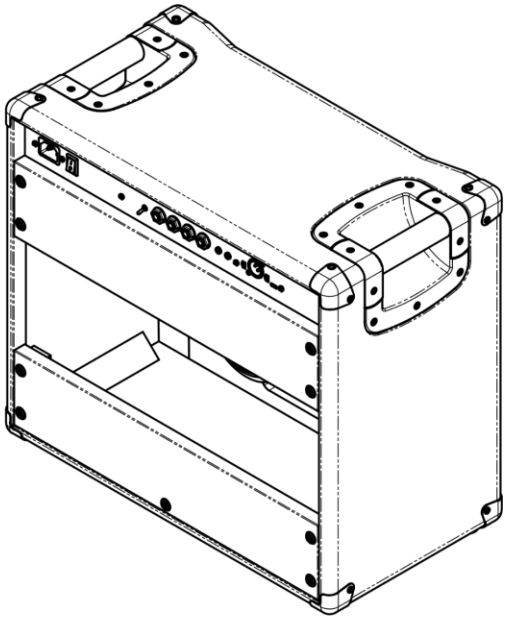
Open the folder where all your imported IRs are stored in the .lair format.

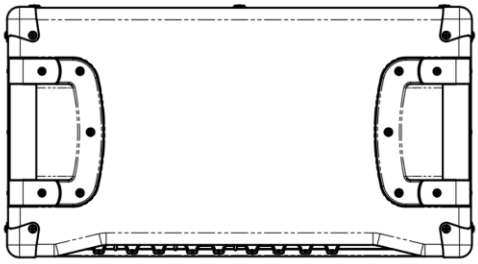
SPECIFICATIONS

Model No	IRF60-112
Name	Ironheart Foundry 60-112
Type	Guitar amplifier combo
Input Impedance	1MΩ
Amplifier Power	60W RMS or low power <1W bedroom mode
Channels	CHANNEL 1 (RHYTHM) , CHANNEL 2 (LEAD) with control panel and footswitchable selection
EQ	Shared BASS, MIDDLE & TREBLE (passive tone stack), gain character switch (CH1) and EQ voicing switch (CH2)
Effects	Adjustable digital springline REVERB with footswitch control and external EFFECTS LOOP
Controls	Switchable pre-BOOST, gain character switch, RHYTHM GAIN & VOLUME, channel switch, LEAD GAIN & VOLUME, tone character (NORMAL, BRIGHT, DARK), BASS, MIDDLE, TREBLE, REVERB & POWER MODE SWITCH
Indicators	LEDs for BOOST, CHANNEL 1 and CHANNEL 2 active, illuminated logo for POWER
Inputs	6.3mm (1/4") mono instrument input jack, 6,3mm FX RETURN jack, 3.5mm stereo AUX IN jack
Outputs	6.3mm FX SEND (doubles as LINE OUT), 3.5mm stereo headphone jack, balanced male XLR DI OUT with switchable LA·IR featuring high quality 1 x 12 and 4 x 12 options
Loudspeaker	12" HH H1260-8 8 Ohm loudspeaker
Other	USB Type C for class compliant audio streaming @48kHz (In and Out) and accessing LA·IR app
Power Supply	Internal SMPSU 100-240V~ universal voltage 50/60Hz. IEC C14 inlet and power on/off switch
Typical Power Consumption	72W
Main Construction Material	Robust composite wood construction (15mm MDF)
Unit dimensions (HWD)	437 x 486 x 261mm, (17.2" x 19.1" x 10.3")
Unit weight	12.2Kg, (26.9 lbs)
Carton dimensions (HWD)	510 x 550 x 325mm, (20.1" x 21.7" x 12.8") , 0.091 m³
Packed Weight	14.6Kg, (32.2 lbs)
EAN Code (Single)	5061098770348

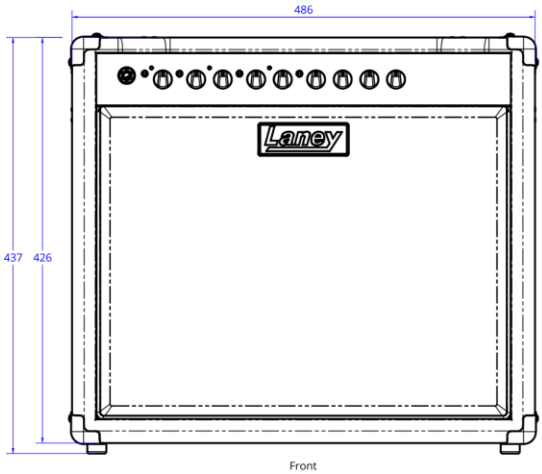
DIMENSIONS



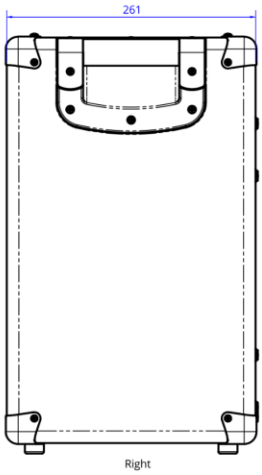




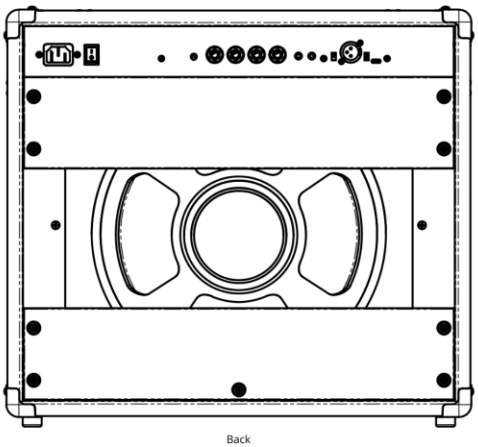
Top



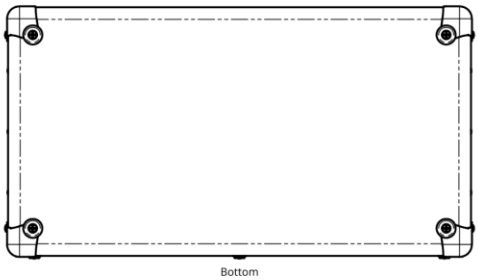
Front



Right



Back



Bottom

SAFETY AND WARNINGS

MANUFACTURER: LANEY AMPLIFICATION. STEELPARK ROAD, COOMBS WOOD BUSINESS PARK WEST, HALESOWEN, B62 8HD, UK

To take full advantage of your new product and enjoy long and trouble-free performance, please read this owner's manual carefully, and keep it in a safe place for future reference.

1) Unpacking: On unpacking your product, please check carefully for any signs of damage that may have occurred whilst in transit from the Laney factory to your dealer. In the unlikely event that there has been damage, please re-pack your unit in its original carton and consult your dealer. We strongly advise you to keep your original transit carton, since in the unlikely event that your unit should develop a fault, you will be able to return it to you dealer for rectification securely packed.
2) Amplifier Connection: To avoid damage, generally it is advisable to establish and follow a pattern for turning on and off your system. With all system parts connected, turn on source equipment, mixers, effects processors etc, BEFORE turning on your amplifier. Many products have large transient surges at turn on and off which can cause damage to your speakers. By turning on your amplifier LAST and making sure its level control is set to a minimum, any transients from other equipment should not reach your loudspeakers. Wait till all system parts have stabilised, usually a couple of seconds. Similarly, when turning off your system always turn down the level controls on your amplifier and then turn off its power before turning off other equipment.
3) 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 complete system. Use good quality shielded cables everywhere else.
4) Servicing: The user should not attempt to service these products. Refer all servicing to qualified service personnel.
5) Heed all warnings.
6) Follow all instructions.
7) Do not use this apparatus near water.
8) Clean only with a dry cloth.
9) Do not block any of the ventilation openings. Install in accordance with manufacturer's instructions.
10) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
11) 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.
12) Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point they exit from the apparatus.
13) Only use attachments/accessories provided by the manufacturer.
14) 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.
15) 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.
16) 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.
17) 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.
18) If this product is to be mounted in an equipment rack, rear support should be provided.
19) 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:
    - 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.
    - The wire that is coloured blue must be connected to the terminal that is marked with the letter N or the colour black.
    - The wire that is coloured brown must be connected to the terminal that is marked with the letter L or the colour red.
20) 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.
21) 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 more than 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 to prevent a permanent hearing loss, if exposure is more than 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 ou inférieur	115

22) If your appliance features a tilting mechanism or a kickback style cabinet, 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.
23) For models with built in Bluetooth. The Bluetooth® word mark and logos are registered trademarks owned by the Bluetooth SIG, Inc. and any use of such marks by Headstock Distribution Ltd is under license. Other trademarks and trade names are those of their respective owners. Laney is a registered trademark of Headstock Distribution Ltd.
    - INCORPORATED RADIO EQUIPMENT DEVICE TECHNICAL SPECIFICATION, REFER TO USER GUIDE
24) For models supplied with a companion mobile or desktop application ("App"), the App is provided as an optional convenience feature and is supplied "as is", "as available" and with all faults. The App may contain bugs, errors or other defects and may not be compatible with all devices, operating systems or future updates. Headstock Distribution Ltd reserves the right to modify, suspend or discontinue the App, or any part of it, at any time. To the maximum extent permitted by applicable law, no warranty is provided and we assume no obligation to provide maintenance, technical support, feature enhancements or compatibility updates. This notice does not affect any statutory rights or obligations that cannot be excluded under applicable law.
25) Symbols & nomenclature used on the product and in the product manuals, intended to alert the operator to areas where extra caution may be necessary, are as follows:

CAUTION:	Intended to alert the user to the presence of uninsulated 'Dangerous Voltage' within the products enclosure that may be sufficient to constitute a risk of electrical shock to persons. Ce symbole est utilisé pur indiquer a l'utilisateur de ce produit de tension non-isolée dangereuse pouvant être d'intensité suffisante pour constituer un risque de choc électrique. Este símbolo tiene el propósito de alertar al usuario de la presencia de '(voltaje) peligroso' que no tiene aislamiento dentro de la caja del producto que puede tener una magnitud suficiente como para constituir riesgo de corrientazo. Dieses Symbol soll den Anwender vor unisolierten gefährlichen Spannungen innerhalb des Gehäuses warnen, die von ausreichender Starke sind, um einen elektrischen Schlag verursachen zu können.
WARNING:	Intended to alert the user of the presence of important operating and maintenance (Servicing) instructions in the literature accompanying the product. Destiné à alerter l'utilisateur de la présence d'instructions importantes d'exploitation et de maintenance (entretien) dans la documentation accompagnant le produit. Este símbolo tiene el propósito de la alertar al usuario de las presencias de instrucciones importantes sobre la operación y mantenimiento en la literatura que viene con el producto. Dieses Symbol soll den Benutzer auf wichtige Instruktionen in der Bedienungsanleitung aufmerksam machen, die Handhabung und Wartung des Produkts betreffen.
CAUTION: ATTENTION : PRECAUCION: VORSICHT:	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. Risques de choc électrique - NE PAS OUVIRIR. Afin de réduire le risque de choc électrique, ne pas enlever le couvercle. Il ne se trouve a l'intérieur aucune pièce pouvant être réparée par l'utilisateur. Confier l'entretien a un personnel qualifié. Riesgo de descarga eléctrica - NO ABRIR. Para reducir el riesgo de descarga eléctrica, no quite la cubierta. No hay piezas reparables por el usuario en el interior. Remita el servicio a personal calificado. Risiko - Elektrischer Schlag! Nicht offen! Um das Risiko eines elektrischen Schlages zu vermeiden, nicht die Abdeckung entfernen. Es befinden sich keine Teile darin, die vor Anwender repariert werden konnten. Reparaturen nur von qualifiziertem Fachpersonal durchführen lassen.
WARNING: ADVERTISSEMENT : ADVERTENCIA: ACHTUNG:	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 for further warnings. Afin de prévenir les risques de décharge électrique ou de feu, n'exposez pas cet appareil a la pluie ou a l'humidité. Avant d'utiliser cet appareil, lisez les avertissements supplantais situes dans le guide. Para evitar descargas eléctricas o peligro de incendio, no exponga este aparato a la lluvia ni a la humedad. Antes de usar este aparato, lea las instrucciones de funcionamiento para conocer más advertencias. Um einen elektrischen Schlag oder Feuergefahr zu vermeiden, sollte dieses Gerat nicht dem Regen oder Feuchtigkeit ausgesetzt werden. Vor Inbetriebnahme unbedingt die Bedienungsanleitung lesen.
FCC	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.
CE	SIMPLIFIED EU DECLARATION OF CONFORMITY Hereby, Laney Electronics declares that the radio equipment is in compliance with Directives 2014/53/EU, 2011/65/EU, 2009/125/EU This product conforms to the requirements of the following European Regulations, Directives & Rules: CE Mark (93/68/EEC), Low Voltage (2014/35/EU), EMC (2014/30/EU), RoHS (2011/65/EU), ErP (2009/125/EU) *For models with built in wireless communication: This product conforms to the requirements of the following European Regulations, Directives & Rules: CE Mark (93/68/EEC), Low Voltage 2014/35/EU, EMC (2014/30/EU), RoHS (2011/65/EU), RED (2014/30/EU), ErP, 2009/125/EU Full text of the EU declaration of conformity is available at the following internet address: http://support.laney.co.uk/approvals
UK CA	The object of the declaration described above is in conformity with the relevant statutory requirement Electrical Equipment (Safety) Regulations 2016, Electromagnetic Compatibility Regulations 2016, The Restriction of the use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012, The Ecodesign for Energy-Related Products and Energy Information, (Amendment) (EU Exit) Regulations 2012
	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.

IRONHEART
- FOUNDRY -

LANEY AMPLIFICATION
STEELPARK ROAD, COOMBSWOOD BUSINESS PARK WEST, HALESOWEN, B62 8HD. UK
FOR THE LATEST INFORMATION PLEASE VISIT WWW.LANEY.CO.UK

IN THE INTEREST OF CONTINUED DEVELOPMENT, LANEY RESERVES THE RIGHT TO AMEND PRODUCT SPECIFICATION WITHOUT PRIOR NOTIFICATION.

V1.1