

**IRT212**

**IRT412**

**IRT412A**

**IRONHEART**

**Laney**  
POWER TO THE MUSIC

[www.Laney.co.uk](http://www.Laney.co.uk)

# IMPORTANT SAFETY INSTRUCTIONS

## IMPORTANT SAFETY INSTRUCTIONS

**1). Read Instructions** carefully before installing or operating this product.

**2). Retain these Instructions.**

**3). Comply with Warnings:** All warnings and instructions for these products should be adhered to.

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

**5). 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 permissible noise level exposure in the chart opposite. According to OSHA, any exposure in excess of the above permissible limits could result in some hearing loss. Ear plugs or protectors in 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 exceeds the limits set forth opposite. 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

## INSTRUCTIONS DE SÛRETÉ IMPORTANTES - En français

**1). Lisez les instructions** soigneusement avant d'installer ou actionner ce produit.

**2). Maintenez ces instructions.**

**3). Conformez-vous aux avertissements:** Tous les avertissements et instructions pour ces produits devraient.

**4). Attention:** Ces systèmes de haut-parleur professionnels sont capables de produire des niveaux très élevés de pression acoustique. Prenez soin avec le placement et l'opération d'éviter les niveaux excessifs qui peuvent endommager permanent audition.

**5). L'exposition** aux niveaux extrêmement élevés de bruit peut causer une perte d'audition permanente. Les individus varient considérablement dans la susceptibilité à la perte d'audition due au bruit, mais presque chacun perdra une certaine audition si exposé au bruit suffisamment intense pendant un temps suffisant. L'administration du gouvernement des États-Unis (OSHA) a spécifié les expositions permises suivantes de niveau de bruit : Selon l'OSHA, n'importe quelle exposition au-dessus des limites permises ci-dessus a pu avoir comme conséquence une certaine perte d'audition. Des boules quies ou les protecteurs aux canaux d'oreille ou au-dessus des oreilles doivent être portés en actionnant ce système d'amplification afin d'empêcher une perte d'audition permanente, si l'exposition est au-dessus des limites comme déterminé ci-dessus. Pour s'assurer contre l'exposition potentiellement dangereuse aux niveaux élevés de pression acoustique, on lui recommande que toutes les personnes aient exposé à l'équipement capable de produire les niveaux élevés de pression acoustique tels que ce système d'amplification soient protégées par les protecteurs auriculaires tandis que cette unité est en fonction.

Durée par Jour (heures)	Niveau sonore moyen (dBA)
8	90
6	92
4	95
3	97
2	100
1 ½	102
1	105
½	110
¼ ou inférieur	115

WICHTIGE SICHERHEITSVORSCHRIFTEN - Auf deutsch

- 1). **Vor der Installation** oder dem Betrieb dieses Produktes lesen Sie Anweisungen sorgfältig.
- 2). **Behalten Sie diese Anweisungen.**
- 3). **Willigen Sie mit Warnungen ein:** Alle Warnungen und Anweisungen für diese Produkte sollten an gehaftet werden.
- 4). **Vorsicht:** Diese Berufslautsprechersysteme sind zur Erzeugung der sehr hohen Schalldruckpegel fähig. Passen Sie mit Platzierung und Betrieb auf, übermäßige Niveaus zu vermeiden, die dauerhaften Hörfähigkeitsschaden verursachen können.
- 5). **Belastung** durch extrem hohe Lärmpegel kann zu dauerhaftem Gehörverlust führen. Die Anfälligkeit für durch Lärm bedingten Gehörverlust ist von Mensch zu Mensch verschieden, das Gehör wird jedoch bei jedem in gewissem Maße geschädigt, der über einen bestimmten Zeitraum ausreichend starkem Lärm ausgesetzt ist. Die US-Arbeitsschutzbehörde (Occupational and Health Administration, OSHA) hat die folgenden zulässigen Pegel für Lärmbelastung festgelegt:

Laut OSHA kann jede Belastung über den obenstehenden zulässigen Grenzwerten zu einem gewissen Gehörverlust führen. Sollte die Belastung die obenstehenden Grenzwerte übersteigen, müssen beim Betrieb dieses Verstärkungssystems Ohrstöpsel oder Schutzvorrichtungen im Gehörgang oder über den Ohren getragen werden, um einen dauerhaften Gehörverlust zu verhindern. Um sich vor einer möglicherweise gefährlichen Belastung durch hohe Schalldruckpegel zu schützen, wird allen Personen empfohlen, die mit Geräten arbeiten, die wie dieses Verstärkungssystem hohe Schalldruckpegel erzeugen können, beim Betrieb dieses Geräts einen Gehörschutz zu tragen.

Dauer pro Tag in Stunden	Geräuschpegel dBA langsame Reaktion
8	90
6	92
4	95
3	97
2	100
1 ½	102
1	105
½	110
¼ oder weniger	115

INSTRUCCIONES DE SEGURIDAD IMPORTANTES - En español

- 1). **Lea las instrucciones** cuidadosamente antes de instalar o de funcionar este producto.
- 2). **Conserve estas instrucciones.**
- 3). **Confórmese con advertencias:** Todas las advertencias e instrucciones para estos productos se deben adherir.
- 4). **Precaución:** Estos sistemas de altavoz profesionales son capaces de generar niveles de presión sana muy altos. Tenga especial cuidado con la colocación y la operación evitar los niveles excesivos que pueden causar daño permanente de la audiencia.
- 5). **La exposición** a altos niveles de ruido puede causar una pérdida permanente en la audición. La susceptibilidad a la pérdida de audición provocada por el ruido varía según la persona, pero casi todo el mundo perderá algo de audición si se expone a un nivel de ruido suficientemente intenso durante un tiempo determinado. El Departamento para la Salud y para la Seguridad del Gobierno de los Estados Unidos (OSHA) ha especificado las siguientes exposiciones al ruido permisibles:

De acuerdo al OSHA, cualquier exposición que exceda los límites arriba indicados puede producir algún tipo de pérdida en la audición. Protectores para los canales auditivos o tapones para los oídos deben ser usados cuando se opere con este sistema de sonido para prevenir una pérdida permanente en la audición, si la exposición excede los límites indicados más arriba. Para protegerse de una exposición a altos niveles de sonido potencialmente peligrosa, se recomienda que todas las personas expuestas a equipamiento capaz de producir altos niveles de presión sonora, tales como este sistema de amplificación, se encuentren protegidas por protectores auditivos mientras esta unidad esté operando.

Duración por Día en Horas	Nivel de Sonido dBA, Respuesta Lenta
8	90
6	92
4	95
3	97
2	100
1 ½	102
1	105
½	110
¼ o menos	115

## WELCOME

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 parent's garage.

Since then we have moved on from strength to strength developing an extensive range of guitar, bass, public address 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,

A handwritten signature in black ink, appearing to read 'Lyndon Laney', with a stylized flourish at the end.

Lyndon Laney CEO

*IRT212*

The Ironheart IRT212, IRT412 & IRT412A are a series of cabinets optimised for use with IRT120H, IRT60H, IRT60-212 - or indeed any amplifier in the Laney range.

The IRT212 is a 2 x 12" cabinet rated at 160 watts (8 ohms) and can be used in isolation or combined with other Laney enclosures. Construction features a robust plywood cabinet, with large top mounted 90 degree bar handles for ease of portability, textured black fret material, steel corner protection and top mounted castor cups.

Rated at 320 watts (16 ohms) the IRT412 can be used singularly or as paired with an IRT412A to form an 8 x 12 stack. In addition to the similar design & construction of its smaller brother, both of the 412's also have a set of robust steel castors to make life easier on the road.

All the cabinets have similar appearance, all have a great sound, choose whichever combination is best for your rig.



Every Laney product is extensively play tested by experienced guitarists to ensure it has the tone and durability to perform at the very highest level, before being shipped to our customers.

We hope you enjoy using your new extension cabinet as much as we enjoyed designing and making it. It should give you years of trouble-free service, however please take time to read this manual, as it will allow you to get the best from your Ironheart Cabinet.

Best wishes from all at Laney.

*IRT412**IRT412A*

## GENERAL INSTRUCTIONS

In order 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 repack 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 your dealer for rectification securely packed.

2). Amplifier Connection: In order to avoid damage, 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, tape decks, cd players, mixers, effects processors 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 level control is set to a minimum, any transients from other equipment should not reach your loud speakers. 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 guitar 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.

4). Servicing: The user should not attempt to service these products. Refer all servicing to qualified service personnel



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.

# IRT212

# IRT412/A

Power RMS	160 Watts	320 Watts
Inputs	2 x 6.3 Jack sockets	2 x 6.3 Jack sockets
Impedance	8 Ohms	16 Ohms
Drivers	2 x 12" Custom Designed Driver	4x12" Custom Designed Drivers
Cabinet Design	Rugged plywood construction, black metal corners, black textured fret material, castor cups, comfortable top edge bar handles and rubber feet	Rugged plywood construction, black metal corners, black textured fret material, castor cups, comfortable side bar handles, metal castors and rubber feet. Choice of angled or straight design.
Weight	19Kg	30Kg
Overall Dimensions	W 715 x H 483 x D 358	W 715 x H 728 (over feet) 778 (over castor) x D 358



From amplifier speaker socket

Optional link out to Input Socket on another Extension Cabinet



From amplifier speaker socket

IRT412 & IRT412A rear panels are similar

Optional link out to Input Socket on another Extension Cabinet

### UNPACKING INSTRUCTIONS (IRT412/A)

1. Open the top of the carton, remove the top foam tray, side protectors and open the protective bag, pull back to sides.
2. Flip the carton over. Cabinet now rests on its castors.
3. Remove the carton, bottom foam tray and protective bag.
4. Enjoy.



