



Operation Manual



PCCbox Series

IBZA-PCCbox
Self Powered Loudspeakers

*Keep these important operatin instructions.
Check www.tecnare.com for updates*

General Information

IBZA-PCCBox Series Operation Manual

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The information contained in this manual has been carefully checked for accuracy, at the time of going to press, however no guarantee is given with respect to the correctness.

Exel Acoustics SL accepts no responsibility for any errors or inaccuracies that may appear in this manual or the products and software described in it. Technical specifications, dimensions, weights and properties do not represent guaranteed qualities. As manufacturers we reserve the right to make alterations and modifications within the framework of legal provisions, as well as changes aimed at improving quality.

EXEL ACOUSTICS SL

CL Encinar, 282 – Pol. Ind. Monte Boyal
45950 Casarrubios del Monte (Toledo) Spain
Phone: (+34) 918 170 110 Fax:

e-mail: support@tecnare.com www.tecnare.com

IMPORTANT SAFE INSTRUCTIONS

Before using our product, be sure to carefully read the manual and safe Instructions. Keep this document with the device all time.

1. Read these instructions
2. Keep these instructions.
3. Heed all warnings.
4. Follow all SAFETY INSTRUCTIONS as well DANGER and OBLIGATION warnings.
5. Only use attachments / accessories specified by Exel Acoustics SL.
6. Do not use this apparatus near water.
7. Clean only with dry cloth.
8. Do not block any ventilation openings. Install in accordance with Exel Acoustics' instructions.
9. Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus (including amplifiers) that produce heat.
10. Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one more wide than the other. A grounding type plug has two blades and a third pin are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
11. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles and the point where they exit from the apparatus.
12. Unplug this apparatus during lightning storms or when unused for long periods of time.
13. Refer all servicing to qualified service personnel. Service is required when the apparatus has been damaged in any way, such as power-supply cord or plug damaged, liquid has been spilled or objects have fallen into the apparatus, this apparatus has been ex-

posed to rain or moisture, does not operate normally, or has been dropped.

CAUTION: To reduce the risk of fire of electric shock, do not expose this device to rain or moisture.

14. Use the mains plug to disconnect the device from mains.
15. Do not expose this equipment to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the equipment.
16. The mains plug of the power supply cord shall remain readily operable.
17. Do not connect the unit's output to any other voltage source, such as battery, mains source, or power supply, regardless of whether the unit is turned on or off.
18. Do not remove the top (or bottom) cover. Removal of the cover will expose hazardous voltages. There are no user serviceable parts inside and removal may void warranty.
19. If the equipment is used in a manner not specified by the Exel Acoustics, the protection by the equipment may be impaired.

CAUTION: Do not remove any covers, loosen any fixings or allow items to enter any aperture

CAUTION: The rear of the product may get hot. Avoid direct skin contact during operation and for at least 5 minutes after power has been isolated.

CAUTION: The product must only be positioned at floor level when operated in a horizontal position.

IMPORTANTES INSTRUCCIONES DE SEGURIDAD

Antes de usar este producto, asegúrese de leer cuidadosamente el manual y las instrucciones de seguridad.

1. Lea estas instrucciones.
2. Conserve estas instrucciones.
3. Respete y siga todas las advertencias.
4. Siga todas las INSTRUCCIONES DE SEGURIDAD, así como las advertencias de PELIGRO y OBLIGACIÓN.
5. Utilice solo accesorios autorizados por Exel Acoustics SL.
6. No use este aparato cerca del agua.
7. Limpiar solo con un paño seco.
8. No bloquee las aberturas de ventilación e intalar de acuerdo con las instrucciones de Exel Acoustics.
9. No instale el aparato cerca de fuentes de calor tales como radiadores, calefactores estufas u otros aparatos que produzcan calor.
10. Esta unidad debe ser conectada mediante un cable de alimentación de 3 hilos. Por razones de seguridad, LA CONEXIÓN A TIERRA NO DEBE DESCONECTARSE EN NINGUNA CIRCUNSTANCIA.
11. Proteja el cable de alimentación de ser pisado o aplastado, especialmente los enchufes, receptáculos y en el punto en el que salen del aparato.
12. Desconecte este aparato durante tormentas eléctricas, terremotos o cuando no vaya a emplearse durante largos periodos.
13. Confíe las reparaciones a personal cualificado. Se requiere servicio cuando el aparato ha sido dañado de alguna manera como por ejemplo si el cable de alimentación o el enchufe está dañado, se ha derramado líquido o han caído objetos dentro del aparato,

el aparato ha sido expuesto a lluvia o a la humedad, no funciona con normalidad o se ha caído.

PRECAUCIÓN: Para reducir el riesgo de incendio por desgarga eléctrica, no exponga este aparato a la lluvia o a la humedad.





14. Desconecte completamente este aparato de la red eléctrica desconectando el cable de alimentación.
15. No exponga este equipo a salpicaduras ni coloque sobre él objetos que contengan líquidos, tales como vasos o botellas. Equipo IP20.
16. El enchufe o la conexión a red debe ser fácilmente accesible.
17. No conecte la salida de la unidad a ninguna otra fuente de voltaje, como batería o fuente de alimentación independientemente de si la unidad está encendida o apagada.
18. No retire la cubierta superior (o inferior). La retirada de la cubierta lo expondrá a voltajes peligroso. No hay piezas reparables por el usuario en el interior y su extracción podría anular la garantía.
19. Si el equipo se utiliza de la forma no especificada por Exel Acoustics, la protección del equipo puede verse afectada.

PRECAUCIÓN: No retire la cubiert, afloje tornillos o permita la entrada de elementos por ninguna abertura

PRECAUCIÓN: La parte trasera del equipo puede calentarse. Evite el contacto directo con la piel durante su funcionamiento y durante, al menos, 5 minutos después de que se haya apagado

PRECAUCIÓN: El equipo solo debe colocarse en el suelo cuando se opera en posición horizontal.

SYMBOL USED

			
Dangerous voltages; risk of electrical shock	Important operating instructions	Frame or chassis	Protective earth ground
Pour indiquer les risques résultant de tensions dangereuses	Pour indiquer important Instructions	Masse, chassis	Terre de protection
Warnung vor gefährlicher elektrischer Spannung	Wichtige Betriebsanweisung oder Gebrauchsanleitung	Rahmen oder Gehäuse	Masse Schutzleiter
Presencia de voltajes peligrosos	Importantes instrucciones operativas	Masa o chasis	Puesta a tierra



DO NOT EXPOSE TO
RAIN OR MOISTURE



NE PAS EXPOSER A LA
PLUIE NI A L'HUMIDITE



AVERTISSEMENT DE SECURITE

Pour déconnecter l'appareil de l'alimentation principale de façon permanente, débranchez le connecteur du câble fourni à l'arrière de l'appareil.

Ne retirez pas les couvercles, ne desserrez pas les fixations et ne laissez aucune pièce s'introduire dans les ouvertures.

Ne placez pas d'objets contenant du liquide à proximité de l'appareil.

Ne remplacez le fusible de réseau principal que par un fusible du même type.

Le radiateur arrière de cet appareil devient chaud. Evitez tout contact direct avec la peau pendant le fonctionnement et au moins 5 minutes après la mise hors tension de l'appareil

STANDARDS

FOR CUSTOMERS IN EUROPE



This product complies with both the LVD (electrical safety) 73/23/EEC and EMC (electromagnetic compatibility) 89/336/EEC directives issued by the commission of the European community.

Compliance with these directives implies conformity with the following European standards:

EN60065	Product safety
EN55103-1	EMC emissions
EN55103-2	EMC immunity

This product is intended for the following electromagnetic environments: E1, E2; E3 & E4.

THIS PRODUCT MUST BE EARTHED. Use only a flexible cable or cord with a green and yellow core which must be connected to the protective earthing terminal of a suitable mains plug or the earthing terminal of the installation. The cord must be a maximum of 2m long, have a 2.5mm² CSA, a 300/500V rating and comply with EN50525-2-11 / H05W-F.

THIS PRODUCT IS DESIGNED FOR PERMANENT INSTALLATION. It must be fitted in to a 19" rack enclosure and not operated unless so installed. The rack enclosure should be open at the front and back to allow free ventilation and movement of air through the product.

FOR CUSTOMERS IN THE USA

This product has been tested for electrical safety and complies with UL60065 7th edition

THIS PRODUCT MUST BE EARTHED. Use only a flexible cable or cord with a green or green / yellow core which must be connected to the protective earthing terminal of a suitable mains plug or the earthing terminal of the installation. The cord must be a maximum of 6' long, be 14AWG, have a rating SJ, SJT, SJE or 300/500V H05W-F and be marked VW-1.

THIS PRODUCT IS DESIGNED FOR PERMANENT INSTALLATION. It must be fitted in to a 19" rack enclosure and not operated unless so installed. The rack enclosure should be open at the front and back to allow free ventilation and movement of air through the product.

DECLARATION OF CONFORMITY WITH FCC RULES

We, EXEL Acoustics SL, CL Encinar 282, Pol. Ind. Monte Boya, 45950 - Casarrubios del Monte (Toledo), España, declare under our sole responsibility that this family of devices, complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FEDERAL COMMUNICATIONS COMMISSION NOTICE

An example of 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 and commercial 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 distance between the equipment and the receiver.
- Connect the equipment to 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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

FOR CUSTOMERS IN THE CANADA

This product complies with CA /CSA C22.2 No.60065-03
Ce produit est conforme avec CA /CSA C22.2 No.60065-03

THIS PRODUCT MUST BE EARTHED. Use only a flexible cable or cord with a green or green / yellow core which must be connected to the protective earthing terminal of a suitable mains plug or the earthing terminal of the installation. The cord must be a maximum of 6' long, be 14AWG, have a rating SJ, SJT, SJE or 300/500V H05W-F and be marked VW-1.

CE PRODUIT DOIT ÊTRE MIS À LA TERRE. Utilisez uniquement un câble souple avec un noyau vert ou vert / jaune qui doit être relié à la borne de terre de connecteur d'alimentation ou la borne de terre de l'installation. Le cordon doit être un maximum de 6' (2m) de long, 14 AWG (2.5mm² CSA), être classé SJ, SJT, SJE ou 300/500V H05W-F et être marquée VW-1.

THIS PRODUCT IS DESIGNED FOR PERMANENT INSTALLATION. It must be fitted in to a 19" rack enclosure and not operated unless so installed. The rack enclosure should be open at the front and back to allow free ventilation and movement of air through the product.

CE PRODUIT EST CONÇU POUR UNE INSTALLATION PERMANENTE. Il doit être installé dans un boîtier rack 19-in. Le rack devrait être ouvert à l'avant et l'arrière pour permettre la ventilation et le mouvement d'air libre à travers le produit .

DECLARATION OF CONFORMITY WITH CANADIAN ICES-003

This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

DECLARACIÓN DE CONFORMIDAD

DECLARATION OF CONFORMITY

EXEL ACOUSTICS SL

CL Encinar, 282. Polígono Industrial Monte Boyal. 45950 – Casarrubios del Monte (Toledo), España (Spain).

Declara que los productos IBZA-PCCbox Series y sus respectivas opciones, cumple con los objetivos de las Directivas:

Declare under our sole responsibility that devices in the IBZA-PCCbox range of products comply with relating Directives:

- (1) Directiva de Baja Tensión - 2014/35/UE
- (2) Directiva de Compatibilidad Electromagnética - 2014/30/UE
- (3) Directiva RoHS - 2011/65/UE
- (4) Directiva RAEE - 2012/19/UE



- (1) *Low Voltage Directive 2014/35/EU*
- (2) *EMC 2014/130/EU*
- (3) *RoHS Directive 2011/65/EU*
- (4) *WEEE Directive 2012/19/EU*

Y es conforme a las siguientes Normas Armonizadas Europeas:
In compliance with these Harmonized European Norms:

- (1) EN60065 8th. Audio, video and similar electronic apparatus. Safety requirements.
- (2) EN55032:2012. EMC emissions & immunity.
- (3) EN55035-2017

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1. Welcome and unpacking

1.1. Welcome to Tecnare

Thank you for choosing a Tecnare® **IBZA-PCCbox Series** “Made In Spain” for your application.

Please spare a little time to study the contents of this manual, so that you obtain the best possible performance from this unit.

All Tecnare® products are carefully engineered for world-class performance and reliability.

If you would like further information about this or any other Tecnare® product, please contact us. We look forward to helping you in the near future.

As part of a continuous evolution of techniques and standards, Exel Acoustics SL as manufacturer of Tecnare® products reserve the right to change the specifications of its products and the content of its documents without prior notice.

Updates and supplementary information are available on the Tecnare® website:

<http://www.tecnare.com>

Tecnare Technical Support is available at:

- (T): +34 918 170 110 - +34 918 171 001
- (e-mail): support@tecnare.com

Thank you again for placing your confidence in Tecnare® products.

1.2. Overview the IBZA-PCCBox Series

Tecnaire **IBZA-PCCbox** Series is the ultimate self-powered reference for rental productions, fixed installations and dance clubs environments. A combination of high-end audio, sound quality, stunning aesthetics, extreme sound pressure level and reliability. IBZA is a family of distinct format of loudspeaker systems, engineered for different short-throw applications, including FOH systems, distributed systems, side-fill monitors, complementary fills and, of course, dance environments, where high-output, low-distortion, and the highest quality sound are required.

The IBZA-PCCbox Series is formed from:

- **IBZA10-PCCbox**, self-powered enclosure, 110° axis-symmetric, 65Hz-18KHz
- **IBZA12-PCCbox**, self-powered enclosure, (50°x100°)x60°, 56Hz-18KHz
- **IBZA15-PCCbox**, self-powered enclosure, 80°x50°, 48Hz-18KHz

IBZA Series constitutes a broad range of point sources, full range loudspeakers that providing high SPL, different directivities patterns and a good sonic performance off-axis.

The IBZA Series is suited to various sound reinforcement applications as a main or complementary system.

IBZA Series enclosures are easy to integrate, combining sonic character with style. Its aesthetics appearance makes it ideal for the most demanding architectural environments.

The PCCbox Series features a Class D bi-amplified unit with a outstanding performance that incorporates a high quality Analogue Devices® DSP with a fixed factory -presets.

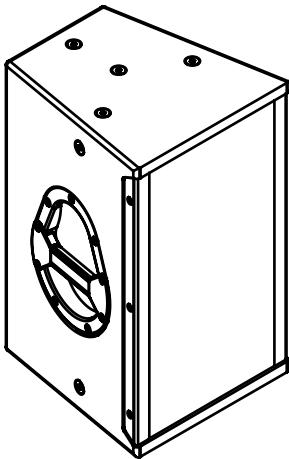
Applications:

- ***Dance Club***
- ***Theatre and corporate events***
- ***House of worship***
- ***Touring***
- ***Live music venues***

Main Characteristics:

- ***Built in proprietary hardware for simple, fast and safe rigging.***
- ***Enclosures made with the latest techniques ensuring a perfect and rigid construction.***
- ***16mm or 18mm birch plywood. Finished in black semi-matt textured Durawood weatherized coating. One recessed carrying handle.***
- ***Powder coated perforated steel grid with acoustically transparent reticulated foam.***

1.3. The IBZA PCCbox Series Loudspeaker

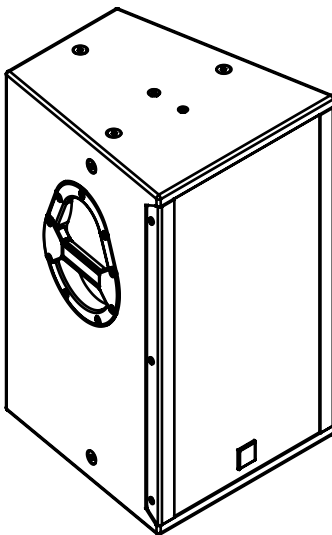


IBZA10-PCCbox

The Tecnares IBZA10-PCCbox self-powered loudspeakers are comprised of:

- *One 10-inch driver and one 1-inch HF compression driver.*
- *A two-channel class H amplifier.*
- *Pole mount socket*
- *Switching power supply*

The IBZA10-PCCbox is compact full-range loudspeakers where driver, DSP control and amplifier are integrated into a compact trapezoidal enclosure. The 700W peak power of Class-D amplifier provides extended bandwidth, improved dynamic range and substantial power without endangering the drivers. It has a highly extended bass performance for such a small volume, with a well-balanced mid-high section.

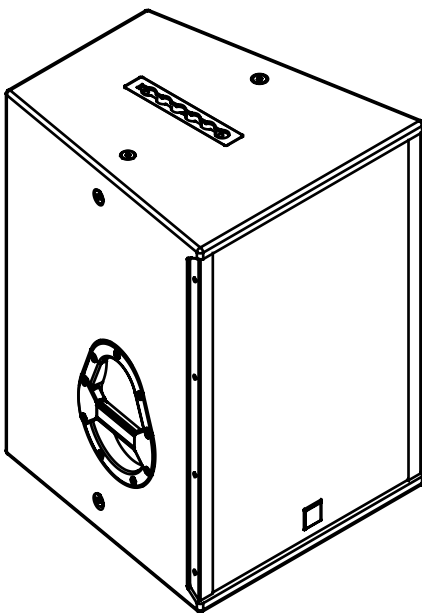


IBZA12-PCCbox

The Tecnares IBZA12-PCCbox self-powered loudspeakers are comprised of:

- *One 12-inch driver and one 1-inch HF compression driver.*
- *A two-channel class H amplifier.*
- *Asymmetrical Dispersion rotatable CD horn*
- *Switching power supply*

The IBZA12-PCCbox is compact full-range loudspeakers where driver, DSP control and amplifier are integrated into a compact trapezoidal enclosure. The box houses multiple internal rigging points for ground-support, truss and wall mounting, screw for an external pole mount socket. This two-way system is designed for applications where very high output is required from a compact enclosure. It has been designed for use as standalone full-range speaker or together with a passive subwoofer.



IBZA15-PCCbox

The Tecnares IBZA15-PCCbox self-powered loudspeakers are comprised of:

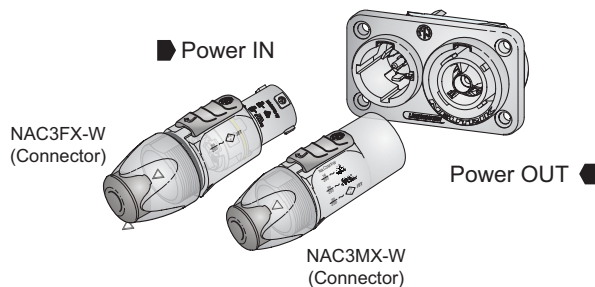
- *One 15-inch driver and one 1.4-inch HF compression driver.*
- *A two-channel class H amplifier.*
- *Pole mount socket*
- *Switching power supply*


The IBZA15-PCCbox is compact full-range loudspeakers where driver, DSP control and amplifier are integrated into a compact trapezoidal enclosure. The box houses multiple internal rigging points for ground-support, truss and wall mounting. This two-way system is designed for applications where very high output is required from a compact enclosure. It has been designed for use as standalone full-range speaker or together with a passive subwoofer.

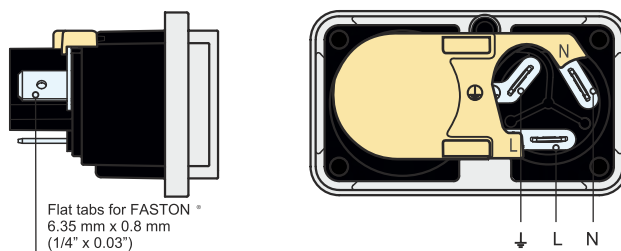
2. AC Power


The Tecnae IBZA-PCCbox uses a Neutrik PowerCon® TRUE1 TOP locking 3-pole AC mains connector that prevents inadvertent disconnection. The power module features a cable duplex socket with input and output. The unit must have the correct power plug for the AC power in the area in which it will be used.


To lock, twist ¼ turn clockwise after fully inserting it into the AC MAINS receptacle.



 **Before connecting the apparatus to the mains, make sure the supply voltage matches the one indicated on the back of the apparatus.**

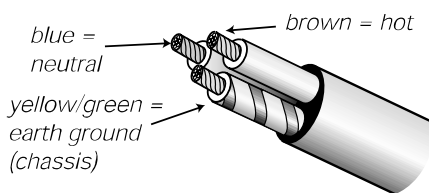


 **IMPORTANT:** A robust AC supply is necessary for maximum performance. If the supply is too weak the bass performance may be affected and if it sags (drops) too much the system may self-mute to protect itself. As soon as the appropriate AC supply is restored it will continue to operate. Plugging multiple systems into the same outlet and long extension cord runs may affect the AC supply to the systems.


 Before connecting a Self-Powered loudspeaker to the AC mains supply, completely turn down the input signal. If not, there could be excessive and possibly damaging sound levels from the loudspeaker when energized

2.1. Power Connector Wiring

Use the following AC cable wiring diagram to create international or special –purpose power connectors:



If the colours referred to in the diagram don't correspond to the terminals in your plug, use the following guidelines:

- Connect the blue wire to the terminal marked with an N.
- Connect the brown wire to the terminal marked with an L.
- Connect the green and yellow wire to the terminal marked with an E (or ) or coloured green (or green and yellow).

**SAFETY ISSUES**

Don't use a ground-lifting adapter or cut the AC cable ground pin.

Keep all liquids away from IBZA-PCCBOX to avoid hazards from electrical shock.

Don't operate the unit with worn or frayed cables; replace them immediately.

If the IBZA-PCCbox will be operated outdoors contact Exel Acoustics SL for information about the rain hood and weather protection for the driver and electronics.

3. REAR PANEL FEATURES AND CONTROLS

1.- XLR INPUT AND OUTPUTS: The system accepts XLR input connector. The output XLR connector provides a loop through for speaker daisy chaining. The balanced connectors are connected in active parallel, and can be used to send the audio signal to other speaker or supplementary amplifiers.

2.- SYSTEM SET UP ENCODER: Rotary knob and push-sensitive

3.- MULTIFUNCTION LED:

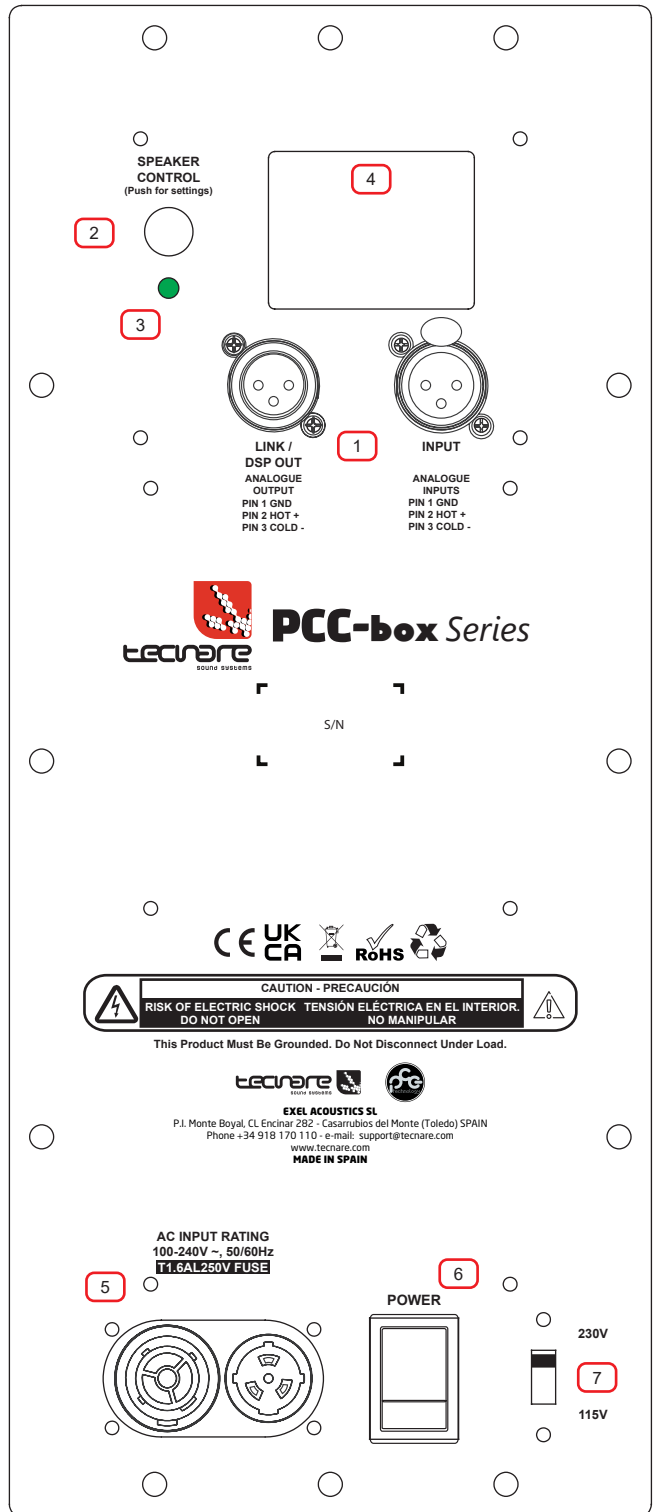
RED: It will stay red for 3 seconds when you turn the unit on.


GREEN: It shifts from red to green and remains in it for 10 seconds while the DSP prepares the preset bank.

BLUE: It shifts from green to blue for 3 seconds while the unit activates the audio.

4.- LCD SYSTEM SET UP DISPLAY: The LCD display shows the dsp functionalities and allows you to navigate for its menus using the rotary knob “**System Set Up Encoder**” [2]

5.- AC POWER INPUT / OUTPUT: PowerCON® TRUE1 TOP IP-rated power connection. Send de AC power to another Loudspeaker. Power Link: 100-120V ~ max: 1300W // 200-240V ~ max: 2800W. Only use this equipment with an appropriate main cord.





MAKE SURE THAT THE AC POWER IS MATCHED TO THE AC POWER INDICATED ON THE SELECTOR [7]

6.- POWER SWITCH: Main power ON / OFF switch


7.- VOLTAGE SELECTOR SWITCH: This switch is used to set the input voltage to the power supply to either 220v/230v or 110v/115v.

4. CONNECTIONS

4.1. AUDIO INPUT

Connect the output from your line-level signal source to the XLR - INPUT connector on the rear panel. This is an electronically balanced input. Users must provide their own XLR cables. The XLR -type connectors on the rear of each **SW118M-PCCbox** are designed for professional audio signal levels, nominally 0 dBu (= 0.775 V). Normally, use the female XLR as the signal input.

The input panel also features a XLR-LINK connectors actively wired to the input connectors. They allow transmitting the input signal and link it to daisy-chained loudspeaker or amplifier.



IMPORTANT: The Loop output connector is wired to the Input connector through a buffer and it does not transmits the source signal when the loudspeaker is powered off.

The wiring convention is as follows:

The HOT, + or 'in phase' connection should be made to pin 2 of the XLR connector.
 The COLD, - or 'out of phase' connection should be made to pin 3 of the XLR connector.
 Pin 1 of the XLR connectors is internally connected to the chassis.

The shield of the input cable should always be connected Pin 1 of the XLR to ensure the EMC performance and regulations are met.

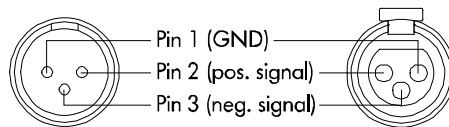


Fig. 05: PIN out assignment SW-118M-PCCbox Analogue Input/Link - Balanced connection

4.1.1. Using unbalanced connection

Please note that the use of unbalanced connections is not recommended, however when connecting the amplifier to an unbalanced audio source, the signal conductor should be connected to XLR pin2. The 'Cold' conductor or cable screen should be connected to XLR pin 1 with a short connection made between pin 1 and pin3 as shown in Figure 06.

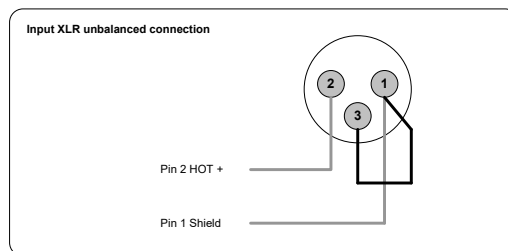


Fig. 06: Balanced to Unbalanced Analogue wiring and PIN out.

4.1.2. Before Connecting the Loudspeaker

On the rear panel you will find all the controls, signal and power inputs. At first verify the Voltage Selector Switch on rear panel [\[8\]](#) (115 Volt or 230 Volt) This fast check will avoid any damage.

4.2. Before Turning On the Loudspeaker

You can now connect the power supply cable and the signal cable. Before turning on the speaker make sure the volume control on the mixer output is at the minimum. It is important that the mixer is already ON before turning on the speaker. This will avoid damages to the speaker and noisy “bumps” due to turning on parts on the audio chain. It is a good practice to always turn on the speakers at last and turning them off immediately after their use. You can now turn ON the speaker.

4.3. Limiting

The IBZA-PCCbox Series performs within its acoustical specifications and operates at a normal temperature if the Limit bar on the Display is on for no longer than three seconds, and off for at least one second. If either Limit bar remains on for longer than four seconds, that channel incurs these consequences:

- ***Increasing the input level will not increase the volume.***
- ***The system distorts due to clipping and nonlinear driver operation.***
- ***Unequal limiting between the low and high frequency drivers alters the frequency response.***

Never intentionally drive a IBZA-PCCbox into continuous limiting to attain compression effects.

For applications where large amounts of compression are required, we recommend using an out-board compressor/ limiter for greater control of limit and compressor effects.

5. LOUDSPEAKER CONTROL

The IBZA-PCCbox system is set up using the loudspeaker control section comprising the TFT screen and rotary encoder which incorporates a push-button for selecting properties selected on the screen using the encoder.

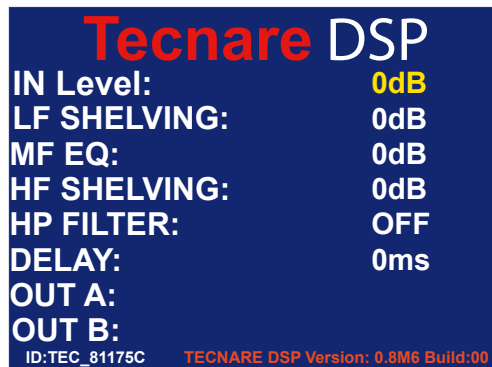
5.1. Power Up

On Power up the screen briefly display the Tecnare Logo while the DSP boot up.



5.2. Home Screen

Rotating the loudspeaker *System Set up Encoder* will adjust whichever function is highlighted in yellow. In the home window this defaults to the Input level. Push the encoder once to revert to select mode, the highlighted output level will change from the figure in dB to IN, rotate the encoder to scroll between the selections. Push again to skip the next parameters. These parameters will act on the DSP's input signal.



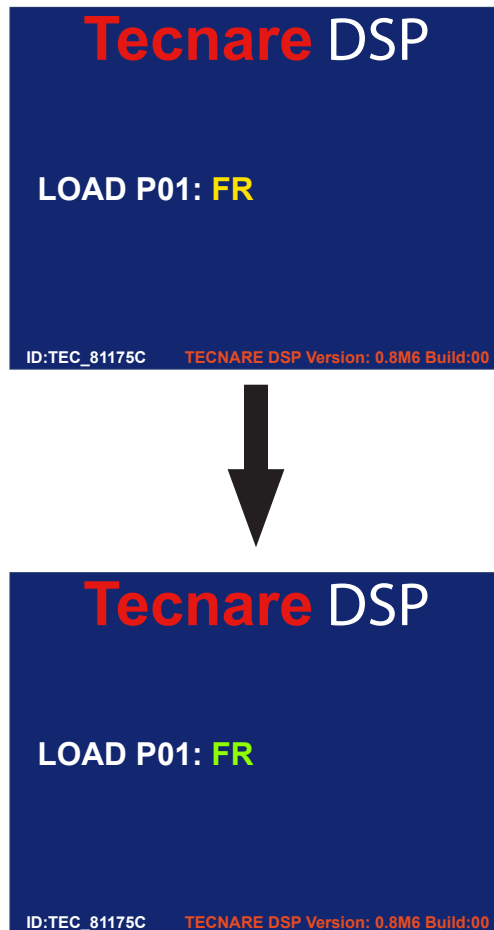
The control ranges are as follows:

- **Input Level:** -33dB to +6 dB
- **LF SHELIVING:** -12 to +6 @ 250Hz, 6dB per octave
- **MF EQ:** -12 to +6 @ 1kHz
- **HF SHELIVING:** -12 to +6 @ 5 kHz 6dB per octave
- **HP FILTER:** 20 - 200 HZ at 12 dB per octave

5.3. Preset

From the home and after you reach to the end of the list, press the encoder to enter on the preset screen. There you can choose between the six available presets.

The currently loaded preset in the loudspeaker, will appear in green. As you had done previously, rotate the system set up encoder until the loudspeaker mode you desire. It will appear in orange. Then push for five seconds to select and load it. The selected preset will change from **orange** to **green**. Double-tap the encoder to go back to the home screen.



Any changes to home screen setting may be stored in the memory of the device. These changes will overwrite your current preset. To save these changes, from the home screen, go to the end of the setting lines and press the encoder twice to get to the save level. As you had done previously, push for five seconds to save the preset. The un-stored preset will highlight orange. After saving it, will turn green.



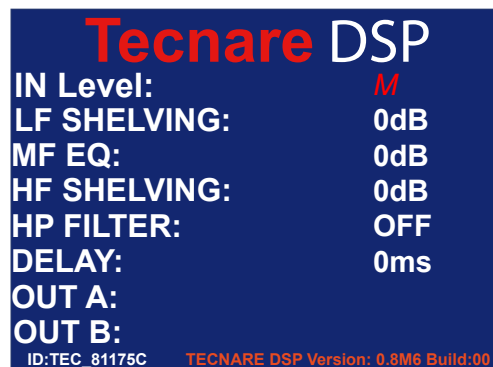
IMPORTANT: Please note, the saved preset overwrites the current using preset and this action cannot be undone. If you want to return to the factory preset, you must tweak the setting manually and save it again.



IMPORTANT: Take into account: If you don't save before turn the loudspeaker off, it will be lost forever.

5.4. Mute

From the home screen, push the encoder for five (5) seconds and it will be completely muted. A [M] will appear in the input level dB indicator. Push for 5 seconds again to unmute the device.



6. Care and Maintenance

6.1. Care Guidelines

Your PCCbox Self Powered Loudspeaker will provide many years of reliable service if you follow these guidelines:

- **Avoid exposing the loudspeakers to moisture. If they are set up outdoors, be sure they are under cover if rain is expected.**
- **Avoid exposure to extreme cold (below freezing temperatures). If you must operate the loudspeakers in a cold environment, warm up the voice coils slowly a low-level signal through them for 15 minutes prior to high-power operation.**
- **Use a dry cloth to clean the cabinet. Only do this when the power is turned off. Avoid getting moisture into the cabinet openings, especially where the driver is located.**

7. Technical Specifications

Model	IBZA10-PCCbox	IBZA12-PCCbox	IBZA15-PCCbox
Type	Compact, direct radiating vented Full Range self-powered enclosure		
Power Amplifier	750W continuous (two channels Class-D)	750W continuous (two channels Class-D)	750W continuous (two channels Class-D)
Input Type	Balanced Differential Line		
Input Level	1.8 dBV (1.23Vrms, 1.8V peak)		
Input Impedance	6.2k ohm unbalanced/12.4k ohm balanced		
Input Sensitivity	26 dB		
Input Overloading level:	Maximum input level 8V peak (+20dBu)		
ADC SNR	100 dB		
DAC SNR	104 dB		
Audio Resolution	24 bit		
Sample Rate	48 kHz		
DSP Capability	50 MIPS		
Display	2.4" Full Color TFT		
Connector	Input: Female NC3FAH LOOP THRU: Male NC3MAH AC INPUT: PowerCon® TRUE1 TOP NAC3PX	Input: Female NC3FAH LOOP THRU: Male NC3MAH AC INPUT: PowerCon® TRUE1 TOP NAC3PX	Input: Female NC3FAH LOOP THRU: Male NC3MAH AC INPUT: PowerCon® TRUE1 TOP NAC3PX
Frequency Range	45 - 18 KHz	56 - 18 KHz	48 - 18 KHz
Total Harmonic Distortion, THD	<0,03%		
Heat Radiation	Variable-speed Fan		
Safety Voltage Range	Selectable: AC 220v-240v ~ 50/60Hz AC 110v-120v ~ 50/60Hz	Selectable: AC 220v-240v ~ 50/60Hz AC 110v-120v ~ 50/60Hz	Selectable: AC 220v-240v ~ 50/60Hz AC 110v-120v ~ 50/60Hz
Dimensions (H x W x D)	596 x 602 x 691 (mm) 23.46 x 23.7 x 27.2 (-in)		
Weight	20 kg. // 44 lbs	24 kg. // 52,9 lbs	33 kg. // 72,8 lbs

Application information is presented for guidance only. Exel Acoustics SL reserves the right to make any necessary changes to the products and the published specifications. As part of the ongoing development program Exel Acoustics SL tries to maintain the highest degree of product compatibility.



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IBZA-PCCbox Series Operation manual

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EXEL ACOUSTICS SL
CL Encinar, 282 - Pol. Ind. Monte Boyal
45950 - Casarrubios del Monte (To)
Spain

www.tecnare.com - www.facebook.com/tecnare
(T): +34 918 170 110 - +34 918 171 001



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