

INTUSONIC INTUSONIC is a brand of Unitec Industries Limited

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INTUWORX ASA12

Mobile Device Connection Bay & Racklight

RevA

Welcome

Thank you for choosing INTUSONIC for your sound system. To make sure that this product meets your expectations and provides long-term, reliable performance, please read and follow this instruction manual carefully.

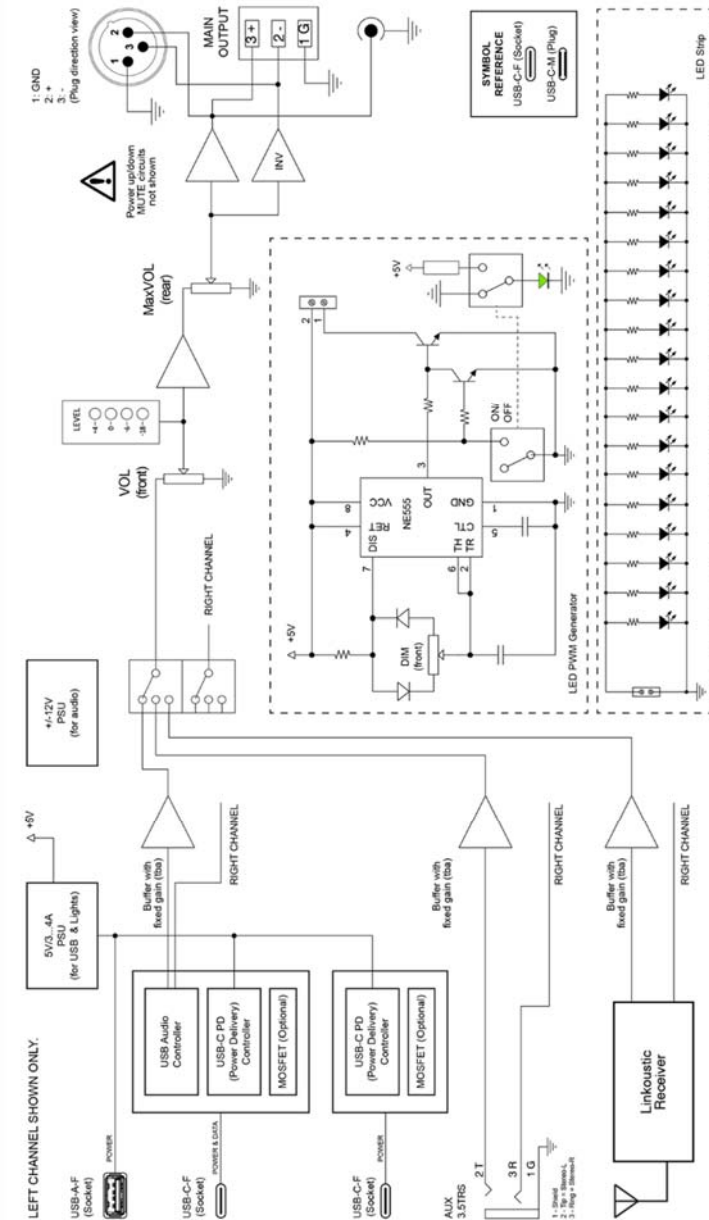
Manual language

- UK** This user manual is written in English. For other languages, please use an auto-translation service of your choice.
- FR** Ce guide est écrit en anglais. Pour les autres langues, veuillez utiliser un service de traduction automatique de votre choix.
- DE** Diese Anleitung ist in Englisch verfasst. Für andere Sprachen verwenden Sie bitte einen automatischen Übersetzungsdienst Ihrer Wahl.
- ES** Este manual está escrito en Inglés. Para otros idiomas, utilice un servicio de traducción automática de su elección.
- PT** Este manual está escrito em Inglês. Para outros idiomas, use um serviço de tradução automática de sua escolha.
- IT** Questo manuale è scritto in inglese. Per altre lingue, utilizza un servizio di traduzione automatica a tua scelta.

Important safety instructions

- Read these instructions and all markings on the product. Keep these instructions.
- Heed all warnings and instructions, both in this manual and on the product.
- Clean only with a dry cloth. Unplug the unit or its power adaptor/charger from AC supply before cleaning.
- Do not use this product near water and avoid any exposure to water.
- Before connecting this product to any AC supply (if any), make sure to check whether the AC mains voltage and frequency match the indication on the product and its packaging.
- Only connect this product or its power adaptor/charger to an AC supply (if any) with sufficient power handling, protective earth connection, ground-fault (earth-fault) protection and overload protection.
- Disconnect the product or its power adaptor/charger from the AC supply (if any) during thunderstorms or longer periods of being unused.

Block diagram



Cabling

This product may use all or a selection of the below connector types, for which the pin assignment must comply with the following specification. Always make sure to use good connectors and cables to ensure proper operation. Balanced connections are to be preferred over unbalanced connections where applicable and feasible. Avoid unbalanced connections exceeding 2m of cable length.

	Structure	Balanced connection	Unbalanced connection
XLR male		red = 2 black = 3 shield = 1	red = 2 shield = 1+3
XLR female		red = 2 black = 3 shield = 1	red = 2 shield = 1+3
6.35mm TRS-stereo		red = tip black = ring shield = sleeve	red = tip shield = sleeve+ring
6.35mm TRS-mono		red = tip black = sleeve shield = uncon.	red = tip shield = sleeve
3.5mm TRS-stereo		red = tip black = ring shield = sleeve	red = tip shield = sleeve+ring
RCA		red = tip black = sleeve shield = uncon.	red = tip shield = sleeve
Terminal Plug		red = 1 black = 2 shield = 3	red = 1 shield = 2+3
CABLE Types	<p>2-conductor shielded cable (for balanced connections)</p> <p>1-conductor shielded cable (for unbalanced connections)</p>		

- Make sure any heat sink or other cooling surface, or any air convection slot, is exposed sufficiently to free air circulation and is not blocked.
- Do not operate this product in environmental temperatures exceeding 35 degrees Celsius and/or 85% relative humidity.
- Position the product in a safe and stable place for operation, out of reach of unauthorized persons.
- Make sure any cable connections to and from the product are neither subject to potentially destructive mechanical impact nor present any risk of stumbling or other accident risk to people.
- Audio equipment may generate sound pressure levels sufficient to cause permanent hearing damage to persons. Always start up at low volume settings and avoid prolonged exposure to sound pressure levels exceeding 90dB.
- Do not open this product for service purposes. There are no user-serviceable parts inside.
- Warranty will be void in any case of unauthorized service by the user or other not authorized persons.
- Take any precaution required by local law, applicable regulations or good business practice to avoid injury of people or material damage by use of this product.

Symbols used in this manual

- DANGER!** Safety hazard. Risk of injury or death.
- ATTENTION!** Read manual before installation and operation.
- WARNING!** Hazardous voltage. Risk of severe or fatal electric shock.
- WARNING!** Fire hazard.

Health Advice

This unit may produce and absorb electromagnetic radiation. The strength of radiation and the sensitivity for disturbing interference matches the CE and FCC requirements. A corresponding sign is printed on the backside of the unit. Any change or modification may affect the behavior of the unit concerning electromagnetic radiation, with the CE and FCC requirements eventually not to be met any more. The manufacturer takes no responsibility in this case.

Functional Advice (only for powered products)

This unit is immune to the presence of electromagnetic disturbances – both conducted and radiated - up to a certain level. Under peak conditions, the unit is classified to show a “class C” performance criteria and may encounter temporary degradation or loss of function which may need manual help to recover. In such case, switch the unit off and back on to recover.

Environmental Advice

This unit is built to conform to the ROHS-2 standard according to directive 2011/65/EU and the WEEE directive 2012/19/EU of the European Parliament and of the Council of the European Union. Under these regulations, the product shall not be discarded into regular garbage at the end of its life, but shall be returned to authorized recycling stations.

Battery Advice (only for battery-powered products)

- Some products may contain a battery. Refer to the further chapters of this manual to determine whether this product contains a battery, and whether this is removable and/or rechargeable.
- Where applicable, adhere to the relative regulations in aviation transport.
- If the battery is rechargeable, the battery might not be fully charged or partly discharged at the time of purchase. Recharge before use. Only use recommended or included chargers with appropriate voltage/current rating.



WARNING! Fire hazard. Batteries might heat up during charging. Only charge in a place with sufficient air convection.

Wireless Advice

- Some products may contain a wireless transmitter, receiver or transceiver. Refer to the further chapters of this manual to determine whether this product contains a wireless function, and in which frequency this operates.
- Make sure the frequency of operation does not require a specific license in the territory you operate the product in. If it does, obtain such license prior to any operation.
- Certain wireless technologies are designed for short distance operation. The actual distance will depend on how jammed the

Technical Data

Linkoustic, residual noise	.....-78dBu
USB-C, residual noise	.....-70dBu
3.5TRS, residual noise	.....-88dBu
Max Output @ 1% THD	.....+23.5dBu
Linkoustic, S/N	.....101.5dB
USB-C, S/N	.....93.5dB
3.5TRS, S/N	.....111.5dB
Linkoustic, THD	.....0.2%
USB-C, THD	.....0.03%
3.5TRS, THD	.....0.001%
Main Out, FQ response	.....20H-20kHz (+-0.5dB)
LED light strip	.....19x3528 LED-WW @20MA =1.14w
AC IN	.....115/230V~, 50/60Hz, 26W
Dimensions WxDxH	.....482.6x207x88 mm
Weight	..3.3 kg (+0.35kg for 2U extension panel)

Warranty

This product is guaranteed to be free of defects in material and workmanship at the time of purchase. Send-in warranty repair is granted for a period determined by

- A period of at least 6 months (from the date of purchase), or the minimum period required by law in the territory of sale, whichever is longer.
- A period of no longer (from the date of purchase) than the specified average lifetime of a component by the component's manufacturer.

Please note that incompatibility issues with specific devices in terms of non-connectivity to the USB-C audio interface or non-availability of enhanced PD-enabled charging is not considered as a defect in design, material or workmanship, and as such not considered to be an entitlement for warranty claims.

blinking, until a pairing process is executed from a new compatible device. Once paired with this new compatible device, the pairing LED (19) will turn to be constantly lit.

- If during the “ready to pair” status (LED blinking) or the “paired” status (LED on) the button is pressed and held for a prolonged period, the wireless audio link will be turned off. The pairing LED (19) will then be off. Pressing the button again, will turn the wireless audio link on again and the same process starts as from powering the unit on.

USB-C Audio Interface

The integrated USB-C audio interface’s functionality largely depends on the connected device’s compatibility. Some devices will divert to using an external USB audio interface once connected, without further notice. Others may list this as an option under “sound effects”. Yet others may show the option to use the connected USB audio device upon user’s selection. In any case, the USB identifier of the internal USB-C audio interface is “**KT USB Audio**”. Due to the vast range of different mobile device operating systems and their significantly different compatibility with USB-C audio, the manufacturer of this product cannot guarantee that the internal USB-C audio interface is compatible with every device in the market. If the application depends on this function, please select a compatible mobile device.

PD (power delivery) charging

This product features PD-enabled charging on its two USB-C connectors. In theory, this enables faster charging as the charger and the to-be-charged device can negotiate the power budget that both are capable of. However, such negotiation requires both devices to be PD-enabled, and even in this case, there is a possibility that the negotiation process fails. In any of these circumstances, the charging process will still be expedited, but only at nominal current/power, and the mobile device may display a “charging slowly” message. Due to the vast range of various PD implementations in the market, the manufacturer of this product cannot guarantee that any PD-enabled mobile device will be charged at enhanced current/speed. As the main purpose of the ASA12 is audio replay without the mobile device discharging, it is hence considered sufficient that power is replenished at nominal rate.

frequency band is at the location of use. In adverse cases, operational distances might be as low as 5m. In normal circumstances, 10m can be assumed. Test the operational distance prior to relying on the wireless functionality in a specific application.

Unpacking

Please check that the box contains the following items:

- 1 pc. main unit
- 1 pc. 2U extension panel
- 1 pc. AC cord set
- 1 pc. instruction manual

If any part is missing, please contact your dealer immediately for replacement.



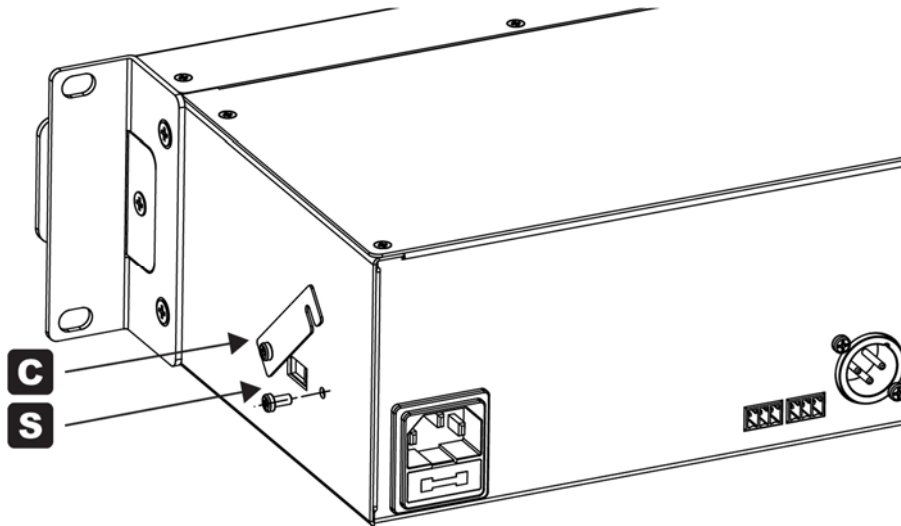
WARNING! After unpacking, and before plugging the AC cord in the wall outlet, check whether the AC mains voltage and frequency is the same as this product is specified for (see rear panel of product). Whenever the specified voltage or your AC plug should not match the local conditions, do NOT plug the AC cord into the wall outlet and contact your dealer immediately.

About this product

The ASA12 is a rack- or shelf-mounted connection interface for mobile devices like smart phones or tablets, in order to integrate the mobile device into a commercial sound system installation. It provides three input connectivity options (wireless, USB-C digital audio, wired 3.5mm TRS) and likewise three output connectivity option (balanced 3.5mm terminal strip, balanced XLR, unbalanced RCA). It provides a safe resting place for the mobile device which is held by an elastic retainer strip, and also offers a built-on warm-white rack light so that other sound system components mounted below may be illuminated while the mobile device remains in the darker top area for better visibility. The ASA12 comes in a 19”/2U form factor suitable for smart phones, and is delivered with a 19”/2U extension panel for use with tablets.

AC Mains Voltage Setting

If the AC mains voltage of your power outlet and the setting of the AC supply voltage on your unit do not match, contact your dealer, contractor or a qualified service workshop to change the setting of the AC voltage selector. The AC voltage selector switch is located on the side panel of the unit, close to the AC inlet.



For a qualified technician to change the AC voltage setting, the AC cord shall be detached, the security cover (C) shall be flipped up, and the Voltage selector switch (S) shall be set to the new position. Afterwards, the security cover (C) shall be set back into a protective position to avoid tampering with the switch.

Rack/Cabinet Mounting

This product comes pre-assembled with 19" rack ears and handles. Depending on the location of installation and use, it might be commendable to remove either only the handles, or both the rack ears and handles. To do so, remove the screws at the side panel of the units as shown: To remove the handle (H), remove the single center screw out of the group of 3 screws at the front side of the metal cabinet. Pull the handles out to the front. To also remove the rack ears (E), remove the remaining two screws and then remove the rack ear.

at standard current. For further information, see also chapter "PD (power delivery) charging".

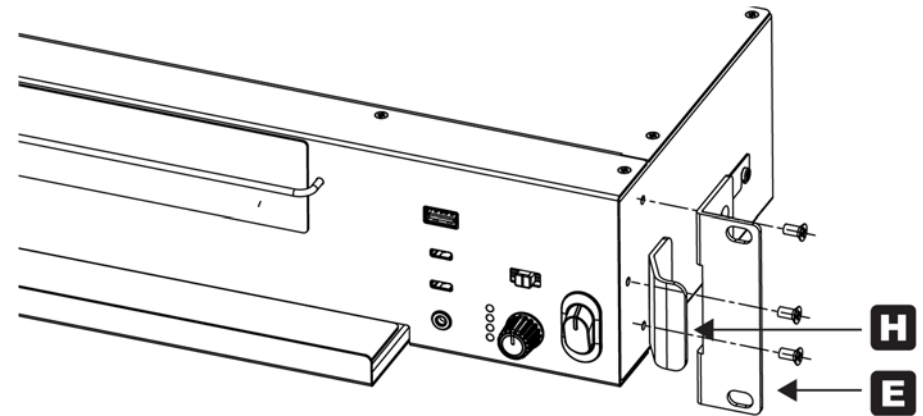
- 17 USB-A charging socket.** Connect your mobile device here if you decided to use wireless audio replay or wired replay through the 3.5mm TRS input jack (17), but you wish to charge the mobile device at the same time, and in case your device does not have PD (power delivery) abilities for faster charging. Charging will appear at nominal USB charging speed.
- 18 Wired 3.5mm TRS Audio Input.** This is a 3.5mm Mini-TRS stereo socket which allows a cabled audio connection between the mobile device and the ASA12. It is compatible with standard headphone outputs of mobile devices; if your device features a specific non-standard TRRS configuration, you may need a TRRS->TRS adapter cable. Set the input selector switch (19) to "AUX" if you use this input for audio replay.
- 19 Audio Source Selector Switch.** This switch determines which of the three internal audio replay methods (wired, wireless, USB-C) is used. Set the switch to the desired position for the selected method.
- 20 Main (stereo) output level control.** Determines the main output level present at the main stereo outputs (2) (3) (4), in combination with the rear-panel output level control (5).
- 21 Output Level Meter.** Indicates the actual output level PRIOR to the rear-side output level adjustment (5). In case the rear-side output level adjustment is done correctly for the system at hand, this allows to see how much actual headroom exist.
- 22 Power switch.** Switches the unit on and off. Make sure to switch the unit off when not in use. The ON position is indicated by a backlight.

Linkoustic™ Wireless Audio Link

This product is fitted with Intusonic's Linkoustic™ wireless audio link, which enables to enjoy the ease of wireless audio replay from compatible devices. Operation is simple and convenient:

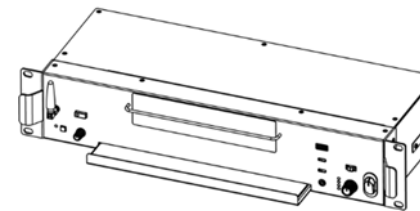
- When powering the unit on, it will be ready to pair with a Linkoustic™-compatible device, indicated by the pairing LED (19) blinking.
- It will then automatically pair with the previously known compatible device if this device is available. The LED will then be constantly lit.
- If no previously known device is available, the unit will keep being available for pairing, which is indicated by the pairing LED (19)

- 8 Wireless Audio Link status LED.** This LED indicates the current operational status. Refer to the chapter for the operation of the Linkoustic™ wireless audio link. Set the input selector switch (19) to “Linkoustic” if you use this input method for audio replay.
- 9 LED Light Strip.** This is a warm-white light illumination strip, which faces downwards and can be used to illuminate the rack space below the ASA12. The light can be enabled or disabled via the switch (10), and can be adjusted in brightness via the control (11).
- 10 LED Light On/Off Switch.** This switch enables and disables the downfacing LED light strip (9).
- 11 LED Light Dimmer.** This control adjusts the brightness of the downfacing LED light strip (9), provided it is enabled via the switch (10).
- 12 Cushion Pad.** Avoids the ASA12 and the mobile device to experience any scratches.
- 13 Elastic Retainer.** Makes sure the mobile devices cannot detach itself from the ASA12 and fall down. Make sure that the elastic retainer is placed on the mobile devices front fascia after placing it on the holder rail (14).
- 14 Holder Rail.** Place the mobile device on the holder rail, so that it sits on the holder rail cushion and touches the bent-up front edge of the holder rail from the inside, thus slanting it against the cushion pad (12). Place the elastic retainer on the mobile device’s front fascia after placing it on the holder rail to secure the position.
- 15 USB-C audio interface and PD charging socket.** Connect your mobile device here for audio replay through the ASA12’s internal USB audio interface (limited compatibility may apply, depending on the mobile device). The mobile device will be configured to be charged and at the same time to allow audio replay. The charging current will depend on the mobile device’s compatibility with the PD (power delivery) standard and its implementation. Note that it is possible that even devices with PD ability may face communication compatibility issues and only charge at standard current. See also chapter “USB-C Audio interface” and “PD (power delivery) charging”. Set the input selector switch (19) to “USB-C” if you use this input method for audio replay.
- 16 USB-C PD charging socket.** Connect your mobile device here if you decided to use wireless audio replay or wired replay through the 3.5mm TRS input jack (17), but you wish to charge the mobile device at the same time. The charging current will depend on the mobile device’s compatibility with the PD (power delivery) standard and its implementation. Note that it is possible that even devices with PD ability may face communication compatibility issues and only charge

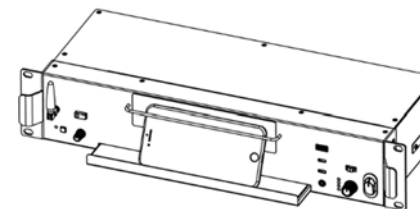


In a rack mounting situation, the product can be configured to the expected mobile devices it will be used with. For maximum flexibility and in case the additional 2U rackspace are not critical to be saved, it is always recommended to mount the product with the supplied 2U extension panel for best application flexibility.

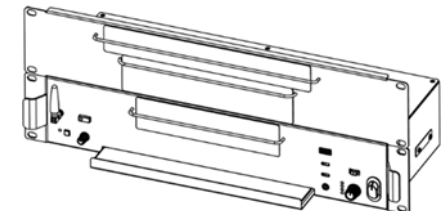
2U rackmount configuration



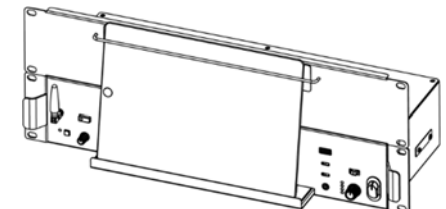
For use with phone-sized devices:



4U rackmount configuration

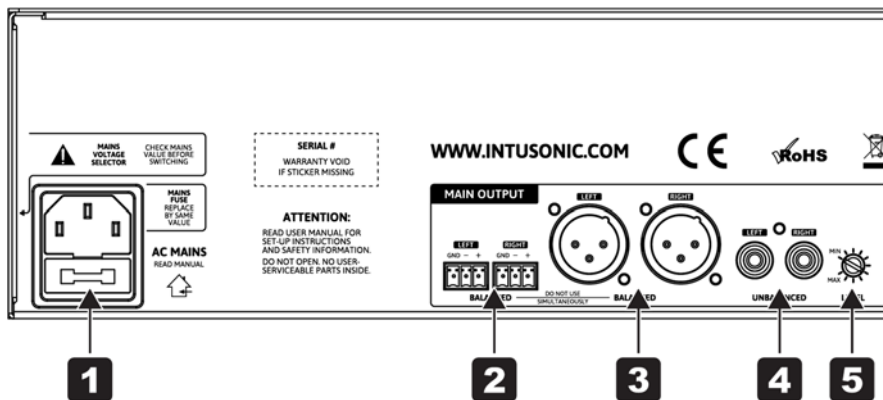


For use with tablet-sized devices:

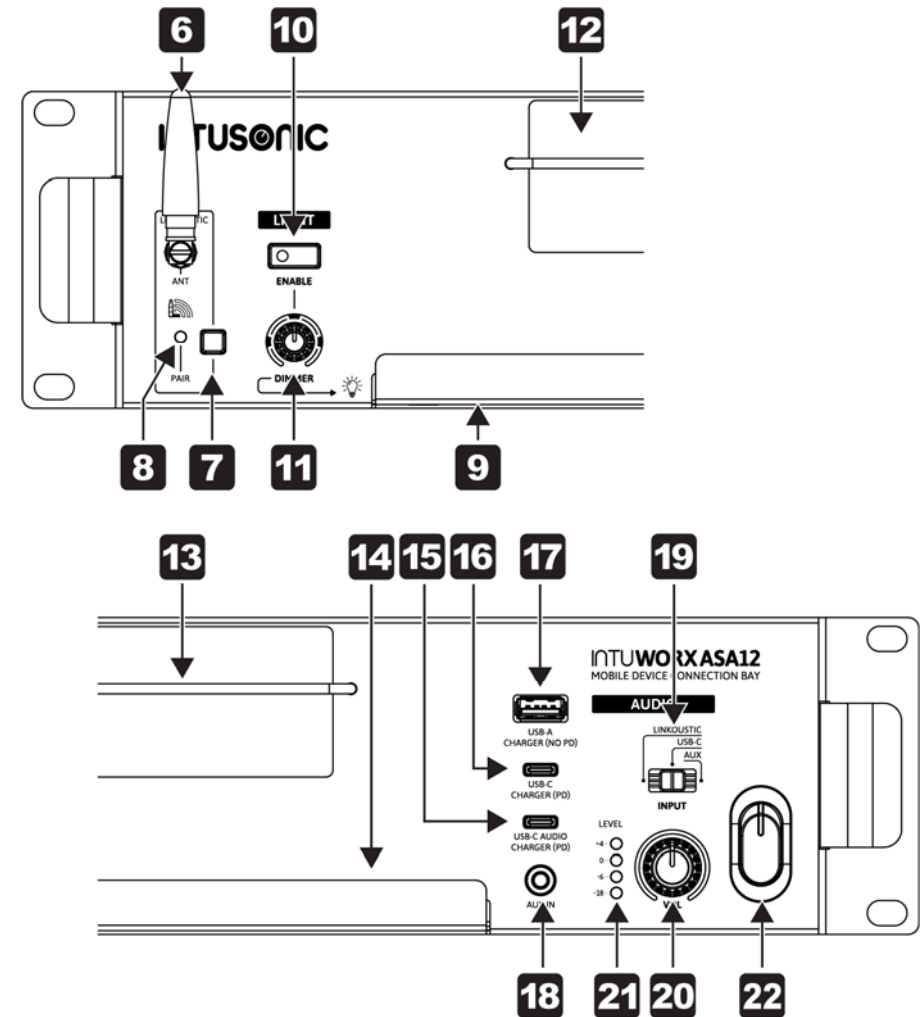


The recommended devices sizes are up to 6.3” screen size for the 2U configuration, and up to 10” screen size for the 4U configuration.

Controls and Connections



- 1 AC inlet and fuse holder.** Use the supplied AC cord to connect the unit to AC mains. Make sure voltage and frequency stated and set on the unit comply with your local AC supply. The fuse can be accessed by the small drawer at the AC inlet. To change the fuse, unplug the AC cord first, pull out the fuse drawer and replace the fuse **ONLY** with a fuse of **SAME** voltage and rating. If the fuse blows again after replacement, hand over the unit to qualified service personnel.
- 2 Stereo Main output.** This is a balanced 3.5mm terminal block output carrying the main output signal controlled by the main volume control (20).
- 3 Stereo Main output.** This is a pair of balanced male XLR output sockets carrying the main output signal controlled by the main volume control (20).
- 4 Stereo Main output.** This is a pair of unbalanced male RCA output connectors carrying the main output signal controlled by the main volume control (20).
- 5 Level setting for Stereo Main output.** This control allows to set the maximum level at the stereo main outputs (2) (3) (4) in order to match the connected sound system. Adjustments made on this control will not be displayed by the output level meter (21). Adjustments shall be made with a small screw driver. Note that the total angle is 300 degrees; do not apply excessive force with the screw driver. The eventual output volume is a combination of this setting and the output volume control (20).



- 6 Wireless Audio Link antenna for Linkoustic™ wireless audio.** Make sure to only use the supplied antenna and that the antenna is properly inserted and the nut fastened, so attain best signal reception.
- 7 Wireless Audio Link pair button.** This button invokes pairing and un-pairing functionality. Refer to the chapter for the operation of the Linkoustic™ wireless audio link. Refer to the chapter for the operation of the Linkoustic™ wireless audio link.