high effiency infra subwoofer

S221 manual

2x21" Sub Operating Instructions



Thank you for purchasing the Quint Audio S221 loudspeaker.

This manual contains essential information on installing and operating the product correctly and safely. It is necessary to read this manual carefully in order to become familiar with these procedures.

Keep the manual for future use. This manual forms an integral part of the product. Reselling of the product is only possible if the user manual is available. Any changes made to the product must be documented in writing and passed on to the buyer in the event of resale.

As part of a continuous evolution of techniques and standards, Quint Audio BV reserves the right to change the specifications of the product and the content of this manual without prior notice. Please check the Quint Audio BV web site at www.quintaudio.com on a regular basis for any updates.

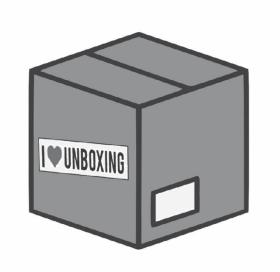
Should the product require repair or should information about the warranty be needed, please contact an approved Quint Audio BV distributor. The address of the nearest distributor is available on the Quint Audio BV web site.

Unpacking

Carefully open the shipping carton and check the product for any noticeable damage.

Each Quint Audio BV product is tested and inspected before leaving the factory and should arrive in perfect condition. If found to be damaged, notify the shipping company or the distributor immediately.

Only the consignee may initiate a claim with the carrier for damage incurred during shipping. Be sure to save the carton and packing materials for the carrier's inspection.



Safety Warnings in this manual

This refers to potentially dangerous situations or dangerous forces that may lead to personal injury.



This refers to a potentially dangerous situation which may lead to damage to the equipment.



This refers to a situation which may cause the equipment to malfunction.



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Read this manual carefully before using the product.

- Read all safety instructions, warnings and instructions concerning this product.
- Make sure you fully understand the safety issues mentioned.
- Read all cautions present on the product itself.
- Read all the related product information before using the system.
- Work with qualified personnel only.
- Rigging, hoisting and flying pro audio equipment is never free
 of potential hazards. You cannot rule out human error while
 gravity, wind and electrical forces do their regular job.
 Therefore: Always use your common sense!



Personal safety

Ensure health and safety during installation and setup. In order to prevent accidents when deploying loudspeakers on the ground or when flown, please take note of the following:



- The system may not be used for other purposes than it is meant for.
- All system components must be inspected before use, in order to detect any possible defects.
- Do not place the product on an unstable cart, stand, tripod, bracket, or table. The product may fall and be seriously damaged and may cause serious human injury.
- Never stand in the immediate vicinity of loudspeakers driven at a high SPL level. Professional loudspeaker systems are capable of causing a sound pressure level that isharmful to human hearing. Seemingly non-critical sound levels (from approx. 95 dB SPL) can cause hearing damage if people are exposed to it over a long period of time.
- Loudspeakers and amplifiers work withpotentially harmful voltages. Avoid any direct contact with the human body.
 Respect eelectrical safety warnings at all times.
- Use certified connectors and cables. All cables must be electrically safe (according to NEN1010) and routed so that there is no direct walking on an/or driving over it nor objects are placed on top of them in any way it might damage the cable. Make sure that the cables and connectors are used stress free.





Product monitoring, care and maintenance

- Regularly check the loudspeaker housings and accessories for visible signs of wear and tear, and replace them when necessary.
- Keep the loudspeakers away from heat poducing sources such as heaters, stoves, fireworks etc. etc.
- Keep the loudspeakers away from water; prevent the possibility of water and moisture entering it.
- Even if the product is weather-resistant, it should not be exposed to moisture (rain, sea spray, shower, steam) for a long period of time, nor put in direct contact or immersed in water.
- Prevent objects and/or any liquid to enter the device.
- The loudspeaker housings can be cleaned with a damp cloth.
 Do not use aggressive cleaning agents or solvents as they can damage the protective layers.
- Small damages can be repaired with a water-based paint such as Warnex textured paint. The base layer however is an environmentally friendly polyurea. Damage to this layer can be repaired with polyurea, but this must be done by the manufacturer or a certified Quint Audio service point.
- The user should not carry out any work or maintenance on the system other than those mentioned in the manufacturers instructions. Technical service must be carried out by authorised technical personnel only.

Conditions which require immediate service

In all cases, when after an event risk of unsafe operation of the device, such as:

- After the damaged hitting any casing or cable.
- After a fall from the product resulting in visible or invisble damage.
- After mishaps and/or misuse and or possible visible or invisible deformation of any rigging system, rigging part or rigging accessory.
- After noticing a change in the operation of the device.
- After the product has been exposed to rain or moisture.
- After the product has been exposed to foreign objects or liquids.

Magnetic field

Loudspeakers produce a static magnetic field even if they are not connected or are not in use. Therefore make sure when managing and transporting loudspeakers, they are nowhere near equipment and objects which may be impaired or damaged by their external magnetic field. Generally speaking, a distance of 0.5 m (1.5 ft) from magnetic data carriers (floppy disks, audio and video tapes, bank cards, etc.) is sufficient; a distance of more than 1 m (3 ft) may be necessary with computer and video monitors.





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Design

The Quint Audio S221 is a 2x21" subwoofer with a deep linear tuning to be used as (sub)bass extension of Quint Audio loudspeakers. The cabinet is built of birch plywood and equipped with a wear-, tear- and impact-resistant hybrid black coating (other RAL colors are available). Various internal bracings are applied in order to increase the rigidity of the design.

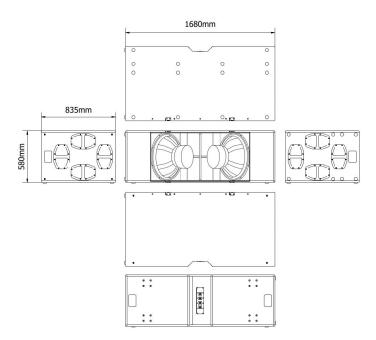
The optimized coupling of the bass reflex ports and the speakers is such that a constant coherent pressure front with a minimum of port noise appears at the mouth of the S221.

The inversed mounting of the 21" speakers combined with the internal airflow and a patented internal cooling system of the speakers themselves, facilitate effective cooling of the powerful engine, so that power compression is minimized. The 21-inch woofers of the S221 feature a 100 mm voice-coil inner/outer winding and are equipped with a demodulation-ring which results in a further improvement in the thermal and dynamic behavior of the speaker.

Inside the S221 the damping material is partly made of keratin, a natural material that not only provides a balanced acoustic damping but is also known for its fine moisture regulating effects. This will minimize condensation inside the speaker.

Due to its functional design and truck-size width, the S221 is firmly stackable and easy in handling and transport. It is equipped with multiple ergonomic handles on either side of the cabinet and fittings on the back on which castors can be mounted.

The Speakon-8 connector on the back is made of double NLT8MP and NLT4MP chassis parts. on the back of the cabinet. The front is finished by a coated steel grille and covered with an acoustically transparent layer.





MODEL S221 2x21" (infra) sub type filter none power handling 2800 W program power 5600 W 4 Ohms impedance sensitivity 101 dB 1W/1m program SPL 139 dB 1m peak SPL 145 dB 1m frequency range 28-150 Hz dispersion omni 138 kg weight size (wxhxd) 1680 x 580 x 835 mm



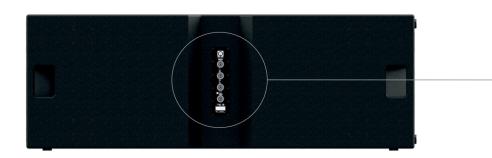
S221 front lid



Application

By design the Quint Audio S221 provides very high efficiency output associated with a deep and powerful bass foundation. This makes this 2x21" subwoofer deployable in large-sized PA-applications such as large format live concerts (for example underneath large line arrays).

Also smaller setups are very well possible. With its height of almost 1.7m in upright position, the S221 is easy to use as subwoofer underneath a medium-sized PA top. The response in the mid-low is sufficient for use in this way. A top cabinet placed on top of the S221 radiates directly over the audiences heads.

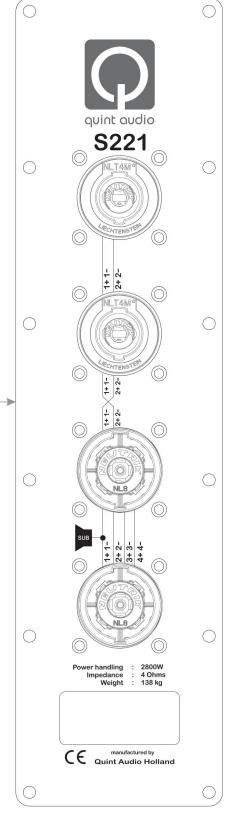


Connectors and internal wiring of the loudspeaker

The connection panel on the of the S221 cabinet is fitted with a pair of Neutrik Speakon NL4 connectors and a pair of Neutrik Speakon NL8 connectors.

- The pins of both NL8 connectors are wired in parallel.
- The pins of both NL4 connectors are wired in parallel.
- Between the NL8 and the NL4 connectors ther is twist: pin 1+/1- of the NL8 goes to pin 2+/2- of the NL4 pin 2+/2- of the NL8 goes to pin 1+/1- of the NL4. This offers maximum flexibility in connecting PA tops with pin assigment on 1+/1-.
- Within the S221 two 8 Ohms loudspeakers are connected to pin 1+/1- in parallel resulting in a 4 Ohms cabinet load in total.

Pin assignment is stated on the backpanel (layout on the right).



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Warranty

Quint Audio BV warrants the original purchaser and any subsequent owner of each new Quint Audio BV product, for a period of 5 years limited from the date of the original purchase by the original purchaser that the new Quint Audio BV product is free of defects in materials and workmanship. Quint Audio BV warrants the new product regardless of the reason for failure, except as excluded in this warranty. In order to obtain warranty, you must keep the original sales receipt to establish the exact date of purchase.

Warranty does not cover any product which has been damaged because of any misuse, accident, or negligence. Warranty also does not extend to a new Quint Audio BV product if the serial number has been defaced, altered or removed.

Quint Audio BV will replace defective parts and repair malfunctioning products, regardless of the reason for failure (except as excluded). Warranty work can only be performed at our authorized service centres, or at our factory.

Disclaimer

Quint Audio BV is not liable for any damage to loudspeakers, amplifiers, or any other equipment that is caused by negligence, misuse or improper installation.

Quint Audio BV is not liable for any incidental damages resulting from any defect in the new Quint Audio BV product. This includes any damage to another product or products resulting from such a defect.

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.

Quint Audio BV by 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.

Quint Audio BV reserves the right to change specifications without notice.



years limited warranty

EC declaration of conformity

This declaration applies to the product Quint Audio model S221. All product variants are included, provided they correspond to the original technical version and have not been subject to any later design or electro-mechanical modifications.



We, Quint Audio BV herewith declare that said products are in conformity with the provisions of the following EC directives including all applicable amendments.

The S221 system is in conformity with the provisions of the following EC directives and applicable amendments:

Machinery 2006/42/EC and the national laws to enforce this directive, National standards and technical specifications applied: DIN EN ISO 12 100, DIN EN 1050, BGV C1 provided the mounting components are unaltered/modified and in "factory-original" condition.

Established at Wintelre, the Netherlands Aug 1th, 2017 A detailed declaration is available on request and can be ordered from Quint Audio BV

WEEE Declaration (Disposal)

Electrical and electronic equipment must be disposed of separately from normal waste at the end of its operational lifetime.





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The provided images are meant to represent the actual product, but the image content may vary from reality.

This manual replaces all previous versions and their contents.

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