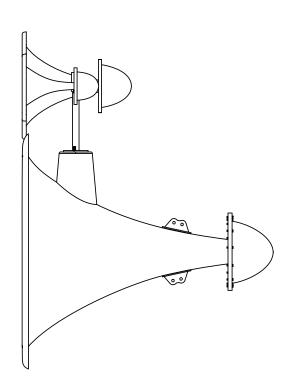
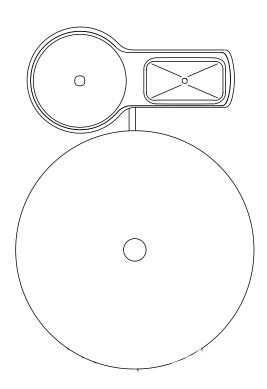
Shockwave 2.1

Three-way passive loaded full-horn system





User guide

Shockwave 2.1

Three-way passive loaded full-horn system

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1 Technical Specifications

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Shockwave 2.1 is a very high-performance, passively amplified, fullhorn, three-way system. A professional HI-PRO three-way audio system with horn-loaded speaker technology, Shockwave is designed to seamlessly integrate the dedicated transducers with composite horns for elevated sensitivity, dynamics, definition, and durability. Providing wide-angle coverage of a highly controlled sound field, it can reach sound levels at the limits of human tolerance with no perceptible distortion. The system is thus characterized by extraordinary sound quality while reaching elevated sonic pressures. Assembled it forms a triptych of large horns in frontal development. The high-frequency horn is characterized by a specially tuned shape, with long and complex development and a variable section allowing a wide dispersion without compromising powerful energy loading. The mid-horn Shockwave 2.1 has levels of efficiency and sensitivity that are truly out of the ordinary. This allows for excellent dynamics that distinguish the entire system from the first listen. The midbass-horn is used its superior dimensions to achieve, with a powerful neodymium 8" midbass woofer, extraordinary performances. The LF driver is protected by a water-resistant cone. Speakers, woofers, and compression drivers all represent wor-Id-class quality, without commercial or technological compromises. Thank its elevated sensitivity, the system requires limited amplification power, and thus permits an extreme simplification of the line of inputs for playback. The system can be driven, in the three routes, completely passively through a dedicated crossover. A Full-Fat audio FFA 6000 is the recommended amplifier partner for this solution. Otherwise, it can be managed actively by three amplifiers and by traditional DSP. Subwoofers sold separately

ТҮРЕ	Three ways passive full-horn loaded
FREQUENCY RESPONSE	125 Hz - 18 KHz
TOTAL SENSITIVITY	105 dB 1W/m with passive crossover
MID-BASS FREQUENCY	8" (210 mm) 8 Ohm 200 W nominal 400 W peak
MEDIUM FREQUENCY	2" (50 mm) MF compression driver 8 Ohm 80 W nominal 160 W peak
HIGH FREQUENCY	1" (25 mm) HF compression driver 8 Ohm 60 W nominal 120 W peak
NOMINAL IMPEDANCE	4 Ohm with three way passive crossover
POWER HANDLING	recommended amplifier 700 W 4 Ohm
MANAGE	2 Ch amplifier to a couple of SWave loudspea- kers (outer passive crossover provided, for each SWave)+DSP to match to subwoofer. High-pass filter @130Hz, 24 dB/oct. LR
RECOMMENDED AMPLIFIER	Full Fat Audio FFA 6000 2 Ch with external DSP to match to subwoofer
DISPERSION	60° horizontal, 40° vertical
CONSTRUCTION MATERIALS	Fiber-reinforced composite, stainless steel
FINISH	all ral color and texture on order
CONNECTORS	3x Neutrik NL4 or custom preference
DIMENSIONS (with trolley)	(W) 1100 mm (H) 1630 mm (D) 1200 mm (W) 43,3 inch (H) 64,2 inch (D) 47,2 inch
WEIGHT	39 Kg (86 lb) w trolley, 29 Kg (63 lb) w/o trolley



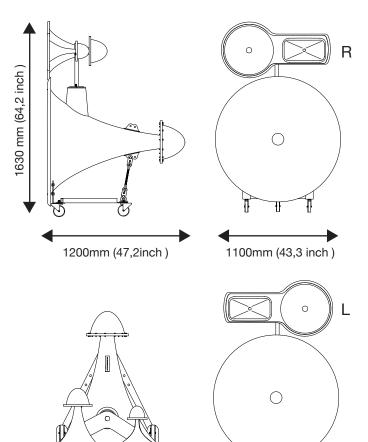
2: Unpacking

The Shockwave, like every other Pequod product, is built with high standards of control and quality. At the end of the production process and before packaging, each system is tested: acoustically measured and recorded in our company database. For each Shockwave serial number, we have the related test files recorded in the archive. Before being packed in its box we complete an inspection of surfaces and structures. Units are packed into wooden crates or heavy cardboard boxes with internal foam padding before shipping.

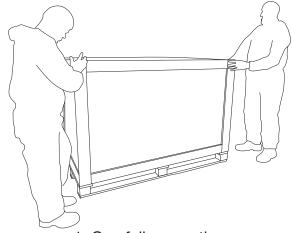
Extraction from box:

The Shockwave weighs 39 Kg (86 lb) w trolley, 29 Kg (63 lb) w/o trolley each, and it's being shipped contained inside suitable wooden packaging box. Its extraction from the box is achievable by two operators, at least.

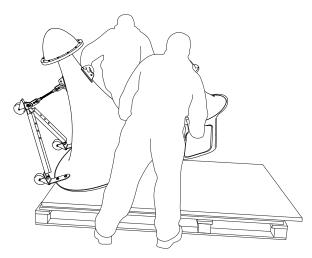
Notes: Shockwave is coded in 2 versions mirrored, right and left (cod Right and cod Left), for stereo configuration



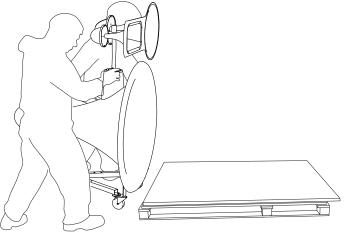
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1: Carefully open the wooden packaging box



2: Remove packing materials and save for re-use. Lift speaker body with both hands when ready

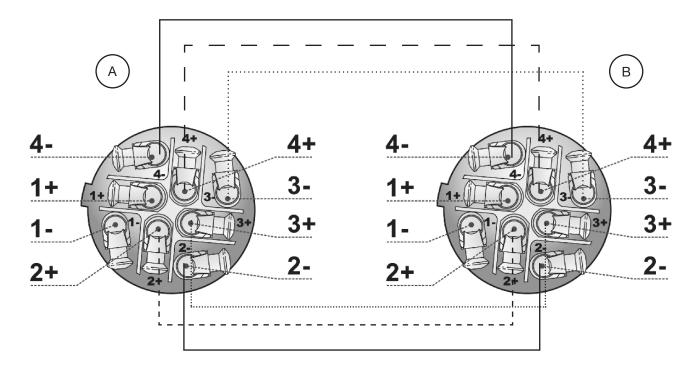


3: put the loudspeaker on the floor

3 Wiring and Settings

The SW has 3 inputs made with a female NL4 connector. By means of three 2-pole cables not supplied, (minimum section 2.5 sq.mm per pole, for cable lengths up to 15m), terminated with 2 male NL4 connectors (+ 1 / -1 connected, + 2 / -2 empty), the SW is connected to a splitter box (if purchased from Pequod the code is BoxSW00) which has 3 female NL4 connectors at the output (+ 1 / -1 connected, + 2 / -2 empty), and a female NL8 connector at the input .

The splitter box is connected to the crossover by means of a cable (if purchased from Pequod it is the code CAB03SW) terminated with NL8 connectors: 6/8-pole cable and 2 connectors (A and B) NL8FC (do not connect terminals 1+ 1-). Connection of the cable poles between the 2 connectors, according to the following diagram, where each wire connects corresponding numbers on connector A and connector B, used to terminate the cable itself. The cable can also be 8-pole, not connecting, also in this case, the terminals 1+ 1- of the connectors. See diagram below:



The specific connection cable Pequod (code CAB03SW), which can be ordered for the product, is made of high quality OF copper, conductor section 2.5 sq mm and standard length of 3 m and is suitable when the xover box is near the splitter box. Other lengths are provided upon request.

The 3-way passive crossover, made with high quality components, is housed inside a specific box. In our catalogue there are 3 box types (also equipped with a female NL8 output for connection with the aforementioned dedicated cable, and a female NL4 input): standard box (cod.STBOXSW), metal rack box (cod. RBOXSW), or weatherproof box in composite (cod.WPBOXSW). The connectors are standard NL8, NL4 or water proof on request.

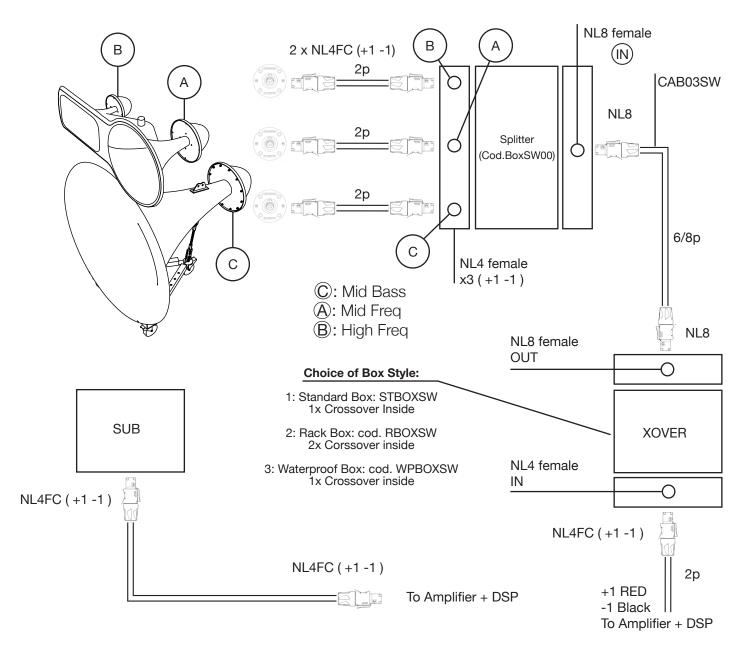


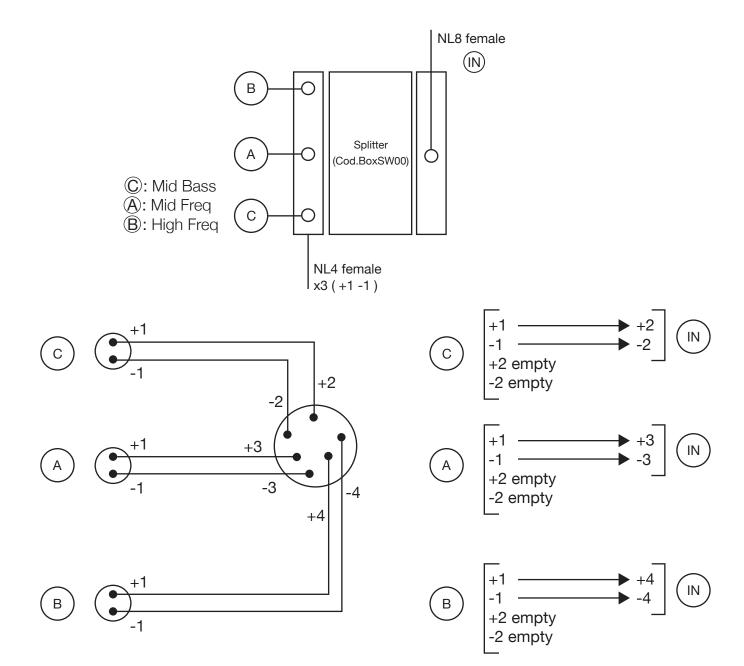
In case of custom realization by the installer of the connection cables, we recommend specfying installation-grade Low Smoke Zero Halogen (LSZH) cables for permanent installations. The cables should use Oxygen Free Copper (OFC) of grade C11000 or above. For distances of more than 15 meters between xover and amplifiers we recommend increasing the section of the cable poles to 4 sq.mm, to avoid excessive emission level losses. For lengths less than 15 m, you can use 2-pole cables, each with a section of 2.5 sq.mm.

Finally we have:

Cable between crossover and amp (not supplied): 2-pole cable (2.5 sq.mm minimum section per pole up to 15 m cable length, in addition we recommend switching to 4 sq.mm per pole), terminated with NL4FC male connector (+1 / -1 connected and corresponding to +1 red and -1 black on the amplifier, + 2 / -2 empty) to connect to the crossover input, which has a NL4 female connector, standard or WP on request.

Cable between subwoofer and amplifier (not supplied): as above





+1 empty -1 empty

DSP general settings:

- *1) (SWave)High-pass filter @130Hz, 24 dB/oct. LR
- *2) (Subwoofer) Band pass:

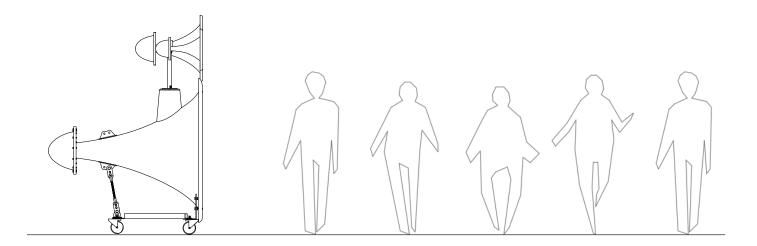
High-pass filter @20Hz, 24 dB/oct. Low pass filter @130Hz, 24 dB/oct.

Gain and Time Alignment: it depends on Subwoofer utilized

4 Installation and system design

Shockwave can typically be used as a very high quality system to sonorize listening areas, such as a dance floor or for an audience of a live concert. In all cases it is necessary to use suitable subwoofers (Ovoid or Hydra available from the Pequod catalog) to have a full range system. Hydra represents the optimal choice as a subwoofer to be combined with the Shockwave, to have an all horn loaded full range system, of high quality and global sensitivity.

For on stage installation facing an audience, they can be housed on their mobile frame, for easy handling.

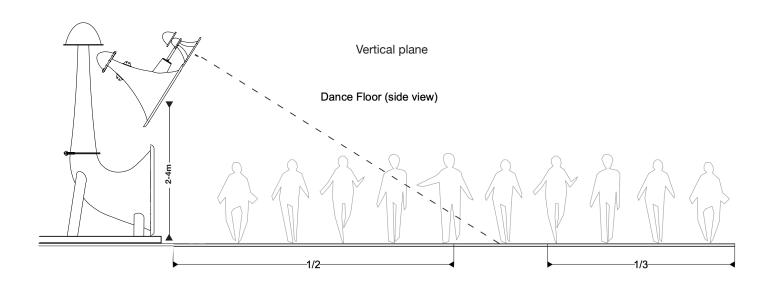


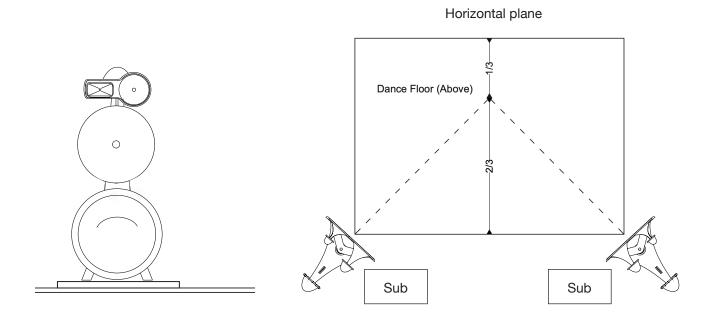
4 Installation and system design

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For the installation of the SWaves facing a wide audience, it is necessary to take into account that optimal acoustic coverage is obtained by lifting the SWAves of 2/4 m from the ground on the vertical plane, tilting them towards the audience, so that the ideal outgoing axis between the HF and MF horns is oriented in an area located between 1/2 and 2/3 of the depth of the area to be soundtracked (dance floor or stalls). On the horizontal plane, it is also necessary to orientate the ideal axis coming out of the SWave in an area that is located at about 2/3 of the depth of the area to be covered, on the center line of the area itself.

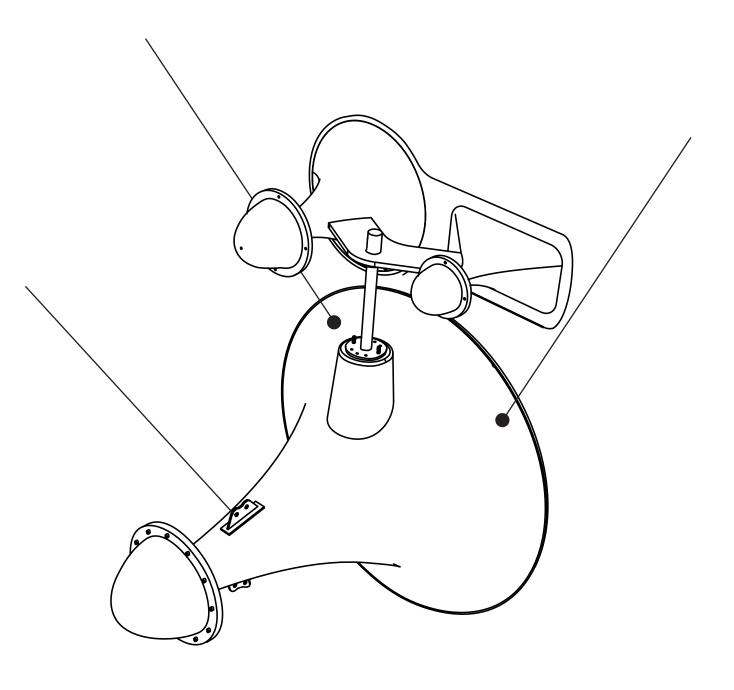
Refer to the following diagram:





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The system Swave can be easily suspended with chains or cables in steel or synthetic technical fiber. The system is equipped with rings and suspension eyebolts (see pic below). The suspension loads are very small for the suspension points. You can refer to the weights indicated in the table (we recommend a multiplicative safety factor in operation equal to 5).





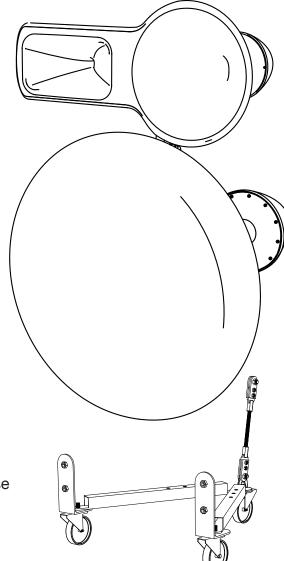
5: Accessories

In the Pequod catalog there are some accessories to be used with Shockwave.

Cod. BAG01SW: Protective PVC Bag sized for Shockwave, waterproof soft finish to protect from scratches and weather

Cod. BS3WSW: stainless steel base for Shockwave, with 3 wheels.





Stainless steel base cod: BS3WSW



6: Maintenance and Surface Protection

All Pequod units are built from a unique high quality composite material which is inert to atmospheric agents and requires minimal regular maintenance, just a simple cleaning of the surfaces with a soft cloth dampened with alcohol.

For best practice in long term care of the composite components, and to obtain or restore a truly professional level of surface finish, we recommend using the 3M "Perfect It™" line of Gelcoat cleaners and protective waxes (above right).

Follow the instructions provided to ensure the best possible finish for your Pequod composite speaker bodies and accessories.

Many installations require Stainless Steel support structures or armatures to complete mounting and assembly of different Pequod units. For these components, we recommend cleaning with $3M^{TM}$ Stainless Steel Cleaner and Polish (right).

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7: Warranty

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Pequod Acoustics offers a guarantee to the original owner (person or company who purchased the product brand new) of each new Pequod product (provided it was purchased directly from Pequod or through a Pequod Acoustics Authorised Dealer/ Distributor) that it is free of defects in materials and workmanship and that each product was tested in the factory to meet or exceed all specifications declared. Each model has a test file recorded in our database, related to its serial number.

The period of limited warranty is three (3) years from the date of delivery to the original purchaser (as shown on the original invoice or sales receipt; a copy may be required as proof of warranty dates)

Pequod Acoustics will repair or replace (at its discretion) all defective parts at no charge for labor or materials; subject to following provisions:

Pequod Acoustics shall take no responsibility for repair or replacement under this warranty if:

- a) The damaged product has been subject to misuse, accident, neglect or failure to comply with normal maintenance procedures
- b) There are improper alterations or unauthorized parts or repairs.
- c) The serial number has been altered, defaced or removed and the original owner won't be able to give information related to our Anti-counterfeit authentication system (see below, section 8)

Pequod Acoustics will remedy any defect, regardless of the reason for failure (except as excluded above) by repair or replacement. Pequod Acoustics will ship the product within a reasonable time after receipt of the defective product at a Pequod Acoustics Authorised Service Centre.

How to obtain service under warranty:

If a Pequod Acoustics product requires service, the original owner must contact the Pequod Acoustics dealer who supplied the product, to receive our Return Authorisation Code (RA code), and instructions on how to return the product to the Pequod Authorised Service Centre, or to Pequod Acoustics.

The original owner must give information about:

- Problems with the product
- Serial number
- Original invoice or sales receipt
- Anti-counterfeit system (see section 8)

After receiving the RA code the owner can pack the unit in the original factory packaging if possible. Please include a note describing the problem packed together with the product. Do not send it separately.

All products being returned to the factory or service center for repairs must be shipped prepaid. Ensure safe transportation of your unit to the authorized service center

Pequod Acoustics (or an Authorised Service Centre) will initiate corrective repairs upon receipt of the returned product, in order to complete the repairs and ship back the product within a reasonable amount of time.

If the repairs made by Pequod or a Pequod Authorised Service Centre are not satisfactory to the owner, they are instructed to give written notice to Pequod.

The original owner is not entitled to recover from Pequod any incidental damages resulting from any defect in the Pequod product. This includes any damage to another product or products resulting from such a defect.

The warranty is not extended by the length of time which the owner is not engaged in active use of the product. Repairs and replacement parts provided pursuant to the warranty will be covered only by the non-expired portion of the warranty.



8: Authentication and Anti Counterfeiting Measures

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Each product by Pequod Acoustics is carefully hand made using high quality components that are, by themselves, difficult to replicate. But we also protect our products using special marks on the inside and outside, which are unique and serve to authenticate original Pequod products.

Thus, each individual product has a special mark, placed in a unique position. For each product (each serial number) we keep a record of the exact position where we placed this mark.

When warranty claims are made, or other requests that require authentication of an individual Pequod product, we will ask the owner to provide a description of the identifying marker as further proof of originality.