Ostro 11.1 Two way passive coaxial



User guide



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1 Technical Specifications

Ostro 11.1 is a passive loudspeaker with two-channel, direct, coaxial emission. A professional HI-PRO speaker designed to seamlessly integrate with dedicated transducers, it is built from highly resistant composite materials for elevated sound sensitivity, dynamics, and definition. Wide-angle coverage of a highly controlled sound field, and the ability to reach high levels without perceptible distortion. The system is characterized by a high-end audio quality and can reach elevated sound pressures. This is classified as a full-range system, in that it does not need a dedicated subwoofer if used in limited spaces, where there would often be insufficient area for a sub. Perfect for private or enclosed areas as the first choice, or as an entry-level DJ monitor and eventually matched to a subwoofer (our reference as DJ monitor is Pequod Kona System). It can be used as a high-quality Satellite in combination with subwoofers such as Ovoid18. In this case, a DSP must be used to match the diver. The Ostro is driven by a special external crossover of extremely high quality and technological complexity, built to high-end specs. This can greatly surpass the quality of sound available through the more common DSP technology or cheap, off the shelf crossovers. Sound dispersion is very precise and regular, allowing it to be used in smaller spaces where sound quality is a high priority. This allows for excellent dynamics which distinguish the entire system from the first listen. The coaxial speaker component represents world class quality, without commercial or technological compromises. Thanks to its elevated sensitivity, the system requires limited amplification power. A Full Fat audio FFA 2004 is the recommended amplifier for 4 Ostro.

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TYPE	Two way passive coaxial
FREQUENCY RESPONSE	50 Hz - 18 KHz (-3dB)
TOTAL SENSITIVITY	93 dB 1W/1m with passive crossover
LOW - MEDIUM FREQUENCIES	10" woofer @ 8 Ohm 500W continuo- us power handling , sensitivity 95 dB 1W/1m
HIGH FREQUENCIES	HF compression driver with titanium diaphragm with voice coil diameter 65mm, @ 8 Ohm 160W continuous power handling , sensitivity 104dB 1W/1m
NOMINAL IMPEDANCE	4 Ohm with 2 way passive crossover
POWER HANDLING	450W 4 Ohm with amplifier @ 2 Ohm stable
MANAGE	2 Ch amplifier to a couple of Ostro loudspeakers (passive crossover provi- ded, for each Ostro) .If very high output is needed we recommend to use a DSP : High-pass filter @50Hz, 12 dB/oct. or higher slope Otherwise as Satellite with subwoofer : Amplifier+DSP to match to subwoofer. High-pass filter @90Hz, 12 dB/oct. or higher slope
SPL MAX	119 dB with 450 W
RECOMMENDED AMPLIFIER	A Full Fat audio FFA 2004 is the recom- mended amplifier for 4 Ostro.
DISPERSION	70 deg conical
CONSTRUCTION MATERIALS	Fiber-reinforced composite, stainless steel
FINISH	all ral color and texture on order
PROTECTIVE GRILLES	Ostro is usually sold with this grid made of stainless steel to protect the 10" coax ,as standard
CONNECTORS	1x Neutrik NL4FX or custom
DIMENSIONS (without support or suspension)	(W) 480mm (H) 480mm (D) 450mm (W) 18,8inch (H) 18,8 inch (D) 17,7inch
WEIGHT	16Kg (36lb)







2: Remove packing materials and save for re-use



3: lift speaker body with both hands when ready



2: Unboxing

The Ostro, 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 Ostro 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 Ostro weighs 16 kg each, and is taken from the box simply following the steps shown here.

Keep the packaging for further storage or transporation, unless units are to be permanently installed.

3 Wiring and Settings

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Ostro has an input made with a female NL4 connector. Through a dedicated cable and terminated with 2 male NL4Fc connectors it is connected to its passive crossover, contained in a box of 3 types of your choice (also equipped with a female NL4 output for connection with the aforementioned dedicated cable): standard box (cod STBOXOS), metal rack box (cod RBOXOS), or weatherproof box in composite (cod WPBOXOS).

The connectors on Ostro are standard NL4 female, or water proof on request. In case of custom realization by the installer of the connection cables, we recommend specifying 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 over 15 meters between Kona and crossover box we recommend increasing the section of the cable poles to 4 sq mm, to avoid excessive emission level losses. For lengths of less than 15 m, you can use 2-pole cables, each with a section of 2.5 sq mm.

Connection diagrams:

A) Cable between Ostro and xover (not supplied): 4-pole cable

(section 2.5 sq mm minimum per pole up to cable length of 15 m, in addition we recommend switching to 4 sq mm per pole), terminated with 2 male NI4Fc connectors (+ 1 / -1 connected, + 2 / -2 connected). Connection of the cable poles between the 2 connectors (A and B), according to the following diagram, where each wire connects corresponding numbers on connector A and connector B, used to terminate the cable itself. Then connect to the Ostro input, which has an NL4fc female connector, standard or WP on request.





B) Cable between xover and amp (not supplied):

2-pole cable (2.5 mmq minimum section per pole up to 15 m cable length, in addition we recommend switching to 4 mmq per pole), terminated with NI4Fc male connector (+ 1 / -1 connected and corresponding to +1 red and -1 black on the amplifier, + 2 / -2 empty) to connect to the xover box, which has a female NL4fc input connector.

DSP general settings:

1) Stand alone : Just if very high output is needed we recommend to use a DSP : High-pass filter @50Hz, 12 dB/oct. or higher slope

2)Ostro as Satellite with subwoofer :

Amplifier+DSP to match to subwoofer.

Ostro : High-pass filter @90Hz, 12 dB/oct. or higher slope

Sub:

Band pass:

High-pass filter @20Hz, 12 dB/oct. or higher slope Low pass filter @90Hz, 12 dB/oct. or higher slope

Gain and Time Alignment : it depends on Subwoofer utilized



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Pequod High pro Speakers

For private or enclosed areas as first choice, or as entry level DJ monitor and eventually matched to a subwoofer (our reference as DJ monitor is Pequod Kona Storm System). Or as a Satellite with subwoofer for small dance floor or for a small audience of a live event. Also used as a filler for medium-high frequencies in areas that require such sound reinforcement.

For on stage installation as an entry level DJ monitor, the reference heights and distances are visible in the diagram. The Ostros must be oriented towards the DJ's head, with a minimum recommended distance of 1.5 m. In height, the ideal central outgoing axis must be approximately 1.7 m from the ground. Possible presence of the subwoofer.

1) Entry level DJ Monitor system





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2) Ostro facing an audience:

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For the installation of Ostro facing an audience, it is necessary to take into account that optimal acoustic coverage is obtained by lifting the Ostro 2/4 m from the ground on the vertical plane, tilting them towards the public, so that the ideal central outgoing axis is oriented in an area located between 1/2 and 2/3 of the depth of the area to be soundtracked (dance floor or audience).

On the horizontal plane it is also necessary to orientate the ideal axis coming out of the Ostro in an area that is placed at about 2/3 of the depth of the area to be soundtracked, on the center line of the area itself.

2 Ostro (+ possible subwoofer):



HIGH PRO

SPEAKERS

4 Ostro placed at the 4 vertices of a square area to be sonorized in the central area.





Water proof bag

5: Accessories

Accessories are available to complete the experience of the Pequod Ostro system:

Cod. BAG01OS: Protective PVC Bag sized for Ostro system, waterproof soft finish to protect from scratches and weather

Cod. GR10OS: Front Protection Grille of the 10" coax, made of stainless steel. Usually included as standard component in most orders, delete option is available when protection is not needed (installation at ceiling height, for example)

Cod. BSSTOS: Stand with Concrete Base with logo and stainless steel 35mm tube (lenght 1500 mm) for supporting a freestanding Ostro system without Ovoid sub

Cod. TBBOV18OS: Ovoid Connection Pipe in stainless steel diameter 35 mm (length 800 mm) suitable for coupling above the sub Ovoid 18 system. Other lengths available on demand.

Cod. WALLPLTOS : Wall plate, made of stainless steel, to suspend the Mounting Bracket.

Cod: MBRAOS : Mounting Bracket, made of stainless steel, to be connected to the wall plate or directly to wall, ceiling.

Steel Mesh grille Cod. GR10OS



Ovoid connection pipe Cod. TBBOV18OS

Cod. BAG01OS Wall plate Cod. WALLPLTOS **Mounting Bracket** Cod. MBRAOS Stand with Concrete Base Cod. BSSTOS

Pequod High pro speakers

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[™] Stainless Steel Cleaner and Polish (right).





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7: Warranty

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.

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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.



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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.

