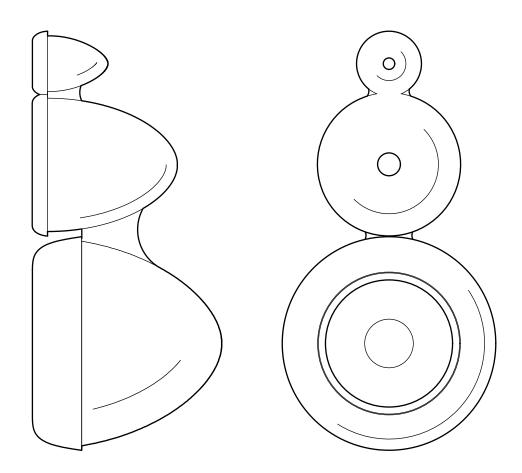
# Kona Supra 17.1 Three way horn loaded passive system



# **User Guide**

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## 1: Technical Specifications

Kona Supra 17.1 is a three-way passive horn-loaded system with extended low frequency direct emission components. Main use is as DJ Monitor, as when coupled to a subwoofer such as our Ovoid 18.

Professional HI-PRO system designed to seamlessly integrate with dedicated transducers, built from high resistance composite materials for elevated 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 high-end audio quality and is able to reach elevated sound pressures. A pair of full-frontal horns manage the high-mid frequency range.

The high range horn is characterized by a special high-end derivation design. The long and complex development allows for a wide dispersion without compromising a powerful sonic loading.

The mid-horn has a unique design that creates an extraordinary efficiency and sensitivity. This allows for excellent dynamics that distinguish the entire system from the first listen. The extended low frequency direct emission component is characterized by a light structure with a highly resistant ovoid shell containing a 12" woofer with a range of 100-500 Hz and high sensitivity. The 12" LF driver features a water resistant cone.

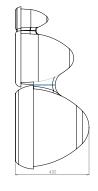
Components such as the speakers, woofers and compression drivers all represent world class quality, without commercial or technological compromises. Thanks to its elevated sensitivity, the system requires limited amplification power.

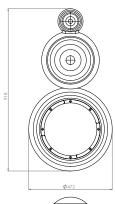
The Kona Supra 17.1 system is managed through a dedicated specific passive crossover filter for the best performance.

The Full Fat audio FFA 6000 (+ external DSP) is the recommended 2 channel amplifier for this system.

The Kona Supra requires a subwoofer to be a full range system

ТҮРЕ	Three way passive horn loaded with extended low frequency direct emission component
FREQUENCY RESPONSE	100 Hz – 20 KHz
TOTAL SENSITIVITY	100 dB 1W/1m with passive crossover
LOW FREQUENCIES	12" Low woofer 8 Ohm 500 W nominal, 1000 W peak
MEDIUM FREQUENCIES	2" (50 mm) MF compression driver @ 8 Ohm 100 W nominal, 200 W peak
HIGH FREQUENCIES	1" (25 mm) HF compression driver @ 8 Ohm 70W nominal, 140 W peak
NOMINAL IMPEDANCE	4 Ohm with 3 way passive crossover
POWER HANDLING	1000W @ 4 Ohm with amplifier, 2 Ohm stable
MANAGMENT	2 Ch amplifer to a couple of Kona loudspeakers (passive crossover inside, for each Kona Supra) + DSP to match to subwoofer. High-pass filter @100Hz, 24 dB/oct. LR.
RECOMMENDED AMPLIFIER	loudspeakers (passive crossover inside, for each Kona Supra) + DSP to match to subwoofer. High-pass filter @100Hz, 24
RECOMMENDED	loudspeakers (passive crossover inside, for each Kona Supra) + DSP to match to subwoofer. High-pass filter @100Hz, 24 dB/oct. LR.  Full Fatt Audio FFA 6000 with external
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RECOMMENDED AMPLIFIER DISPERSION CONSTRUCTION	loudspeakers (passive crossover inside, for each Kona Supra) + DSP to match to subwoofer. High-pass filter @100Hz, 24 dB/oct. LR.  Full Fatt Audio FFA 6000 with external DSP to match to subwoofer  60° horizontal, 60° vertical  Fiber-reinforced composite, stainless
RECOMMENDED AMPLIFIER DISPERSION CONSTRUCTION MATERIALS	loudspeakers (passive crossover inside, for each Kona Supra) + DSP to match to subwoofer. High-pass filter @100Hz, 24 dB/oct. LR.  Full Fatt Audio FFA 6000 with external DSP to match to subwoofer  60° horizontal, 60° vertical  Fiber-reinforced composite, stainless steel
RECOMMENDED AMPLIFIER DISPERSION CONSTRUCTION MATERIALS FINISH PROTECTIVE	loudspeakers (passive crossover inside, for each Kona Supra) + DSP to match to subwoofer. High-pass filter @100Hz, 24 dB/oct. LR.  Full Fatt Audio FFA 6000 with external DSP to match to subwoofer  60° horizontal, 60° vertical  Fiber-reinforced composite, stainless steel  all ral color and texture on order  Stainless steel grille standard on 12"
RECOMMENDED AMPLIFIER DISPERSION CONSTRUCTION MATERIALS FINISH PROTECTIVE GRILLES	loudspeakers (passive crossover inside, for each Kona Supra) + DSP to match to subwoofer. High-pass filter @100Hz, 24 dB/oct. LR.  Full Fatt Audio FFA 6000 with external DSP to match to subwoofer  60° horizontal, 60° vertical  Fiber-reinforced composite, stainless steel  all ral color and texture on order  Stainless steel grille standard on 12" mid-low speaker
RECOMMENDED AMPLIFIER DISPERSION CONSTRUCTION MATERIALS FINISH PROTECTIVE GRILLES CONNECTORS DIMENSIONS	loudspeakers (passive crossover inside, for each Kona Supra) + DSP to match to subwoofer. High-pass filter @100Hz, 24 dB/oct. LR.  Full Fatt Audio FFA 6000 with external DSP to match to subwoofer  60° horizontal, 60° vertical  Fiber-reinforced composite, stainless steel  all ral color and texture on order  Stainless steel grille standard on 12" mid-low speaker  1x Neutrik NL4 or custom preference  (W) 472 mm (H) 918 mm (D) 420 mm









## 2: Unboxing

The Kona Supra system, 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 Kona 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.

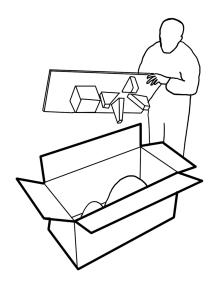
#### Extraction from box:

The Kona Supra weighs 28 kg each, and is taken from the box simply following the steps shown here.

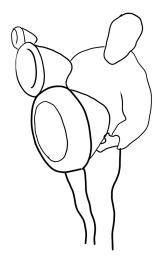
Keep the packaging for further storage or transporation, unless units are to be permanently installed.



1: Carefully cut tape and open carboard box



2: Remove packing materials and save for re-use



3: Lift speaker body with both hands when ready



### 3: Cables and Setup

#### **Configuration 1**

The Kona Supra recieves input from a female NL4 connector. Through a dedicated cable and terminated with 2 male NL4FC connectors it is connected directly to the output of the power amplifier.

The 3-way passive crossover, made without compromise with high quality components is housed inside the Kona Supra itself, and provides a ventilation hole to allow adequate thermal dissipation.

The connectors are standard NL4 (+ 1 / -1 connected + 2 / -2 empty) 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 more than 15 meters between Kona Supra and amplifiers 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 Schemes:

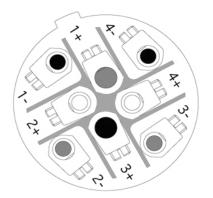
A) Cable between Kona Supra and amp (not supplied): 2-pole cable (2.5 sq.mm minimum section per pole up to 15 m cable length, in addition we recommend switching to 4 sq.mm per pole), terminated with NI4FC male connector (+ 1 / -1 connected and corresponding to +1 red and -1 black on the amplifier, +2/-2 empty) to connect to the Kona input, which has an NL4 female connector, standard or WP on request.

- B) Cable between subwoofer and amplifier (not supplied): as point A
- \*1) Kona: High-pass filter @100Hz, 24 dB/ oct. LR.
- \*2) Subwoofer Band pass:

High-pass filter @25Hz, 24 dB/oct. But Low pass filter @100Hz, 24 dB/oct. LR

Gain and Time Alignment : it depends on Subwoofer utilized

Below: Connectors A and B



#### **Configuration 2**

The Kona Supra recieves input from a female NL4 connector.

Through a dedicated cable and terminated with 1 male NL4FC connector and 2 fastone. This cable is inside the tube, where is connected to a 2 pole cable from the Ovoid (red-blue) by fastons, to the power amplifier.

The 3-way passive crossover, made without compromise with high quality components is housed inside the Kona Supra itself, and provides a ventilation hole to allow adequate thermal dissipation.

The connectors are standard NL4 (+ 1 / -1 connected + 2 / -2 empty) 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 more than 15 meters between Kona Supra and amplifiers 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.

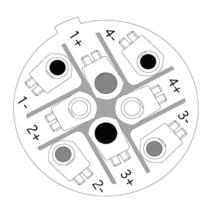
#### Connection Schemes:

- A) Cable between Kona Supra and Ovoid (supplied): 2-pole cable (2.5 sq.mm minimum section per pole terminated with NI4FC male connector (+1/-1 connected) and 2 fastons to connect to the Kona input, which has an NL4 female connector, standard or WP on request.
- B) Cable between subwoofer and amplifier (not supplied): 4 pole cable, 2.5 sq.mm minimum section. NL4FC male connectors. +1 / -1 for Sub Ovoid and +2 / -2 for Kona.
- \*1) Kona: High-pass filter @100Hz, 24 dB/ oct. LR.
- \*2) Subwoofer Band pass:

High-pass filter @25Hz, 24 dB/oct. But Low pass filter @100Hz, 24 dB/oct. LR

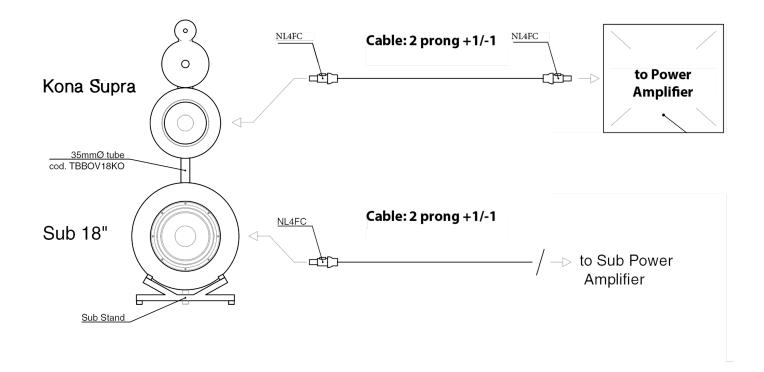
Gain and Time Alignment : it depends onSubwoofer

Below: Connectors A and B



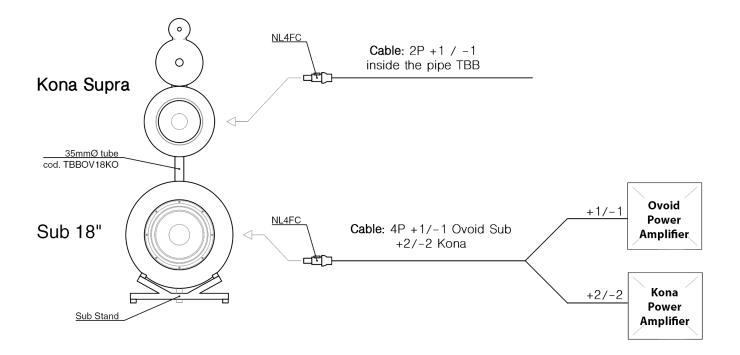
# 3: Cables and setup (cont.)

#### **Configuration 1**



# 3: Cables and setup (cont.)

### **Configuration 2**



# 4: Installation and System Design (DJ Monitor)

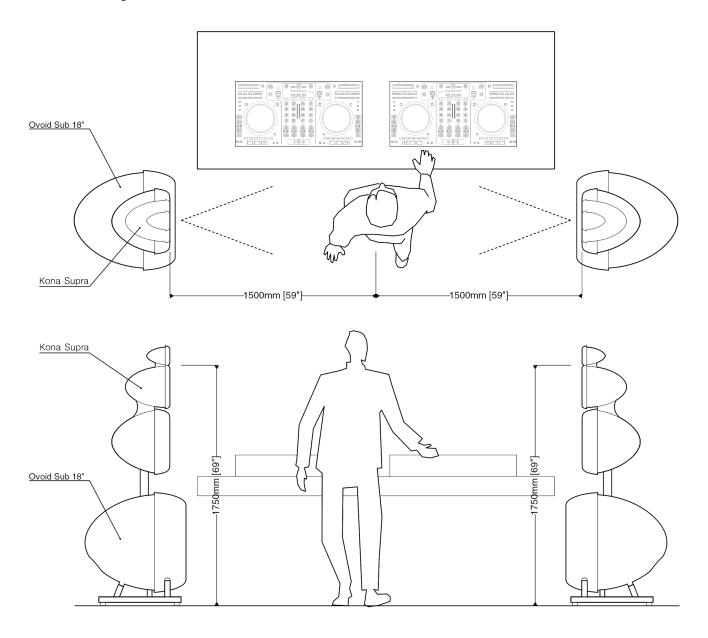
The Kona Supra can typically be used as a professional DJ monitor, as a front studio monitor, or as a very high quality system in listening areas, such as a smaller dance floor or for a live concert audience. In some cases it is necessary to use suitable subwoofers (Ovoid or Hydra available from the Pequod catalog) to have a full range system.

For on-stage installation as a monitor, the reccomended heights and distances are visible in

the diagram below.

The Kona must be oriented towards the DJ's head, with a minimum recommended distance of 1.5m.

In height, the ideal outgoing axis, placed at the intersection between the hf horn and mid horn, must be approximately 1.75 m from the ground.

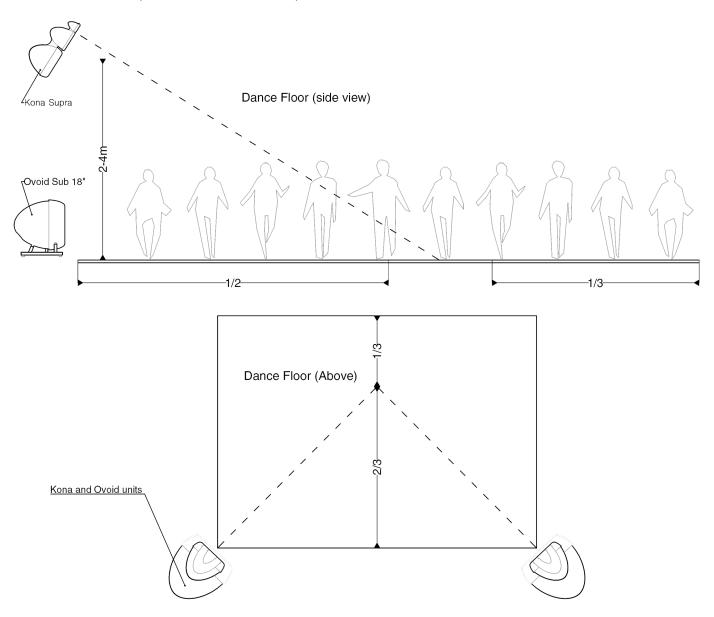


# 4: Installation and System Design (For Audience)

For the installation of the Kona Supra facing an audience, it is necessary to take into account that optimal acoustic coverage is obtained by lifting the kona 2-4 m from the ground in the vertical plane, tilting them towards the audience, so that the ideal outgoing axis, placed at the intersection between the hf horn and mid horn, are 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 orient the ideal axis coming out of the Kona Supra in an area that is located approximately 2/3 of the depth of the area to be covered, on the center line of the area itself.

Refer to the following diagrams:



#### 5: Accessories

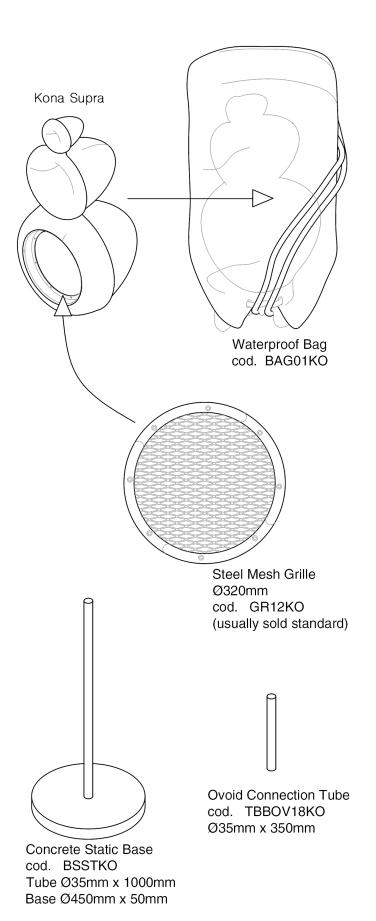
Accessories are available to complete the experience of the Pequod Kona Supra system:

Cod. BAG01KO: **Protective PVC Bag** sized for Kona Supra system, waterproof soft finish to protect from scratches and weather

Cod. GR12KO: **Front Protection Grille** of the 12 woofer, 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. BSSTKO: **Stand with Concrete Base** with logo and stainless steel 35mm tube for supporting a freestanding Kona Supra system without Ovoid sub

Cod. TBBOV18KO: **Ovoid Connection Pipe** in stainless steel diameter 35mm, length 350mm suitable for coupling above the sub Ovoid 18 system. Other lengths available on demand



# 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 reccomend using the 3M "Perfect It™" line of Gelcoat cleaners and protective waxes (above right).

Follow the instuctions provided to ensure the best possibile 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 reccomend cleaning with 3M<sup>™</sup> Stainless Steel Cleaner and Polish (right).





### 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 direct 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 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 labour 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 unauthorised 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 centre for repairs must be shipped prepaid. Ensure safe transportation of your unit to the authorised service centre

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

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 a further proof of originality.

