

# Opera Prima

## System

Opera Prima ("First" in Italian) is the smallest model in the Linea Classica series: it is a 2-way bass-reflex loudspeaker of about 13 internal litres, designed to be placed either on a shelf or stand, and characterised by good extension of the frequency response towards lower frequencies. The loudspeaker is equipped with four bi-wire ready gold-plated connectors of large diameter.

## The Cabinet

The Opera Seconda cabinet is designed with rounded edges, using quality MDF, and finished with finely polished real wood veneers. The front, top and rear panels are covered with manufactured leather, which beyond aesthetic qualities, also work as damping for the loudspeakers.

The front panel, following Opera's tradition, is thick enough to properly control the drivers.

In this model, seeing as the loudspeaker was designed to be placed on a stand or shelf, the reflex port is located on the front panel.

The cabinet interior is filled with quality acrylic wadding in order to control the extended frequency response, while lowering internal reflections.

## The Components

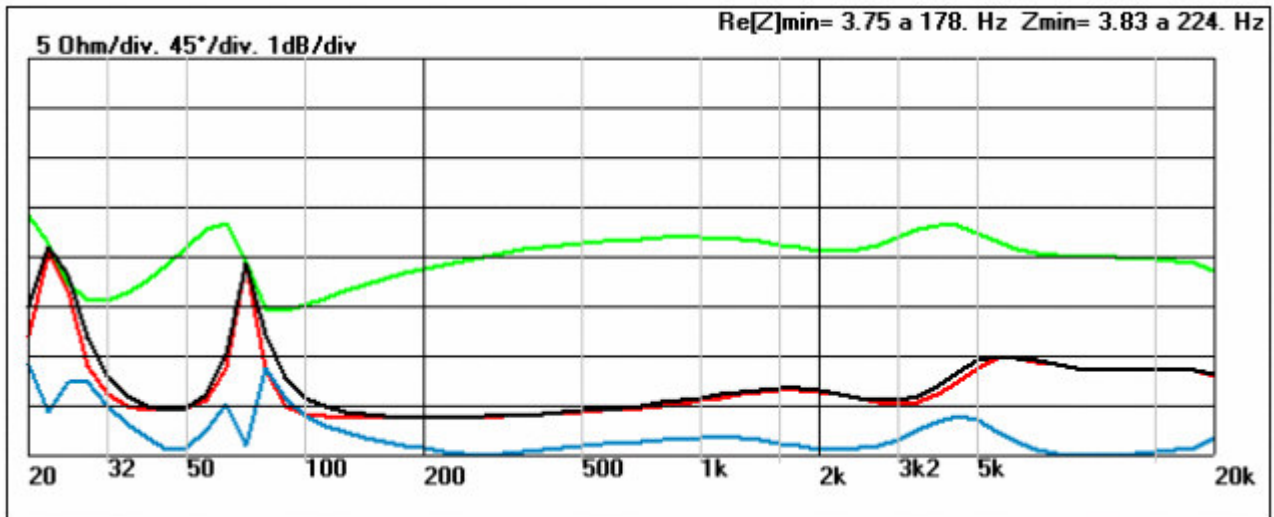
All Linea Classica models use the same drive units; the one inch tweeter (the same used in the Callas SP) is a silk dome unit, with ferrofluid in the air gap and a wide rear decompression chamber. The qualities of this SEAS tweeter are well known and appreciated. The woofer, also made by SEAS, was developed specially for this line of loudspeakers. It is a 6.5 inch unit with 18cm chassis, 38mm voice coil, aluminium diaphragm and rubber outer suspension. It has a dynamic mass appreciably higher than the norm, and an impedance of 4 ohm. Two copper rings are fitted above and below the T-shaped pole piece, which both reduce distortion and stabilize the magnetic flux. Finally, the bullet-shaped phase plug in ABS helps to dissipate heat and overcomes compression effects associated with normal dust-caps. It also improves emission at the high-frequency end of the unit's range. The cast chassis, of aerodynamic design, is fully open even beneath the inner suspension.

## The Crossover

In designing this new "Classic Series", particular attention has been paid to the electrical impedance. In particular, we wanted to guarantee a load condition compatible with any type of amplifier.

In order to do so, the impedance minimums have been kept within the limits allowed by the DIN regulation that provides that, for a nominal 4 ohm loudspeaker, the impedance does not fall below 3.2 ohm.

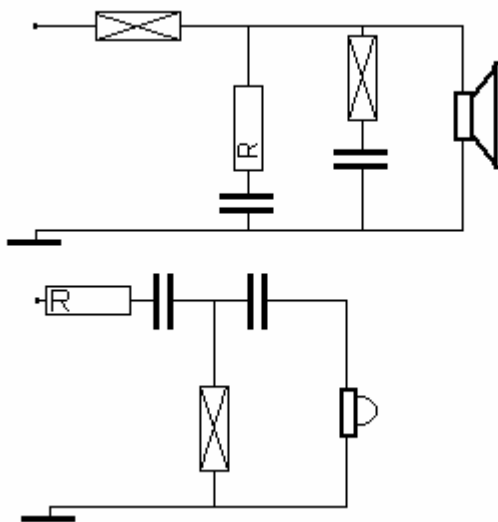
The electrical impedance modulus of Opera Prima is always over 3.8 ohm, and the progression is regular with contained phase rotations.



Electrical Impedance of the Opera Prima model  
 Electrical Impedance : Black = Z module, Green =Phase, Red =Real[Z], Cyan Imag[Z]

We believe that the cost of a diffuser has to be assessed together with the cost of the amplifier more suited to guide it. Opera Prima is a nominal 4 ohm diffuser that can be easily driven by a wide range of amplifiers, either with valves or solid.

The cross-over of Opera Prima uses a classic network with asymmetrical slopes. The cross-over frequency is at about 2300 Hz and the sensitivity is 89 dB (2.83 V at one metre).

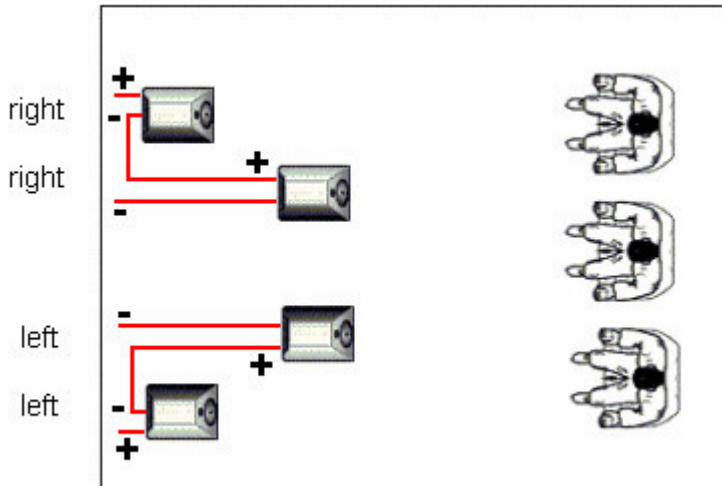


Opera Prima Filter Scheme

## Room Positioning

The Opera Prima has been designed to be placed either on a solid shelf or a quality stand (the latter available from Opera). In any case, we advise against placing the loudspeakers in a corner, and one needs to keep a minimum distance of at least 30 cm (12") from the side walls. If the loudspeakers are put on stands, the best position within your surroundings will be found with a little experimenting.

In case two pairs of Opera Prima diffusers are used, these have to be connected in series as illustrated in the figure below.



Positioning of two pairs of diffusers, suggested by Righini

### Technical Specifications:

#### *Prima*

#### **System:**

Bookshelf or standmount, re.ex loaded with front port

#### **Drive units:**

1 x 6.5 inch bass drivers – aluminium cone

1 x 1 inch tweeter - fabric dome

#### **Number of ways:**

2 way

#### **Frequency response:**

40-20000 Hz

#### **Cross-over: low pass:**

12 dB/octave for the low pass

24 dB/octave for the high pass

Crossover frequency 2300 Hz approx

#### **Power handling:**

70 watt RMS

#### **Recommended amplifier:**

10 to 70 Watt RMS or more ( Without clipping )

#### **Sensitivity:**

89 dB/1watt/1 meter

#### **Nominal Impedance:**

4 ohm (Z min > 3.9 ohm)

#### **Room positioning:**

At least 20-30 cm from side room boundary

#### **Size:**

36,5 x 24 x 31,5 cm (h x w x d)

14,4 x 9,5 x 12,4 inch (h x w x d)

#### **Weight:**

10,5 Kg (23 lbs)