



# **Compact, High-quality, Self-powered Loudspeakers** for Portable Applications and Fixed Installations



Great-sounding Plug-and-Play System
Compact and Lightweight
High Power - SPL (peak) 126 to 131 dB
Rotateable HF Driver
Separate Amplifiers and Processing for each Driver
4 Presets (Standard, Near-field, Stage Monitor & 80 Hz Hi-Pass)
Robust Birch Plywood Construction
Matching Subwoofer with 4 LPF Presets

Corporate A/V
Ballrooms
Congress Centres
Trade Shows
Clubs

Theatres In-Fill Delay Effects Under-Balcony

Television Sound Broadcast Monitor Audience Monitors Houses of Worship Stage Monitor
DJ Monitor
Nearfield Monitor
Side-Fill
Drum Monitors

# Latest Technology!

La Line high-quality, self-powered loudspeakers are designed for a wide range of portable and fixed sound reinforcement applications. Using the latest technologies, excellent sound, high power and controlled dispersion are combined in a compact package that's easy to carry and install.

La test Technology!

The **La Line** features the latest in amplifier and processor technology. The Class D amplifiers feature Fixed Frequency PWM-PPM modulation and are light, clean, power-efficient and matched to the drivers. Each driver in the **La-8** and **La-12** is powered by a separate amplifier and separately optimised using DSP. The result is a smooth sound, accurate in the lower mid frequencies and very low in distortion. Two amplifiers in bridge mode drive the **La-112S** subwoofer.

LED-indicated features include **READY** status, **SIGNAL** present, **TEMP**erature warning and **LIMIT**ing. The limiter is optimised for the system which also features sophisticated overload protection. The **INPUT** connection is by balanced +4dB XLR and an XLR **THROUGH** connector allows multiple systems to be efficiently daisy-chained.

#### **PROTECTION CIRCUITS**

There are three limiter stages; a clip limiter, responding to excess harmonic distortion, an average power limiter and an average high frequency limiter to protect the HF driver. Additionally, the **La Line** features average and peak current protection, whereby the amplifier stage is shut down should the specified thresholds be exceeded, and over-temperature protection with a warning phase before shut down. This comprehensive set of protection circuits allows the full potential of the system to be achieved with minimal risk of damage.

#### **PROCESSOR PRESETS**

The processor is used for the crossover, time alignment of components, equalisation and dynamic processing of the signal. There are 4 Presets accessed in sequence by a step-through switch.

On the full range cabinets these are:-

**FRONT** - FOH, no subwoofers: low and high frequency shelving equalisation provides a frequency response contour suitable for music applications.

**NEARFIELD** - this setting provides a natural, balanced frequency response when the unit is placed close to listeners in near field and delay applications.

**MONITOR** - this preset provides a nominally flat response for stage monitor and speech reinforcement.

**X'OVER**- adds a 80 Hz High Pass Filter to the system for use with a subwoofer.

On the subwoofer:-

A choice of Low Pass Filter values is offered - **90 Hz**, **100 Hz**, **110 Hz** and **120 Hz**. This allows system optimization with a wide variety of full range cabinets. **90Hz** is recommended for use with **La-12** and **100Hz** recommended for **La-8**.

# AMP / PROCESSOR SPECIFICATIONS:

INPUT

Sensitivity:  $1 V_{RMS} / 2.22 \text{ dBU}$ 

Connections Electronically balanced (pin 2+) 10K

Maximum Input Signal 4.5 V RMS

DSP

Sampling: 24 bit AD/DA; 48 KHz simple rate.

Dynamic Range 100 dB
Presets 4 memories

**Amplifier** 

Power **La-8** & **La-12** 1 x 350 W (4 ohms) plus 1 x 180 W (8 ohms)

Power **La-112S** 1 X 500 W Gain: 32 dB (40 times)

AC POWER Min.100 V max. 250 V Frequency: min.40 Hz-max. 80 Hz



Built to a st!

The **La Line** components are mounted in a rigid, 15mm birch plywood cabinet coated with a durable paint finish. All drivers are high-quality, high-sensitivity and made in Europe. Each cabinet is fitted with a sturdy metal grille designed to cope with the rigours of the road - this is especially important for stage monitor applications. Handles are formed directly into the plywood and positioned at the top of the cabinet, rather than the side, to facilitate removal from flight cases.

Fixing points allow horizontal or vertical mounting using optional brackets and a 35mm polemount socket enables use with a variety of third party stands. The left hand side of the cabinet is angled at 42° - the optimum angle when used on its side as a stage monitor. Additionally the HF driver on the **La-8** and **La-12** can easily be rotated to give the same dispersion characteristic when the cabinet is mounted either horizontally or vertically. The **VIETA** logo can be rotated accordingly for cosmetic purposes and to indicate the rotation of the horn



# Built to ast!



#### **Acoustic Specifications**

dB (SPL):

#### 120 dB Continuous :126 dB Peak

Freq Response: 89 Hz-18 KHz (+/-3dB) Useable Bandwidth: 55 Hz-20 KHz (-10dB)

Weight: 12 Kg

Size: (H X W X D): 418 X 267 X 270 mm

Dispersion (-6dB)

Horizontal 90° Vertical 60° (Standard)

Horizontal 60° Vertical 90° (Horn Rotated)

Components:

Mid/Bass 1 X 8"; High 1 X 1"

Neodymium

Axial Sensitivity:

SPL 94 dB (-21 dBu 0,07 Vrms)

Voice Coil Diameter:

Mid/Bass 51 mm / 2"; High 44.4 mm / 1.75"

#### **Applications**

#### Stand-alone

Mobile and Installed AV systems Presentations and Trade Shows TV Audience monitors Theatrical Sound reinforcement -fill, delay and effects systems Under-balcony coverage Distributed systems in:-Conference Centres Houses of Worship Concert Halls Clubs Stage Monitoring

Nearfield Monitors - broadcast and

#### With Subwoofer

studio

Small to mid-size sound reinforcement Side fills, Drum Monitors DJ Monitors

#### La-12



#### **Acoustic Specifications**

dB (SPL):

#### 125 dB Continuous:131 dB Peak

Freq Response: 89 Hz-18 KHz (+/-3dB) Useable Bandwidth: 55 Hz-20 KHz (-10dB)

Weight: 18 Kg

Size: (H X W X D): 610 X 366.5 X 370 mm

Dispersion (-6dB)

Horizontal 80° Vertical 50° (Standard)

Horizontal 50° Vertical 80° (Horn Rotated)

Components:

Mid/Bass 1 X 12"; High 1 X 1.4"

Axial Sensitivity:

SPL 97 dB (-21 dBu 0,07 Vrms)

Voice Coil Diameter:

Mid/Bass 75 mm / 3"; High 72.2 mm / 2.84"

#### **Applications**

As La-8 but with higher power and greater bass response.





## La-112S



#### **Acoustic Specifications**

dB (SPL):

# 125 dB Continuous:131 dB Peak

Freq Response: 39Hz-160KHz (+/-3dB)

Weight: 25Kg

Size: (H X W X D): 380 X 530X 390 mm

Components: 1 X 12"

#### **Applications**

For use with La-8 and La-12

Can be used with other full-range systems using one of the four pre-set Low Pass Filter settings.





#### Why self-powered loudspeakers?

Speaker cable is the natural enemy of installers and hire companies alike. Long signal cable runs degrade the audio signal, unless high-quality, (and thus expensive), sectionally-wound 100V line transformers are employed. In mobile applications, as well as being inconvenient and bulky, speaker cables are unsightly and need careful positioning for health and safety reasons.

Self-powered loudspeakers eliminate the need for speaker cable and the accompanying amp racks, requiring only a local AC supply and the input signal, which, if professionally balanced, can be run long distances using relatively modest cable without loss of signal quality.

Incorporating DSP with the amplifier allows the package to be completely self-contained and the components to be accurately matched so the audio system becomes totally "plug-and-play" and consequently quick and easy to set-up or install.

In the past, the addition of the electronics was accompanied by an unacceptable increase in the weight of self-powered boxes but the latest generation amplifier/processors, as used in the **La Line**, solve this problem.

#### What do I look for when I buy self-powered speakers?

While the amplifier and processor must be of good quality, conventional questions like "how many watts?" are almost irrelevant when choosing a quality self-powered system like the **La Line**. Of course, there are many factors to consider but here is

#### Vieta Pro's "1-2-3 check-list"!

### **No1: Sound Quality**

As with all high-end, professional audio systems, great sound quality is priority one. One of the problems with comparing unpowered speakers is that much of the outcome relies on matching the component parts. This can be a complex process, involving not only the amplifier and speakers but also processor settings and the nature of any wiring, especially when long runs of speaker cables are to be employed.

Auditioning competing self-powered systems couldn't be easier. Simply provide the same balanced audio signal to the boxes and listen.

#### No2: SPL

The power of an amplifier and power handling of a speaker, the "how many watts?" question, is relevant when matching individual system components. But the power of any "plug-and-play" system cannot be judged this way, as the acoustic power produced depends on many other things, particularly the sensitivity of the drive units. So, for complete systems, the sound pressure level - dB (SPL) - figure is the one to use when comparing acoustic power. The **La Line** employs very high-quality, high sensitivity drivers. These maximise the effectiveness of the on-board amplifiers to produce SPL values which equal or exceed other heavier and more expensive systems.

#### No3: Size and Weight

The smaller the system, the less likely it is to interfere with sightlines and the look of an event or installation. The lighter the boxes, the easier to transport and rig or install. Provided the sound quality is not affected, this is a definite case of "small is beautiful". La Line delivers no-compromise high-fidelity, high-power sound in a compact lightweight easy-to use package.

## How do I best use the system with a subwoofer?

On **La-8** and **La-12**, preset 4 adds a 80 Hz high pass filter for use with a subwoofer. If one **La-112S** subwoofer is used per full-range cabinet, for example when a pole-mount is used, the XLR "through" cable can be used to send the unprocessed audio signal directly to the subwoofer, which has complementary, on-board, low pass filter choices. If there is more than one full-range cabinet per sub, best results are achieved with a dedicated, high-quality, mono-sum feed to the subwoofer. For most environments, these factory recommendations will be the best options:-

With La-8, select the 100Hz pre-set (pre-set 2) on La-112S.

With La-12, select the 90Hz pre-set (pre-set 1) on La-112S.

However, depending on the location of the subwoofers and full-range cabinets in the acoustic space, there may be a better combination using the **La-112S** preset options at 110Hz and 120Hz. As always, use your ears!

#### "Can you Tell me something about the company?"





Vieta is based in Barcelona, Spain, the home of Gaudi and the style capital of Europe! Vieta has been making quality audio for over 50 years and introduced the Vieta Pro range in 2004. Since then, Vieta Pro, and parent company Seesound, have received many awards and nominations for quality and innovation.



Another great innovation from the makers of....

















parks.