

# KL12



## Quick start user manual

### *Section 1*

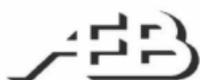
The warnings in this manual must be observed together with the "USER MANUAL - Section 2".

Le avvertenze nel presente manuale devono essere osservate congiuntamente al "MANUALE D'USO - Sezione 2".

Die Warnungen in diesem Handbuch müssen in Verbindung mit der "BEDIENUNGSANLEITUNG - Abschnitt 2" beobachtet werden".

Les avertissements spécifiés dans ce manuel doivent être respectés ainsi que les "CARACTERISTIQUES TECHNIQUES - Section 2"

Las advertencias del presente manual se deben tener en cuenta conjuntamente con las del "MANUAL DEL USUARIO" - Sección 2".



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## Thank you for choosing a dBTechnologies Product!

The SYA 12 is a versatile active speaker. It is equipped with one 1" compression driver (1.35" voice coil), and one 12" woofer (2.5" voice coil). The multiple input pattern allows an easy and versatile use. For example the user can connect a dynamic microphone (CH1), an independent source from a mixer (CH2), a Bluetooth® MP3 reader (CH3), controlling each volume level. The user can enhance lower and upper frequencies with the convenient DSP preset function. A balanced link output allows the audio connection to a second loudspeaker, choosing among "Mix" or "Line" output type.

Check the site [www.dbtechnologies.com](http://www.dbtechnologies.com) for the complete user manual!

### 1) Unpacking

The box contains:

N°1 SYA 12

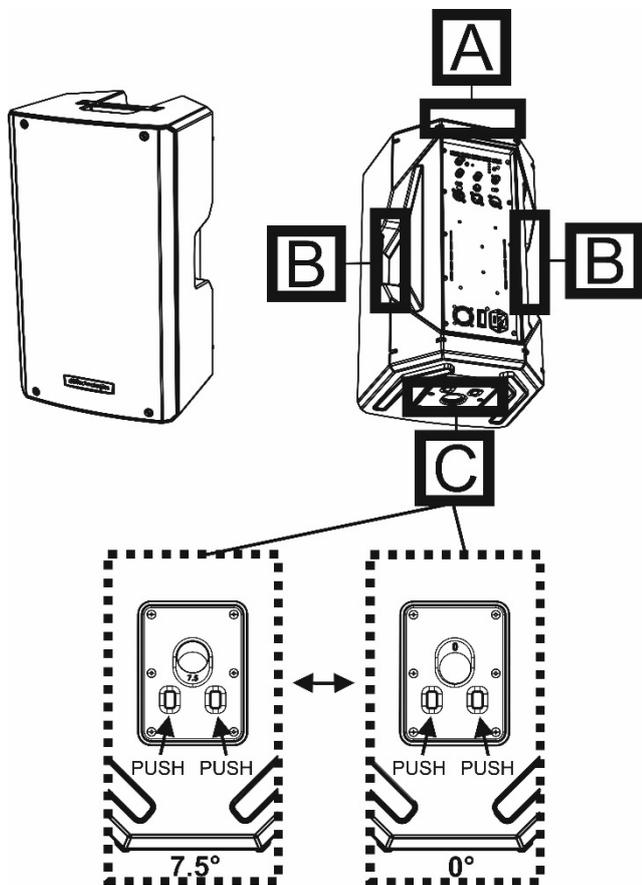
N°1 Mains cable (VDE)

This quick start and warranty documentation

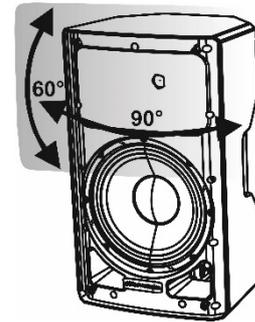
### 2) Easy installation

SYA 12 is equipped with:

perfect for gigging bands as well as small venues installations. The 36 mm pole-mount predisposition is designed for the use on standard pole stand (like a tripod).



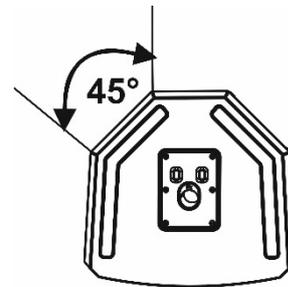
- A - Upper integrated handle
- B - Lateral integrated handles
- C - Pole mount hole, with two tilt angles selection (0° / 7.5°)



The acoustical design allows to face different environments. The dispersion pattern is shown in the upper picture.

As described, the related pattern data are:

- a) vertical coverage: 60°
- b) horizontal coverage: 90°



The rear side inclination, symmetrical, as shown in the upper picture, is 45°. SYA12 can be used as a stage monitor in small contexts, in this case please consider the characteristic dispersion pattern presented above.



**NEVER USE THE HANDLES TO SUSPEND THE SPEAKER!**



**IT IS MANDATORY TO READ AND FULLY UNDERSTAND THE COMPLETE USER MANUAL FOR THE ADMITTED CONFIGURATIONS OF THE PRODUCT, SAFETY INFORMATION, AND THE PROPER USE OF ACCESSORIES (IF ANY).**

Those mechanical particulars were thought for an easy use and for different configuration needs. SYA 12 is

## 3) Connections, controls, first turn on

All the connections and controls are in the amplifier panel side:



### CH1:

- 1–Audio Combo Input (for XLR or TRS connectors)
- 2–Line/Mic selector
- 3–Mic/Line Volume Control

### CH2:

- 4–Audio Input (Balanced / TRS)
- 5–Line Volume control

### CH3 (Bluetooth®):

- 6–BT status sync LED
- 7–BT Volume Control

### MASTER SECTION

- 8–DSP Preset switch
- 9–Balanced audio output
- 10–Link/Mix switch
- 11–Master Volume with control LEDs

### MAINS SECTION

- 12–VDE MAINS INPUT
- 13–ON-OFF SWITCH

a) Connect the audio input (1). The combo connector allows a TRS or XLR connection. In case of a dynamic microphone, plug it and select “Mic” in the Audio input sensitivity switch (2). In the other cases check that the switch is set on “Line”. Adjust the level of Volume (3).

b) Connect a second input, depending on the kind of connection (XLR/TRS), then adjust the related volume level.

c) If needed, enable with the switch (7) the Bluetooth® receiver. Pair it with a visible device (ex. a MP3 reader).

d) If you need to link SYA 12 to another one, please use a cable with XLR connectors (not supplied). Connect the Link output (9) of the first, to the balanced Input (1) of the second one. In the second loudspeaker, please check that Selector (2) is set on “Line” position and that Volume (3) is set to the correct value.

e) Set properly the DSP preset switch (8), choosing between “Playback”, “Flat”, “Bass Boost” or “Wedge” configuration.

e) Plug properly the mains VDE input cable (supplied) in the related input (12). Check that the audio source is set on the minimum level. Then switch the POWER switch (13) to “ON” position. Increase gradually the volume of the audio source to the desired level.

Check the site [www.dbtechnologies.com](http://www.dbtechnologies.com) for further information, for added accessories and for the complete user manual!

## Technical Data

**Speaker Type:** 2-way active speaker  
**Usable Bandwidth [-10 dB]:** 53 - 20000 Hz  
**Frequency Response [-6 dB]:** 58 - 19500 Hz  
**Max SPL (1 m):** 127 dB  
**HF compression driver:** 1 " Exit  
**HF voice coil:** 1.35"  
**LF:** 12"  
**LF Voice Coil:** 2.5"  
**Crossover frequency:** 1700 Hz (24 dB/oct)  
**Horizontal dispersion:** 90°  
**Vertical dispersion:** 60°

## Amplifier

**Amp:** Custom made  
**Amp Class:** Class-D + A/B- Active Fan cooling  
**RMS Power:** 800 W

## Operating voltage (factory set):

220-240V~ (50-60Hz) or  
110-120V~ (50-60 Hz)



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## Processor and user interface

**Controller:** 28/56 bit  
**AD/DA Conversion:** -24 bit, 48 kHz  
**Limiter:** Peak, RMS, Thermal  
**Controls:** Line/mic, Channel Volume, Link/Mix, Presets

## Input / Output

**Mains connections:** VDE  
**Signal Inputs:** 3 channels (Combo, XLR+trs, Bluetooth®)  
**Signal Out:** (Balanced) 1x XLR OUT (LINK)

## Mechanics

**Housing:** Polypropylene  
**Grille:** Full metal grille  
**Pole Mount:** Yes, 36 mm (0°/7.5° selectable)  
**Handles:** 3 (2 on sides. 1 on the top)  
**Width:** 365 mm (14.37 in)  
**Height:** 622 mm (24.51 in)  
**Depth:** 342 mm (13.46 in)  
**Weight:** 16.5 kg (36.37 lbs).

## POWER SUPPLY SPECIFICATIONS (POWER ABSORPTION)

Draw at 1/3 of full power in maximum use conditions (\*\*): 1.1 A (220-240V~) - 1.7 A (100-120V~)

**\*\* INSTALLER NOTES:** The values refer to 1/3 of full power, in heavy operating conditions (music program with frequent clipping or activation of the limiter). We recommend sizing according to these values in case of professional installations and tours.

Download the complete user manual from the site:

[www.dbtechnologies.com/EN/Downloads.aspx](http://www.dbtechnologies.com/EN/Downloads.aspx)

## EMI CLASSIFICATION

According to the standards EN 55032 and EN 55035 this equipment is designed and suitable to operate in class B electromagnetic environments.  
FCC ID: 2ADDV-TLSYA12

## FCC CLASS B STATEMENT ACCORDING TO TITLE 47, PART 15, SUBPART B, §15.105

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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## RED CERTIFICATION

Hereby, AEB Industriale declares that KL loudspeaker is in compliance with Directive 2015/53/EU, in reference to the following harmonized standards:

Health & Safety EN 62479 / EN 62368-1+A11  
EMC EN 301 489-1 V2.2.0, EN 301 489-9 V2.1.1, EN 55032, EN 55035  
Spectrum EN 300 328 V2.1.1

## SIMPLIFIED EU DECLARATION OF CONFORMITY

The full text of the EU declaration of conformity is available at the following internet address:

<http://www.dbtechnologies.com/en/downloads>

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