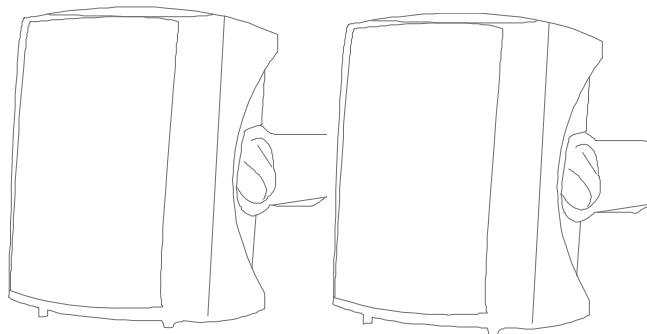


Active Speaker System
LX523

AUDAC

PROFESSIONAL AUDIO EQUIPMENT

Active Speaker System with remote input LX523



User Manual & Installation Guide

AUDAC PROFESSIONAL AUDIO EQUIPMENT

User Manual & Installation Guide

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Introduction

This section briefly describes the possibilities of the LX523 Active Speaker System with remote input.

The LX523 is a speaker set consisting of one active and one passive speaker, to be linked together. What makes the LX523 special and superior to traditional active speaker systems is the remote input connection (RJ45) which provides the possibility to transfer a signal (both line and microphone level with local mixing) from a wall panel (WP523) or web based input control unit (RM523) to the speaker. The panel allows both line and microphone level signals to be mixed locally. This way, the speaker set is ideal for small to medium fixed installations where the loudspeakers become a part of the standard equipment. This set was specifically designed for interiors such as classrooms, conference rooms, meeting rooms, ... The input and/or control unit can be unobtrusively installed at locations which are easily accessible for the speaker such as walls, the pulpit, the tables, ... The audio signal will be transferred from the input or control unit to the speaker by using only one single CAT5 cable which simultaneously provides the power supply to the input unit.

Key features:

- 3-Way speaker system
- One Passive and one active speaker
- Two band tone control (Bass & Treble)
- RJ45 Remote input connection
- Adjustable mounting brackets
- Easy to mount on walls/ceilings
- Available in Black (/B) and White (/W)

Safety Requirements

Always handle the unit with care.

This unit is not a toy. It should not be operated by children.

Ensure that sufficient space is available behind the active speaker for cooling.

Do not open the unit (risk of electrical shock).

Always read the user manual before getting started.



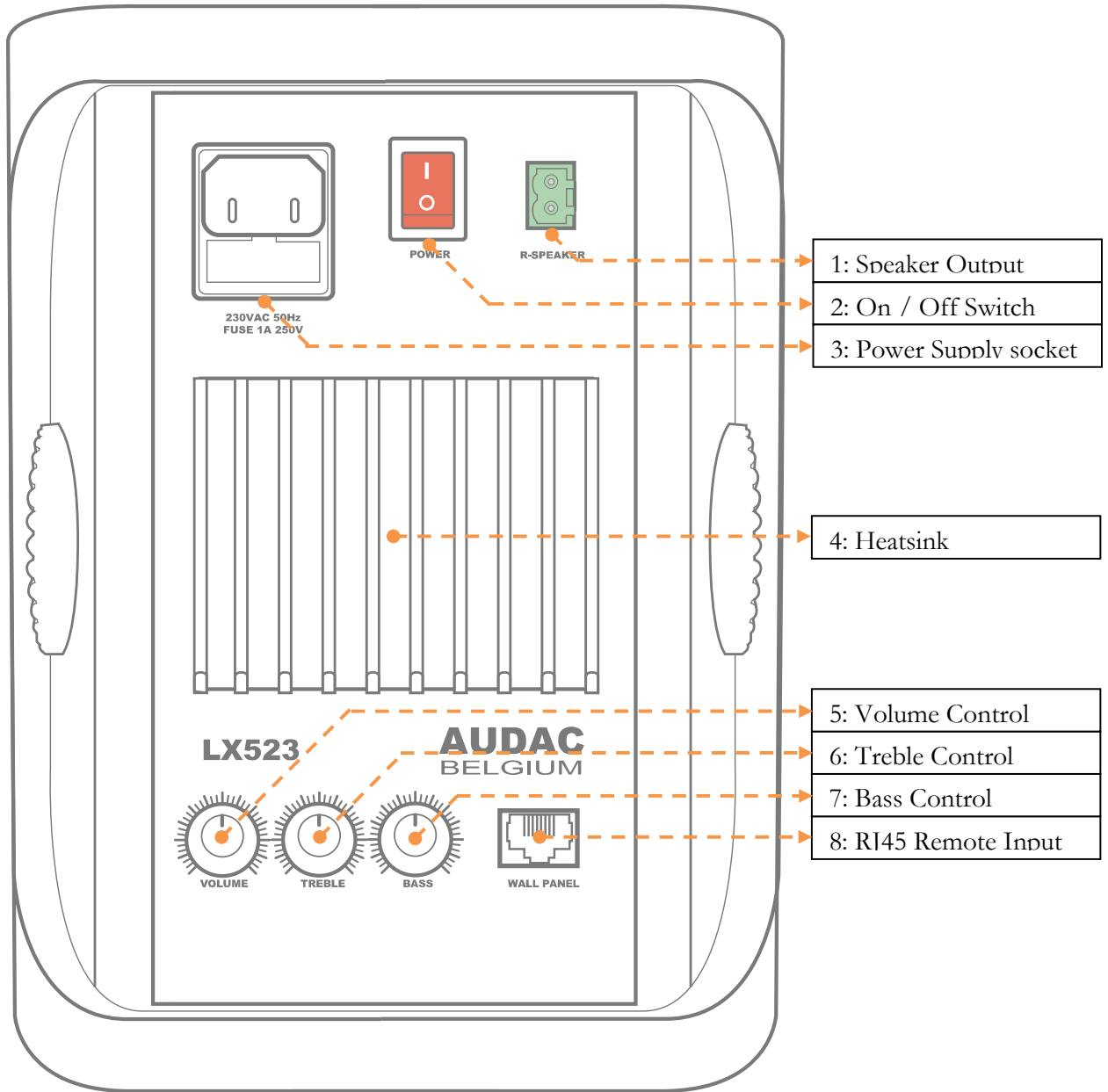
CAUTION – SERVICING

This unit contains no user serviceable parts. Refer all servicing to qualified service personnel. Do not perform any servicing unless you are qualified to do so.

Note

This product conforms to the following European Standards: EN 50081-1: 1992, EN 50082-1: 1992, EN 60065: 1994

Overview rear panel of the LX523



Description

1: Speaker output:

This two pin EURO terminal block connector should be used to connect the supplied passive loudspeaker. Using other loudspeakers can give bad result and even cause damage to the main unit. Be sure that the polarity of the speakers is correct.

2: On / Off switch:

The main unit can be turned on and off with this power button. When switched on, the green power LED at the bottom of the amplifier unit should illuminate.

3: Power supply socket:

The unit should be connected to the mains circuit by using a standard IEC type power cord. This socket contains a 1A slow blow fuse. To replace the fuse, the fuse compartment has to be flipped out by a screwdriver. Be sure that you don't use a quick blow fuse. This socket doesn't contain a ground pin to avoid ground loops.

4: Heat sink:

When using the LX523 at full power for a long time, this heat sink will warm-up. Make sure there's always some space behind the speaker ensuring a proper airflow. Take care when placing the speaker close to other items sensitive to heat. Don't touch!

5: Volume Control:

With this button the general volume for the speaker system can be controlled.

6: Treble Control:

With this button, the high frequency's can be increased and decreased. Adding high frequency's can improve the intelligibility. Adjust it to the desired level. In the centre position, the sound should be neutral.

7: Bass Control:

By adding bass, you can add warmth to your music. Decreasing bass can improve the intelligibility of spoken messages, certainly in reverberant rooms.

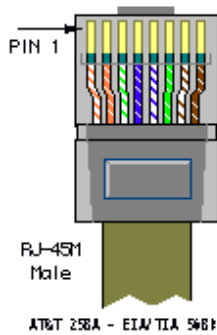
8: RJ45 Remote input

The remote input unit (WP523 wall panel or RM523 web based input control unit) should be connected to this RJ45 connector by means of CAT5 (or better) twisted pair cabling. For more information about wiring the input units to the speaker system, read the next chapter of this manual.

Remote input connection specifications

The connections between the LX523 speaker system and the used input unit (WP523 or RM523) should be always made by means of twisted pair cabling. The maximum cable distance between the input unit and the speaker system depends of the used cable. For standard CAT5 cable, the maximum cable distance between the input unit and the speaker system can reach up to 500 meter. When better CAT6 or CAT7 cable is used, the maximum cable distance can reach even longer distances.

To ensure a proper working of the system, all 8 conductors of the twisted pair cable have to be connected according to the table below.



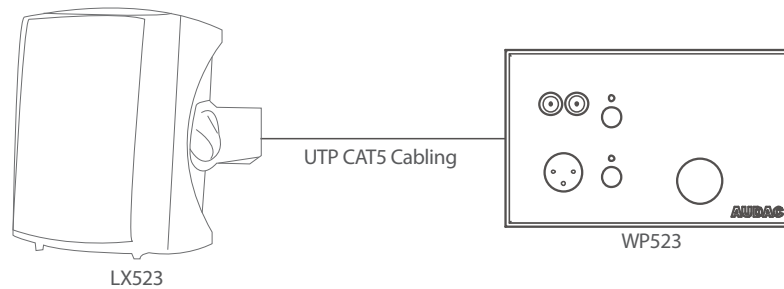
Pin 1	White-Orange	Audio Left
Pin 2	Orange	Audio Left
Pin 3	White-Green	+12V DC
Pin 4	Blue	-12 V DC
Pin 5	White-Blue	GND
Pin 6	Green	GND
Pin 7	White-Brown	Audio Right
Pin 8	Brown	Audio Right



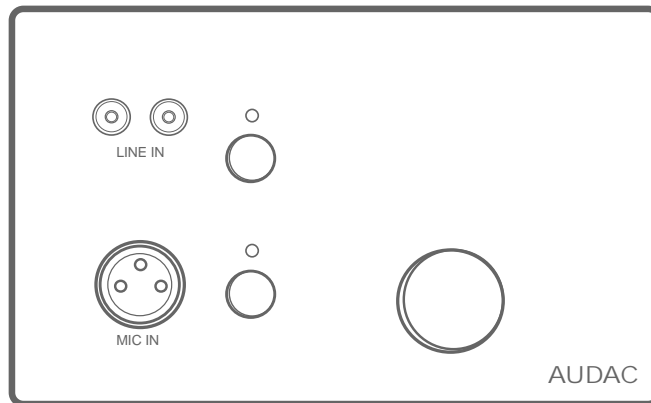
ATTENTION

The twisted pair cabling must always be 'straight'. In case of self made cabling, it must be wired as described above, to make the system work properly.

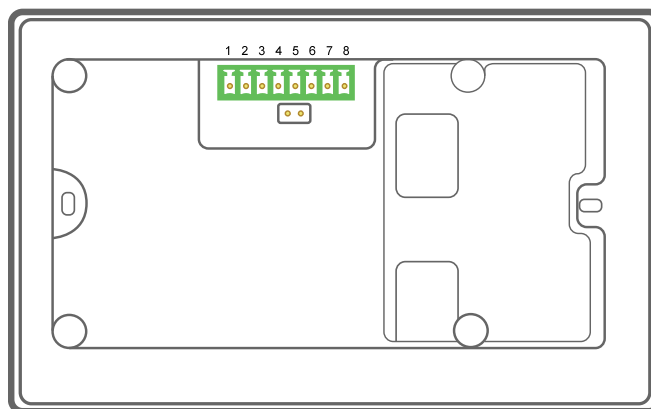
Connecting the LX523 to WP523



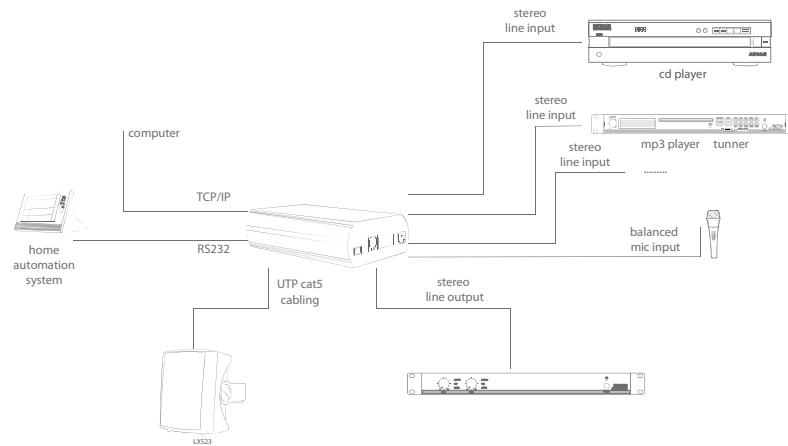
In the most common applications the LX523 active speaker system will be used in combination with the WP523 wall panel. This wall panel contains an unbalanced line input (RCA) and balanced microphone input (with phantom power). Both input channels have local mixing which can be controlled through the push-lock potentiometers, and the master volume can be controlled by means of the big dial.



The WP523 wall panel should be connected to the LX523 speaker system by means of the 8-pin Euro-Terminal block connector on the rear side of the wall panel. The pins starting from Pin 1 on the left side, to Pin 8 on the right side should be connected with the corresponding conductors of the twisted pair cable as described on the previous page.



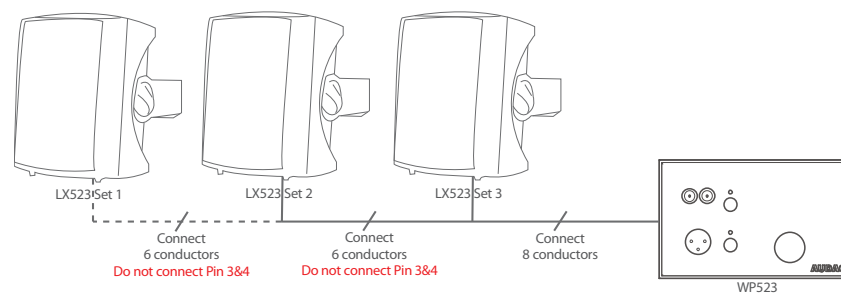
Connecting the LX523 to RM523



When connecting the LX523 speaker system to an RM523 Web based input control unit, both devices use RJ45 in- and output connectors. In this case, just a regular CAT5 cable (or better) should be used, on both sides terminated with an RJ45 plug. The connection way of this cable should be 'Straight', according to the colour standard described before in this user manual.

Connecting multiple LX523 sets to one input unit.

The mains for powering the input units (WP523) is distributed from the LX523 speaker over Pin 3 and Pin 4 (White-Green & Blue conductor) of the twisted pair cabling. When connecting multiple speaker sets to one single input unit, make sure the mains from only one speaker set is distributed to the input unit. When connecting all pins (& power supply's) from all loudspeaker sets with each other, this can cause malfunctioning to the system. To prevent any malfunctioning of the system the **Pin's 3 and 4** from the other speaker sets **should be interrupted**



Attention

Make sure the mains power for the input units is only distributed from one loudspeaker at a time. When the power is distributed from multiple loudspeaker sets, this can cause malfunctioning of the system. This can be avoided by **interrupting Pin's 3 and 4** of the twisted pair cabling for the additional loudspeaker sets.

Features and specifications

Technical specifications

Frequency response		80 Hz – 20 kHz
Sensitivity		88 dB
RMS Power		2 x 40 Watt
Drivers	HF	3/4"
	MF	1"
	LF	5 1/4"
Construction	Speaker	ABS
	Bracket	Coated steel
Power supply		230 – 240 V AC
Connectors	Power	IEC power connector
	Input	RJ45 remote input connection
	Speaker output	Two pin EURO terminal block
Fuse		1A Slow
Colours		Black LX523/B
		White LX523/W
Dimensions (W x H x D)		178x240x193mm
Packaging		Carton Box
Weight net. (2 Speakers)		5.4 Kg
Shipping Weight/Volume		6.5 Kg/0.0082Cbm

Personal Notes