



MAILA[®] SUB P

2 X 15" PASSIVE BANDPASS PA SUBWOOFER

LDMAILASUBP;

TABLE OF CONTENTS

1	INTRODUCTION	5
1.1	You Made the Right Choice!	5
1.2	Contacts.....	5
1.3	Link to the Download Centre.....	5
1.4	Visualisation Conventions in This User Manual.....	6
2	PRODUCT COMPLIANCE	7
2.1	Manufacturer's Declaration.....	7
2.2	Declaration of Conformity	7
3	SAFETY INSTRUCTIONS	8
3.1	Intended Use	8
3.2	Explanation of Safety and Warning Symbols.....	8
3.3	Structure of Warning Messages.....	9
3.4	General Safety	9
3.5	Physical Safety.....	10
4	PRODUCT DESCRIPTION	11
4.1	Product Overview	11
4.2	Product Variants.....	11
4.3	Optional Accessories.....	11
4.4	Technical Data	12
4.5	Connection Panel.....	14
4.6	Wink LED	14
5	PREPARATION	15
5.1	Scope of Delivery	15
6	INSTALLATION.....	16
6.1	Attaching the Speaker Pole	16
6.2	Attaching the MAILA COL P speaker column.....	17

7	OPERATION	18
7.1	Power Amplification	18
7.1.1	Compatible Amplifiers.....	18
7.1.2	Configuration via ArmoniaPlus (A+) by Powersoft.....	18
7.1.2.1	Downloading ArmoniaPlus (A+) by Powersoft.....	18
7.1.2.2	Downloading Amplifier Models and Loudspeaker Presets.....	18
7.1.2.3	ArmoniaPlus Presets MAILA SUB P	19
7.2	Loudspeaker Setups	19
7.2.1	Stereo Setup with Single Subwoofer – Vertical or Horizontal Orientation.....	19
7.2.2	Stereo Setup with Cardioid Subwoofers – Vertical or Horizontal Orientation	19
8	MAINTENANCE	20
8.1	Product Maintenance	20
8.2	Storing the Device.....	20
9	DISPOSAL	21
9.1	Packaging Disposal	21
9.2	Device Disposal	21
	INDEX	22

1 INTRODUCTION

1.1 YOU MADE THE RIGHT CHOICE!

This product has been developed and manufactured to the highest quality standards to ensure many years of problem-free operation. Find further information about LD Systems on our website:

<https://www.ld-systems.com/>

1.2 CONTACTS

	Adam Hall GmbH Headquarter	Customer Service
E-mail	info@adamhall.com	customerservice@adamhall.com
Phone	+49 6081 9419-0	+49 6081 941973-0
Street	Adam-Hall-Str. 1	Adam-Hall-Str. 1
Postal code / city	61267 Neu-Anspach	61267 Neu-Anspach
Website	www.adamhall.com	www.adamhall.com

1.3 LINK TO THE DOWNLOAD CENTRE



You can download some information, such as CAD data or technical data, from the Download Centre. Scan the QR code or click the link to download this information:

1.4

VISUALISATION CONVENTIONS IN THIS USER MANUAL

In this manual we use graphical symbols and icons in certain contexts. Find below a table with explanations and use cases of the graphical symbols and icons.

Icon / Symbol	Designation	Context	Explanation / Example
✓	Prerequisite	Tasks	Used in task topics to indicate a prerequisite that must be met before beginning the task.
⇒	Result / Intermediate Result	Tasks	Used in task topics to indicate a result or intermediate result of an action step.
1 Step a) Substep	1 Action Step a) Substep	Tasks	Used in task topics to indicate action steps and substeps.
1	Callout	Graphics; tasks	Text-image reference or labeling of certain functions on the device
[...]	Value range indicator	Technical data; paragraphs; lists	Indicates the range of a value, such as "Compressor ratio: 1:1...20:1 ". Mostly used in tables or callouts.
*	Asterisk	Paragraphs; tables	Indicates additional information in a footnote.
The LIM LED lights up	General User Interface element	Paragraphs; tasks; tables; lists	The words presented in this way represent graphic user interface elements on the device.
PAGE button	Key / Button	Paragraphs; tasks; tables; lists	The words presented in this way represent user interface controls on the device.
<name>	User input	Paragraphs; tasks; tables; lists	The words presented in this way represent required user inputs.
<u>https://adamhall.com</u>	Weblink	Paragraphs; tables; lists	External link to a website

2 PRODUCT COMPLIANCE

2.1 MANUFACTURER'S DECLARATION

Adam Hall offers a voluntary, EU-wide manufacturer's guarantee of 2 years. The statutory warranty period is not affected by this voluntary guarantee.

Visit the Adam Hall Service Portal to access the **Download Centre**:

<https://portal.adamhall.com/>

Under the **Service & Regulations** section, you find our current detailed manufacturer's declarations, warranty conditions, and limitation of liability.

To request warranty for a product, please contact:

Adam Hall GmbH, Adam-Hall-Str. 1, 61267 Neu-Anspach

customerservice@adamhall.com

0049 (0)6081 / 9419-1000

2.2 DECLARATION OF CONFORMITY

UK
CA

Hereby, Adam Hall Ltd. declares that this product meets the following guidelines (where applicable)

- Electrical Equipment (Safety) Regulations 2016
- Electromagnetic Compatibility Regulations 2016 (SI 2016/1091)
- The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulation 2012 (SI 2012/3032)
- Radio Equipment Regulations 2017 (SI 2016/2015)

Products that are subject to Electrical Equipment(Safety)Regulation 2016, EMC Regulation 2016 or RoHS Regulation can be requested at info@adamhall.com. Products that are subject to the Radio Equipments Regulations 2017 (SI2017/1206) can be downloaded at <http://www.adamhall.com/compliance>.

FCC STATEMENT



This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

⚠ CAUTION! RF Exposure Information: This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body.

⚠ CAUTION! Any changes or modifications to this device not explicitly approved by the manufacturer could void your authority to operate this equipment.

3 SAFETY INSTRUCTIONS

3.1 INTENDED USE

The **MAILA SUB P** is a 2 × 15" passive bandpass PA subwoofer, intended as sound reinforcement.

This product has been developed for the professional use in the field of event technology. Furthermore it is intended for qualified users with specialist knowledge of event technology only.

The device is intended for both mobile applications and fixed installations.

The device is intended for indoor use only.

It is not suitable for domestic use.

Do not use the product outside the operating conditions as stated in the user manual under Technical Data. Liability for damage and third-party damage to persons and property due to inappropriate use is excluded.

This product is not suitable for children and persons with limited physical, sensory, or mental capabilities or lack of experience and knowledge.

3.2 EXPLANATION OF SAFETY AND WARNING SYMBOLS

Find the following safety and warning symbols on the device, the user manual, or the packaging:



This symbol indicates that you must read the complete user manual before using the product.



This symbol indicates a general hazardous situation.



This symbol indicates tripping hazards.



This symbol indicates high sound pressure levels.



This symbol indicates pinching hazards.



This symbol indicates that the product is for indoor use only.



This symbol indicates that the product is not suitable for household use.



This symbol indicates helpful hints or additional information.

3.3

STRUCTURE OF WARNING MESSAGES

In this user manual, warning messages are structured with a safety symbol, a signal word, a hazard description, and instructions on how to avoid injuries or death.



DANGER

Indicates a hazardous situation which will result in death or serious injury.



WARNING

Indicates a hazardous situation which could result in death or serious injury



CAUTION

Indicates a hazardous situation which could result in minor or moderate injury.



NOTICE

Indicates situations or conditions that could result in damage to property and/or the environment.

3.4

GENERAL SAFETY



- Read this document carefully.



- Keep this document for later reference.



- Follow closely the instructions in this document.
- This document is an integral part of the product. If you sell or pass on the product, you must include this document.
- Only use this product according to its intended use.
- Risk of choking. Keep small parts away from children and individuals with impaired physical, sensory, or mental capabilities.
- Risk of suffocation. Keep plastic bags away from children and individuals with impaired physical, sensory, or mental capabilities.
- Observe all safety instructions and warning messages in this document, on the device, and on the packaging.
- Products are subject to continuous further development. If you find discrepancies between this document and the product labeling, the information on the product always takes priority.
- Do not remove safety instructions or warning messages from the product.
- Do not open the device.
- Do not modify the product.
- If the product shows any sign of damage, do not use it.
- Do not operate the product with removed or missing covers.

- Do not expose the product to direct sunlight.
- If not further specified in the user manual under Technical Data, do not use the product in ambient temperatures that exceed 40 °C / 104 °F or fall below 0 °C / 32 °F
- Do not use the product in tropical climate.
- Do not use the product above 2000 metres of altitude.
- Unless otherwise stated, do not use the product under marine conditions.
- Use only accessories specified by the manufacturer.
- Maintenance and repairs may only be carried out by authorized service personnel.
- Store and transport the product in a dry and safe environment.
- Clean the product on a regular basis. If applicable, see the user manual for maintenance intervals.
- High sound pressure levels may cause hearing damage. Avoid prolonged exposure to high sound pressure levels. Wear hearing protection.
- Risk of hearing damage. Plugging or unplugging devices in the signal chain may cause an audio signal peak. Switch on the loudspeaker as the last device in the signal chain.
- Risk of hearing damage. Switching on or off other devices in the signal chain may cause an audio signal peak. Switch on the loudspeaker as the last device in the signal chain.

3.5

PHYSICAL SAFETY



- Make sure that the device and any accessories are securely positioned. Secure against unintentional movement.



- Check all cable routes to prevent tripping accidents.



- Moving components, such as mounting brackets, pose a risk of pinching injuries.

4 PRODUCT DESCRIPTION

4.1 PRODUCT OVERVIEW

The **LD Systems MAILA SUB P** is a 2 × 15" passive bandpass PA subwoofer.

FEATURES

- 2 × 15" high-performance bandpass subwoofer
- Power handling (AES): 2,500 W
- Input impedance: 4 Ω
- Frequency response (-6 dB): 34 Hz ... fx
- Max. SPL (peak): 139 dB
- 2 × docking plate for vertical and horizontal setup with pole (M20) or **MAILA COL**
- Four airflow-optimised bass reflex ports
- Wink-LED for individual speaker identification
- Six handles for touring-grade handling
- Rugged wooden cabinet with polyurea coating

4.2 PRODUCT VARIANTS

The **MAILA SUB** is available in 2 variants:

- **MAILA SUB** - 2 × 15" Powered Bandpass PA Subwoofer
- **MAILA SUB P** - 2 × 15" Passive Bandpass PA Subwoofer

4.3 OPTIONAL ACCESSORIES

Find various accessories for your product in the Adam Hall Shop:

<https://www.adamhall.com/shop>

Accessory	Article Number
MAILA SUB PC Padded protective cover for MAILA SUB	LDMAILASUBPC
MAILA SUB CB Castor board for MAILA SUB	LDMAILASUBCB
MAILA DB Speaker pole for MAILA SPA	LDMAILADB

4.4

TECHNICAL DATA

GENERAL

Parameter	Value
Article number	LDMAILASUBP
Peak load capacity	5,000 W
Peak load capacity (AES)	2,500 W
Max. SPL peak (sine burst, halfspace/1 m, THD≤10 %)	137 dB
Max. SPL peak (pink noise, halfspace/1 m, CF 4)	139 dB
Max. SPL average (sine burst, halfspace/1 m, THD ≤ 10 %)	130 dB
Frequency response (-3 dB, rel. Avg)	39 Hz ... fx
Frequency response (-6 dB, rel. Avg)	34 Hz ... fx
Frequency response (-10 dB, rel. Avg)	33 Hz ... fx
Impedance	4 Ω
Number of inputs	1
Input connector types	SpeakOn female
Number of outputs	2
Output connector types	SpeakOn female
Colour	Black

BASS DRIVER

Parameter	Value
Size	15"
Quantity	2
Magnet	Neodymium
Voice coil	4"

HOUSING

Parameter	Value
Design	Bandpass
Number of handles	6
Flange	M20, MAILA® COL (System flange)
Cabinet material	Birch multiplex
Coating	Polyurea

ENVIRONMENTAL

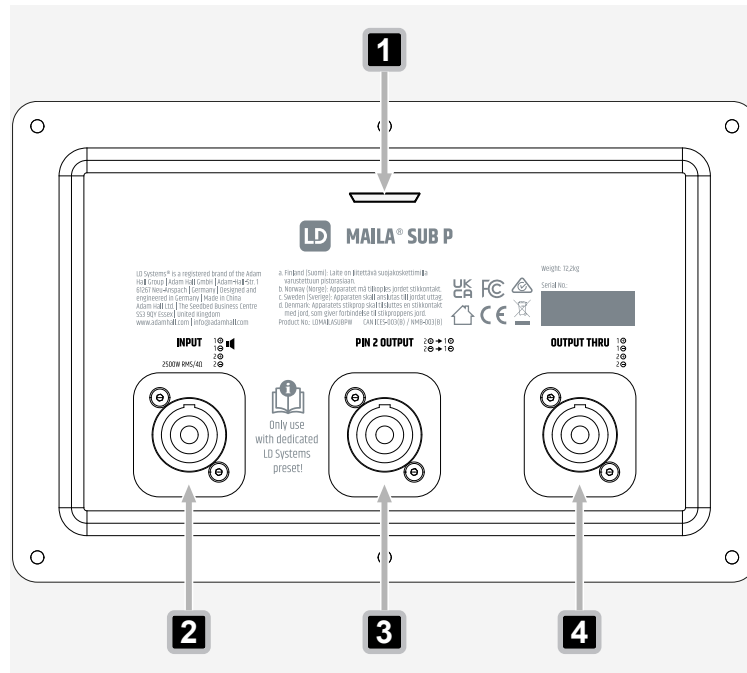
Parameter	Value
Ambient temperature	0 °C ... 40 °C
Maximum air humidity (non-condensing)	80 %

DIMENSIONS AND WEIGHT

Parameter	Value
Width	536 mm
Height	932 mm
Depth	796 mm
Weight	72.2 kg

4.5

CONNECTION PANEL



- 1 Wink LED** - Activate an LED for easy identification of the device when configuring with **ArmoniaPlus (A+)**.
- 2 INPUT** - 4-pole speakon-compatible input connector. Pins **1+** and **1-** drive the subwoofer.
- 3 PIN 2 OUTPUT** - Speakon-compatible output connector. Pins **2+** and **2-** from the input are passed through to pins **1+** and **1-**.
- 4 OUTPUT THRU** - 4-pole speakon-compatible output connector. Direct pass-through of all pins connected to the input.

4.6

WINK LED



Activate an LED on the front **1** and on the back of the device **2** for easy identification of the device when configuring with a dedicated **LD Systems** preset in **ArmoniaPlus (A+)**.

5 PREPARATION

5.1 SCOPE OF DELIVERY

- Device
- Mains power cable
- Safety Compliance Information

6 INSTALLATION

6.1 ATTACHING THE SPEAKER POLE



WARNING

Falling object

Risk of serious injury

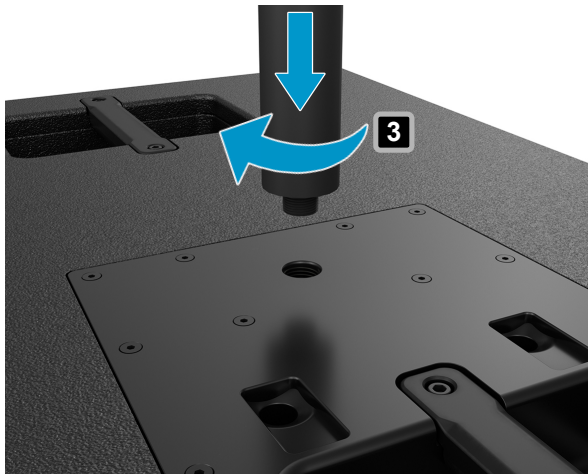
- a. Observe all regional safety regulations concerning overhead loads.
- b. Use only speaker poles with a suitable tube diameter.
- c. Make sure that the speaker pole supports the weight of the device.
- d. Make sure that the device with attached speaker pole is securely positioned on a level surface.



The **MAILA SUB P** has two flanges. One on the top and one on the right-hand side.



✓ You have securely placed the subwoofer up-right **1** or sideways **2** on a stable and level surface.



1 Screw in the **MAILA DB** speaker pole. **3**

See also:
Optional Accessories [► 11]

6.2

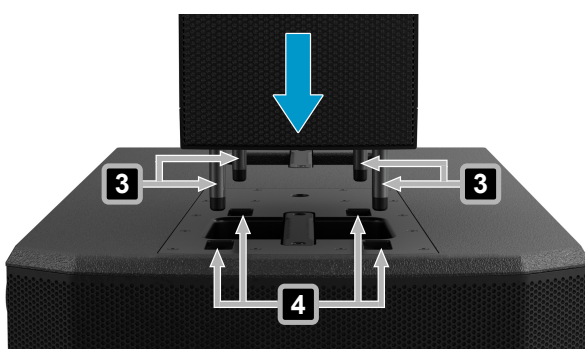
ATTACHING THE MAILA COL P SPEAKER COLUMN



The **MAILA SUB P** has two flanges. One on the top and one on the right-hand side.



✓ You have securely placed the subwoofer upright **1** or sideways **2** on a stable and level surface.



- 1** Insert the 4 steel bolts **3** of the **MAILA COL P** speaker column into the 4 retaining sockets **4** of the connecting plate.
- 2** Move the **MAILA COL P** speaker column as far down as possible.

7 OPERATION

7.1 POWER AMPLIFICATION

7.1.1 COMPATIBLE AMPLIFIERS

All components of the **MAILA Passive** series are designed for use with the following amplifiers.

Amplifier	Article Number
ADA 8 K4 4-channel amplifier with DSP & DANTE® - 4 × 2,000 W @ 4 Ω	LDADA8K4
ADA 12 K4 4-channel amplifier with DSP & DANTE® - 4 × 2,700 W @ 4 Ω	LDADA12K4



The use of amplifiers offered directly by Powersoft is also possible, as long as the specifications of the amplifier and loudspeaker match.

7.1.2 CONFIGURATION VIA ARMONIAPLUS (A+) BY POWERSOFT

7.1.2.1 DOWNLOADING ARMONIAPLUS (A+) BY POWERSOFT



Configure your **MAILA Passive** system via **ArmoniaPlus (A+)** by **Powersoft**. Download **A+** on the manufacturers website.

7.1.2.2 DOWNLOADING AMPLIFIER MODELS AND LOUDSPEAKER PRESETS

In **ArmoniaPlus (A+)** download the corresponding amplifier model in the **Marketplace**.

Amplifier	Amplifier Model
ADA 8 K4	LD Systems ADA 8K4 Model
ADA 12 K4	LD Systems ADA 12K4 Model

To add **MAILA** loudspeaker models to the **A+** workspace, download the **LD Systems Speaker's Presets** in the **Marketplace**.

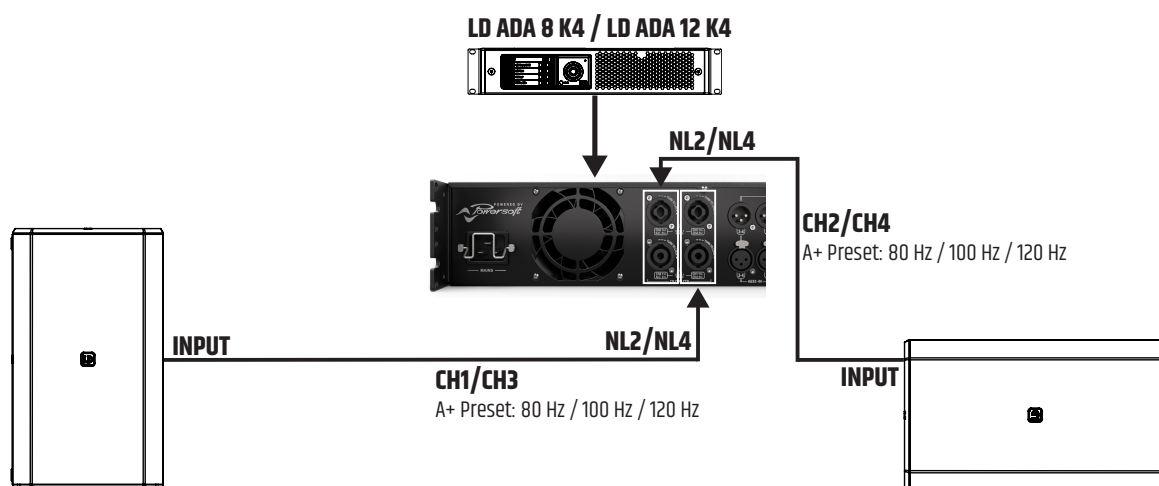
7.1.2.3 ARMONIAPLUS PRESETS MAILA SUB P

The following presets are available for the **MAILA SUB P**.

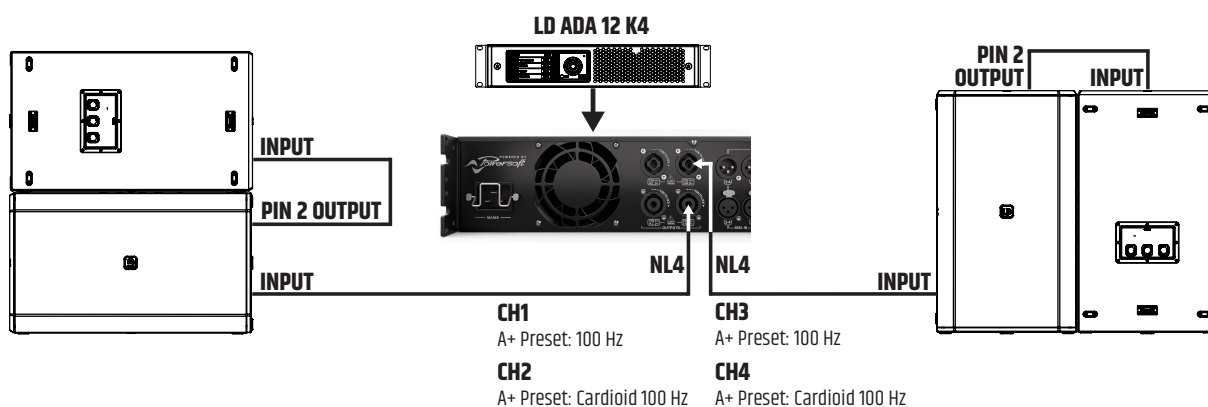
Application	Number of Amp Channels	Channel Naming
80 Hz	1	1X
100 Hz	1	1X
120 Hz	1	1X
Cardioid - 100 Hz	1	1X

7.2 LOUDSPEAKER SETUPS

7.2.1 STEREO SETUP WITH SINGLE SUBWOOFER – VERTICAL OR HORIZONTAL ORIENTATION



7.2.2 STEREO SETUP WITH CARDIOID SUBWOOFERS – VERTICAL OR HORIZONTAL ORIENTATION



8 MAINTENANCE

8.1

PRODUCT MAINTENANCE



NOTICE

Damage to the device and void of warranty

- a. Do not use cleaning agents, disinfectants, alcohol, or agents with abrasive effect for cleaning.

Carry out the maintenance measures listed below on a regular basis. The frequency of cleaning depends on the environment in which you use the product. Damp or dirty environments may cause increased soiling and wear.

VISUAL INSPECTION

Check the following points before operating the device.

- Check all outside screws and covers for corrosion, damage or excessive wear.
-  **WARNING! Risk of falling objects.** Check that all screws, fasteners, and rigging points are securely tightened.

CLEANING

- Clean the surface with a clean and damp lint-free cotton cloth. Wipe off all excess moisture.

8.2

STORING THE DEVICE

Store the device only in a dry and clean environment. If you are storing the individual components of the device, use special protective covers, bags, and cases. Find such accessories for your product in the Adam Hall Shop (<https://www.adamhall.com/shop>).

9 DISPOSAL

9.1

PACKAGING DISPOSAL



1. You can feed the packaging into the reusable material cycle using the usual disposal methods.
2. Separate the packaging in accordance with the applicable disposal laws and recycling regulations in your country

9.2

DEVICE DISPOSAL



1. This device is subject to the European Directive on Waste Electrical and Electronic Equipment, as amended. WEEE Directive Waste Electrical and Electronic Equipment. Old appliances do not belong in the household waste. The old device must be disposed of via an approved disposal company or a municipal disposal facility. Observe the applicable regulations in your country.
2. Observe all disposal laws applicable in your country.
3. As a private customer, you can obtain information on environmentally friendly disposal options from the seller of the product or the appropriate regional authorities.
4. Retailers are often legally obliged to take back items free of charge.
5. Old appliances that contain harmful substances are labelled with the symbol of a crossed-out dustbin.
6. Current information on the collection rate can be found at the following website:
<https://environment.ec.europa.eu/>. Search for the following term: waste-electrical-and-electronic-equipment-weee.

INDEX

A

Accessories	11
Amplifier	18
Amplifier Models	18
ArmoniaPlus (A+) by Powersoft	18, 19

C

Cleaning	20
Connection panel	14
Customer Service	5

I

Input connections	14
-------------------	----

M

MAILA COL P	17
Mounting	
MAILA COL P	17
Speaker pole	16

O

Optional accessories	11
Output connections	14
Overview	
Connection panel	14
Product	11

P

Presets	18, 19
Product variants	11

S

Scope of delivery	15
Speaker pole	16
Speakon	14
Storing	20

T

Technical data	12, 13
----------------	--------

W

Wink LED	14
----------	----

