



spree

Active Stereo USB-C Media DI-Box

PSPREE;

TABLE OF CONTENTS

1	DOCUMENT VERSION AND REVISIONS	5
2	INTRODUCTION	6
2.1	You Made the Right Choice!	6
2.2	Contacts.....	6
2.3	Link to the Download Centre	6
2.4	Visualisation Conventions in This User Manual.....	7
3	PRODUCT COMPLIANCE	8
3.1	Manufacturer's Declaration	8
3.2	Declaration of Conformity.....	8
4	SAFETY INSTRUCTIONS	10
4.1	Intended Use	10
4.2	Explanation of Safety and Warning Symbols	10
4.3	Structure of Warning Messages	11
4.4	General Safety	11
4.5	Electrical Safety	12
4.6	Thermal Safety	12
4.7	Device Safety.....	12
5	PRODUCT DESCRIPTION	13
5.1	Product Overview.....	13
5.2	Technical Data	13
5.3	Front Panel Overview	15
5.4	Back Panel Overview	16
6	PREPARATION	17
6.1	Scope of Delivery	17
7	OPERATION	18
7.1	Connection Diagram	18
7.2	Using the Power Adapter	19
7.2.1	Connecting the Power Adapter	19
7.2.2	Disconnecting the Power Adapter.....	19
7.3	Connecting an Audio Source via USB-C	20
8	MAINTENANCE.....	21
8.1	Product Maintenance	21

8.2	Storing the Device	21
9	DISPOSAL.....	22
9.1	Packaging Disposal.....	22
9.2	Device Disposal	22
	INDEX	23

1 DOCUMENT VERSION AND REVISIONS

Version	Date	Implemented changes
V1.0	06/2026	Original version

2 INTRODUCTION

2.1 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 Palmer on our website:

<https://www.palmer-germany.com/>

2.2 CONTACTS

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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

2.3 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:

2.4 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.
https://adamhall.com	Weblink	Paragraphs; tables; lists	External link to a website

3 PRODUCT COMPLIANCE

3.1 MANUFACTURER'S DECLARATION

Adam Hall offers a voluntary, EU-wide manufacturer's guarantee of 5 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

3.2 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.

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:

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

ISED STATEMENT

The digital apparatus complies with Canadian CAN ICES-003 (B) / NMB-003 (B).

4 SAFETY INSTRUCTIONS

4.1 INTENDED USE

The **Palmer RIVER spree** is an active stereo USB media DI box, intended for audio transmission from digital devices to professional audio equipment.

This product has been developed for the professional use in the field of event technology, studio, TV, and broadcast.

This product is intended for both mobile applications and fixed installations.

This product is intended for indoor use only.

This product is 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.

4.2 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 hazards that can cause electric shock.



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



This symbol indicates helpful hints or additional information.

4.3 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.



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



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



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



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

4.4 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 70 °C / 158 °F or fall below -10 °C / 14 °F

- Do not use the product in tropical climate.
- Do not use the product above 2000 metres of altitude.
- This device is not suitable for use in marine environments, including ships, offshore applications, or areas exposed to salt-laden air, seawater, or corrosive atmospheres. Use in such environments is at the user's own risk. Any damage or malfunction resulting from such use is excluded from the manufacturer's warranty.
- 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.
- If the device was exposed to strong temperature changes, such as during transport, do not switch it on immediately. Wait until the device has reached ambient temperature.

4.5**ELECTRICAL SAFETY**

- Do not bypass the mains fuse.
- Use only mains fuses as specified by the manufacturer.
- Do not use kinked or otherwise damaged power cables.
- Only operate the device on compliant, tested and intact mains power outlets.
- Do not use the device in the vicinity of water. Keep the device away from splashing or dripping water.
- Make sure that the voltage and frequency of the mains power match the values specified by the manufacturer.
- Take suitable measures against overvoltage, such as lightning strikes.
- For devices with a power out connector, make sure the total current consumption of all connected devices does not exceed the value specified by the manufacturer.
- This device is not suitable for continuous current.
- Disconnect the device from all poles before maintenance, repair or extend periods of non-use.
- Permanently connected power cables may only be replaced by a qualified service technician.

4.6**THERMAL SAFETY**

- Do not install the device near heat sources, such as radiators or ovens.
- Do not block any ventilation openings.
- Unless otherwise stated, keep a minimum clearance of at least 20 centimetres around the device.
- Unless otherwise stated, keep flammable materials, such as paper or wood, at least 50 centimetres away from the device

4.7**DEVICE SAFETY**

- Do not switch the device on and off in quick succession, because this will shorten the device lifetime.

5 PRODUCT DESCRIPTION

5.1 PRODUCT OVERVIEW

The **Palmer spree** is an active stereo USB media DI box.

FEATURES

- Converts USB-C audio to balanced XLR signals
- D/A conversion with 32 bit / 192 kHz
- Galvanically isolated XLR outputs
- Switchable output level: Mic / Line
- Ground-lift switch
- Optimal impedance matching for lossless, linear sound transmission
- 1 × USB-C audio port with bidirectional power supply
- 2 × XLR outputs, balanced (L / R)
- 1 × 6.3 mm TRS headphone output
- Power supply via USB-C cable or power adapter (both included)
- USB-C power pass-through when using the power adapter
- Status LEDs: SIGNAL, SYNC & POWER
- Metal housing for touring and stage applications
- Designed as a robust alternative to repurposed recording interfaces
- Engineered in Germany

5.2 TECHNICAL DATA

GENERAL

Parameter	Value
Type	Active
Included Accessories	Rubber feet, Tour label, USB cable
Material	Aluminium, Steel
Coating	Powder coated
Isolated transformer	Yes
Transformer ratio	1:1
Ground lift	Yes
Frequency response (± 0.5 dB, rel. Avg)	20 Hz ... 20,000 Hz
Number of inputs	1
Number of outputs	2
Number of channels	2

INPUTS

Parameter	Value
Input signal type	USB
Input connector types	USB-C socket female

OUTPUTS

Parameter	Value
Output signal type	Balanced, Headphone
Number of line outputs	2
Line outputs connector type	XLR 3-pole male
Number of Headphone outs	1
Headphone out connector type	6.3 mm Jack TRS female

LINE OUTPUT PERFORMANCE

Parameter	Value
Max. output level (<1 % THD, 20 Hz - 20 kHz)	18 dBu
Balanced output impedance (1 kHz)	600 Ω

SIGNAL PROCESSING

Parameter	Value
Min. Signal-to-noise ratio (SNR)	112 dB
Max. THD+N (1 kHz, +4 dBu, unity, un-weighted)	0.015 %
Max. THD+N (30 Hz, +4 dBu, unity, un-weighted)	0.015 %
Max. IMD (SMPTE, 60 Hz, 4:1, +4 dBu)	0.001 %

MAINS OPERATION

Parameter	Value
Operation voltage	18 V DC (external power supply) USB-C bus powered (5 V DC / 500 mA)
Rated power	5 W

HOUSING

Parameter	Value
Cabinet material	Aluminium, Steel
Coating	Powder coated
Colour	Black

ENVIRONMENTAL

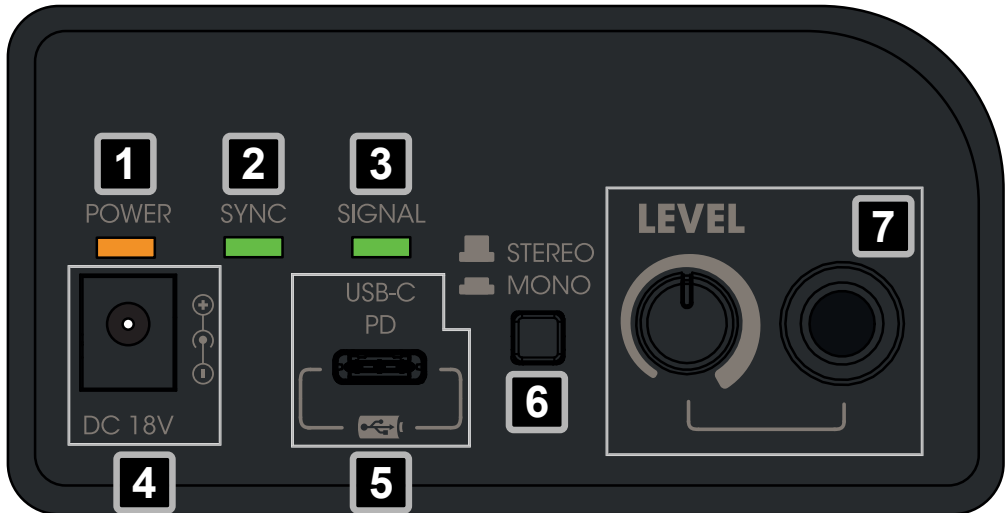
Parameter	Value
Ambient temperature	-10 °C ... 70 °C
Maximum air humidity (non-condensing)	80 %

DIMENSIONS AND WEIGHT

Parameter	Value
Width	140 mm

Parameter	Value
Height	50 mm
Depth	128 mm
Weight	575 g

5.3 FRONT PANEL OVERVIEW

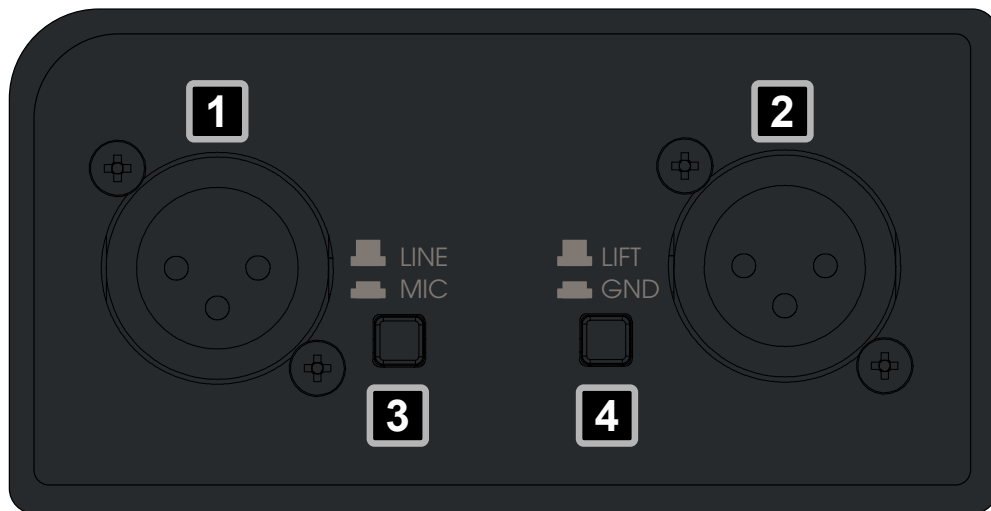


- 1 POWER LED** – The LED indicates that the device is powered. Power is supplied either via the USB-C port or via the connected power adapter.
- 2 SYNC LED** – Indicates an established and synced connection to a digital input device connected via USB-C.
- 3 SIGNAL** – Indicates that a signal is present at the digital audio input.
- 4 Power Supply Input** – Socket for connecting the supplied power adapter.
- i*

When used with self-powered audio sources such as computers, a power adapter is not required and may cause noise or hum (e.g. ground loops).

The power adapter is intended for mobile devices such as smartphones or tablets.
- 5 USB-C PD** – Input connector for connecting digital devices via USB-C. Supports USB-C Power Delivery (**PD**) and supplies power to mobile devices when the supplied power adapter is connected to the power supply input **4**.
- 6 STEREO / MONO Switch** – Toggles between stereo and mono signal processing. When **MONO** is enabled, the stereo signal is summed and sent to both outputs.
- 7 Stereo Headphone Output** – Output socket for connecting a headphone via 6.3 mm TRS jack. The output level can be adjusted using the **LEVEL** control.

5.4 BACK PANEL OVERVIEW



- 1 OUTPUT BALANCED RIGHT** – Audio output socket (balanced 3-pin XLR). Outputs the right channel.
- 2 OUTPUT BALANCED LEFT** – Audio output socket (balanced 3-pin XLR). Outputs the left channel.
- 3 LINE / MIC Switch** – Toggles between line and microphone output.
- 4 LIFT / GND Switch** – Toggles between connected ground and ground lift.

6 PREPARATION

6.1 SCOPE OF DELIVERY

- Device
- Power Adapter
- Safety Compliance Information
- USB-C cable
- Set of rubber feet
- Tour label

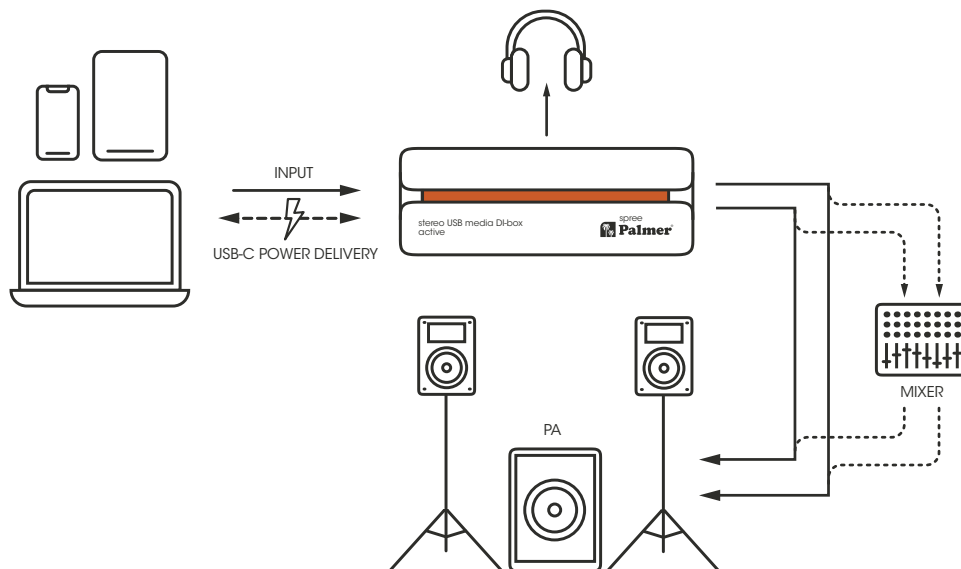
7 OPERATION

7.1 CONNECTION DIAGRAM

This diagram shows a typical connection setup for the **Palmer spree**. Use this setup as a reference for standard operation.

- Connect a USB audio source to the USB-C input.
- The unit is powered via USB-C or via the supplied power adapter.
- When you use the supplied power adapter, the unit can also supply power to connected mobile devices.
- Connect the outputs to active speakers, a mixer or a PA system.
- Use headphones to monitor the signal if required.

stereo USB media DI-box
active



7.2 USING THE POWER ADAPTER



When used with self-powered audio sources such as computers, a power adapter is not required and may cause noise or hum (e.g. ground loops).

The power adapter is intended for mobile devices such as smartphones or tablets.

7.2.1 CONNECTING THE POWER ADAPTER



WARNING

Mains voltage

Risk of electric shock

- a. Do not use damaged power adapters.



NOTICE

Damage to the device

- a. Use only the supplied power adapter.
- b. Make sure that the power adapter matches the device specifications.
- c. Do not use damaged power adapters.
- d. Disconnect the power adapter from the mains before connecting or disconnecting the device.

- 1 Plug the DC connector of the supplied power adapter into the power supply input socket on the device.
- 2 Plug the power adapter into the mains socket.

7.2.2 DISCONNECTING THE POWER ADAPTER

- 1 Disconnect the power adapter from the mains socket.
- 2 Pull the DC connector out of the power input socket.

7.3 CONNECTING AN AUDIO SOURCE VIA USB-C

This device allows you to connect a digital audio source directly via USB-C. No driver installation is required.

When connected, the device is recognised as a USB-C audio device. The device name may be shown as **USB-C DI-Box**, depending on the system.

OUTPUT LEVEL



The device provides a fixed output level (line level). Adjust the volume on the connected equipment or in the playback application. Operating system volume control may be unavailable.



CAUTION

High Output Level

Risk of hearing damage

a. Turn down the volume on all connected output devices such as mixer, amplifier, or powered speakers before connecting the device.

b. Start playback only after the connection is established.

c. Increase the volume gradually.

- 1 Connect the USB-C cable between your audio source and the device.
⇒ The device is automatically recognised as a USB-C audio output.
- 2 Audio playback can then be routed to the device, depending on the operating system.

BEHAVIOUR ON DIFFERENT SYSTEMS

Windows	The device is automatically detected and typically selected as the active stereo output. Audio is routed immediately.
macOS	The device is recognised immediately, but must be selected manually in the audio setup or audio application.
iPhone / iPad	The device is recognised as a digital headphone output. Depending on the application or system prompt, you may need to confirm or start playback before audio is routed.
Android	The device is recognised as a USB audio output. Selection and routing behaviour may vary depending on the device.

8 MAINTENANCE

8.1 PRODUCT MAINTENANCE

**CAUTION**

Mains Voltage

Risk of electric shock

- a. Before you perform maintenance work on the device, disconnect the device from all poles.

**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.

- **⚠ WARNING! Risk of electric shock.** Check mains power cables for damage or material fatigue.
- Check all air inlets and outlets for damage, dust, or dirt deposits.
- Check all outside screws and covers for corrosion, damage or excessive wear.
- Check all connectors and rubber sealing caps for damage, dust, or dirt deposits.
- **⚠ 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.
- **! NOTICE! Do not use compressed air.** Clean any air inlets and outlets of dust and dirt deposits with a clean and damp lint-free cotton cloth.
- Clean all plug contacts from dust and dirt with a dry lint-free cotton cloth.

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

C

Cleaning	21
Connections	18
Customer Service	6

P

Power adapter	19
---------------	----

S

Scope of delivery	17
Storing	21

T

Technical data	13, 14, 15
----------------	------------

