STAIRVILLE

Outdoor Stage PAR 12 × 3W WLA

User Manual

LED PAR

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1 General information

This document contains important instructions for the safe operation of the product. Read and follow the safety instructions and all other instructions. Keep the document for future reference. Make sure that it is available to all those using the product. If you sell the product to another user, be sure that they also receive this document.

Our products and documentation are subject to a process of continuous development. They are therefore subject to change. Please refer to the latest version of the documentation, which is ready for download under *www.thomann.de*.

1.1 Symbols and signal words

In this section you will find an overview of the meaning of symbols and signal words that are used in this document.

Signal word	Meaning
DANGER!	This combination of symbol and signal word indicates an immediate dangerous situation that will result in death or serious injury if it is not avoided.
WARNING!	This combination of symbol and signal word indicates a possible dangerous situation that can result in death or serious injury if it is not avoided.
NOTICE!	This combination of symbol and signal word indicates a possible dangerous situation that can result in material and environmental damage if it is not avoided.

Warning signs	Type of danger
	Warning – high-voltage.
	Warning – dangerous optical radiation.
	Warning – suspended load.

Warning signs	Type of danger
	Warning – danger zone.

2 Safety instructions

Intended use

This device is intended for use as an electronic lighting effect by means of LED technology. The device is designed for professional use only and is not suitable for use in households. Use the device only as described in this user manual. Any other use or use under other operating conditions is considered to be improper and may result in personal injury or property damage. No liability will be assumed for damages resulting from improper use.

This device may be used only by persons with sufficient physical, sensorial, and intellectual abilities and having corresponding knowledge and experience. Other persons may use this device only if they are supervised or instructed by a person who is responsible for their safety.

Extend the operating life of the device by regular breaks and by avoiding frequent switching on and off. The device is not suitable for continuous operation.

Safety

DANGER!

Risk of injury and choking hazard for children!

Children can suffocate on packaging material and small parts. Children can injure themselves when handling the device. Never allow children to play with the packaging material and the device. Always store packaging material out of the reach of babies and small children. Always dispose of packaging material properly when it is not in use. Never allow children to use the device without supervision. Keep small parts away from children and make sure that the device does not shed any small parts (such knobs) that children could play with.

DANGER!

Danger to life due to electric current!

Within the device there are areas where high voltages may be present. Never remove any covers. There are no user-serviceable parts inside. Do not use the device when covers, safety equipment or optical components are missing or damaged.

DANGER!

Danger to life due to electric current!

A short circuit could lead to a fire hazard and risk of death. Do not modify the mains cable or the plug! In case of isolation damage, disconnect immediately the power supply and arrange repair. If in doubt, seek advice from a qualified electrician.

WARNING!

Risk of eye damage caused by high light intensity!

The device generates highly intense light radiation. Looking directly into the light source can damage the eyes. Never look directly into the light source.

WARNING!

Risk of epileptic fit due to flashing lights!

The device emits flashing lights (strobe effects). Flashing lights can trigger epileptic fits in specific people. If you are at risk of epilepsy, avoid spending longer periods of time subjected to flashing lights and looking into strobing light.

NOTICE!

Risk of fire due to covered vents and neighbouring heat sources!

If the vents of the device are covered or the device is operated in the immediate vicinity of other heat sources, the device can overheat and burst into flames. Never cover the device or the vents. Do not install the device in the immediate vicinity of other heat sources. Never operate the device in the immediate vicinity of naked flames.

NOTICE!

Risk of fire by exceeding the maximum current!

The device can supply power to other devices of identical design and connected in series. If too many devices are connected, the maximum permitted power consumption can be exceeded, which can cause the device to overheat and burst into flames. Only connect devices of identical design to the device. When deciding how many devices you can connect in series, make sure that the maximum output current specified on the device and in the "Technical specifications" chapter of the user manual is not exceeded. Only use power cords with a cable cross-section designed for the required current intensity when connecting the devices in series.

NOTICE!

Damage to the device due to high voltages!

The device can be damaged if it is operated with the incorrect voltage or if high voltage peaks occur. In the worst case, excess voltages can also cause a risk of injury and fires. Make sure that the voltage specification on the device matches the local power grid before plugging in the device. Only operate the device from professionally installed mains sockets that are protected by a residual current circuit breaker (FI). As a precaution, disconnect the device from the power grid when storms are approaching or it the device will not be used for a longer period.

3 Features

Due to its sturdy and weather-proof die-cast aluminium housing, the Outdoor Stage PAR 12 × 3W WLA is specially designed for outdoor use.

Special features of the device:

- 12 × WLA LEDs (3 W each)
- Control via DMX (3 different modes) and via the buttons and display on the device
- Seven pre-programmed automatic shows
- Master/slave operation
- Rugged die-cast aluminium housing
- International Protection Rating IP65 (suitable for outdoor use)
- Splash-proof safety plug (IP44)
- Pressure compensation element (prevents condensation inside the device)
- Sturdy double bracket for secure attachment to trusses or firm footing on the ground

For technological reasons, the light output of LEDs decreases over their lifetime. This effect increases with higher operating temperature. You can extend the service life of the illuminants by providing adequate ventilation and operating the LEDs with the lowest possible brightness.

Information about protection class IP65

Equipment with protection class IP65 are dust-tight and completely protected against contact (first code number). They are also protected against splash water from any angle (second code digit). That is why this equipment can also be used outdoors. Event technology equipment is generally only designed for temporary use however (event lighting) and not for permanent use outdoors.

The specified protection class does not make a statement about the weather resistance of the equipment (resistance to changing ambient conditions as well as against the effects of sunlight and UV rays).

The seals and screw connections of the equipment must be checked regularly to ensure a fault-free operation. In cases of doubt, consult a specialist workshop in due time.

4 Installation

Unpack and check carefully there is no transportation damage before using the unit. Keep the equipment packaging. To fully protect the product against vibration, dust and moisture during transportation or storage use the original packaging or your own packaging material suitable for transport or storage, respectively.

WARNING!

Risk of injury from falling devices that were inadequately secured!

If devices are not properly secured during assembly, they can cause severe injury and considerable damage by falling.

When installing and operating, make sure to follow the standards and regulations that apply in your country.

Always secure the device with a secondary safety attachment, such as a safety cable or a safety chain.

NOTICE!

Risk of overheating due to bad ventilation!

If the device is badly ventilated, the device can overheat.

Do not operate the unit at ambient temperatures outside the specified temperature range (see chapter "Technical data" of the user manual).

Always ensure sufficient ventilation at the operating location.

NOTICE!

Potential property damage due to unsuitable stands!

If the device is mounted on an unsuitable stand, there is a risk that the stand will fall over and cause damage.

Only use stands whose maximum bearing capacity is at least as high as the weight of the device. Always ensure that the stand is stable.

NOTICE!

Data transfer errors due to improper wiring!

If the DMX connections are wired incorrectly, this can cause errors during the data transfer.

Do not connect the DMX input and output to audio devices, e.g. mixers or amplifiers.

Use special DMX cables for the wiring instead of normal microphone cables.

NOTICE!

Possible damage due to moisture penetrating into open connectors!

Moisture entering open connectors (plugs and couplings) of DMX and power supply cables can cause short circuits and damage to connected fixtures.

Always seal unused connectors with end caps intended for this purpose (*www.thomann.de*).

Mounting options

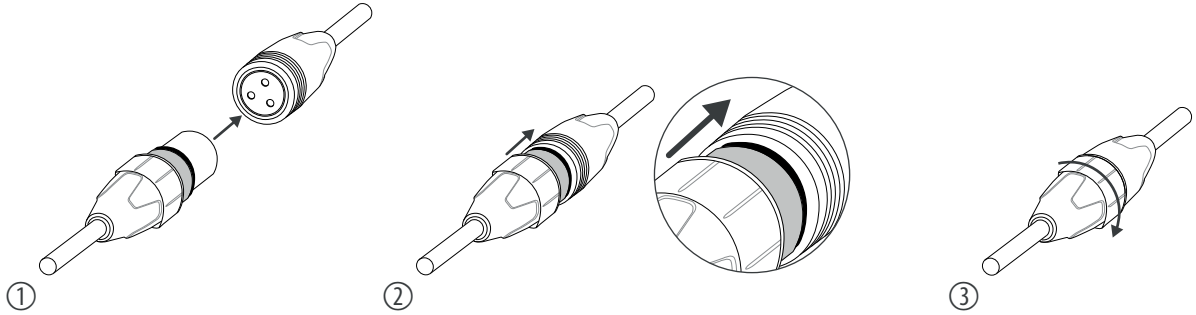
You can install the device in hanging or standing positions. When in use, the device must always be attached to a solid surface or an approved mount. Use the openings provided on the two-piece bracket for attaching.

Always work from a stable platform whenever installing, moving or servicing the device. While you do this, the area underneath the device must be cordoned off.

The safety cable must be attached to the safety eyelet.

Please note that this device must not be connected to a dimmer.

Connecting the DMX IP65 connectors



Proceed as follows to connect the DMX-IP65 connectors:

1. Insert the plug completely and straight into the coupling.

2. Make sure that the flexible sealing ring has complete contact.

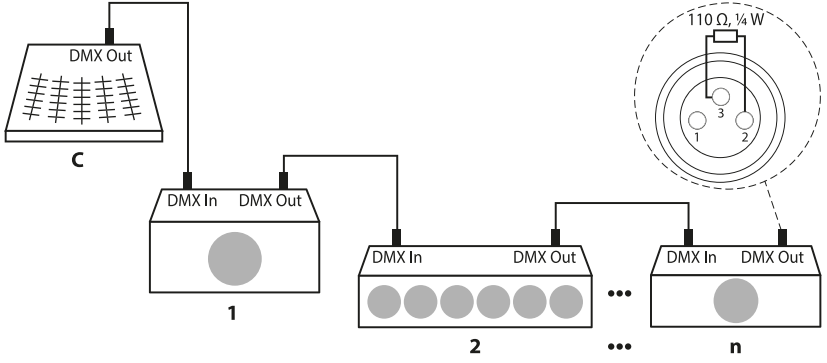
3. Turn the union nut straight onto the thread of the coupling. Hand-tighten the union nut.

5 Starting up

Create all connections while the device is off. Use the shortest possible high-quality cables for all connections. Take care when running the cables to prevent tripping hazards.

Connections in DMX mode

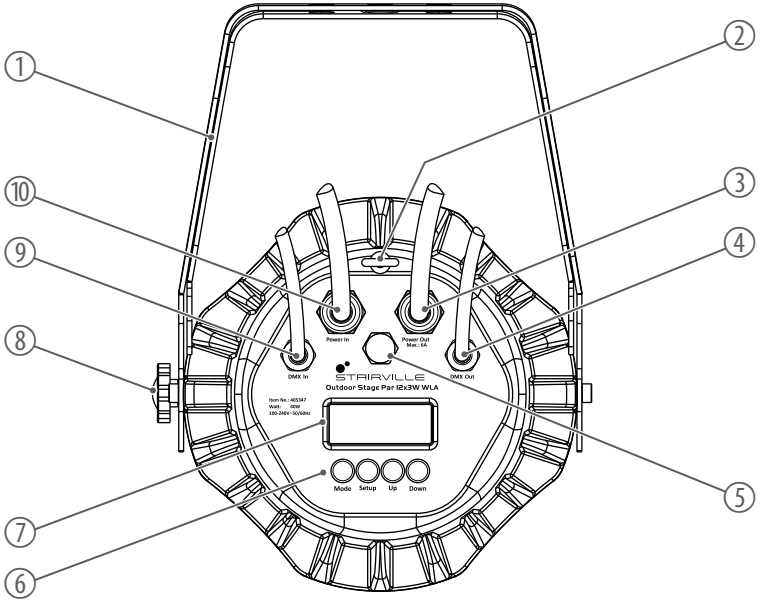
Connect the DMX input of the device to the DMX output of a DMX controller or another DMX device. Connect the output of the first DMX device to the input of the second one, and so on to form a daisy chain. Always ensure that the output of the last DMX device in the daisy chain is terminated with a resistor (110 Ω, ¼ W).



Connections in 'Master / Slave' mode

When you configure a group of devices in 'Master / Slave' mode, the first unit will control the others. This feature is especially useful to start a show without much programming. Connect the DMX output of the master unit to the DMX input of the first slave unit. Then connect the DMX output of the first slave unit to the DMX input of the second slave unit and so on.

6 Connections and controls



1	Two-piece bracket for suspension or set-up
2	Safety cable eyelet
3	*[Power Out]* | Power cable for the power supply of up to 12 identical, serially connected devices
4	*[DMX Out]* | DMX output cable
5	Pressure equalisation element
6	Function buttons
	[Mode] | Activates the main menu and toggles between menu items.
	[Setup] | Selects an option of the respective operating mode.
	[Up] | Increases the displayed value by one.
	[Down] | Decreases the displayed value by one.
7	Display
8	Locking screw for the two-piece bracket
9	*[DMX In]* | DMX input cable
10	*[Power In]* | Power cable for the power supply of the device

7 Operating

7.1 Starting the device

Connect the device to the power supply to start operation. After a few seconds, the display indicates that a reset is in progress. The device is then ready for use.

7.2 Main menu

Press *[Mode]* to activate the main menu and select an operating mode. Use *[Up]* and *[Down]* to change the respectively displayed value. When the display shows the desired value confirm with *[Setup]*. To return to the parent menu without making changes, press *[Mode]*.

If you don't press any button for about 20 seconds, the unit returns to the previously selected mode. The set values are retained even when the device is disconnected from the mains power supply.

Operating mode Auto

In this mode, all preprogrammed shows are played consecutively in an endless loop. This setting is only relevant if the device is not controlled via DMX.

Use *[Mode]* to open the main menu. Press *[Up]* or *[Down]* repeatedly until the display shows *'Auto'*. Confirm the selection with *[Setup]*.

Operating mode Show/Master

In this mode, the device operates in stand-alone mode and can control connected devices of the same type. This setting is only relevant if the device is not controlled via DMX.

Use *[Mode]* to open the main menu. Press *[Up]* or *[Down]* repeatedly until the display shows *'Pr.xx'*. Now you can select one of the seven preprogrammed automatic shows. Use *[Up]* and *[Down]* to select a value between *'Pr.01'* and *'Pr.07'*.

Settings programme Pr.01

For programme *'Pr.01'* you have the choice between various static colours and colour mixtures based on the three basic colours amber, warm white and cold white. Select programme *'Pr.01'* first, then confirm with *'Setup'*. Now you can use the *[Up]* and *[Down]* buttons to select one of the following options:

Value	Description
'OFF'	all off
'--A'	Amber
'-AS'	Amber / warm white
'--S'	Warm white
'-AU'	Amber / cold white
'-SU'	Warm white / cold white
'--U'	Cold white
'ALL'	Amber / warm white / cold white

Confirm again with *'Setup'*. In the following menu, you can use *[UP]* and *[DOWN]* to set the strobe frequency for the strobe effect individually in a range from *'FS00'* to *'FS99'*.

Settings programme Pr.02 … Pr.07

For programmes *'Pr.02'* to *'Pr.01'*, you can set the programme speed and the flash frequency for the strobe effect after selecting the desired program.

First select the desired programme and confirm the selection with *[Setup]*.

Then use *[Up]* or *[Down]* to set the programme speed in a range from *'SP01'* … *'SPFL'* (slow … fast) and confirm with *[Setup]*.

Then use *[Up]* or *[Down]* to set the flash frequency for the strobe effect in a range from *'FS01'* … *'FS99'* (slow … fast) and confirm with *[Setup]*.

Dimmer presets

In this menu, you can set the dimmer presets for the three basic colours of the unit.

Use *[Mode]* to open the main menu. Press *[Up]* or *[Down]* repeatedly until the display shows *'Colr'*. Press *[Up]* or. *[Down]* to consecutively set the dimmer presets for amber, warm white, and cold white as well as the flash frequency for the strobe effect. Confirm each value with *[Setup]* to get to the next value.

Value	Description
'A.000' … *'A.255'*	amber, intensity 0 % … 100 %
'S.000' … *'S.255'*	warm white, intensity 0 % … 100 %
'U.000' … *'U.255'*	cold white, intensity 0 % … 100 %
'FS00' … *'FS99'*	Flash frequency for the strobe effect

DMX mode

This setting is only relevant when the device is controlled via DMX.

Use *[Mode]* to open the main menu. Press *[Up]* or *[Down]* repeatedly until the display shows *'d.xxx'*. Now you can set the number of the first DMX channel to be used by the device (DMX address). Use *[Up]* or *[Down]* to select a value between 1 and 510 (display shows *'d.001'* … *'d.510'*).

Make sure that this number matches the configuration of your DMX controller. The following table shows the highest possible DMX address for the various DMX modes.

Mode	Highest possible DMX address
3-channel	510
5-channel	508
7-channel	506

Confirm with *[Setup]*. Press *[Up]* or *[Down]* to select the desired DMX mode:

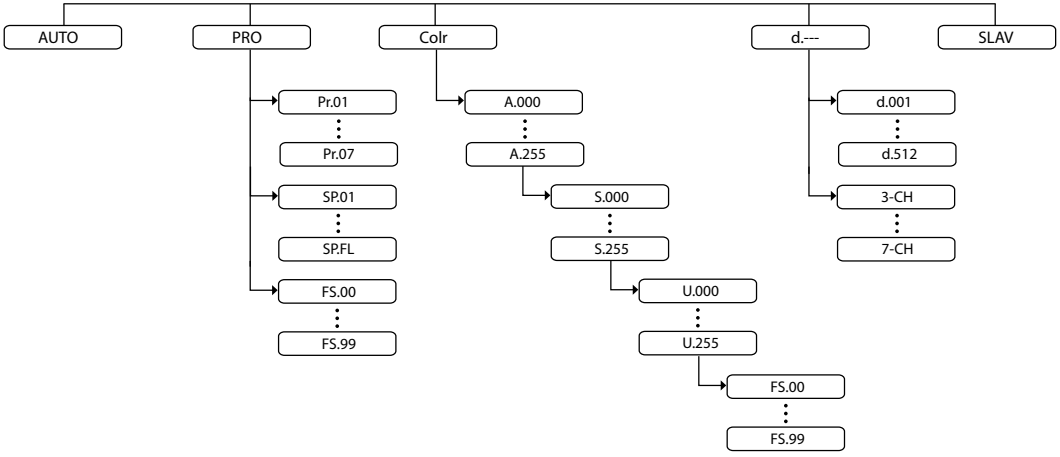
- *'3-CH'* (three channels)
- *'5-CH'* (five channels)
- *'7-CH'* (seven channels)

Operating mode 'Slave'

This setting is only relevant if the device is working as Slave in a Master / Slave configuration and is not controlled via DMX. In this operating mode, the device responds to the control signals of the master device.

Use *[Mode]* to open the main menu. Press *[Up]* or *[Down]* repeatedly until the display shows *'SLAv'*. Confirm with *[Setup]*.

7.3 Menu overview



7.4 Functions in 3-channel DMX mode

Channel	Value	Function
1	0…255	Intensity amber (0 % to 100 %)
2	0…255	Intensity warm white (0 % to 100 %)
3	0…255	Intensity cold white (0 % to 100 %)

7.5 Functions in 5-channel DMX mode

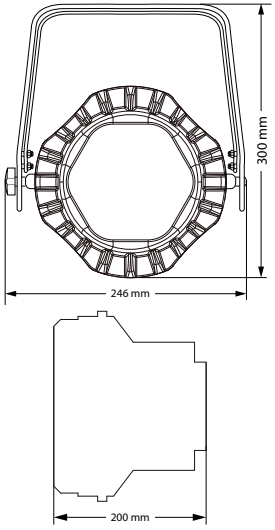
Channel	Value	Function
1	0…255	Dimmer (0 % to 100 %)
2	0…255	Intensity amber (0 % to 100 %)
3	0…255	Intensity warm white (0 % to 100 %)
4	0…255	Intensity cold white (0 % to 100 %)
5	0…255	Stroboscope effect (0 % to 100 %)

7.6 Functions in 7-channel DMX mode

Channel	Value	Function
1	0…255	Dimmer (0 % to 100 %)
2	0…255	Intensity amber (0 % to 100 %)
3	0…255	Intensity warm white (0 % to 100 %)
4	0…255	Intensity cold white (0 % to 100 %)
5	Programme selection	
	0…35	Dimmer (0 % to 100 %)
	36…71	Programme 01
	72…107	Programme 02
	108…143	Programme 03
	144…179	Programme 04
	180…215	Programme 05
	216…251	Programme 06
	252…255	Programme 07
6	Macros (programme 1, if channel 5 = 36…71), process speed (programme 02 bis 07)	

Channel	Value	Function
	0…35	Blackout
	36…71	amber 255, warm white 0, cold white 0
	72…107	amber 255, warm white 255, cold white 0
	108…143	amber 0, warm white 255, cold white 0
	144…179	amber 255, warm white 0, cold white 255
	180…215	amber 0, warm white 255, cold white 255
	216…251	amber 0, warm white 0, cold white 255
	252…255	amber 255, warm white 255, cold white 255
7	0…255	Stroboscope effect (0 % to 100 %)

8 Technical specifications



Light source		12 × WLA LEDs, 3 W each (warm white, cold white, amber)
Light source properties	Colour temperature	2500…2700 K
	Colour rendering index	CRI 85
Optical properties	Beam angle	30°
Control		DMX
Number of DMX channels		3, 5, 7
Input connections	Power supply	Power cable with IP65 screw connector
	DMX control	DMX cable with IP65 XLR plug, 3-pin
Output connections	Power supply for further devices	Power cable with IP65 screw connector for the power supply of up to 12 identical, serially connected devices Output current, max.: 6 A
	DMX control	DMX cable with IP65 XLR coupling, 3-pin
Power consumption		40 W

Supply voltage		110 - 240 V ~ 50/60 Hz
International Protection Rating		IP65
Mounting options		Hanging, standing
Dimensions (W × H × D)		246 mm × 300 mm × 200 mm
Weight		3.5 kg
Ambient conditions	Temperature range	0 °C…40 °C
	Relative humidity	20%…80% (non-condensing)

Further information

Outdoor housing design	Studio housing
Colour mix	CW/WW/A
LED type	x-in-1
Floor housing	Yes
Fanless	Yes
Remote control	Not possible
Wireless DMX	No
Housing colour	Black

9 Plug and connection assignments

Introduction

This chapter will help you select the right cables and plugs to connect your valuable equipment so that a perfect light experience is guaranteed.

Please take our tips, because especially in 'Sound & Light' caution is indicated: Even if a plug fits into a socket, the result of an incorrect connection may be a destroyed DMX controller, a short circuit or 'just' a not working light show!

DMX connections

The unit offers a 3-pin XLR socket for DMX output and a 3-pin XLR plug for DMX input. Please refer to the drawing and table below for the pin assignment of a suitable XLR plug.

Pin	Configuration
1	Ground, shielding
2	Signal inverted (DMX–, 'cold signal')
3	Signal (DMX+, 'hot signal')

10 Troubleshooting

NOTICE!

Data transfer errors due to improper wiring!

If the DMX connections are wired incorrectly, this can cause errors during the data transfer.

Do not connect the DMX input and output to audio devices, e.g. mixers or amplifiers.

Use special DMX cables for the wiring instead of normal microphone cables.

In the following we list a few common problems that may occur during operation. We give you some suggestions for easy troubleshooting:

Symptom	Remedy
The device does not work, no light	Check the mains connection and the fuse.
No response to the DMX Controller	1. Check the DMX connectors and cables for proper connection.
	2. Check the address settings and the DMX polarity.
	3. Try using another DMX Controller.
	4. Check whether the DMX cables run near or parallel to high-voltage cables that may cause damage or interference to a DMX interface circuit.

If the procedures recommended above do not succeed, please contact our Service Center. You can find the contact information at *www.thomann.de*.

11 Cleaning

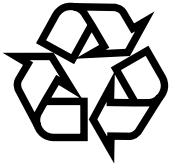
Optical lenses

Clean the optical lenses, that are accessible from the outside, regularly in order to optimize the light output. The frequency of cleaning depends on the operating environment: wet, smoky or particularly dirty surroundings can cause more accumulation of dirt on the optics of the device.

- Clean with a soft cloth using our lamp and lens cleaner (item no. 280122).
- Always dry the parts carefully.

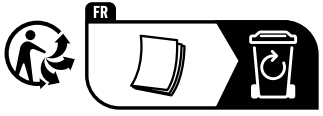
12 Protecting the environment

Disposal of the packing material



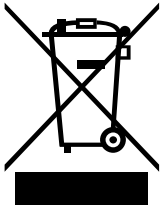
Environmentally friendly materials have been chosen for the packaging. These materials can be sent for normal recycling. Ensure that plastic bags, packaging, etc. are disposed of in the proper manner.

Do not dispose of these materials with your normal household waste, but make sure that they are collected for recycling. Please follow the instructions and markings on the packaging.



Observe the disposal note regarding documentation in France.

Disposal of your old device



This product is subject to the European Waste Electrical and Electronic Equipment Directive (WEEE) as amended.

Do not dispose of your old device with your normal household waste; instead, deliver it for controlled disposal by an approved waste disposal firm or through your local waste facility. If in doubt, consult your local waste management facility. You can also return the device to a retailer if they offer to take the device back for free or if they are legally obliged to do so. When disposing of the device, comply with the rules and regulations that apply in your country. You can also return your old device to Thomann GmbH at no charge. Check the current conditions on *www.thomann.de*.

Proper disposal protects the environment as well as the health of your fellow human beings. This is because the proper handling of old devices negates the potential negative effects of hazardous substances, and because it conserves resources by recycling them.

Also note that waste avoidance is a valuable contribution to environmental protection. Repairing a device or passing it on to another user is an ecologically valuable alternative to disposal.

If your old device contains personal data, delete those data before disposing of it.