





user manual

Musikhaus Thomann Thomann GmbH Hans-Thomann-Straße 1 96138 Burgebrach Germany Telephone: +49 (0) 9546 9223-0 E-mail: info@thomann.de Internet: www.thomann.de

17.08.2015, ID: 326889

# **Table of contents**

1		eral notes	
2	Safe	ety instructions	8
3	Fea	tures	13
4	Inst	allation	14
5	Starting up		18
6	Connections and operating elements		21
7 Operating		erating	24
		Starting the device	
		Main menu	
		Menu overview	
		Functions in 2-channel DMX mode	
	7.5	Functions in 3-channel DMX mode	33
		Functions in 5-channel DMX mode	
		Functions in 7-channel DMX mode	
	7.8	Functions in 18-channel DMX mode	37

Show Bar Tri 18x3W RGB

th•mann

	7.9 Functions in 27-channel DMX mode	39
	7.10 Functions in 54-channel DMX mode	41
8	Technical specifications	43
9	Plug and connection assignments	44
10	Troubleshooting	45
11	Cleaning	48
12	Protecting the environment	49



# 1 General notes

	This user manual contains important information on safe operation of the device. Read and follow all safety notes and all instructions. Save this manual for future reference. Make sure that it is available to all persons using this device. If you sell the device, include the manual for the next owner.
	Our products are subject to a process of continuous development. We therefore reserve the right to make changes without notice.
Symbols and signal words	This section provides an overview of the symbols and signal words used in this user manual.



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 pos- sible 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 pos- sible dangerous situation that can result in material and environmental damage if it is not avoided.
Warning signs	Type of danger
	Warning – high-voltage.
	Warning – suspended load.

LED floodlight

thomann MUSIC IS OUR PASSION

Warning signs	Type of danger
	Warning – danger zone.



# 2 Safety instructions

#### Intended use

This device is intended to be used as an electronic illumination effect using LED technics. The device is designed for professional use 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.



#### Safety



## DANGER!

#### Danger for children

Ensure that plastic bags, packaging, etc. are disposed of properly and are not within reach of babies and young children. Choking hazard!

Ensure that children do not detach any small parts (e.g. knobs or the like) from the unit. They could swallow the pieces and choke!

Never let children unattended use electrical devices.



#### DANGER!

#### Electric shock caused by high voltages inside

Within the device there are areas where high voltages may be present. Never remove any covers.

There are no user-serviceable parts inside.





#### DANGER!

#### Electric shock caused by short-circuit

Always use proper ready-made insulated mains cabling (power cord) with a protective contact plug. Do not modify the mains cable or the plug. Failure to do so could result in electric shock/death or fire. If in doubt, seek advice from a registered electrician.



#### WARNING! Eye damage caused by high light intensity

Never look directly into the light source.



## WARNING!

#### **Risk of epileptic shock**

Strobe lighting can trigger seizures in photosensitive epilepsy. Sensitive persons should avoid looking at strobe lights.



#### NOTICE!

#### **Risk of fire**

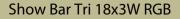
Do not cover the device nor any ventilation slots. Do not place the device near any direct heat source. Keep the device away from naked flames.



#### NOTICE!

#### **Operating conditions**

This device has been designed for indoor use only. To prevent damage, never expose the device to any liquid or moisture. Avoid direct sunlight, heavy dirt, and strong vibrations.





#### NOTICE!

#### Power supply

Before connecting the device, ensure that the input voltage (AC outlet) matches the voltage rating of the device and that the AC outlet is protected by a residual current circuit breaker. Failure to do so could result in damage to the device and possibly injure the user.

Unplug the device before electrical storms occur and when it is unused for long periods of time to reduce the risk of electric shock or fire.



## 3 Features

The LED floodlight is particularly suitable for lighting applications in clubs and discotheques, on rock stages, in theatres and musicals. It can also be used for effect lighting of stage back-grounds or framing catwalks.

Special features of the device:

- 18 tri-colour LEDs (3 W each)
- Control via DMX (seven different modes) and via buttons and display on the unit
- 25 preprogrammed automatic shows
- Sound control
- Master / Slave mode
- Robust metal housing with compact design
- Versatile placement and mounting options
- Looped through mains voltage output for powering further devices

th•mann

## 4 Installation

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

You can install the device on the wall, ceiling or floor. The package includes:

- A removable and adjustable mounting bracket with locking screws mounted on a horizontally slidable carriage. To completely remove the slidable carriage, detach a side plate of the device.
- Two adjustable angle brackets with locking screws; the angle brackets can also be used as pedestals.





#### WARNING!

#### Risk of injury caused by falling objects

Make sure that the installation complies with the standards and rules that apply in your country. Always secure the device with a secondary safety attachment, such as a safety cable or a safety chain.

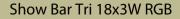


#### NOTICE!

#### **Risk of overheating**

Always ensure sufficient ventilation.

The ambient temperature must always be below 40 °C (104 °F).





#### NOTICE!

#### Use of stands

When mounting the device onto a stand, ensure that the stand is in a safe and stable position and that the weight of the device does not exceed the maximum permissible load capacity of the stand.



#### NOTICE!

#### Possible data transmission errors

For error-free operation make use of dedicated DMX cables and do not use ordinary microphone cables.

Never connect the DMX input or output to audio devices such as mixers or amplifiers.





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



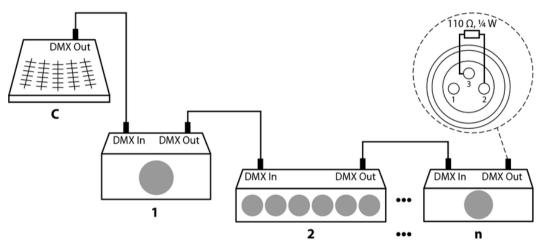
# 5 Starting up

Establish all connections as long as the unit is switched off. Use the shortest possible highquality cables for all connections.



#### **Connections in DMX mode**

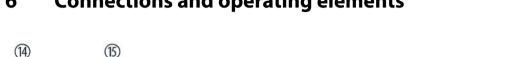
Connect the DMX input of the device to the DMX output of a DMX controller or another DMX device. Connect the output of the first DMX device to the input of the second one, and so on to form a daisy chain. Always ensure that the output of the last DMX device in the daisy chain is terminated with a resistor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



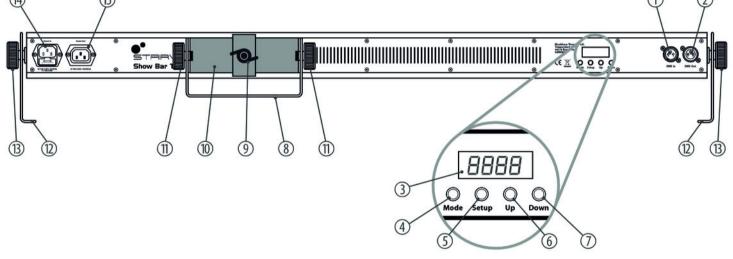


DMX indicator	If the unit is in DMX mode and a DMX controller is connected and turned on, a dot on the fourth digit of the display will flash. If the unit is in DMX mode, but without a turned on DMX controller connected, the display will flash.
Connections in master/slave mode	When you configure a group of devices in master/slave mode, the first unit will control the other units for an automatic, sound-activated, synchronized show. This function is ideal when you want to start a show immediately. Connect the DMX output of the master device to the DMX input of the first slave device. Then connect the DMX output of the first slave device to the DMX input of the second slave device and so on.





#### **Connections and operating elements** 6

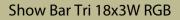




1	[DMX In]
	DMX input.
2	[DMX Out]
	DMX output.
3	Display.
4	Button [Mode]
	Activates the main menu and toggles between menu items.
5	Button [Setup]
	Selects an option of the respective operating mode.
б	Button [Up]
	Navigates upwards in a menu list. Increases the displayed value by one.
7	Button [Down]
	Navigates downwards in a menu list. Decreases the displayed value by one.
8	Adjustable and detachable bracket for mounting or transporting the device.

th • mann

9	Locking screw for fixing the carriage.
10	Horizontally slidable carriage.
11	Locking screws for the adjustable retaining bracket.
12	Adjustable and removable mounting brackets and feet.
13	Locking screws for the mounting brackets / feet.
14	[POWER In]
	IEC chassis plug for operating voltage supply, with fuse holder.
15	[POWER Out]
	IEC chassis socket for the power supply cable to the next unit.





## 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. The display shows the operating mode that was selected when the unit was last powered off.

#### 7.2 Main menu

Press [Mode] to activate the main menu and select an operating mode. Use [Up] and [Down] to change the respectively indicated value. When the display shows the desired value, press [Mode].

If you don't press any button for about 30 seconds, the current setting will be automatically applied and the display turns off. The set values are retained as long as the device is connected to the mains power supply.



#### Operating mode 'Preprogrammed automatic show'

A preprogrammed automatic show can only be activated when the unit is operating in stand alone mode or as master in a master / slave combination. This setting is only relevant if the device is not controlled via DMX.

Press [Mode] repeatedly until the display shows 'Prxx'. Now you can select one of the preprogrammed automatic shows. Use [Up] and [Down] to select a value between 'Pr01' and 'Pr25'.

To adjust the speed of the selected automatic show, press [Setup] repeatedly until the display shows 'SPxx'. Using [Up] and [Down] you can now select a value between 'SP01' (slow) and 'SPFL' (fast).

To adjust the strobe frequency, press [Setup] repeatedly until the display shows 'FSxx'. Using [Up] and [Down] you can now select a value between 'FSO0' (slow) and 'FSFL' (fast).

Wait about 30 seconds until the display turns dark. Then the settings have been applied. To return to the parent menu without making changes, press [Mode].

MUSIC IS OUR PASSION

Operating mode 'Automatic'	Automatic operation can only be activated when the unit is operating in stand alone mode or as master in a master / slave combination. This setting is only relevant if the device is not con- trolled via DMX.
	Press [Mode] repeatedly until the display shows 'Auto'. Press [Setup]until the display shows 'nxxx'. Now you can select an automatic option. Use [Up] and [Down] to select a value between 'n001' and 'n100'.
	To adjust the speed of the selected automatic option, press [Setup] repeatedly until the display shows 'SPxx'. With [Up] and [Down] you can now select a value between 'SP01' (slow) and 'SPFL' (fast).
	To adjust the strobe frequency, press <i>[Setup]</i> repeatedly until the display shows <i>'FSxx'</i> . With <i>[Up]</i> and <i>[Down]</i> you can now select a value between <i>'FS00'</i> (slow) and <i>'FSFL'</i> (fast).
	Wait about 30 seconds until the display turns dark. Then the settings have been applied. To return to the parent menu without making changes, press [Mode].



#### **DMX address**

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

Press [Mode] repeatedly until the display shows 'dxxx'.

Now you can set the number of the first DMX channel to be used by the device (DMX address). Use [Up] and [Down] to select a value between 1 and 512 (the display shows 'd001'...'d512').

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

Mode	Highest possible DMX address
2-channel	511
3-channel	510
5-channel	508
7-channel	506
18-channel	495
27-channel	486
54-channel	459

	Wait about 30 seconds until the display turns dark. Then the settings have been applied. To return to the parent menu without making changes, press [Mode].
DMX mode	This setting is only relevant if the device is controlled via DMX.
	Press [ <i>Mode</i> ] repeatedly until the display shows <i>'dxxx'</i> . Press [Setup]. With [Up] and [Down] you can now select one of the following DMX operating modes:
	<ul> <li>'2-ch' (two channels)</li> <li>'3-ch' (three channels)</li> <li>'5-ch' (five channels)</li> <li>'7-ch' (five channels)</li> <li>'18ch' (18 channels)</li> <li>'27ch' (27 channels)</li> <li>'54ch' (54 channels)</li> </ul>

Wait about 30 seconds until the display turns dark. Then the settings have been applied. To return to the parent menu without making changes, press *[Mode]*.



Operating mode 'Slave'	This setting is only relevant if the device is serving as Slave in a Master / Slave configuration and is not controlled via DMX. Press [ <i>Mode</i> ] repeatedly until the display shows ' <i>SLAv</i> '. Wait about 30 seconds until the display turns dark. Then the settings have been applied. To return to the parent menu without making changes, press [ <i>Mode</i> ].
Sound control and microphone sensitivity	A sound controlled automatic show can only be activated when the unit is operating in stand alone mode or as master in a master / slave combination. This setting is only relevant if the device is not controlled via DMX.
	Press [Mode] repeatedly until the display shows 'SUxx'. This activates a sound controlled auto- matic show.
	Now you can adjust the sensitivity of the built-in microphone for sound control. Use [Up] and [Down] to select a value between 0 (low sensitivity) and 31 (high sensitivity), the display shows 'SU00''SU31'.
	Wait about 30 seconds until the display turns dark. Then the settings have been applied. To return to the parent menu without making changes, press [Mode].



# **Constant unicoloured pattern** A constant unicoloured pattern can only be activated when the unit is operating in stand alone mode or as master in a master / slave combination. This setting is only relevant if the device is not controlled via DMX.

Press [Mode] repeatedly until the display shows 'CLor'.

Press [Setup]. With [Up] and [Down] you can choose from the following options:

Display	Description
′r.000′ ′r.255′	Red
'G.000' 'G.255'	Green
'b.000' 'b.255'	Blue

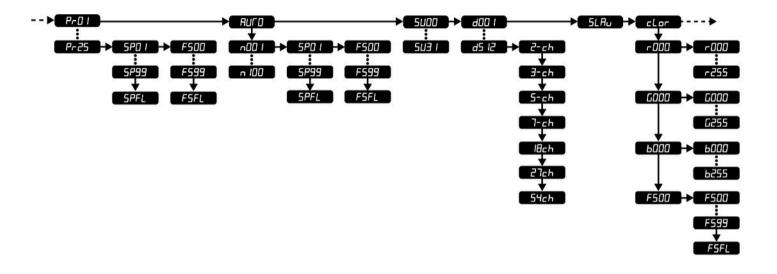
To adjust the strobe frequency, press [Setup] repeatedly until the display shows 'FSxx'. With [Up] and [Down] you can now select a value between 'FS00' (slow) and 'FSFL' (fast).

Wait about 30 seconds until the display turns dark. Then the settings have been applied. To return to the parent menu without making changes, press [Mode].



Operating

## 7.3 Menu overview





## 7.4 Functions in 2-channel DMX mode

Channel	Value	Function
1	Operating mode	
	0	Dark
	17	Red
	815	Red + green
	1623	Green
	2431	Green + blue
	3239	Blue
	4047	Red + blue
	4855	Red + green + blue
	5663	Preprogrammed automatic show no. 2
	6471	Preprogrammed automatic show no. 3

LED floodlight

th•mann

Channel	Value	Function
	7279	Preprogrammed automatic show no. 4
	:	:
	240247	Preprogrammed automatic show no. 25
	248255	Sound-controlled show
2	0255	Sound control sensitivity (from insensitive to highly sensitive)

## 7.5 Functions in 3-channel DMX mode

Channel	Value	Function
1	0255	Intensity red (0 % to 100 %)
2	0255	Intensity green (0 % to 100 %)
3	0255	Intensity blue (0 % to 100 %)



## 7.6 Functions in 5-channel DMX mode

Channel	Value	Function
1	0255	Intensity red (0 % to 100 %)
2	0255	Intensity green (0 % to 100 %)
3	0255	Intensity blue (0 % to 100 %)
4	0255	Dimmer (0 % to 100 %)
5	0255	Strobe effect, increasing speed

## 7.7 Functions in 7-channel DMX mode

Channel	Value	Function
1	0255	Intensity Red (0 % to 100 %), if channel $5 = 0$
2	0255	Intensity Green (0 % to 100 %), if channel $5 = 0$

th•)	mann
MUSIC IS	OUR PASSION

Operating

Channel	Value	Function
3	0255	Intensity Blue (0 % to 100 %), if channel 5 = 0
4	0255	Dimmer (0 % to 100 %)
5	0255	Strobe effect, increasing speed
6	Operating mode	
	0	Colour mixing with channels 1, 2 and 3
	17	Red
	815	Red + green
	1623	Green
	2431	Green + blue
	3239	Blue
	4047	Red + blue
	4855	Red + green + blue
	5663	Preprogrammed automatic show no. 2



Channel	Value	Function
	6471	Preprogrammed automatic show no. 3
	7279	Preprogrammed automatic show no. 4
	:	: :
	240247	Preprogrammed automatic show no. 25
	248255	Sound-controlled show
7	0255	Progress speed, if channel $6 = 1247$ , slow to fast
		Sound control sensitivity, if channel $6 = 248255$ , from insensitive to highly sensitive



### 7.8 Functions in 18-channel DMX mode

In this mode, the LEDs are divided into six groups of three LEDs each. Each channel controls a base colour of a group.

Channel	Value	LEDs	Function
1	0255	13	Intensity Red (0 % to 100 %)
2	0255		Intensity Green (0 % to 100 %)
3	0255		Intensity Blue (0 % to 100 %)
4	0255	46	Intensity Red (0 % to 100 %)
5	0255		Intensity Green (0 % to 100 %)
6	0255		Intensity Blue (0 % to 100 %)
7	0255	79	Intensity Red (0 % to 100 %)
8	0255		Intensity Green (0 % to 100 %)



Channel	Value	LEDs	Function
9	0255		Intensity Blue (0 % to 100 %)
10	0255	1012	Intensity Red (0 % to 100 %)
11	0255		Intensity Green (0 % to 100 %)
12	0255		Intensity Blue (0 % to 100 %)
13	0255	1315	Intensity Red (0 % to 100 %)
14	0255		Intensity Green (0 % to 100 %)
15	0255		Intensity Blue (0 % to 100 %)
16	0255	1618	Intensity Red (0 % to 100 %)
17	0255		Intensity Green (0 % to 100 %)
18	0255		Intensity Blue (0 % to 100 %)



### 7.9 Functions in 27-channel DMX mode

In this mode, the LEDs are divided into nine groups of two LEDs each. Each channel controls a base colour of a group.

Channel	Value	LEDs	Function
1	0255	12	Intensity Red (0 % to 100 %)
2	0255		Intensity Green (0 % to 100 %)
3	0255		Intensity Blue (0 % to 100 %)
4	0255	34	Intensity Red (0 % to 100 %)
5	0255		Intensity Green (0 % to 100 %)
6	0255		Intensity Blue (0 % to 100 %)
7	0255	56	Intensity Red (0 % to 100 %)
8	0255		Intensity Green (0 % to 100 %)



Channel	Value	LEDs	Function
9	0255		Intensity Blue (0 % to 100 %)
:		:	
22	0255	1516	Intensity Red (0 % to 100 %)
23	0255		Intensity Green (0 % to 100 %)
24	0255		Intensity Blue (0 % to 100 %)
25	0255	1718	Intensity Red (0 % to 100 %)
26	0255		Intensity Green (0 % to 100 %)
27	0255		Intensity Blue (0 % to 100 %)



### 7.10 Functions in 54-channel DMX mode

In this mode, you can control each LED individually. Each channel controls a base colour of an LED.

Channel	Value	LEDs	Function
1	0255	1	Intensity Red (0 % to 100 %)
2	0255		Intensity Green (0 % to 100 %)
3	0255		Intensity Blue (0 % to 100 %)
4	0255	2	Intensity Red (0 % to 100 %)
5	0255		Intensity Green (0 % to 100 %)
6	0255		Intensity Blue (0 % to 100 %)
7	0255	3	Intensity Red (0 % to 100 %)
8	0255		Intensity Green (0 % to 100 %)



Channel	Value	LEDs	Function
9	0255		Intensity Blue (0 % to 100 %)
:		:	
49	0255	17	Intensity Red (0 % to 100 %)
50	0255		Intensity Green (0 % to 100 %)
51	0255		Intensity Blue (0 % to 100 %)
52	0255	18	Intensity Red (0 % to 100 %)
53	0255		Intensity Green (0 % to 100 %)
54	0255		Intensity Blue (0 % to 100 %)



# 8 Technical specifications

Number of DMX channels	2, 3, 5, 7, 18, 27 or 54 channels, depending on operating mode
Illuminant	18 × 3 W LEDs (RGB)
Dispersion angle	approx. 23°
Operating supply voltage	100 240 V~ (AC), 50/60 Hz
Power consumption	84 W
Fuse	5 mm × 20 mm, 3 A, 250 V, slow blow
Dimensions (W $\times$ D $\times$ H)	1078 mm $ imes$ 120 mm $ imes$ 130 mm (without bracket)
Weight	4.96 kg



## 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.



mann

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

## 10 Troubleshooting

#### NOTICE!

#### Possible data transmission errors

For error-free operation make use of dedicated DMX cables and do not use ordinary microphone cables.

Never connect the DMX input or output to audio devices such as mixers or amplifiers.

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

th•mann

Symptom	Remedy
The unit does not work, no light, the display is dark	Check the mains connection and the main fuse.
Apparently no function despite proper power supply	Check if the unit is in DMX mode or in 'slave' mode. If so, check the device into a different mode.
No response to the DMX con- troller	1. If the unit is in DMX mode and the display flashes, no DMX signal is received. Check that the DMX controller is switched on. Check the DMX connectors and cables for proper connection.
	2. If the unit is in DMX mode and a DMX controller is connected and turned on, a dot on the fourth digit of the display will flash. If it doesn't, no valid DMX signal is received. Check that the DMX controller is switched on. Check the DMX connectors and cables for proper con- nection.
	3. If the display dot is flashing but there is still no response, check the address settings and the DMX polarity.

th•mann MUSIC IS OUR PASSION

Symptom	Remedy
	4. Try using another DMX controller.
	5. Check to see if the DMX cables run near or alongside to high voltage cables that may cause damage or inter- ference to DMX interface circuits.

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



## 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.

#### Fan grids

The fan grids of the device must be cleaned on a regular basis to remove dust and dirt. Before cleaning, switch off the device and disconnect AC-powered devices from the mains. Use a lint-free damp cloth for cleaning. Never use solvents or alcohol for cleaning.



## 12 Protecting the environment

Disposal of the packaging material



#### Disposal of your old device



For the transport and protective packaging, environmentally friendly materials have been chosen that can be supplied to normal recycling.

Ensure that plastic bags, packaging, etc. are properly disposed of.

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

This product is subject to the European Waste Electrical and Electronic Equipment Directive (WEEE). Do not dispose with your normal household waste.

Dispose of this device through an approved waste disposal firm or through your local waste facility. When discarding the device, comply with the rules and regulations that apply in your country. If in doubt, consult your local waste disposal facility.





Musikhaus Thomann • Hans-Thomann-Straße 1 • 96138 Burgebrach • Germany • www.thomann.de