



# DS-2 RF DMX dimmer



user manual

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

23.06.2020, ID: 228802 (V2)

## **Table of contents**

1	General information	
	1.1 Further information	5
	1.2 Notational conventions	
	1.3 Symbols and signal words	6
2	Safety instructions	8
3	Features	12
4	Installation and starting up	13
5	Connections and controls	14
6	Operating	18
7	Technical specifications	21
8	Plug and connection assignments	23
9	Cleaning	24
10	Protecting the environment	25

DS-2 RF DMX

th•mann

## 1 General information

This user manual contains important information on the 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 to another user, be sure that they also receive this manual.

Our products and user manuals are subject to a process of continuous development. We therefore reserve the right to make changes without notice. Please refer to the latest version of the user manual which is ready for download under <u>www.thomann.de</u>.



#### 1.1 Further information

On our website (<u>www.thomann.de</u>) you will find lots of further information and details on the following points:

Download	This manual is also available as PDF file for you to download.
Keyword search	Use the search function in the electronic version to find the topics of interest for you quickly.
Online guides	Our online guides provide detailed information on technical basics and terms.
Personal consultation	For personal consultation please contact our technical hotline.
Service	If you have any problems with the device the customer service will gladly assist you.



Letterings

#### **1.2 Notational conventions**

The letterings for connectors and controls are marked by square brackets and italics. <b>Examples:</b> [VOLUME] control, [Mono] button.	This manual uses the following notational conventions:
Examples: [VOLUME] control, [Mono] button.	The letterings for connectors and controls are marked by square brackets and italics.
	Examples: [VOLUME] control, [Mono] button.

DisplaysTexts and values displayed on the device are marked by quotation marks and italics.Examples: '24ch', 'OFF'.

#### **1.3** 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 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.
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
A	Warning – high-voltage.
	Warning – danger zone.



## 2 Safety instructions

#### Intended use

This appliance is designed for professional use only and is intended to be used to control the brightness of connected spotlights. 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.

Do not use the device if covers, protectors or optical components are missing or damaged.



MUSIC IS OUR PASSION

#### DANGER!

#### Electric shock caused by short-circuit

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.

#### NOTICE!

#### **Risk of fire**

Do not block areas of ventilation. Do not install 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.

th•mann MUSIC IS OUR PASSION

#### 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

- I dimmer channel, 10 A max.
- Output: 1 × outlet
- Digital control system
- Control via DMX 512



## 4 Installation and starting up

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.

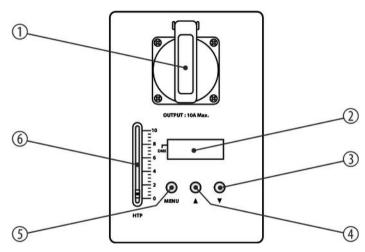
Create all connections while the device is off. Use the shortest possible high-quality cables for all connections. Take care when running the cables to prevent tripping hazards.

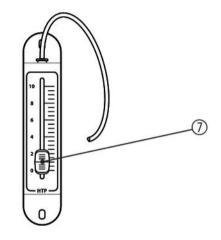
## **Connections in 'DMX' mode** Connect the DMX input of the device to the DMX output of a DMX controller or other DMX device. Connect the output of the first DMX device to the input of the second one and so on, to form a series connection. Make sure that the output of the last DMX device in the chain is terminated by a resistor ( $110 \Omega$ , $\frac{1}{4}$ W).



## 5 Connections and controls

#### Top view



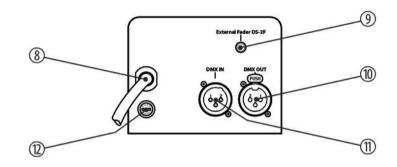




1	[OUTPUT]
	Dimmer outlet for connecting the spotlight to be controlled, loadable up to 10 A.
2	Display.
3	$\checkmark$
	Button to page up in the menu system, and to decrease the displayed value.
4	
	Button to page down in the menu system, and to increase the displayed value.
5	[MENU]
	Button to open the main menu and confirm display values.
б	[HTP]
	This fader adjusts the brightness of the connected spotlight. It works according to the HTP principle (Highest Takes Precedence), the highest issued value has priority here.
7	External fader with the same function as the fader on the unit.



#### **Rear panel**



8	Power cord.
9	[External Fader]
	Mini phone connector for the external fader.
10	[DMX OUT]
	DMX output.



11	[DMX IN]
	DMX input.
12	[F10AL250V]
	Fuse holder.



## 6 Operating

Starting the device	Connect the device to the power grid. The unit starts with the last settings. The display shows the last set DMX address.
	If the power supply is unstable, the display shows <i>'AC-0'</i> . In this case, wait until the display turns off.
DMX address	The display shows the last set DMX address, e.g. 'A123'. Use the arrow buttons to select a value between 1 and 512 (display shows 'A001' 'A512'). The setting is instantly applied. While setting the DMX address the output is switched off.



#### Switch-Pack mode

First set the desired DMX address. Press [MENU] to change to the next menu. Press one of the arrow buttons repeatedly until the display shows 'S---'.

Press [MENU] to switch to Switch-Pack mode. There are two statuses.

Switch On:

The output is switched on, a connected spotlight lights regardless of the DMX signal.

Switch Off:

A connected spotlight is operated depending on the DMX signal. If the DMX signal specifies a brightness of less than 40 % the headlight is turned off; if the DMX signal specifies a brightness of 40 % or more the spotlight is turned on.

Use the arrow buttons to choose between Switch On (display shows 'S-on') and Switch Off (display shows 'S-oF'). Press [MENU] to apply the settings and return to adjusting the DMX address.

th mann

# Dimmer-Pack modeFirst set the desired DMX address. Press [MENU] to change to the next menu. Press one of the<br/>arrow buttons repeatedly until the display shows 'd---'.Press [MENU] to switch to Dimmer-Limit mode. Use the arrow buttons to set a value between<br/>10 and 100 (display shows 'L010' ... 'L100'). The value is applied automatically.Press [MENU] to switch to Dimmer-Preset mode. Use the arrow buttons to set a value between<br/>0 and 100 (display shows 'L010' ... 'L100'). The value is applied automatically.Press [MENU] to switch to Dimmer-Preset mode. Use the arrow buttons to set a value between<br/>0 and 100 (display shows 'L010' ... 'L100'). The value is applied automatically.Press [MENU] to apply the settings and return to adjusting the DMX address.



## 7 Technical specifications

Control principle	Leading edge phase control	
Input connections	Power supply	Three-phase connection, max. 32 A per phase
	Signal input	DMX 512 via 3-pin XLR plug
Output connections	Power supply	1 × outlets, 230 V
	Signal output	DMX 512 via 3-pin XLR socket
Channel fuse	5 mm × 20 mm, 10 A, 250 V, fast-acting	
Power consumption	2300 W	
Supply voltage 230 V ~ 50 Hz		
Degree of protection	IP20	
Mounting options	Wall or ceiling mounting	
Dimensions (W $\times$ H $\times$ D)	92 mm × 182 mm × 65 mm	
Weight	1.1 kg	

DS-2 RF DMX

th.mann

Ambient conditions	Temperature range	0 °C40 °C
	Relative humidity	50 %, non-condensing



### 8 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')





## 9 Cleaning

#### **Device components**

Clean the device components that are accessible from the outside regularly. The cleaning frequency depends on the operating environment: damp, smoky or particularly dirty environments can cause greater accumulation of dirt on the device components.

- Clean with a dry soft cloth.
- Stubborn dirt can be removed with a slightly dampened cloth.
- Never use solvents or alcohol for cleaning.



## 10 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) in its currently valid version. 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