

ART-4 RGBW / ART-9 RGBW

# DMX controller

User manual

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### 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.

### **1.2 Notational conventions**

	This manual uses the following notational conventions:
Letterings	The letterings for connectors and controls are marked by square brackets and italics.
	<b>Examples:</b> [VOLUME] control, [Mono] button.
Instructions	The individual steps of an instruction are numbered consecutively. The result of a step is indented and highlighted by an arrow.
	Example:
	<b>1.</b> Switch on the device.
	<b>2.</b> Press [Auto].
	$\Rightarrow$ Automatic operation is started.
	<b>3.</b> Switch off the device.

#### **Cross-references** References to other locations in this manual are identified by an arrow and the specified page number. In the electronic version of the manual, you can click the cross-reference to jump to the specified location.

Example: See & 'Cross-references' on page 9.

### **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.



### DANGER!

### Hazardous voltage

Hazardous voltage may be present at cable ends and screw terminals.

The connection of screw terminals as well as all maintenance and repair work on the electrical installation of the device must only be performed by qualified electrical personnel in volt-free condition. Failure to do so may result in electric shock and risk of fire and loss of life.

By all means you have to observe all electrical safety instructions applicable at the place of operation.



#### 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.

Only operate the device within the ambient conditions specified in the chapter 'Technical specifications' of this user manual. Avoid heavy temperature fluctuations and do not switch the device on immediately after it was exposed to temperature fluctuations (for example after transport at low outside temperatures).

Dust and dirt inside can damage the unit. When operated in harmful ambient conditions (dust, smoke, nicotine, fog, etc.), the unit should be maintained by qualified service personnel at regular intervals to prevent overheating and other malfunction.

### 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

- 4 channels
- 4 storable scenes and 4 storable colours (ART-4 RGBW)
- 9 storable scenes and 9 storable colours (ART-9 RGBW)
- 10 built-in colour programmes with adjustable duration and one automatic programme
- Definable fade times from 0 to 4 seconds (ART-4 RGBW) or 0 to 9 seconds (ART-9 RGBW) for switching on and changing colours
- Link input and output for networking up to 32 devices
- Pre-configured DMX patch with RGBW channels
- Touch-sensitive buttons and touch dial with lighting
- Aluminium case with glass surface
- Power supply not included

### 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.

Connector

First connect your LED stripes to the [PWM Out] terminals and the devices to be controlled to the [DMX Out] terminals. Then establish the connection to a power supply unit (12 – 24 V).



### DANGER!

### Hazardous voltage

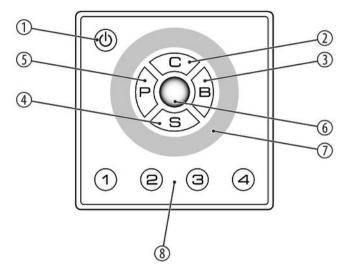
Hazardous voltage may be present at cable ends and screw terminals.

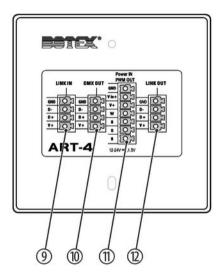
The connection of screw terminals as well as all maintenance and repair work on the electrical installation of the device must only be performed by qualified electrical personnel in volt-free condition. Failure to do so may result in electric shock and risk of fire and loss of life.

By all means you have to observe all electrical safety instructions applicable at the place of operation.

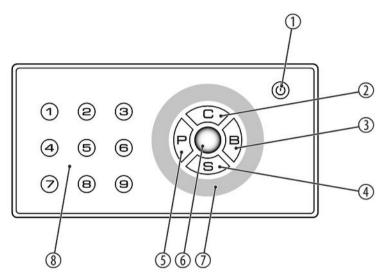
## 5 Connections and controls

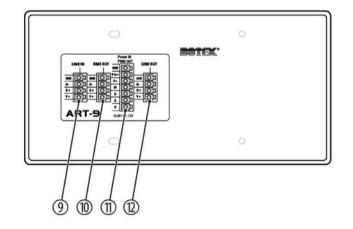
#### **ART-4 RGBW**





**ART-9 RGBW** 





1	<b>රා</b>
	Main switch with LED lighting. Turns the device on and off. This LED lights once the device is turned on.
2	[C]
	Button to activate the colour setting
3	[B]
	Button to activate the Brightness setting
4	[5]
	Button to activate the duration setting
5	[P]
	Button to activate the colour programme selection
6	Output indicator LED
	The LED lights up as soon as output signals are present.
7	Touch dial
	Increases or decreases the value of the currently selected parameter. Click tones will sound until the minimum or maximum values are reached.

8	Numeric buttons for storing and playing back scenes and colours and for setting the fade time
9	[LINK IN]
	LINK input for networking up to 32 devices, designed as a 4-pin terminal (note the device label when connecting the cables)
10	[DMX OUT]
	DMX output, designed as a 4-pin terminal (note the device label when connecting the cables)
11	[Power IN / PWM OUT]
	Mains connection and PWM output, designed as a 7-pin terminal (note the device label when connecting the cables)
12	[LINK OUT]
	LINK output for networking up to 32 devices, designed as a 4-pin terminal (note the device label when connecting the cables)

## 6 Operating

The device automatically returns to normal operation after each adjustment.

During operation using the touch dial, click tones sound until the respective minimum or maximum values are reached.

### 6.1 Turning the device on / off

- **1.** Connect the device to the power supply.
  - ⇒ The LED of the ७ button is lit. The device switches on and starts the last saved setting.
- 2. Press and hold  $\circ$  for two seconds to put the device to Standby mode.
  - $\Rightarrow$  The outputs are off.
- **3.** Press and hold  $\bigcirc$  for two seconds to turn the device back on again.

### 6.1.1 Button combination for standby mode

In the delivery state, the standby mode can only be exited by pressing the  $\circ$  button. To exit the standby mode with any key, perform the following steps 1 to 3.

- 1. ▶ Press and hold [P] and ७ simultaneously for about ten seconds.
  - ⇒ The LEDs of all buttons flash briefly once.
- 2. Press එ.
  - ⇒ The device is being put into standby mode.
- **3.** To start the device, press any key.
- **4.** Press and hold [P] and  $\bigcirc$  simultaneously for about ten seconds to cancel the button combination.
  - ⇒ The LEDs of all buttons flash briefly once.

### 6.1.2 Fade time

- 1. ▶ Press and hold ७ for five seconds.
  - ⇒ The LEDs of all buttons flash briefly once.
- 2. ▶ Release ७.
  - $\Rightarrow$  The LED of the  $\circ$  button flashes.
- **3.** Press one of the number buttons or [*C*], [*B*], [*S*] or [*P*] to define the fade time for switching on the device.

The following table shows the possible settings on that.

ART-4 RGBW	Button	1	2	3	4	[C] / [B] / [S] / [P]
	Fade time	1 s	2 s	3 s	4 s	0 s (no fade time)
ART-9 RGBW	Button	1	2	3	9	[C] / [B] / [S] / [P]

⇒ The LEDs of all buttons flash briefly once. The setting has been accepted.

### 6.2 Built-in colour programmes

- **1.** Press and hold [P] for one second to call up the colour programme selection menu.
  - $\Rightarrow$  The LED of the [P] button lights up. There is a click sound.
- **2.** Use the touch dial to select one of the ten built-in colour programmes or the automatic programme (sequence of all built-in colour programmes).
  - $\Rightarrow$  A click tone sounds for each set programme.

### 6.3 Brightness

- **1.** Press and hold [B] for one second to call up the brightness settings menu.
  - $\Rightarrow$  The [B] button LED lights. There is a click sound.
- **2.** Use the touch dial to set the brightness from 0 ... 255. Turn the touch control clockwise to increase the brightness, counterclockwise to decrease the brightness.



### 6.4 Run duration

- 1. Press and hold [S] for one second to call up the programme run duration menu.
  - $\Rightarrow$  The [S] button LED lights. There is a click sound.
- 2. Solution Use the touch dial to set the run duration for the built-in colour programmes from 0.2 seconds ... ten minutes. Turn the touch control clockwise to increase the duration, counterclockwise to decrease the duration.

If you turn the touch dial for up to ten minutes, you will no longer hear a click and the number keys will flash. You can now set the run duration using the number buttons.

The following table shows the possible settings on that.

ART-4 RGBW	Button	1	2	3	4
	Run duration	10 min	20 min	30 min	40 min
ART-9 RGBW	Button	1	2	3	9
	Run duration	10 min	20 min	30 min	90 min



### 6.5 Colours

### 6.5.1 Manual colour setting

- **1.** Press and hold [C] for one second to call up the colour setting menu.
  - $\Rightarrow$  The [C] button LED lights. There is a click sound.
- **2.** Use the touch dial to set the desired colour.

### 6.5.2 Saving colour setting

Up to four or nine colours can be saved. Each number button corresponds to a stored colour.

- **1.** Press and hold [C] for one second to call up the colour setting menu.
  - $\Rightarrow$  The [C] button LED lights. There is a click sound.
- **2.** Use the touch dial to set the desired colour.



- **3.** Select one of the number buttons to which you want to save the colour and hold it down for at least two seconds.
  - ⇒ The LEDs of all buttons flash briefly once. The colour and brightness settings were saved on the number buttons.
- **4.** Repeat steps 1 through 3 to save additional colours.

### 6.5.3 Rendering colour setting

- **1.** Press and hold [C] for one second to call up the colour setting menu.
- **2.** Select one of the number buttons to render the colour stored to it.
  - $\Rightarrow$  The [C] button LED lights. The stored colour is rendered.

### 6.5.4 Fade time

- **1.** Press and hold [C] for five seconds.
  - ⇒ The LEDs of all buttons flash briefly once.
- **2.** Release [C].
  - $\Rightarrow$  The [C] button LED flashes.
- **3.** Press one of the number buttons or [C], [B], [S] or [P] to define the fade time for the colour change.

The following table shows the possible settings on that.

ART-4 RGBW	Button	1	2	3	4	[C] / [B] / [S] / [P]
	Fade time	1 s	2 s	3 s	4 s	0 s (no fade time)
ART-9 RGBW	Button	1	2	3	9	[C] / [B] / [S] / [P]
	Fade time	15	25	3 s	9 s	0 s (no fade time)

 $\Rightarrow$  The LEDs of all buttons flash briefly once. The setting has been accepted.

### 6.6 Scenes

### 6.6.1 Saving scenes

Four or nine scenes can be saved and rendered in this mode. Each number button corresponds to a scene.

- **1.** Press [P] or [S] to enter automatic mode.
  - $\Rightarrow$  The LED of the [P] or [S] lights up. There is a click sound.
- 2. Use the touch dial to select one of the ten built-in colour programmes or the automatic programme or set the run duration (see <sup>⊕</sup> Chapter 6.2 'Built-in colour programmes' on page 26 or <sup>⊕</sup> Chapter 6.4 'Run duration' on page 27).
- **3.** Select one of the number buttons to which you want to save the scene and hold it down for at least two seconds.
  - ⇒ The LEDs of all buttons flash briefly once. The settings of the program, the duration and the brightness are saved.
- **4.** Repeat steps 1 through 3 to save additional scenes.

### 6.6.2 Playing scenes

- **1.** Press [P] or [S] to enter automatic mode.
- **2.** Select one of the number buttons to play the scene stored to it.
  - $\Rightarrow$  The LED of the [P] or [S] lights up. The stored colour is rendered.

### 6.6.3 Locking / unlocking scene recording mode

- **1.** Press and hold [P] and [S] simultaneously for about ten seconds to lock the scene recording mode.
  - $\Rightarrow$  The [S] button is inactive.
- **2.** To unlock, press and hold [P] and [S] simultaneously for about ten seconds.



### 6.7 Functions in DMX mode

The DMX patch is already preconfigured with RGBW channels.

The following table shows the possible settings on that.

Colour	Channel
Red	1, 5 ,9,
Green	2, 6, 10,
Blue	3, 7, 11,
White	4, 8, 12,

### 6.8 Turning the click tone on and off

- **1.** Press and hold the number buttons [1]...[4] or [1]...[3] and [9] simultaneously until the LEDS of the number buttons flash briefly once.
- **2.** Release the number button to apply the setting.



When the click tone is turned on, it no longer sounds as soon as the respective minimum or maximum value is reached.

When the click sound is turned off, all buttons flash as soon as the respective minimum or maximum value is reached.

### 6.9 Factory defaults

- To unlock, press and hold [P] and [B] simultaneously for about ten seconds.
  - ⇒ The LEDs of all buttons flash briefly once. All settings and the saved scenes are set to the default values. The user-specific settings are deleted. The fade time for switching on the device and for changing the colour is set to 2 s.

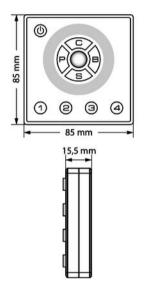
### 6.10 Data transfer

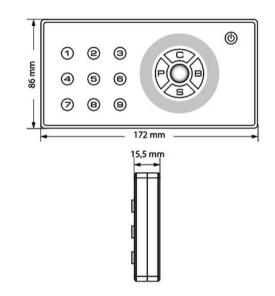
Up to 32 ART-4 or ART-9 DMX controllers can be networked and controlled with each other.

- **1.** Press and hold [C], [B], [S] and [P] simultaneously for five seconds.
  - ⇒ The LEDs of the [C], [B], [S] and [P] buttons flash. The device is ready for data transfer.
- 2. Press [S] to transfer the data of the current device to the connected devices.
  - ⇒ The LEDs of the [C], [B], [S] and [P] buttons light up consecutively. This process can take up to ten seconds.

- **3.** After successful data transfer, the LEDs of the buttons [C], [B], [S] and [P] go out and the devices return to normal operation.
- **4.** Any paired device can now select a programme or scene. The setting is adopted by the other devices.

# 7 Technical specifications





Input connections	Voltage supply	7-pin terminal
	LINK IN	4-pin terminal
Output connections	PWM	7-pin terminal
	LINK OUT	4-pin terminal
	DMX OUT	4-pin terminal
Power consumption		10 W
Current consumption		max. 8 A
Output current		6 A
Voltage supply		12 – 24 V <del></del>
Dimensions (W $\times$ H $\times$ D)		85 mm $\times$ 85 mm $\times$ 15.5 mm (ART-4 RGBW)
		86 mm $ imes$ 172 mm $ imes$ 15.5 mm (ART-9 RGBW)
Weight		100 g (ART-4 RGBW)
		150 g (ART-9 RGBW)



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

### **Further information**

Preset function	Yes
External storage option	No
DMX universes	1
max. control channels	512
Ethernet	No

#### 8 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.





Notes

