



ART-6 Fade

DMX controller

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

11.03.2020, ID: 477614

Table of contents

1	General information	5
	1.1 Further information.....	6
	1.2 Notational conventions.....	7
	1.3 Symbols and signal words.....	8
2	Safety instructions	10
3	Features	15
4	Installation and starting up	16
5	Connections and controls	20
6	Operating	25
	6.1 Turning the device on / off.....	25
	6.2 Functions in DMX mode.....	26
	6.3 Functions in stand-alone operation.....	28
	6.3.1 Recording scenes.....	28
	6.3.2 Setting the Fade time.....	30
	6.3.3 Playing scenes.....	31

6.3.4	Deleting scenes.....	31
6.3.5	Restoring scenes.....	31
6.3.6	Set the total number of controllable channels.....	32
7	Technical specifications.....	34
8	Troubleshooting.....	36
9	Protecting the environment.....	37

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 www.thomann.de.

1.1 Further information

On our website (www.thomann.de) 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.

Examples: *[VOLUME]* control, *[Mono]* button.

Displays

Texts and values displayed on the device are marked by quotation marks and italics.

Examples: *'24ch'*, *'OFF'*.

Instructions



The individual steps of an instruction are numbered consecutively. The result of a step is indented and highlighted by an arrow.

Example:

- 1.** ▶ Switch on the device.
- 2.** ▶ Press *[Auto]*.
 - ⇒ Automatic operation is started.
- 3.** ▶ Switch off the device.

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 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 – danger zone.

2 Safety instructions

Intended use

This device is used to control spotlights, dimmers, lighting effects equipment or other DMX-controlled devices. 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

Special features of the device:

- Control of spotlights and dimmers
- Intuitive operation
- 6 storable scenes
- Control via 6 channel faders, 1 master fader and infrared remote control
- DMX input and output for connecting multiple panels
- DIP switches for setting the DMX start address
- Valuable aluminium housing with glass surface
- Power supply not included

4 Installation and starting up

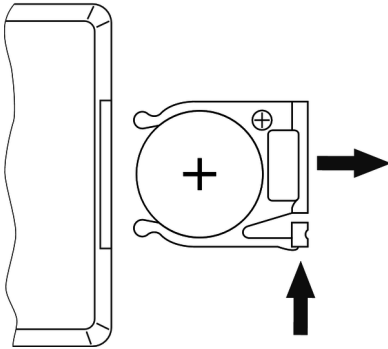
Unpack and check carefully there is no transportation damage before using the unit. Keep the equipment packaging. To fully protect the product against vibration, dust and moisture during transportation or storage use the original packaging or your own packaging material suitable for transport or storage,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

Inserting the battery into the remote control

Press the lock of the battery holder to the centre of the housing and pull out the battery holder like a drawer. Insert the battery. The battery is correct if the positive pole points to the housing base of the remote control. Slide the battery holder back into the remote until it clicks into place.

When shipping, the battery is already installed in the remote and protected against discharge by a transparent plastic foil. Remove the plastic foil prior to first use.





NOTICE!

Possible damage by leaking batteries

Leaking batteries can cause permanent damage to the device.

Take batteries out of the device if it is not going to be used for a longer period.



NOTICE!

Risk of fire due to incorrect polarity

Incorrectly inserted batteries may destroy the device or the batteries.

Ensure that proper polarity is observed when inserting batteries.

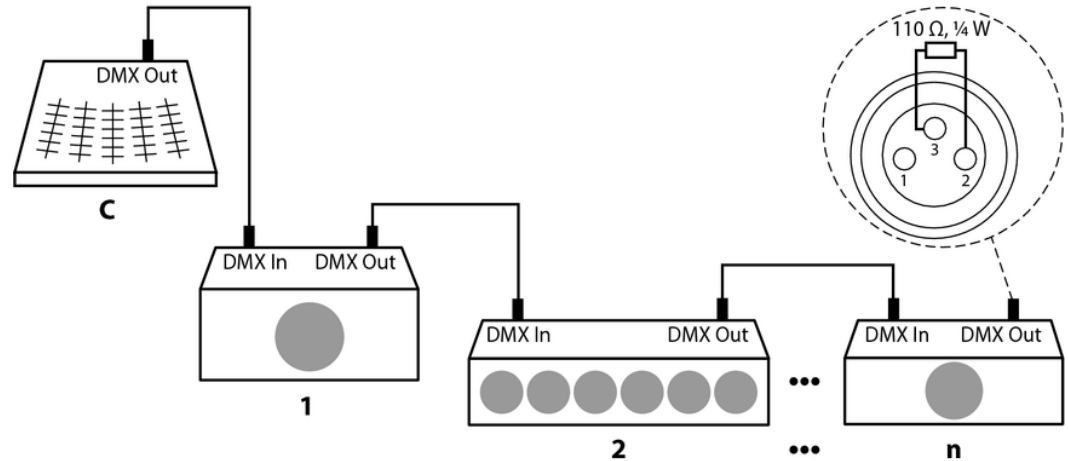
Connector

The DIP switches for setting the DMX start address are located inside the device. Make the desired setting of the DIP switches before you wire the device.

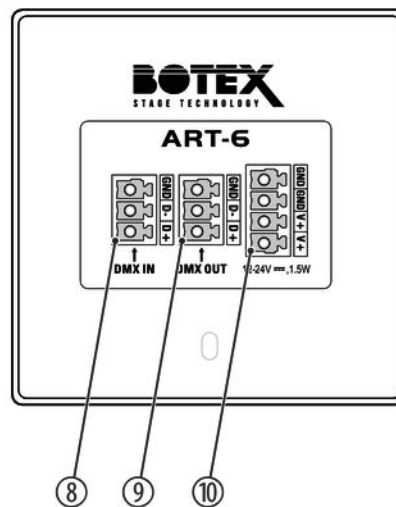
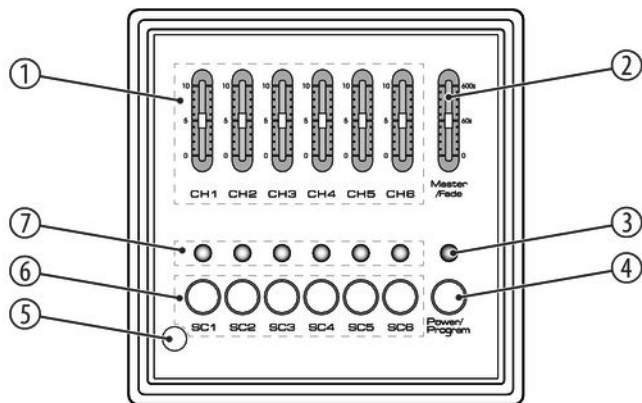
Connect the loads to the connections on the rear panel of the device. Establish the DMX link to the controller. Connect the mains connection terminals with a mains cable. Finally, connect the power plug of the device to a 32 A CEE socket.

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 ($110\ \Omega$, $\frac{1}{4}\text{ W}$).



5 Connections and controls

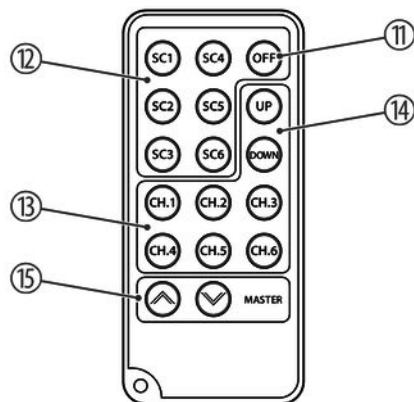


1	<i>[CH1]...[CH6]</i> Channel fader to control the output level of the corresponding channel
2	<i>[Master/Fade]</i> Master fader to control the overall intensity and fade speed of all channels and scenes
3	Output indicator LED The LED lights up as soon as output signals are present.
4	<i>[Power/Program]</i> Main switch. Button to enter or exit the scene recording mode
5	Infrared sensor for signals from the remote control.
6	<i>[SC1]...[SC6]</i> Buttons to select the programmed scene for playback
7	Status LEDs The LEDs show the current fader level for the scenes <i>[SC1]...[SC6]</i>

8, 9 *[DMX IN]/[DMX OUT]*

DMX input and output for connecting multiple panels, designed as a 3-pin terminal (note the device label when connecting the cables)

10 Mains connection, designed as a 4-pin terminal (note the device label when connecting the cables)

Remote control

11	<i>[OFF]</i> Buttons to enter or exit the scene recording mode
12	<i>[SC1]...[SC6]</i> Buttons to select the programmed scene for playback
13	<i>[CH.1]...[CH.6]</i> Buttons to select the channel
14	<i>[UP]/[DOWN]</i> Buttons to control the output level of the corresponding channel <i>[CH.1]...[CH.6]</i>
15	<i>∧/∨ [MASTER]</i> Buttons to control the overall intensity and fade speed of all channels and scenes

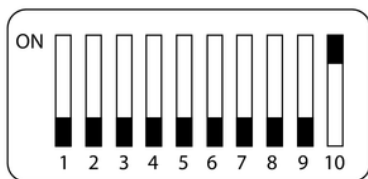
6 Operating

6.1 Turning the device on / off

1. ▶ Connect the device to the power supply. Press *[Power/Program]*.
⇒ The device is now operational.
2. ▶ To switch off the device, press *[Power/Program]* again.

6.2 Functions in DMX mode

Setting up the DMX address



Set DIP switch 10 to the 'ON' position to activate the DMX operating mode.

The value of the DIP switches 1-9 is binary coded. To set the desired DMX address, set the DIP switches so that the sum of the resulting numbers yields the desired DMX address. Please orient yourself by the following table:

SW9	SW8	SW7	SW6	SW5	SW4	SW3	SW2	SW1	DMX address
0	0	0	0	0	0	0	0	1	1
0	0	0	0	0	0	0	1	0	2
0	0	0	0	0	0	1	0	0	4
0	0	0	0	0	1	0	0	0	8
0	0	0	0	1	0	0	0	0	16
0	0	0	1	0	0	0	0	0	32

SW9	SW8	SW7	SW6	SW5	SW4	SW3	SW2	SW1	DMX address
0	0	1	0	0	0	0	0	0	64
0	1	0	0	0	0	0	0	0	128
1	0	0	0	0	0	0	0	0	256
									...
1	1	1	1	1	1	1	1	1	511

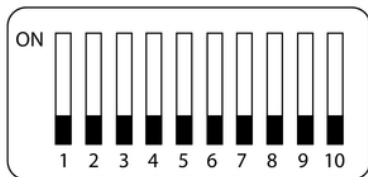
0: DIP switch is in 'OFF' position. 1: DIP switch is in 'ON' position.

Example: To set the DMX address 21 set DIP switches 1, 3 and 5 to 'ON', all others to 'OFF'. The highest possible DMX address is 511 (all DIP switches to 'ON').



The setting for the DIP switches only takes effect when the device is restarted.

6.3 Functions in stand-alone operation



Set DIP switch 10 to the 'OFF' position to activate stand-alone operation.

6.3.1 Recording scenes.

1. ➤ Hold down *[Power/Program]* for three seconds.
⇒ The status LED flashes red. The recording mode is activated.
2. ➤ Press the button of the desired scene *[SC1]...[SC6]* to which you want to save the scene. The associated status LED flashes repeatedly.
3. ➤ Set the corresponding channel fader *[CH1]...[CH6]* between 0 and 10 to select the desired level of a single step of the scene.





4. ▶ Press the button of the desired scene [SC1]...[SC6] again to save the scene.
 - ⇒ The status LEDs of the buttons [SC1]...[SC6] flash three times. The scene has been saved.
5. ▶ Repeat steps 1 ... 4 to record additional steps for the scene. Up to 100 steps can be saved per scene.
6. ▶ When you have saved the desired scenes, press and hold [Power/Program] for three seconds.
 - ⇒ The status LED flashes blue. The recording mode is deactivated.



If two consecutive steps have identical data, they are automatically merged into one step. The fade time is now twice as long as before merging.

6.3.2 Setting the Fade time

In recording mode, you can set the fade time for the saved scenes.

- 1.**  Press and hold the button of the desired scene *[SC1]...[SC6]* to select the scene for which you want to set the fade time.
 - ⇒ The status LED flashes.
- 2.**  Set the fade time of the scene to max. 600 seconds with *[Master/Fade]* while keeping the button of the desired scene *[SC1]...[SC6]* pressed.
- 3.**  To save the fade time, release the button of the selected scene *[SC1]...[SC6]*.
 - ⇒ The status LEDs of the buttons *[SC1]...[SC6]* flash three times. The fade time has been saved.
- 4.**  Repeat steps 1... 3 to save the fade time for further scenes.



When you have saved the fade time for all scenes, move [Master/Fade] back to the original position.

6.3.3 Playing scenes

➔ Press one of the buttons *[SC1]...[SC6]* to play the desired saved scene.

6.3.4 Deleting scenes

- ➔ If the buttons *[SC1]...[SC6]* are already assigned to saved scenes, the associated status LEDs light up when the recording mode is activated.
- ➔ To delete saved scenes, press and hold the button of the desired scene *[SC1]...[SC6]* for two seconds.
 - ⇒ The status LEDs of the buttons *[SC1]...[SC6]* flash three times. The scene has been deleted.

6.3.5 Restoring scenes

The device allows to restore accidentally deleted scenes.

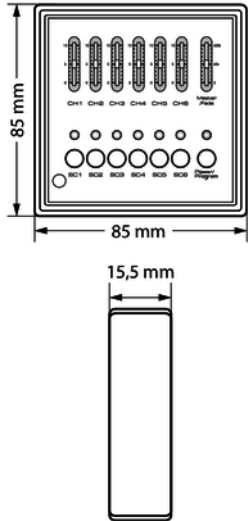
1. ➤ Press *[Power/Program]* to turn the device off.
2. ➤ Press and hold the button of the desired scene *[SC1]...[SC6]* that you want to restore.
3. ➤ Press *[Power/Program]* to turn the device back on.
4. ➤ Release the button of the selected scene *[SC1]...[SC6]*.
 - ⇒ The status LEDs of the buttons *[SC1]...[SC6]* flash three times. The desired scene has been restored.

6.3.6 Set the total number of controllable channels

1. ➤ Press *[Power/Program]* to turn the device off.
2. ➤ Set the corresponding channel faders *[CH1]...[CH6]* that you want to control. When using *[CH1]* the total number of controllable channels is 1, when using *[CH2]*, the total number of controllable channels is 2, etc.. You can control a maximum of six channels.
3. ➤ Set *[Master/Fade]* to 600s.
4. ➤ Hold down *[Power/Program]* for three seconds.
 - ⇒ All status LEDs light up.

-
- 5.** ▶ Release [*Power/Program*].
- ⇒ All status LEDs flash three times. The total number of controllable channels has been set.

7 Technical specifications



Input connections	Voltage supply	4-pin terminal
	DMX IN	3-pin terminal
Output connections	DMX OUT	3-pin terminal
Voltage supply		12 V – 24 V $\overline{\text{DC}}$
Dimensions (W × H × D)		85 mm × 85 mm × 15.5 mm
Weight		230 g
Ambient conditions	Temperature range	0 °C...40 °C
	Relative humidity	50 %, non-condensing

Further information

Preset function	Yes
External storage option	No
DMX universes	1
max. control channels	6
Ethernet	No

8 Troubleshooting

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 unit does not work	Check the mains connection.
No response from the connected devices	<ol style="list-style-type: none">1. Check whether the configuration of the DMX controller matches the configuration of the connected devices.2. Check whether the DMX cables are correctly connected to the 3-pin terminals. Note the device label.3. Check whether the DMX cables run near or parallel to high-voltage cables that may cause damage or interference to a DMX interface circuit.

9 Protecting the environment

Disposal of the packaging material



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 these materials with your normal household waste, but make sure that they are fed to a recovery. Please follow the notes and markings on the packaging.

Disposal of batteries



Batteries must not be disposed of as domestic waste or thrown into fire. Dispose of the batteries according to national or local regulations regarding hazardous waste. To protect the environment, dispose of empty batteries at your retail store or at appropriate collection sites.

Disposal of your old device



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 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.

