



DR-1

DMX recorder



Musikhaus Thomann e.K.

Treppendorf 30

96138 Burgebrach

Germany

Telephone: +49 (0) 9546 9223-0

E-mail: info@thomann.de

Internet: www.thomann.de

25.04.2012

Table of contents

1	General notes.....	4
2	Safety instructions.....	6
3	Features.....	9
4	Installation.....	10
5	Starting up.....	12
6	Connections and operating elements.....	15
7	Operation.....	20
	7.1 Recording.....	20
	7.2 Playback.....	22
	7.3 Menu functions.....	23
	7.4 Firmware update.....	26
8	Technical specifications.....	27
9	Protecting the environment.....	28

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 to other users, be sure that they also receive this manual.

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.
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 – danger zone.

2 Safety instructions

Intended use

This device is intended to be used to record and reproduce DMX signals. 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.



NOTICE!

External power supply

The device is powered by an external power supply. Before connecting the external power supply, 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 the user.

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



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.

3 Features

- DMX input to record DMX sequences in real time
- DMX output; the lines are galvanically isolated by optocouplers
- Data storage on standard SD memory cards (not included)
- Reproduction of the DMX sequences on the DMX output either manually or timer controlled
- Endless loop playback available
- Connection for optional remote control

4 Installation

Unpack and check carefully 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.

Rack mounting

The unit has been designed for rack mounting in a standard 19-inch rack; it occupies one rack unit.

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 pin assignment.



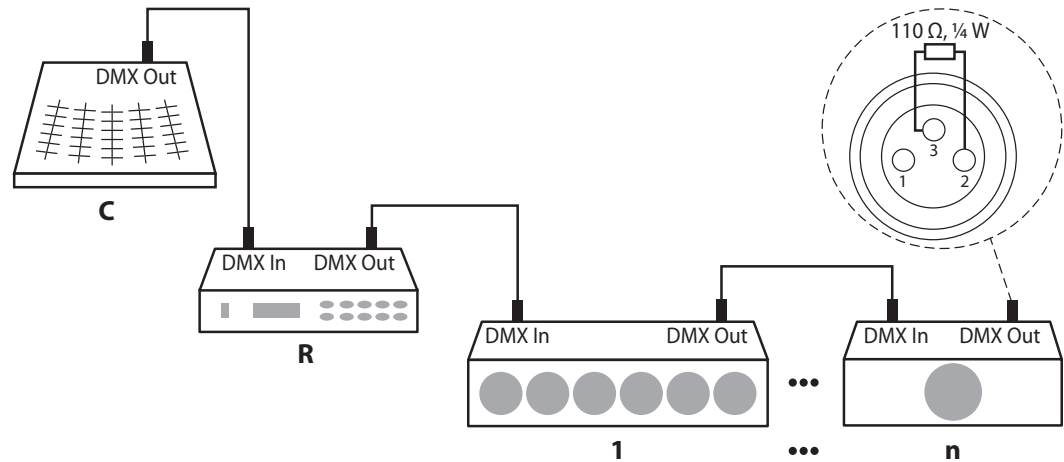
1	Ground, shielding
2	DMX data (-)
3	DMX data (+)

5 Starting up

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

DMX connections

Connect the DMX input of the DMX recorder (R) to the DMX output of a DMX controller (C). Connect the DMX output of the recorder (R) to the first DMX device (1), such as a spotlight. Connect the output of the first DMX device (1) to the input of the second and so on, to form a series connection. Make sure that the output of the last DMX device (n) in the chain is terminated by a resistor ($110\ \Omega$, $\frac{1}{4}\text{ W}$).

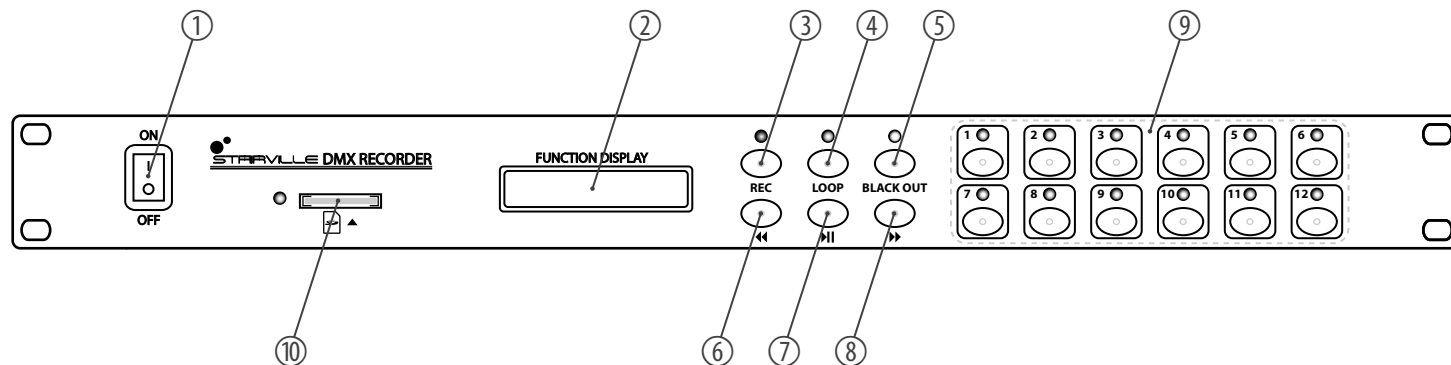


DMX indicator

If the unit and the DMX controller are operating, the word DMX flashes in the display, thereby indicating that a 'DMX' signal is received at the input.

6 Connections and operating elements

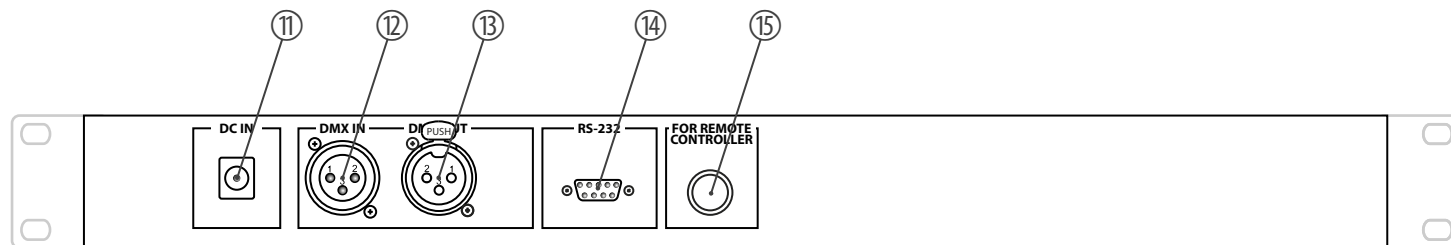
Front panel



1	Main switch to turn the device on or off.
2	Display.
3	REC To start a recording.
4	LOOP To reproduce a recorded file in an endless loop.
5	BLACK OUT To blackout all connected DMX devices.
6	◀◀ During playback: to reduce the speed. In menu: to decrease the displayed value by one.

7	▶ During recording and playback: to pause or resume recording or playback. Keep this button pressed for 3 seconds to open the menu. In menu: to select a sub menu or to confirm a selection.
8	▶▶ During playback: to increase the speed. In menu: to increase the displayed value by one.
9	Keypad to select a file on the SD card for recording or playback. Each file is assigned to an indicator light. If the light flashes, DMX data was already recorded to this file.
10	Indicator light and slot for SD memory cards.

Rear panel



11	DC IN Connection for external power supply (DC 9...12 V $\overline{=}$).
12	DMX IN Input for DMX signal, such as coming from a DMX controller.
13	DMX OUT Output for DMX signal to be connected to DMX controlled devices.
14	RS-232 No function.
15	FOR REMOTE CONTROLLER 1/4" phone socket to connect the optionally available remote control Stairville Pocket Master.

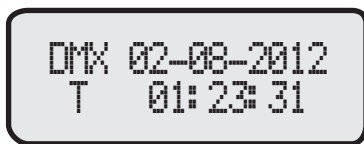
7 Operation

With this device you can record DMX signal sequences. The DMX sequences are recorded to individual files on an SD memory card. Each SD memory card can contain twelve files in total.

You can play back the stored sequences once, or run in an endless loop or let the built-in timer control the playback.

7.1 Recording

Procedure



1. ➤ Make sure that an SD memory card is inserted into the card slot (10) on the front panel.
2. ➤ The device must be in normal operating state, where no menu is open. The display shows date and time. If any menu should still be open, press the ►|| button to quit the menu.



DMX RECORD?
T • SelectFile!



DMX REC09
T ■ T: 00:00:00



DMX REC09
T • T: 00:00:11

3. ➤ Press the [REC] button.

⇒ The indicator light next to the SD card slot lights up and the display prompts you to select a file for recording.

4. ➤ Use the keypad (9) to select a file. If the indicator light above a keypad button flashes, this file already contains a DMX sequence. When choosing a file that already contains data, the new recording will overwrite the previous data.

⇒ After selecting a file, the rectangle in the display indicates that the device is ready to record.

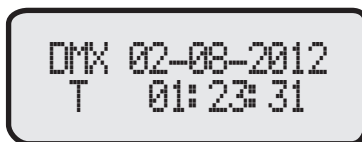
5. ➤ Press the ►|| button to start the recording. Now use your DMX controller to perform the show that should be recorded.

⇒ The dot in the display indicates the running recording. The word 'DMX' is flashing in the display when a signal is received from the DMX controller.

6. ➤ Press the ►|| button for two seconds to stop the recording.

7.2 Playback

Procedure



1. ➤ Make sure that an SD memory card is inserted into the card slot (10) on the front panel.
2. ➤ The device must be in normal operating state, where no menu is open. The display shows date and time. If any menu should still be open, press the ►|| button to quit the menu.
3. ➤ Use the keypad (9) to select a file to be reproduced. If the indicator light above the button flashes, this file already contains a DMX sequence. When choosing a file that does not contain a DMX sequence, the display shows the message 'NO FILE'.
⇒ Playback begins.
4. ➤ You can use the ◀◀ and ▶▶ buttons to decrease or increase the playback speed. The display indicates the playback speed.
To run the playback in an endless loop, press the [LOOP] button. The loop will be repeated until you press the button again.
5. ➤ To pause the playback, briefly press the ►|| button. Press the button again to resume playback on the same position.
6. ➤ Press the ►|| for two seconds to stop the playback of the show.

7.3 Menu functions

Setting the date

Press the ►|| button for three seconds to open the menu.

Press the ◀◀ and ▶▶ buttons until the display shows 'Set date'; then press the ►|| button to select this menu item.

Use the buttons ◀◀ and ▶▶ to input the correct date. Then press the ►|| button to confirm the setting and to quit this menu item.

Setting the clock time

Press the ►|| button for three seconds to open the menu.

Press the ◀◀ and ▶▶ buttons until the display shows 'Set time'; then press the ►|| button to select this menu item.

Use the buttons ◀◀ and ▶▶ to input the correct clock time. Then press the ►|| button to confirm the setting and to quit this menu item.

Using the timer

Press the ►|| button for three seconds to open the menu.

Press the ◀◀ and ▶▶ buttons until the display shows '*Set clock*'; then press the ►|| button to select this menu item.

For each switching point of the timer, you can now select the day of the week, the switching on / off time, the file to be played, etc.. Use the ►|| button to select the individual parameters of the switching point and the ◀◀ and ▶▶ buttons to change the respective value. Then press the ►|| button to confirm the setting.

You can determine 21 switching points per week, a maximum of three per day.

Showing file properties

Press the ►|| button for three seconds to open the menu.

Press the ◀◀ and ▶▶ buttons until the display shows '*File info*'; then press the ►|| button to select this menu item.

The display shows the file name and the total time of the selected file.

Press ►|| to quit this menu item.

Setting the start status

Press the ►|| button for three seconds to open the menu.

Press the ◀◀ and ▶▶ buttons until the display shows '*Start status*'; then press the ►|| button to select this menu item.

Use the buttons ◀◀ and ▶▶ to toggle between '*Normal play*' and '*Last status*'. Then press the ►|| button to confirm the setting and to quit this menu item.

Resetting to factory default values

Press the ►|| button for three seconds to open the menu.

Press the ◀◀ and ▶▶ button until the display shows '*Default set*'; then press the ►|| button to select this menu item.

Use the buttons ◀◀ and ▶▶ to toggle between '*YES*' (reset) and '*NO*' (no reset). Then press the ►|| button to confirm the setting and to quit this menu item.

Indicating the firmware version

Press the ►|| button for three seconds to open the menu.

Press the ◀◀ and ▶▶ buttons until the display shows '*Firmware version*'; then press the ►|| button to select this menu item.

The display now shows the version number of the currently used firmware.

Then press the ►|| button to quit this menu item.

7.4 Firmware update

Procedure

1. ➤ Save the new firmware to a directory SD:\CA-REC2 on an SD memory card.
2. ➤ Insert the SD memory card containing the new firmware into the card slot of the device and switch the unit off.
3. ➤ Keep the buttons [REC], ►► and [7] of the keypad simultaneously pressed while switching the unit on.
 - ⇒ The display message *'Find update file'* indicates, that the new firmware is looked for.
4. ➤ Keep the buttons pressed until the display shows *'Updating firmware, please wait'*.
 - ⇒ The device now checks the new firmware and installs it then.
5. ➤ Neither take out the SD memory card, nor switch the device off until the display shows the message *'Update complete, please reboot'*.
 - ⇒ Now the installation is complete.
6. ➤ Reboot the device to put the new firmware into operation.

8 Technical specifications

Operating voltage supply	DC 9...12 V $\overline{=}$
Dimensions (W × D × H)	482 mm × 102 mm × 44 mm
Weight	1.7 kg

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 your old device



This device is subject to the European directive 2002/96/EC.

Do not dispose the device 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.



