

WLAN ArtNet DMX Interface

WiFi DMX controller





user manual

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Table of contents

1	General information	4
	1.1 Further information	5
	1.2 Notational conventions	6
	1.3 Symbols and signal words	6
2	Safety instructions	8
3	Features	11
4	Installation and starting up	12
5	Connections and controls	18
6	Cleaning	20
7	Troubleshooting	21
8	Technical specifications	25
9	Protecting the environment	26

1 General information

This manual contains important instructions for the safe operation of the product. Read and follow the safety instructions and all other instructions. Keep the manual for future reference. Make sure that it is available to all those using the product. If you sell the unit, please make sure that the buyer also receives this manual.

Our products are subject to a process of continuous development. Thus, they are subject to change.



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:

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].
 - \Rightarrow 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.

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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.	
Wenning since Time of design		
warning signs	Type of danger	
	Warning – danger zone.	



2 Safety instructions

Intended use

This device is used for the wireless reception of control signals in the DMX512 protocol. 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!

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!

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.



3 Features

The wireless DMX and ArtNet interface is suitable for mobile and stationary installations on show stages, in the theatre, in interior design, exhibitions and exhibition construction, event lighting, architecture and night clubs. It is characterized by small dimensions and interference-free operation due to good electromagnetic shielding.

Special features of the device:

- Autonomous generation of a DMX data stream for the independent control of up to 512 DMX channels
- Parallel operation of several devices
- Easy configuration via web browser
- Operation in existing network or direct mode
- Built-in access point
- Direct operation via Android or iOS apps as well as Windows and macOS applications
- Supports ArtNet
- The last used setting remains active even when the transmitter is offline
- Screw-on antenna included
- Power supply via optionally available USB power supply (item # 373709)
- Robust aluminium housing

WLAN ArtNet DMX Interface



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4 Installation and starting up

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.

- **1.** Connect the wireless DMX interface to the DMX device you want to control by connecting the 3-pin XLR connector to the DMX input of the DMX device.
- **2.** Screw the supplied WiFi antenna onto the threaded connector on the side of the interface.
- **3.** Now set your DMX device to DMX protocol and select the start channel, e.g. DMX channel 1.
- **4.** Connect the wireless DMX interface to a USB power supply, e.g. our power supply with the item number 373709. Use a USB extension cable if your USB power adapter is further away.
- **5.** When the operating voltage is switched on, the DMX interface takes approx. 25 seconds to initialize (during the initialization the blue LED flashes several times briefly).

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- **6.** If the blue LED keeps flashing quickly, an initialization error has occurred. Then disconnect the DMX interface from the power supply, wait about 30 seconds and try again. If the blue LED keeps flashing quickly again, a connection error is present and you should follow the tips in the 'Troubleshooting' section.
- **7.** When delivered, the DMX interface is in the operating mode 'Access Point', i.e., in direct mode, so that you can establish a point-to-point connection between your transmitter, e.g. a smartphone or tablet, and the DMX device. In this operating mode, you do not need any additional network components, neither a PC nor a router.
- 8. In direct mode, you have to connect your transmitter, e.g. a smartphone or tablet, in the WiFi settings with the DMX interface. Open the appropriate menu and select 'SV AN-DMX V.X.X' (X.X stands for the current version number of the firmware). When selecting the first time, you are prompted for the WPA2 encryption password. The access password is: 11223344. No further settings are required here. However, you can check in the detailed information whether the correct IP address is entered here. The ROUTER or ACCESSPOINT IP address 192.168.4.1 should be entered here.
- **9.** If you want to go on operating your system in this mode, i.e. in direct or ad-hoc mode, you can now start and configure your DMX application on your smartphone, iPad or PC.
- **10.** In your application, e.g. 'Luminair', select the entry 'ArtNet enabled' in the settings of the app.

- 11. In direct mode, the connection between the transmitter (smartphone, tablet or PC) and the wireless DMX interface is to be established via IP address 192.168.4.1 Port 6454. Accordingly, you should set this address in your application, e.g. 'Luminair'. However, we recommend using the Broadcast IP 255.255.255.255 port 6454 for transmission. This transmission mode is very universal and, above all, the fastest connection type compared to the 'Unicast' transmission with fixed IP address. We have deliberately refrained from DMX polling for speed reasons. Accordingly, no configuration information is necessary here.
- **12.** The configuration described above is almost identical for all DMX applications.

NOTICE!

Keep only ONE DMX / Artnet app in memory to avoid possible interference!

13. However, if you want to operate the wireless DMX interface in your (home) network, you need access to your WiFi router, i.e. the SSID and the associated password.



14. For network operation, you have to configure the interface accordingly. To do so proceed as follows:

• A 'double reset' is necessary to enter the configuration mode. This avoids unintentionally modifying or manipulating the device configuration. In addition, this process offers speed advantages in normal operation, since the configuration server is only activated if required.

• To execute the 'double reset', disconnect the CC512 from the power supply and restore the connection to the power supply after approximately 3 seconds (in the simplest case, pull and re-connect the USB plug).

• As soon as the blue LED on the CC512 lights up, disconnect the USB connection again for 3 seconds, and after a further 3 seconds, plug the USB plug back into the CC512.

• Then wait until the blue LED lights up 7 times, indicating that the CC512 is in configuration mode.

- Connect your transmitter in direct mode with the interface (as described above).
- Open your web browser and enter the IP address '192.168.4.1' in the address line.
- A configuration menu should appear in the browser window.
- Check whether the list of nearby networks contains the name (SSID) of your network.
- Enter this name in the SSID field, keep in mind that it is case-sensitive.

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• Enter the associated password (note again upper / lower case letters).

• Complete the process with 'Send'.

• The menu is then closed and you receive a short confirmation message with the IP address assigned to the DMX controller.

• You can now access the interface in your network via IP end number '222'. The full IP address depends on your router configuration, and could be, e.g. '192.168.0.222'.

• If necessary, you can also adjust the IP address to your requirements, or set it to an automatic IP address (DHCP) by entering '0'.

• In the 'Univers' field, you can specify the Artnet-Univers number under which your CC512 can be reached (1..32). If you enter '0' here, the CC512 processes all Artnet data independently of the transmitted Univers number.

• You can now use the previously mentioned IP address as a unicast address in connection with port number 6454. This is especially recommended for performance reasons in contrast to 'Broadcast' operation, which uses the standardized universal IP address '255.255.255.255', but usually has higher latencies.

• You can now switch your smartphone or tablet back to normal network operation and start your DMX app. If you are already working in broadcast mode, no further configuration changes are necessary. That's why you can easily switch between direct and network mode at any time.

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- If your app requires a dedicated IP unicast address, enter here e.g. '192.168.0.222'.
- **15.** You can reset the device to the delivery state. This will irrevocably delete the configuration data stored in the device. To do this, hold the recessed Reset button with an opened office clip or the like for 3 seconds while turning on the power.



5 Connections and controls

Right side



1	Screw connection for WiFi antenna.
2	Blue status LED.
3	USB A port for voltage supply.
4	Reset button.
5	No function.

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Left side



6 DMX output.



6 Cleaning

Clean the unit with a dry, soft, lint-free cloth. Stubborn dirt can be removed with a slightly dampened cloth.

Never use cleaners containing alcohol or thinner.



7 Troubleshooting



NOTICE!

Never connect the XLR port of the device 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:



Symptom	Remedy
No connection between trans- mitter (e.g., smartphone or tablet) and DMX interface	1. Disconnect the power supply to the interface by removing the USB connection cable from the power supply.
	2. Wait about 30 seconds, then reconnect the power supply.
	3. Observe the blue status LED on the interface, it should briefly light up once after switching on and then light up 3 or 5 times.
	4. Flashing 3 times means that the network operation has been activated.
	5. Flashing 5 times means that the interface is in the delivery state, i.e. in direct or access point mode.
	6. Now proceed as described in the installation guide above.
Switching from direct mode to network operation is not possible	1. In order to integrate the interface into an existing net- work, you need the necessary network structure, which usually consists of a PC and a WiFi router.

WiFi DMX controller

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Symptom	Remedy
	2. For network access, you need the SSID entered in the router and the corresponding password for WiFi access (WPA2 secured).
	3. For configuration, your e.g. smartphone or tablet has to connect directly to the interface. For this, you have to select the interface as WiFi access point in the smartphone or tablet settings. To do so, select the 'SV AN-DMX V.X.X' entry (a check mark must appear next to the network name) and check the WiFi details for '192.168.4.1' to appear as the router address. If it doesn't, turn off the interface for 30 seconds or restart your smartphone or tablet (turn it off and back on again).
	4. Close the settings menu and open your web browser.
	5. Type 'http:// 192.168.4.1' (without '') into the brows- er's address bar.
	6. Now enter the WiFi data SSID and password of your WiFi network in the displayed configuration menu.



Symptom	Remedy
	7. Quit all applications and set your smartphone or tablet back to network mode.
	8. Now proceed as described in the installation guide above according to 'Network operation'.

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>.



8 Technical specifications

WiFi standard	802.11b/g/n
DMX output	XLR 3 pin
Voltage supply	USB (5 V / 300 mA), delivery without power adapter (suitable power adapter: item #. 373709)
Dimensions (W \times H \times D)	120 mm \times 26 mm \times 26 mm (without antenna)
Weight	87 g (incl. antenna)



9 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.

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