

## MADRIX<sup>®</sup> USB contact closure



MADRIX<sup>®</sup> I/O products are supplementary input and output devices. External equipment, such as sensors, bring additional automation processes and interaction to any LED project using MADRIX<sup>®</sup> software.

This digital input device registers if its circuit is either open or closed. In most cases, it is used to build a switch or trigger. Incoming values are directly translated into DMX data in the MADRIX<sup>®</sup> software. The small unit can simply be connected to any USB 2.0 port.

Example of use: Strobe or Blackout

### Quick Start Guide

5<sup>th</sup> Edition, Last Update: March 2017

### Order Number

IA-HARD-001011

### Package Contents

- 1x MADRIX<sup>®</sup> USB contact closure
- 1x Quick start guide

### Software Requirements

MADRIX I/O requires MADRIX 3.  
Please update at least to MADRIX 3.4.

### Technical Specifications

Power:	DC 5 V, 500 mA, Power over USB
Power consumption:	~ 25 mA during normal operation
USB:	USB 2.0, type A plug, Plug and Play, 2 m cable
Case:	IP30
Dimensions:	44 mm x 30 mm x 23 mm (length x width x height)
Weight:	57 g
Temperature range:	-20 °C to 80 °C (Operating / Storage)
Relative humidity:	5 % to 95 %, non-condensing (Operating / Storage)

### Step-By-Step Configuration

- 1) Connect your device.
- 2) Enable drivers in MADRIX<sup>®</sup>.
- 3) Enable your device.
- 4) Set up DMX Input.
- 5) Choose how to use incoming data.

#### 1) Connect Your Device

- Connect your MADRIX<sup>®</sup> I/O device to a free USB 2.0 port of your computer.
- Make sure that Windows recognizes the device. Windows will automatically install the drivers for the device.

#### 2) Enable Drivers In MADRIX<sup>®</sup>

- In MADRIX<sup>®</sup>, go to 'Preferences' > 'Options...' > 'Devices USB'.
- Activate 'MADRIX I/O'.
- Click 'Apply' and 'OK'.

### 3) Enable Your Device

- Go to 'Preferences' > 'Device Manager..' > 'DMX Devices'.
- Click on the Search button (loupe icon) if your device is not shown in the list.
- Select your device in the list and select 'Enable' in the section 'Settings'.  
Click 'Apply'. Now, in the list the 'State' will switch to 'On' [indicated by green light].

It is not recommended to change the 'Frame Time (ms)' of your device. Instead, it is highly recommended to use the default settings.

### 4) Set Up DMX Input

- Go 'Preferences' > 'Device Manager..' > 'DMX Input'.
- Select one entry in the list [e.g., 'Universe 1'] and go to the section 'Device'. Choose your device under 'DMX-IN Device'.
- MADRIX® will now receive data from your device.

### 5) Choose How To Use Incoming Data

Now, you have several options to choose from:

- A) You can activate 'Remote' and choose a protocol in the section 'Remote Control'. This will allow you to control MADRIX® remotely using your controller.
- B) You can use incoming data in a Script or Macro.
- C) You can monitor incoming DMX data in the DMX Watcher. Select your device in the list and click 'Watch Universe...'. Learn more below.

Close the Device Manager with 'OK'.

### Monitoring Incoming DMX Data

To effectively work with incoming DMX data from your device, you can use the DMX Watcher to monitor incoming signals.

- Open the DMX Watcher as explained above or go to 'Tools' > 'DMX Watcher..'
- Select 'Input'.
- Set up the correct 'Universe'. This is the same number as you have chosen in the list under 'Preferences' > 'Device Manager..' > 'DMX Input' [e.g., 'Universe 1'].

### More Information

- The recommended 'Frame Time (ms)' is **500**.
- Incoming data directly translates into DMX data in MADRIX®.
- Data is sent to **DMX channel 1 - DMX channel 2** on your selected DMX universe.
- **Incoming DMX values on DMX channel 1** are 0 or 255 [Off or On].
- **Inverted incoming DMX values on DMX channel 2** are 255 or 0 [On or Off].