# Martin M2GO<sup>™</sup> & M2PC<sup>™</sup> USB DMX configuration

## Introduction

This document will guide you through the USB DMX port configuration on M2GO & M2PC.

### When is it needed?

If the DMX ports on your M2GO or M2PC are not responding in the software after a firmware update, it might be possible that you need to reconfigure the ports.

### **Anti-Static Precautions**

The firmware update does not require you to open up the console as all upgrades will be performed within the M-Series software and without external tools. But in case you need do need to open up your console, please take note about the precautions below.

# Important! Static electricity can destroy electronic components. Follow these ESD precautions to prevent damage to the product and injury to the user.

Carry out the upgrade at an anti-static workstation.

Wear a grounded anti-static wristband.

Touch a grounded conductor every few minutes to discharge any static buildup.

Hold components by their edges only. Do not touch the surfaces or any of the contacts of the PCB.





# **USB DMX configuration**

The below procedure is identical for M2GO and M2PC and requires only a correctly setup M2GO or M2PC console and no external tools. A working M-PC version is applicable when configuring the DMX ports on an M2PC console.

## Starting up

- Start up your M2GO console or connect your M2PC console to a working M-PC version and make sure that the M2PC is initialised properly.
- Load/continue a show
- Go into the menu, select the System tab and go to the Tools section
- In the bottom of the page, select the *Diagnostic* tab
- In the Tools section, click on Console Tester

| Show<br>Network |                          |                                                                                                                                                         |
|-----------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| System          |                          |                                                                                                                                                         |
|                 |                          | Tools                                                                                                                                                   |
| DMX Settings    | Maintenance Q Diagnostic | Console Tester<br>Graphical utility for diagnosing DMX-512, timecode, MIDI, sound trigger input, buttons, LEDs, faders, belts, LCD texts on console and |
| DMX In          |                          | pilytinek king(s)<br>Filmmaer verband<br>Graphical ublity for updating firmware                                                                         |
|                 |                          |                                                                                                                                                         |
| IO Settings     |                          |                                                                                                                                                         |
| × ×             |                          |                                                                                                                                                         |

• A popup saying that all services are being stopped, will show up and the **Console Tester** tool is started





### **Exploring the Console Tester tool**

The software opens 4 windows. Use the touchscreen or an external mouse to drag all windows away from each other so you can see all of them.

- M2GO tester: graphical representation of the front panel layout. All buttons, faders, encoders and LCD can be tested here.
- USB DMX-512 tester: Max. 2 windows that show the configuration of the 2 DMX ports. 1 window per PCB or 2 DMX ports.
- Console device test application: the actual Console Tester tool. Click *Close* to close all test windows and to return into the M-Series menu.

Please note that when you click next to a window, all windows will be put in the background. You can recall them again using the *ALT* + *TAB* buttons on an external USB keyboard.

| n                          |                                                  | Generate a logging document when tro | oubleshooting becomes necessary                                                                |                                                                                                                                    |  |  |  |
|----------------------------|--------------------------------------------------|--------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| 2                          | M2Go tester                                      |                                      | rder to troubleshoot the s                                                                     | artup process                                                                                                                      |  |  |  |
| ut<br>ttings<br>In<br>ings |                                                  |                                      | op output<br>art output<br>start to test<br>ind EDs<br>are 3.40<br>Reset output<br>Reset input | application (V3.42.570.0)<br>vyz console(s) Close<br>a USB port. About e<br>0.0.1 0016D577 01 Rescan LANs<br>0016D577 1 0016D577 1 |  |  |  |
|                            | Mature Control USD D4V 512 Andre Matter USD D4VV |                                      |                                                                                                |                                                                                                                                    |  |  |  |
| ays                        | Port 0                                           | Port 1                               | Port 0                                                                                         | Port 1                                                                                                                             |  |  |  |
|                            | OUT 0 Send Universe                              | OUT 0 Send Universe                  | OUT 0 Send Universe                                                                            | OUT 0 - Send Universe                                                                                                              |  |  |  |
| ls                         | Mark Before Break (µs) 32.00                     | Mark Before Break (µs) 32.00 💌       | Mark Before Break (µs) 32.00 🚔                                                                 | Mark Before Break (µs) 32.00                                                                                                       |  |  |  |
|                            | Break Time (µs) 212.00                           | Break Time (µs) 212.00 💌             | Break Time (µs) 212.00 🚔                                                                       | Break Time (µs) 212.00                                                                                                             |  |  |  |
|                            | Mark After Break (µs) 32.00                      | Mark After Break (µs) 32.00          | Mark After Break (µs) 32.00 💂                                                                  | Mark After Break (µs) 32.00                                                                                                        |  |  |  |
|                            | Channel Time (µs) 16.00                          | Channel Time (µs) 16.00              | Channel Time (µs) 16.00                                                                        | Channel Time (µs) 16.00                                                                                                            |  |  |  |
|                            | Sync frame Enable                                | Sync frame Enable                    | Sync frame Enable                                                                              | Sync frame Enable                                                                                                                  |  |  |  |
|                            | IN                                               | IN                                   | IN                                                                                             | IN                                                                                                                                 |  |  |  |
|                            | DMX 1 & DMX 2 on M2GO/M2PC                       | DMX 3 & DMX 4 on M2GO/M2PC           | DMX 1 & DMX 2 on M2GO/M2PC                                                                     | DMX 3 & DMX 4 on M2GO/M2PC                                                                                                         |  |  |  |
|                            | M2GO/M2PC DMX3/4                                 | Identify Reset                       | M2GO/M2PC DMX1/2                                                                               | Identify Reset                                                                                                                     |  |  |  |



# Configuring the DMX ports

Look at the USB DMX-512 tester window. You might see two windows if your M2GO or M2PC has 4 DMX ports.

| USB DMX-512 tester - "Ma         | artin USB DUO-I | DMX"                                                                       | USB DMX-512 tester - "Ma | rtin USB DUO-D | MX"                           |          |
|----------------------------------|-----------------|----------------------------------------------------------------------------|--------------------------|----------------|-------------------------------|----------|
| Port 0                           |                 | Port 1                                                                     | Port 0                   |                | Port 1                        |          |
| OUT 0 - Si<br>Loop Increment Ran | end Universe    | OUT     0      Send     Universe       Loop     Increment     Random     3 |                          | tom 2          | OUT 0 Sen                     | universe |
| Mark Before Break (µs)           | 32.00           | Mark Before Break (µs) 32.00                                               | Mark Before Break (µs)   | 32.00          | Mark Before Break (µs)        | 32.00 🚔  |
| Break Time (µs)                  | 212.00          | Break Time (µs) 212.00                                                     | Break Time (µs)          | 212.00         | Break Time <mark>(</mark> µs) | 212.00   |
| Mark After Break (µs)            | 32.00           | Mark After Break (µs) 32.00 💻                                              | Mark After Break (µs)    | 32.00          | Mark After Break (µs)         | 32.00    |
| Channel Time (µs)                | 16.00           | Channel Time (µs) 16.00                                                    | Channel Time (µs)        | 16.00          | Channel Time (µs)             | 16.00    |
| Sync frame                       | Enable          | Sync frame Enable                                                          | Sync frame               | Enable         | Sync frame                    | Enable   |
| IN                               |                 | IN                                                                         | IN                       |                | IN                            | 1        |
| DMX 1 & DMX 2 on M               | 2GO/M2PC        | DMX 3 & DMX 4 on M2GO/M2PC                                                 | DMX 1 & DMX 2 on M2      | GO/M2PC        | DMX 3 & DMX 4 on M2G          | O/M2PC   |
| M2GO/M2PC DMX3/4                 |                 | Identify Reset                                                             | M2GO/M2PC DMX1/2         |                | Identify                      | Reset    |

- Now click on IN on one of the windows
- Check on the backside of the console if the LED lights up with a green color (or OFF) on DMX port 1&2 or 3&4.
- If the LED lights up green (or OFF) on DMX port 1&2 then click on the button DMX 1
   & DMX 2 on M2GO/M2PC in the SAME window, to configure the ports as DMX 1 and DMX 2.
- If the LED lights up green (or OFF) on DMX port 3&4 then click on the button DMX 3
   & DMX 4 on M2GO/M2PC in the SAME window, to configure the ports as DMX 3 and DMX 4.
- If you have 4 DMX ports, then select the other **DMX x & DMX y on M2GO/M2PC** button in the second USB-DMX window.

All DMX ports are now configured. Click *Close* in the "Console device test application" window to close all test windows and to return into the M-Series menu. Normal operation of your consol

For further assistance, please contact controllersupport@martin.dk

| Revision | Made by                | Description     | Approved by | Date      |
|----------|------------------------|-----------------|-------------|-----------|
| А        | Kris Van<br>Hullebusch | Initial version |             | 5/03/2015 |

