

M1™, M2GO™ and M2PC™

**MIDI PCB Module Installation Guide
SMPTE PCB Module Installation Guide**

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This guide is also available for download as a color PDF on the M1, M2GO and M2PC Product Support pages under After Sales → Controller Support at the Martin website – www.martin.com

1. Introduction

The MIDI PCB is an optional accessory that can be installed in any Martin™ M1, M2GO or M2PC console.

A combined data and power connection for the PCB is installed in every M1, M2GO and M2PC at the factory and the installation of the PCB will take about 15 minutes.

Before installation, save all important data from the controller to an external USB flash drive.

Have the following tools ready:

- Torx T20 driver
- Torx T10 driver
- 3mm Hex driver (Only M1 controller)

Warning! Disconnect all cables from the controller, especially the IEC power input cable.

Before starting work on the M1, M2GO or M2PC, discharge yourself against a grounded metal surface to prevent static electricity from damaging a component inside the controller. We recommend that you wear an anti-static bracelet and/or work at an anti-static workstation.

2. Installing the MIDI PCB in an M1 controller

2.1 Removing the top plate

1. Place the M1 on a hard and perfectly flat surface.
2. Remove six Torx T20 screws from the front and back of the M1:



Two T20 screws below the hand rest on the front



Four T20 screws on the back

3. Loosen four 3 mm Hex screws from the top plate. They are captive and stay attached. Do not try to unscrew them completely from the plate.



Four 3 mm Hex screws

4. Carefully angle the screen backwards until it is parallel to the surface the M1 is placed on.



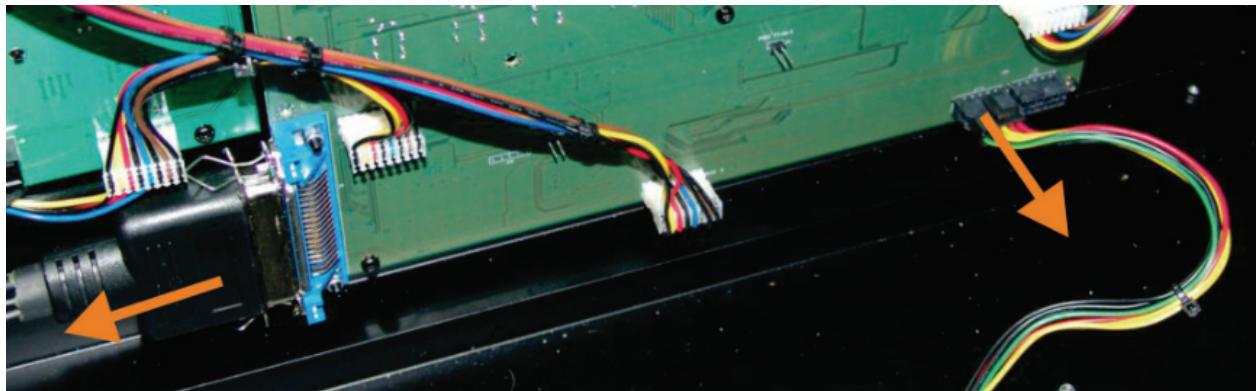
Tilt the touch screen back

5. Lift the top plate out of the controller by about 20 mm until the supporting metal structure is free. Move it towards the front of the controller slowly until it clears the touchscreen housing.



Lift first, then pull forward

6. Lift the top plate forward as if you were opening a hinged lid until it is at about 90° to the work surface.
7. On the back of the top plate are a large data connector and a small power connector. Unclip the data connector and remove it carefully. Release the power connector by pressing on its latch, then disconnect it.

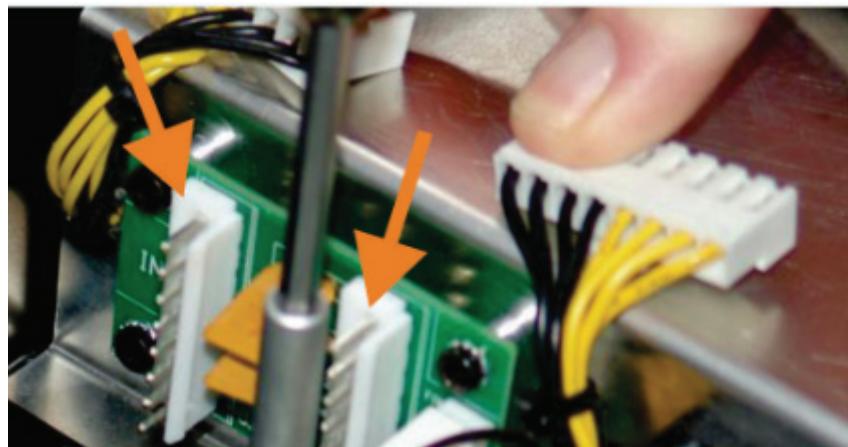


Data and power connectors under the front plate.

8. Remove the top plate from the controller and place it securely away from the desk. Do not rest it on its exposed back. Ideally, lean it against a wall or lay it on a flat surface with soft padding material such as a protective mat or blanket underneath it to avoid damage.

2.2 Removing the blanking plate

1. Locate the MIDI blanking plate to the left of the power supply.
2. To enable easier access, disconnect both power connections from the fuse PCB attached to the power supply chassis:



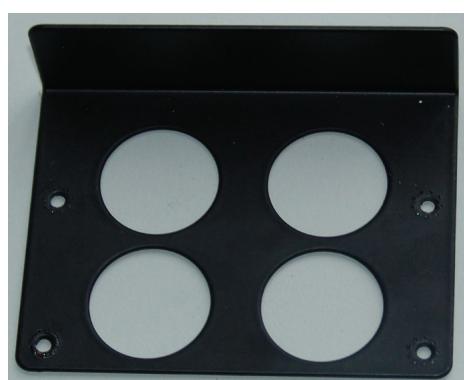
Main Power cables and fuse PCB

3. Using a Torx T10 driver, remove all 4 screws from the MIDI blanking plate and remove the plate from the M1. Do not lose the screws and washers, as they will be needed in a moment to secure the new PCB in its place.

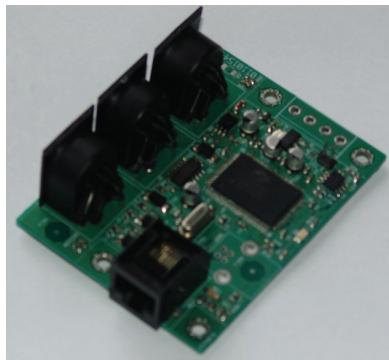


Four T10 screws and washers

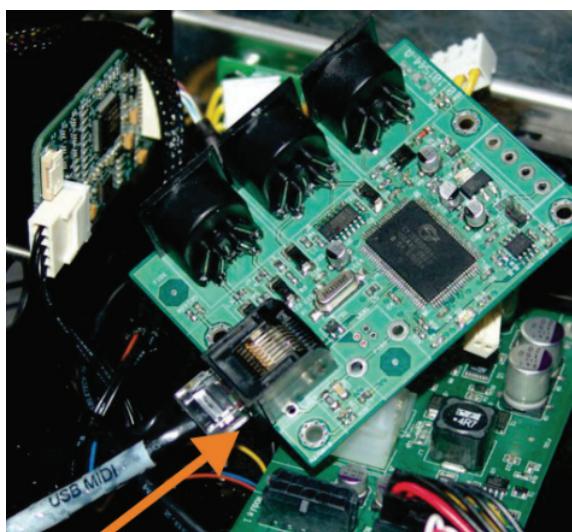
4. Store the blanking plate in a safe, dry place in case you ever wish to remove the MIDI PCB from the M1 again in future.



2.3 Installing the MIDI PCB

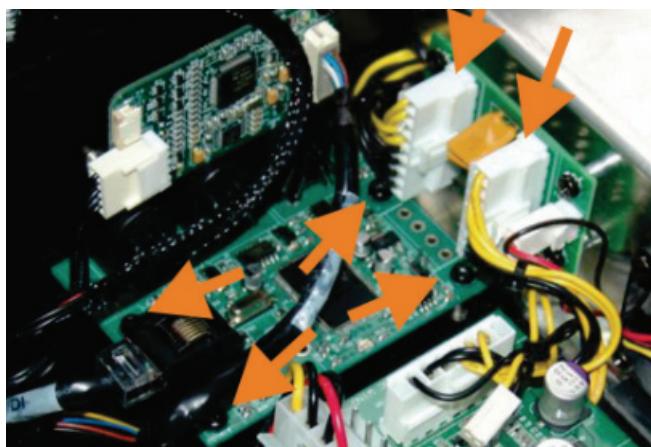


1. Remove the MIDI PCB from its anti-static bag and hold it over its position with the MIDI connectors facing towards the back of the M1.
2. Before you fasten the PCB in place, connect the RJ45 cable with the “USB MIDI” label to the connector on the PCB. No other connections are needed.



Data and Power RJ45 “USB MIDI” connector

3. Fasten the PCB in place with the 4 screws and washers that you removed from the MIDI blanking plate, applying a torque of approximately 1.5 Nm.
4. Reconnect the two power cables next to the PSU and ensure that they click into place:

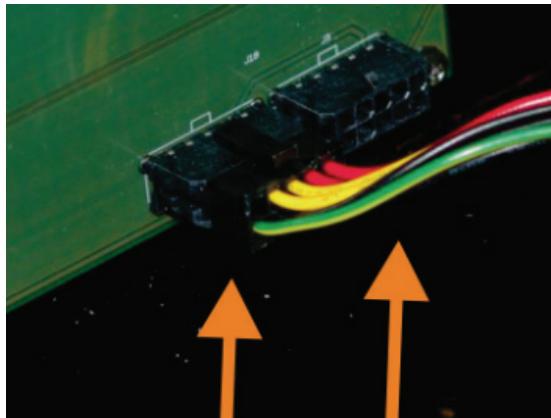


MIDI PCB in place and power cables connected

2.4 Reassembly

The M1 must be standing on a hard and perfectly flat surface during reassembly. If it is not, the chassis may be twisted which will cause damage.

1. Place the top panel in front of the M1 chassis.
2. Reconnect the data and power connections. Secure the data connection with the spring clips provided. Two identical power connectors are provided on the front panel right next to each other, it does not matter which one of them is used:



3. Guide the top plate back into its position carefully underneath the screen housing and lower it into the chassis. If it is difficult to fit at the back, hold it with one hand and hold the screen housing with the other. A slight pull backwards on the screen housing will open more room for the top plate to settle into place.
4. Once the top plate is correctly in position, place the six Torx screws around the front and the back into their holes. Tighten them down lightly at first. Once they are in place, tighten them in the following order:

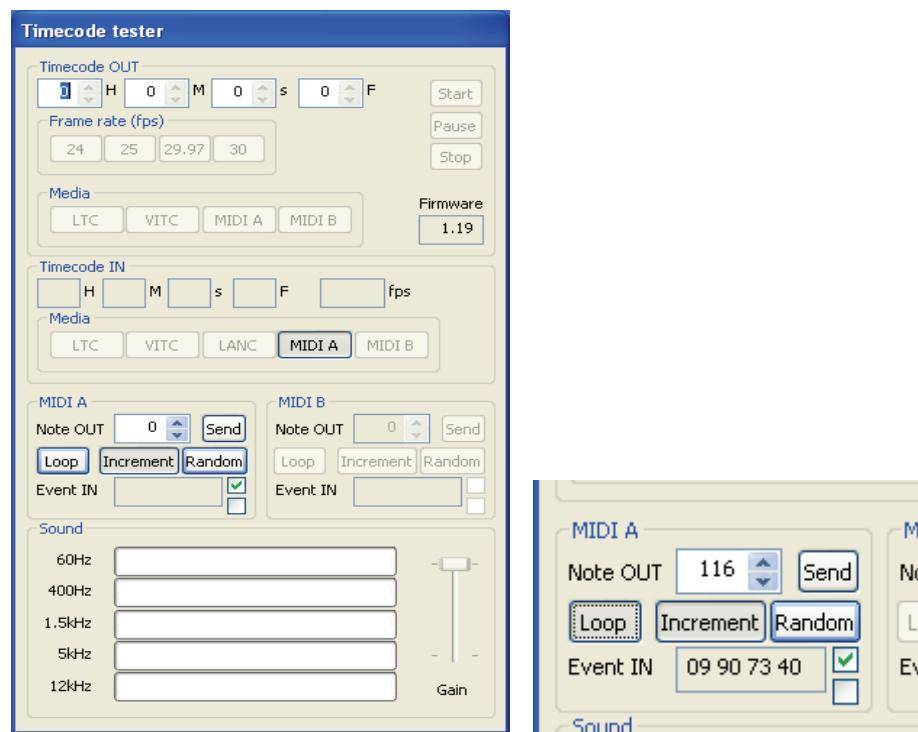
Front left, Front right, Back left, Back right, Monitor left, Monitor right.

5. Now check that the M1 is level by pushing on the corners to test for any wobble. If any of the feet do not rest on the work surface, loosen the screws and adjust the plate and chassis, then repeat the above process.
6. Next, tighten the four 3 mm Hex screws on the top plate, tightening gradually in a cross pattern:
Bottom left, Top Right, Top Left, Bottom Right

7. Reconnect all cables and power the M1 on.

2.5 Test

1. When the LOAD SHOW screen is displayed, find the “More” button at the bottom of the screen and expand it.
2. Find the “Tools - Diagnostic” menu and start the “Console tester”
3. Connect a MIDI cable from the IN port to the OUT port on the back of the M1 to form a loop.
4. Find the “Timecode tester”:



5. Select “Loop”.
 6. Check that:
 - ‘Note OUT’ shows increments
 - 09 90 xx 40 appears in the ‘Event IN’ box (xx is incrementing hexadecimal number)
 7. If this check is successful, close the Console Tester to stop the test.
- The MIDI PCB installation is now complete.

2.6 Troubleshooting

If the Timecode Tester does not perform as described above:

- Check that the MIDI cable is correctly connected to create a loop between IN and OUT ports.
- Disconnect the M1 from power and check all the connections made during installation.

3. Installing the MIDI PCB in an M2GO/M2PC controller

3.1 Removing the top plate

1. Place the M2GO/M2PC on a hard and perfectly flat surface.
2. Remove eight Torx T20 screws from the front and back of the M2GO/M2PC:

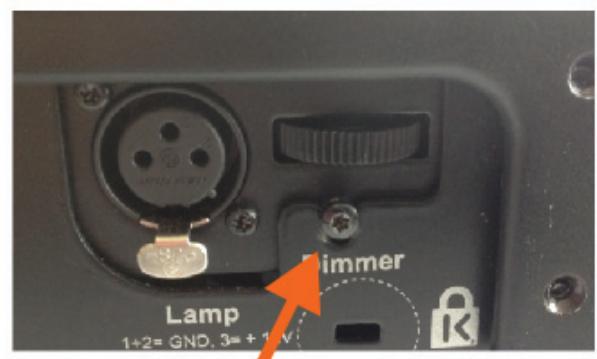


Four T20 screws on the front



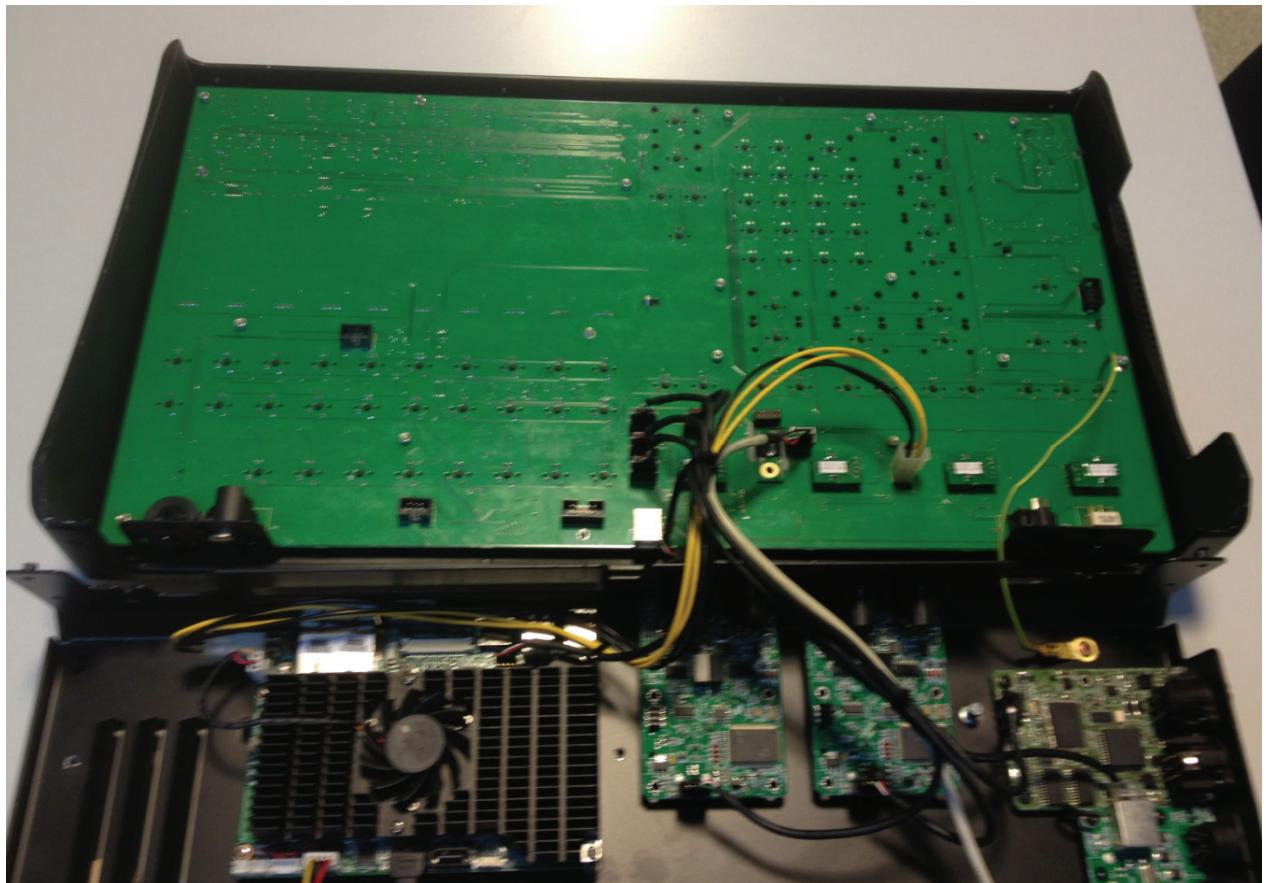
Four T20 screws on the back

3. Loosen two T20 screws that hold the power plate and desk lamp plate. Do not unscrew them completely from the plate.



Two T20 screws

4. Lift the top plate out of the controller and place it upside down behind the controller base. Do not disconnect any cabling.



Lift first, then place upside down behind base

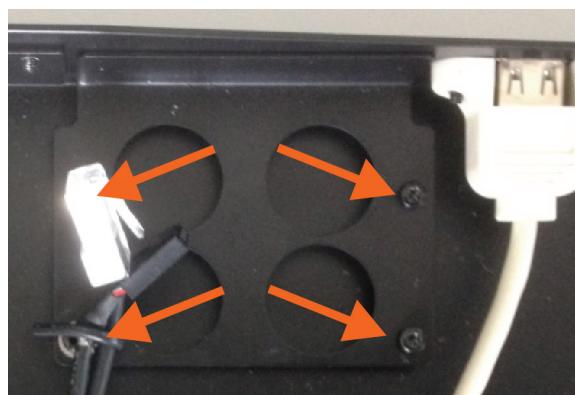
3.2 Removing the blanking plate

5. Locate the MIDI blanking plate on the right of the controller base.



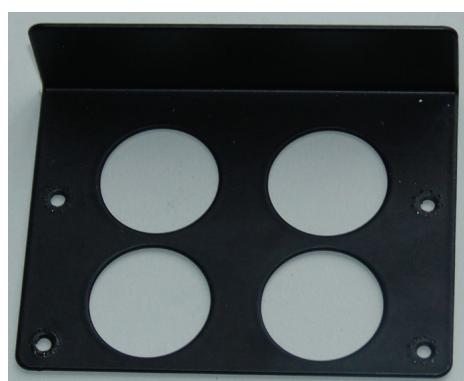
Midi blanking plate

6. Using a Torx T10 driver, remove all 4 screws from the MIDI blanking plate and remove the plate from the M2GO/M2PC. Do not lose the screws, cable tie and washers, as they will be needed in a moment to secure the new PCB in place.

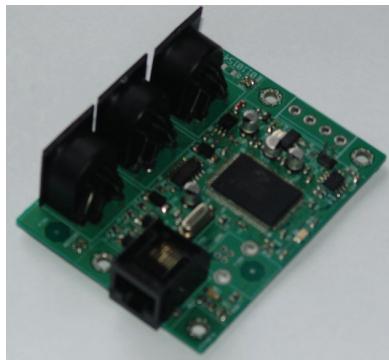


Four T10 screws, cable tie and washers

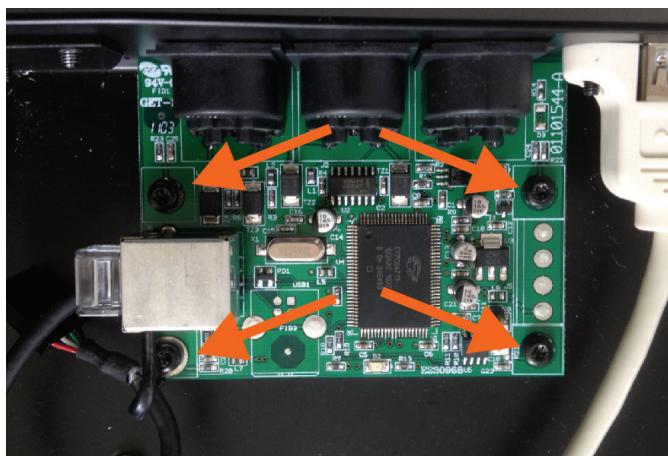
7. Store the blanking plate in a safe, dry place in case you ever wish to remove the MIDI PCB from the M2GO/M2PC again in future.



3.3 Installing the MIDI PCB

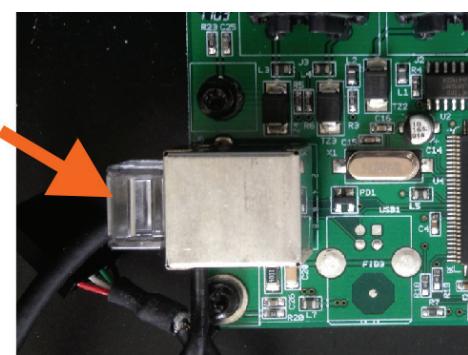


8. Remove the MIDI PCB from its anti-static bag and hold it over its position with the MIDI connectors facing towards the right of the M2GO/M2PC.
9. Fasten the PCB in place with the 4 screws, cable tie and washers you removed from the MIDI blanking plate, applying a torque of approximately 1.5 Nm.



Four T10 screws, cable tie and washers

10. Connect the RJ45 cable to the connector on the PCB. No other connections are needed.



Data and Power RJ45 connector

3.4 Reassembly

The M2GO/M2PC must be standing on a hard and perfectly flat surface during reassembly. If it is not, the chassis may be twisted which will cause damage.

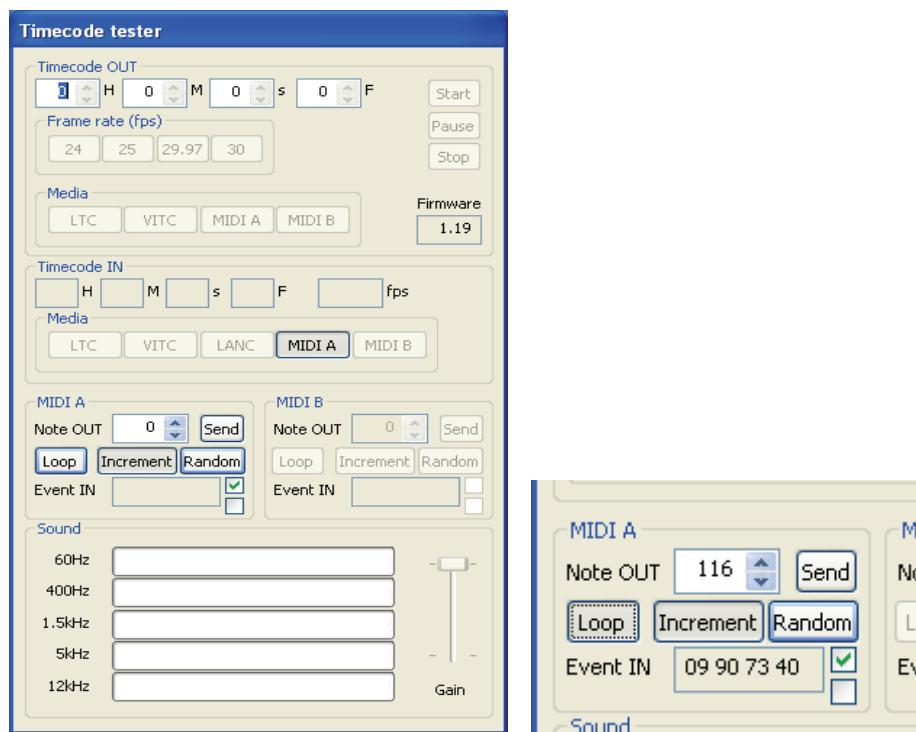
11. Place the top panel on top of the M2GO/M2PC chassis.
12. Lower it into the chassis and watch carefully that the power connector plate and the desk lamp connector plate are behind the bottom chassis metal plate.



13. Once the top plate is correctly in position, place the eight Torx screws around the front and the back into their holes. Tighten them down lightly at first. Once they are in place, tighten them.
14. Tighten the two Torx screws on the power connector plate and the desk lamp connector plate.
15. Reconnect all cables and power the M2GO/M2PC on.

3.5 Test

16. When the LOAD SHOW screen is displayed, find the “More” button at the bottom of the screen and expand it.
17. Find the “Tools, Diagnostic” menu and start the “Console tester”
18. Connect a MIDI cable from the IN port to the OUT port on the right of the M2GO/M2PC to form a loop.
19. Find the “Timecode tester”:



20. Select “Loop”.
 21. Check that:
 - ‘Note OUT’ shows increments
 - 09 90 xx 40 appears in the ‘Event IN’ box (xx is incrementing hexadecimal number)
 22. If this check is successful, close the Console Tester to stop the test.
- The MIDI PCB installation is now complete.

3.6 Troubleshooting

If the Timecode Tester does not perform as described above:

- Check that the MIDI cable is correctly connected to create a loop between IN and OUT ports.
- Disconnect the M2GO/M2PC from power and check all the connections made during installation.

4. Installing the SMPTE PCB in an M2GO/M2PC controller

4.1 Removing the top plate

1. Place the M2GO/M2PC on a hard and perfectly flat surface.
2. Remove eight Torx T20 screws from the front and back of the M2GO/M2PC:

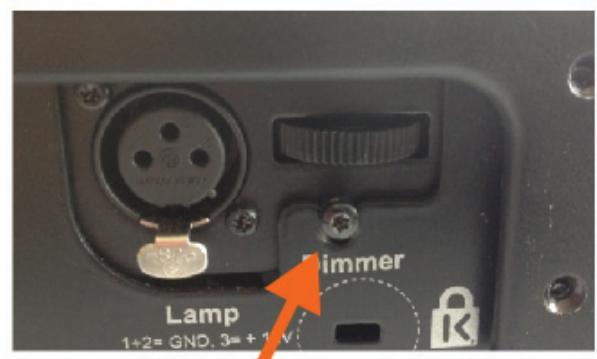


Four T20 screws on the front



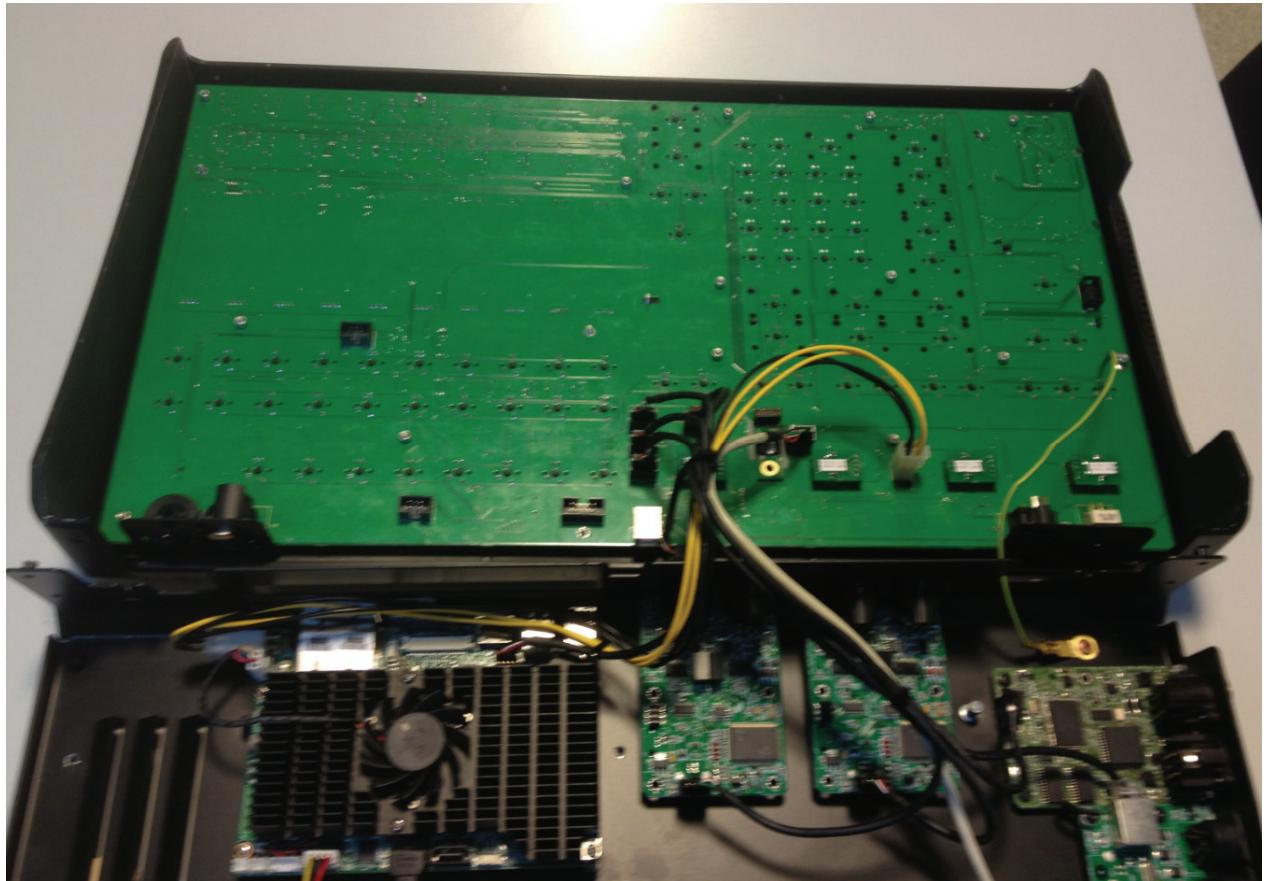
Four T20 screws on the back

3. Loosen two T20 screws that hold the power plate and desk lamp plate. Do not unscrew them completely from the plate.



Two T20 screws

4. Lift the top plate out of the controller and place it upside down behind the controller bottom. Do not disconnect any cabling.



Lift first, then place it upside down behind

4.2 Removing the blanking plate

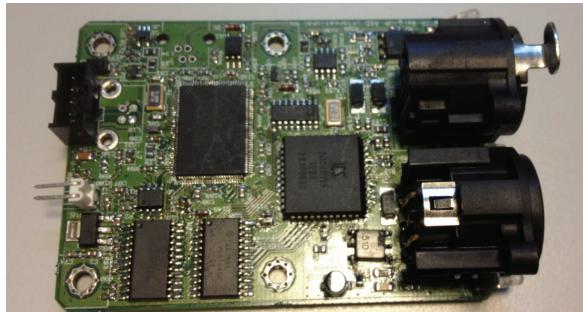
5. Locate the SMPTE blanking plate to the right of the controller bottom.



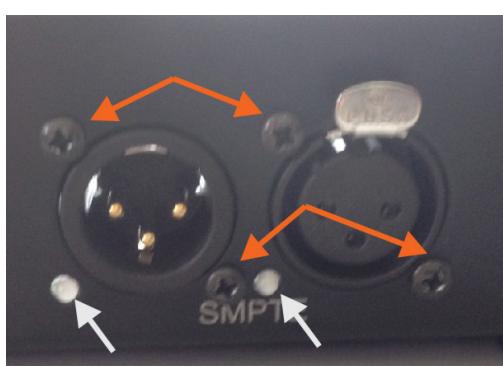
SMPTE blanking plate

6. Using a Torx T10 driver, remove all 4 screws from the SMPTE blanking plate and remove the plate from the M2GO/M2PC.
7. Store the blanking plate in a safe, dry place in case you ever wish to remove the SMPTE PCB from the M2GO/M2PC again in future.

4.3 Installing the SMPTE PCB



8. Remove the SMPTE PCB from its anti-static bag and hold it over its position with the XLR connectors facing towards the right of the M2GO/M2PC.
9. Place the SMPTE PCB in place and check that the two LEDs protrude from the chassis holes. Fasten the PCB in place with the four XLR Torx screws, and two M3 T10 Torx screws, applying a torque of approximately 1.5 Nm.



Four XLR Torx screws, LEDs and 2 T10 Torx screws.

10. Connect the 4-pole cable to the connector on the PCB. No other connections are needed.



Data and Power 4-pole connector

4.4 Reassembly

The M2GO/M2PC must be standing on a hard and perfectly flat surface during reassembly. If it is not, the chassis may be twisted which will cause damage.

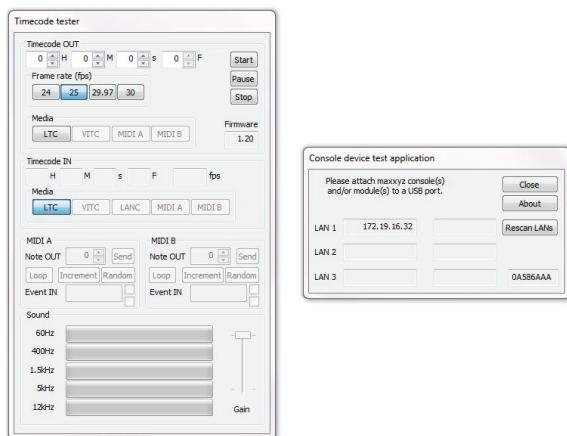
11. Place the top panel on top of the M2GO/M2PC chassis.
12. Lower it into the chassis and watch carefully that the power connector plate and the desk lamp connector plate are behind the bottom chassis metal plate.



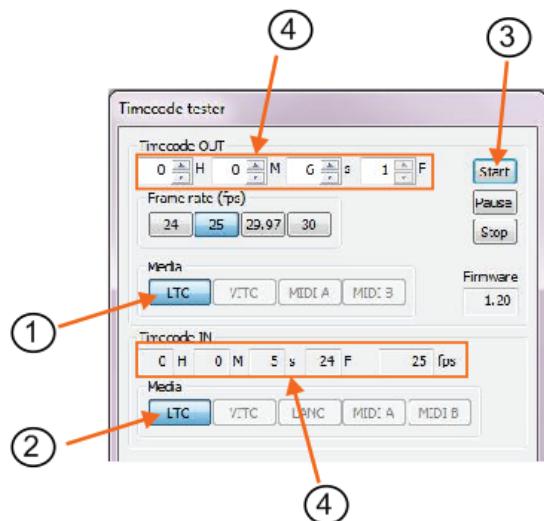
13. Once the top plate is correctly in position, place the eight Torx screws around the front and the back into their holes. Tighten them down lightly at first. Once they are in place, tighten them.
14. Tighten the two Torx screws on the power connector plate and the desk lamp connector plate.
15. Reconnect all cables and power the M2GO/M2PC on.

4.5 Test

16. When the LOAD SHOW screen is displayed, find the “More” button at the bottom of the screen and expand it.
17. Find the “Tools, Diagnostic” menu and start the “Console tester”
18. Connect a 3-pin male/female XLR cable from the SMPTE IN port to the SMPTE OUT port on the right of the M2GO/M2PC to form a loop.
19. Find the “Timecode tester”:



20. Select (1) LTC – (2) LTC – (3) Start



21. Check that:

- Timecode OUT (4) must start to run
- and Timecode IN (4) must follow

22. If this check is successful, close the Console Tester to stop the test.

The SMPTE PCB installation is now complete.

4.6 Troubleshooting

If the Timecode Tester does not perform as described above:

- Check that the SMPTE cable is correctly connected to create a loop between IN and OUT ports.
- Disconnect the M2GO/M2PC from power and check all the connections made during installation.

If you have any questions or comments regarding this document, or if you need technical support with the procedure, please contact: controllersupport@martin.dk

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