

Field Replacement of defective PCB in MapIT G2 SPP (Smart Patch Panel – flat version i.e. p/n: M-SPP-K24E)

If you have any questions, you can contact Technical Support at (860) 945-4385 or E-mail at: technical_support@siemon.com.

Required Tools:

- 5/16" Socket nut driver or Wrench
- Phillips Screwdriver
- SPP tool kit (see p/n below)

Other possible tools dependent on type of control cable connection:

- 110 style punch tool
- Cable jacket stripper

Required Replacement Kits:

p/n: M-SPP-NEWPCBA

p/n: M-SPP-TOOLKIT

Caution: PCB is static sensitive, be sure to use grounding wrist strap included before handling new board.



1.) Disconnect both input & output MapIT control cords from back of SPP (connected via 110 punch or 110 patch plug).



Or



2.) Use nut driver or wrench to remove all four 5/16" acorn nuts and washers from back of front cover.

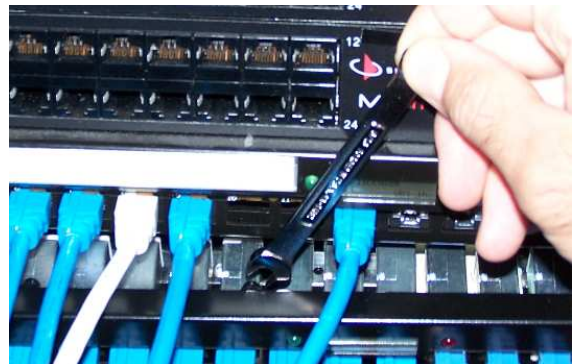


Option 1 - Rear access: Use nut driver from rear of panel.



Rear View – option 1

Option 2 - Front access: Use wrench from front side. (requires detaching panel from rack and pulling out just far enough to access nuts & washer from top).



Front View – option 2
(SPP pulled out slightly)

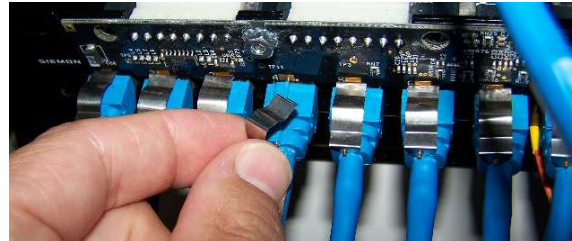
3.) Remove cover. *Note: white spacers are not secured and may fall off during removal.*



4.) Attach pogo-pin retention clips onto any existing patch cords that need to stay connected. (clips prevent pogo-pins from springing out when board is removed)

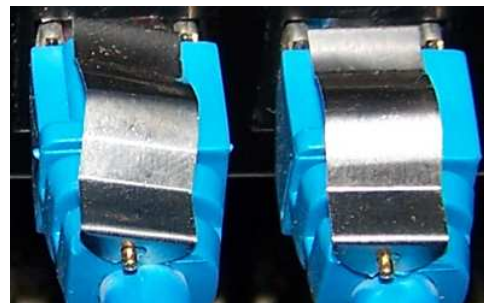


Front



Clip installation: Orient clip as shown, wedging front of clip between pogo-pin and PCB. Rear opening on clip hooks onto rear pin as shown.

Rear

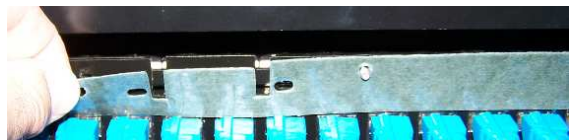


5.) Remove all three 5/16" locking nuts holding PCB and remove board.

(Ensure all pogo-pins remain retracted by temporary retention clips).



Protective gasket (laminated) can remain in place or be replaced along with new PCB board.

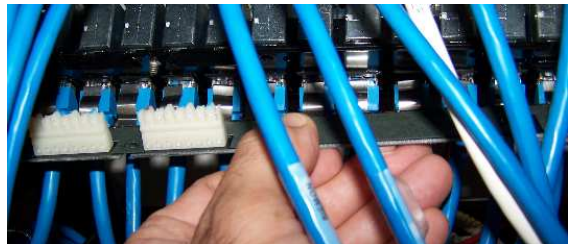


6a.) Remove any static charge before handling new PCB (use disposable grounding strap included with kit).



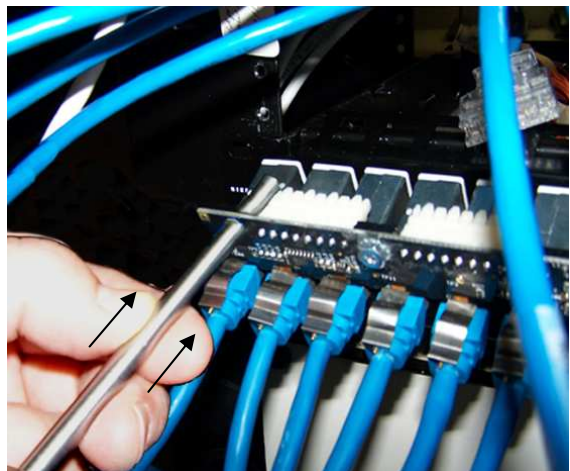
Grounding Wrist Strap

6b.) Carefully insert new PCB board without disturbing pogo-pin retention clips (ensure laminate is included if not already in place).



7a.) **IMPORTANT:** Align new PCB with metal alignment rods inserted firmly into through holes (be sure to push through spacer:

Note: Some original panel designs have smaller holes and will not allow rod to insert as shown. In this case the patch cords themselves can be used as the alignment tool by simply resting pcb board on top of patch cords while tightening nuts in next step.

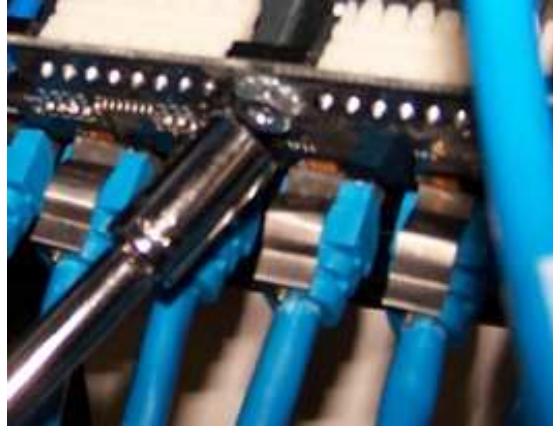


7b.) With temporary alignment rods in place, secure PCB with 5/16" locking nuts.

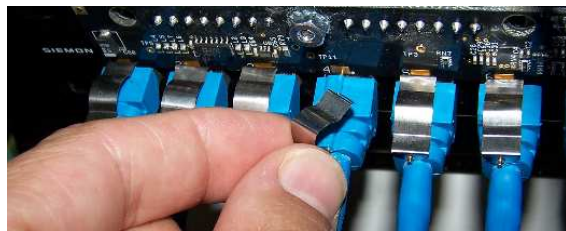
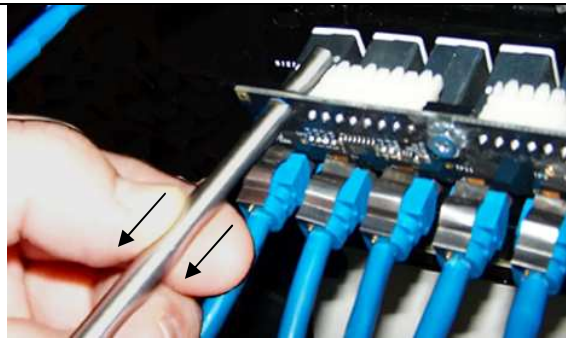


Tip:

For older panels that will not accept alignment rods (as noted in previous step); better alignment can be obtained by shifting 1 or more patch plugs upwards while tightening nuts. This will lift PCB slightly to prevent unnecessary binding of plugs during patching.



8.) After all locking nuts are secured, remove alignment rods and pogo-pin retention clips.



9.) Locate cover and ensure white spacers are placed on threaded rods, re-install front cover and secure all four nuts and washers using option 1 or 2 as described in step 2 above.



10.) Finally, re-secure rack to frame (as necessary) and re-install input & output MapIT control cords via 110 patch plug or 110 punch-down method.

(Be sure not to reverse input & output cords or the system will not function properly).



Firmware update:

If connected properly the panel firmware and panel ID's will update automatically however, you will want to clear the unused panel(s) that have been removed from the patch zone. The 'Clear Unused Panel' command is accessed from the setup menu of the associated MCP (Master Control Panel). If additional instructions on performing this operation are required, please reference the MapIT G2 Training Manual.

END MapIT G2 PCB replacement

