

## CAPI 511-DB25 Rack Hardware List

1. I connector
2. No sticker: 5pc 4-40 X 1/8" black undercut flat head screws (1 extra)
3. Red sticker: 18pc 4-40 X 1/4" black undercut flat head screws (2 extra)
4. Green sticker: 25pc 4-40 X 3/8" black oval head screws (3 extra) for modules
5. No sticker: 6pc orange jumper wires and 10pc EG1218 slide switches
6. No sticker: 58pc 4-40 lockwashers
7. White sticker: 24pc 4-40 X 5/16" black pan head screws (2 extra)
8. No sticker: 33pc black M3 screws and 16pc 24mm standoffs
9. Orange sticker: 15pc Hi/Low screws (1 extra)
10. No sticker: 4pc 4-40 lockwashers and 4pc 4-40 X 3/16" jack-screws

## CAPI 511-DB25 Rack Assembly Notes

1. Install the ten E-Switch mini slide switches.
2. Install the eleven 15-pin card edge connectors.
3. Install the two 24-pin .1" headers. The black shroud should touch the backside of the PCB.
4. Install the two DB25 connectors to the flexible PCB's. Note which side of the flexible PCB the connectors are mounted to. There is only one way for them to work properly!
5. Solder the opposite end of each flexible PCB to the proper 24-pin header. These go to the backside of the backplane just above the black shroud of the 24-pin header. **BE SURE** to match them to their proper locations as marked on the silk screen. These two cables are different and are **NOT** interchangeable.
6. Install the sixteen 24mm aluminum standoffs to both backplanes. The standoffs go to the backside of the backplanes. Use the M3 screws that are packaged in with the standoffs. Also install a 4-40 lockwasher behind each screw. The standoffs are 4.5mm across the flats but a 3/16" socket with work just fine.
7. Put the 9-11 backplane flat on your work surface with the blue card edge connectors facing downward. Locate all seven of the 3-pin XLR's and insert them into the 9-11 backplane with **NO** solder at this time.
8. Position the 1-8 backplane with card edge connector side down, adjacent to the 9-11 backplane. Leave approximately a 1/16" gap between the backplanes. Gently bend the flexible PCB's in a loop so the DB25's will be facing their slots on the rear metal panel.
9. Locate the rear metal panels along with the I connector. Secure the I connector to the 9-11 rear metal panel with 4-40 X 5-16" black pan head screws and 4-40 lockwashers.
10. Secure the 1-8 rear metal panel to the other side of the I connector with 4-40 pan head screws and lockwashers.
11. Look down the top edge of the rear metal panel assembly and make sure it is straight and flat. Carefully adjust a little if required. This is the surface that will help determine how "flat" the backplane assembly is prior to final fitting to the rack carcass.
12. Slip the rear metal panel assembly into position over the XLR connectors. Make sure each and every one is properly aligned in their respective holes.
13. With solid even pressure, push downward on the assembly while securing the Neutrik connectors using the Hi/Low screws. I get both screws started in a connector before fully tightening them. They must be nice and snug but be careful of over tightening. You can strip the connector. These screws cannot be installed with your fingers. You need a screwdriver and some downward pressure since they are cutting their way into the plastic of the Neutrik connectors.

14. Secure the rear metal panel assembly to the standoffs using M3 screws and 4-40 lockwashers. Start with the 9-11 portion and then adjust for alignment to complete the 1-8 section.
15. Reach inside the assembly to guide a DB25 connector into it's hole in the rear metal panel. Secure with 4-40 lockwashers and jack-screws. A 3/16" socket will fit the jack-screws perfectly. These should be nice and snug so the lockwashers are compressed but **DO NOT** over tighten or you can sheer a stud off in a connector and have a real mess on your hands! Complete the fastening of the other connector.
16. Turn the assembly so the blue card edge connectors are facing downward. Insert and solder the six orange board to board jumper wires.
17. With the blue card edge connectors facing upward, solder all pins for the Neutrik XLR connectors.
18. Using the 4-40 X 1/4" black undercut flat head screws, assembly the two sides to the top/ bottom panels. Tighten all of these screws about 85%. The goal is to leave a little alignment room for the next step.
19. Position the 4 sided carcass with the rack ear side facing downward on your work surface. Using 4-40 X 5/16" black pan head screws and 4-40 lockwashers, partially thread all eighteen rear panel perimeter screws adjusting the carcass as necessary.
20. Once all rear panel perimeter screws have been started, work your way around fully tightening them all.
21. Fully tight the sixteen flat head screws that secure the top/bottom to the sides. Do not use gorilla force or you can sheer one of these screws off!
22. Using the 4-40 X 1/8" black undercut flat head screws, secure the black rack ear plates to the carcass.