



SKMP Assembly guide

**Safety warning**

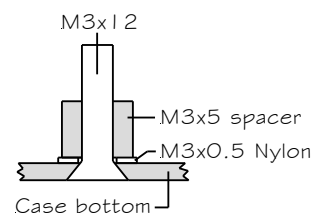
The kits are main powered and use potentially lethal voltages. Under no circumstance should someone undertake the realisation of a kit unless he has full knowledge about safely handling main powered devices.

Please read the “DIY guide” before beginning.

SKMP Assembly guide

**1. Bottom spacers**

On the case bottom, install the 18 spacers made of one M3x12 countersunk screw inserted from below, one nylon spacer and one 5mm brass spacer.

**2. Rubber feet**

Stick the four self adhesive rubber feet on the bottom of the case.

**3. Back panel marking**

Disassemble the backplate.

Stick the channel numbers on each channel that you are going to use, between each pair of XLR's, near the top edge.

**4. XLR installation**

Install the XLR's on the back panel.

The 5 pins power XLR, on the left, is mounted from outside with 2 M3x10 countersunk screws. A shakeproof washer and a solder tag are inserted on the top screw.



The input/output XLR's are mounted from inside with two M3x10 pan head screws. From left to right (inside view) the sequence is female (input), male (output) repeated four times.

If you are installing an MPGG, one couple of XLR's will be omitted.

The unused XLR's will be masked with blanking plates.



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5. Pin 1 wiring

Cut one 5cm piece of $\varnothing 0.9\text{mm}$ (20WG) tinned copper wire and solder it to pin 1 of the 5 pin power XLR.

Cut one 3cm piece of $\varnothing 0.9\text{mm}$ (20WG) tinned copper wire for each input/output XLR. Solder to pin 1.

**6. Ground bar wiring**

Place the 39cm ground bar on top of all the XLR chassis tags and lock it in position with a loop of the wires from pin 1.

The wire from the 5 pins XLR should continue its way to the solder tag on the screw after the loop.

Cut the exceeding wire.

**7. Ground bar soldering**

Put with a generous amount of solder on the point that connects the 3 parts : pin 1 wire, ground bar and XLR chassis tag.

Leave the solder tag on the power XLR screw not soldered at this point.

If you are not installing all 8 XLR's at this time, attach the ground bar tip to the back plate with a piece of adhesive tape.



4 preamps rack



2 preamps rack (MP66)

SKMP Assembly guide



8. Prepare the connecting wires

For the power XLR :

- 1 Red wire 0.5mm², 8cm long
- 1 Yellow wire 0.5mm², 8cm long
- 1 Green wire 0.5mm², 8cm long
- 1 Blue wire 1 mm², 8cm long
- 1 Black wire 1 mm², 11m long

For each preamplifier of type MP12, MP32, MP73:

- 2 blue wires 0.5mm², 8cm long
- 2 Red wires 0.5mm², 8cm long

For each preamplifier of type MP66:

- 1 blue wire 0.5mm², 8cm long
- 1 blue wire 0.5mm², 17cm long
- 1 Red wire 0.5mm², 8cm long
- 1 Red wire 0.5mm², 17cm long

Strip all the wires 5mm on one end and 15mm on the other end.

Fully tin the 5mm side.

Tin minimally the 15mm side, only 1mm at the tip, to prevent the threads splitting apart.



9. Power XLR wire soldering

Solder the 5mm stripped side to the XLR's.

Solder the green wire to pin 5

Solder the yellow wire to pin 4

Solder the blue wire to pin 3

Solder the red wire to pin 2

Solder the black wire to the solder tag on the screw.



10. Input/Output wiring

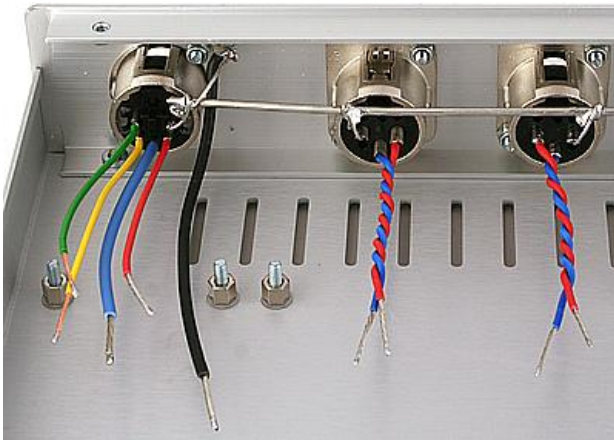
Solder the red wires to pin 2.

Solder the blue wires to pin 3.

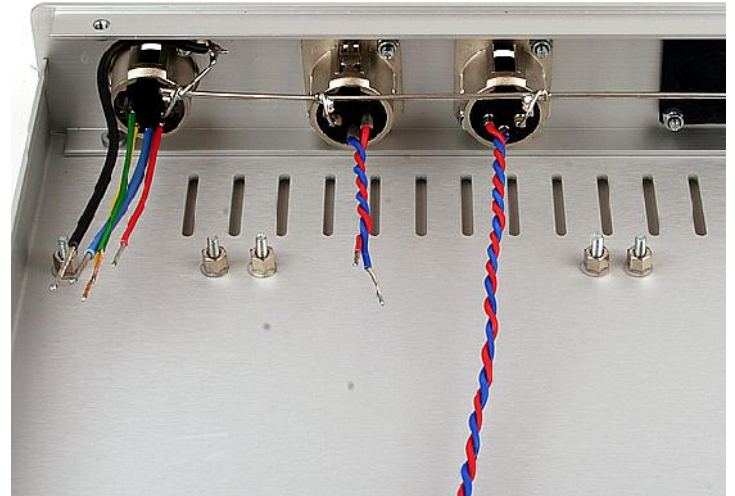
For MP66, solder the long wires to the output XLR (male).

Twist the wires together.

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MPI 2, MP32, MP73



MP66

Power supply cable assembly

1. Cable stripping

When reading the grey cable sleeve writing, the male plug will be to the right, the female plug will be to the left.



Warning : If you reverse the cable direction, the wires positions will not match the XLR pins positions.

Slide the plug boots at both ends of the cable.

Strip 20mm of the grey sleeve.

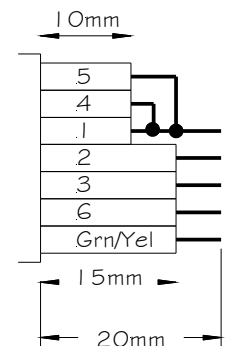
Each one of the black wires inside the cable are identified by numbers 1 to 6, printed on the sleeve. Wire number 1 is in the centre.

Strip 5mm of insulation on wires 2, 3, 6 and green/yellow .

Strip 10mm of insulation on wires 1, 4 and 5.

Twist the wire threads to hold them together.

Tin lightly except for wire 4 and 5.



2. Ground soldering

Wires number 1, 4 and 5 are connected together to form the ground connection.

Bend wire 4 and 5 and twist them half a turn around wire 1.

Solder the 3 wires together.

Insert a 15mm long piece of heat shrink tubing (diameter 4.8mm) around the 3 connected wires and heat with a hot air gun.



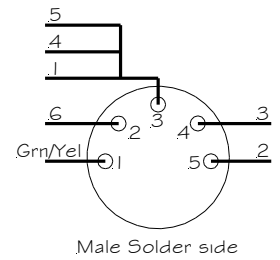


Power supply cable assembly



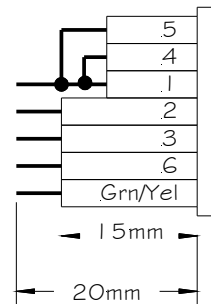
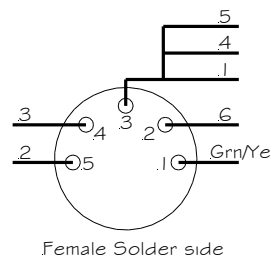
3. Male XLR assembly

Solder the 5 wires to the XLR pins.
Add the shell and screw the boot.



4. Female XLR assembly

Repeat the whole process for the female plug.



Warning : Do not forget to insert the plug boots before soldering !

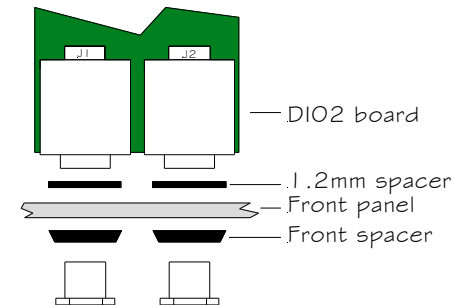
DIO2 Installation

1. Board installation



Place the two 1.2mm flat spacers on the jack sockets and insert the DIO2 board into place. Screw in the two socket front pieces through the bevelled front spacers with an M1.2 socket spanner.

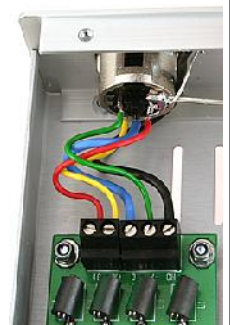
Finish attaching the board with two self locking nuts at the back of the board.



2. Board wiring

Fold the wire tips and insert into the DIO2 terminals.

- Red wire to 48
- Yellow wire to V+
- Blue wire to 0
- Green wire to V-
- Black wire to CH



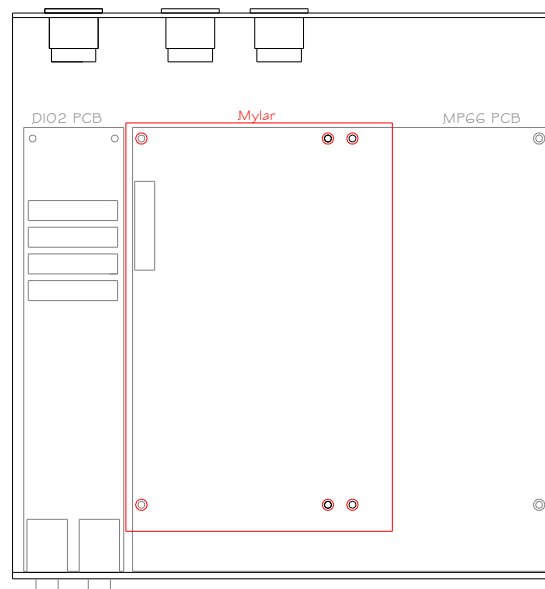


Microphone preamplifier installation

1. Mylar isolating sheet installation

The mylar sheet is only used with the MP66 because of the existing high voltages between the PCB and the case.

As shown in the example, the mylar sheet is placed on 6 spacers underneath the left side of the MP66 board.



2. Board installation

Insert a nut on the gain potentiometer.

Warning : Screwing the nut is easy. If you feel any hardness, it means that the nut is not correctly engaged in the thread. Remove it and try again. Never force.

Install the board in the case on the four spacers in a free slot, in 2 free slots for the MP66.

Adjust the nut position so that it comes flush with the case front panel.



3. Frontplate

Remove the red cap on the 48V switch and put the frontplate in place, checking the LED comes nicely through the hole.

Secure it with two M3x6 stainless steel screws.

Insert a second nut on the gain potentiometer and secure it very gently. The thread is made of plastic and should not be forced.

Secure the board with four self locking nuts. Use 6 nuts for the MP66, one in each corner plus 2 more in the center.

Put back the red cap on the 48V switch.



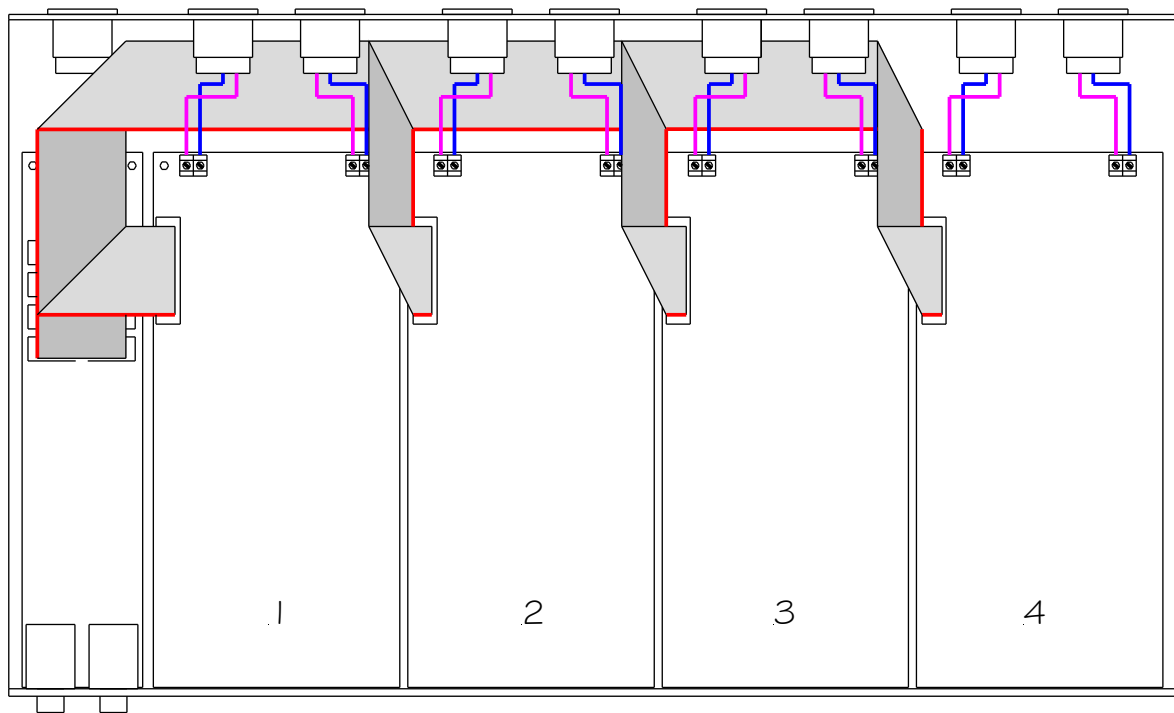
4. Flat cable connections

The flat cables bring the power and the DI signals to the mic pre boards. If the board you are installing is going to have a DI input, it will have to be connected to CN1 or CN2 on the DIO2 board. The connectors CN3 and CN4 are identical, without a DI connection. Try to use slot 1 and 2 or slot 1 and 3 for the DI's. It will make your layout more logical.

It is recommended to install all four cables, even if you don't have four preamps yet. It will make future additions easier. You can tape the unused cable ends to the case bottom to prevent them from moving.

Start laying out from the DIO2 connectors, from CN4 to CN1. Use decreasing length cables for board 4 to 1.

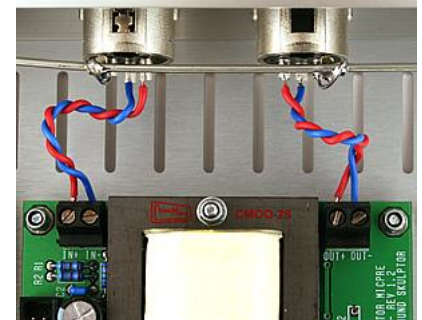
Microphone preamplifier installation



5. Input/Output connection

Connect input and output wires to terminals :

- Red left to Input +
- Blue left to Input -
- Red right to Output +
- Blue right to Output -



6. Knob installation

Insert the gain knob, adjust the position in regard of front plate marking and secure it with a 10mm socket spanner. The nut needs quite some strength to be tightened. Hold the knob with one hand while screwing in the nut. Do not use the potentiometer end of track self stop to lock the knob because you may break it and it will not prevent the knob from slipping against the spindle.

On MP12, MP73 and MP66 secure the second knob with a 7mm socket spanner.

Clip in the knob caps.



7. DI inputs identification dots

Add the self adhesive colour dots above the DI inputs and on the corresponding micpre.



Microphone preamplifier installation

