

# MIDI Interface V0.14: Assembly manual

**Main PCB:** (The smaller one)

Solder the resistors:

QTY.	Value	Code	Name on PCB
1	220	Yellow, Purple, Red, Gold	R12
1	270	Red, purple, black, gold	R11
4	4k7		R1, R2, R4, R36
1	5k6	Brown, Black, Yellow, Gold	R29
2	10k	Brown, Black, Black, Red, Brown	R3, R6

Solder the diodes taking care about the polarity (black line has to match the white one in the PCB's silkscreen):

QTY.	Value	Code	Name on PCB
1	1N4148	1n4148	D1

Solder the two ferrite beads (FERRITE+, FERRITE-) using a resistor leg passing trough, and solder them.

QTY.	Value	Code	Name on PCB
1	22uH	Red, Red, Brown	L1

Place the sockets on IC1, OK1, IC3 minding polarity (watch round mark on silkscreen), solder them but do NOT place the ICs until the end of assembly. IC1 =ATMEGA IC3= 4504 OK1=6N138

Solder 16Mhz crystal oscillator Q2.

Solder the capacitors:

QTY.	Value	Code	Name on PCB
2	22p		C1, C4
7	100n	104	C2, C3, C9, C11, C12, C14, C15
3	10µF	10µF	C8, C10, C13

Solder the transistors taking care to put them on the right position (the shape must match the drawing on the PCB):

QTY.	Value	Code	Name on PCB
1	2n3906	3904	T1
1	7810	7810	IC4

Solder the "Power" connector from the bottom of the PCB and take care of polarity.

Put the two male pin stripe (JP2, JP6) from the top side aligned 90° from PCB and solder it.

**CONTROL PCB:** (the bigger one)

Solder the resistors:

QTY.	Value	Code	Name on PCB
4	120		R7, R8, R9, R10
1	300		R15
4	4k7		R16, R21, R22, R26
4	6k8		R17, R19, R20
6	1k		R5, R13, R25, R27, R32, R33

Place the sockets on IC5, IC6 minding polarity (watch round mark on silkscreen), solder them but do NOT place the ICs until the end of assembly. IC5, IC6 =LF412

Solder the capacitors:

QTY.	Value	Code	Name on PCB
2	100n	104	C16, C17

Put and solder the two female pin stripes on the bottom side straight at 90° (JP2, JP3).

Place and solder MIDI connector from silkscreen side.

Solder the banana or minijack connectors.

Put the three metallic spacers from the bottom of the control PCB (by the male side) and screw them from the top with the two nuts.

Place the button and led, but do not solder them. Place front panel first, set them in their right position, screw bananas or minijacks and then solder them.