DB4020 / EGV+

Enclosure

Assembly manual

Last update: February 01, 2021
ea3gcy@gmail.com
Updates and news at: **www.qrphamradiokits.com**

PARTS LIST

		Quantity	Part
		1	Galvanized iron base
		1	Painted aluminum lid
		1	Front panel
		1	Rear panel
		4	10mm.Hexagonal spacers
		8	M3 x 4mm screws
		8	TA29x5 self-tapping screws
		1	24-26mm Knob (D shaft type)
		2 (3)	15-16mm Knob
		2	M2.5 x 8mm black screws
		2	M2.5 nuts
		1 (0)	Microphone socket
		1 (0)	Microphone connector
		1	10K mini potentiometer w/switch
		(1)	50K mini potentiometer
		1	pins strip female
		2 (1)	pre-assembled cable 5 poles
		1	5-pin female connector (to assemble)
		3	50 cm colored cables
		4	adhesive rubber feet

Numbers in parentheses () are only for the EGV+ box pack

COMMON ASSEMBLY FOR DB4020 AND EGV+

Installing the DB4020 in the box is pretty straightforward. However, there is some detail that needs to be paid close attention. Take your time. Please, work carefully. *Have a good time!*

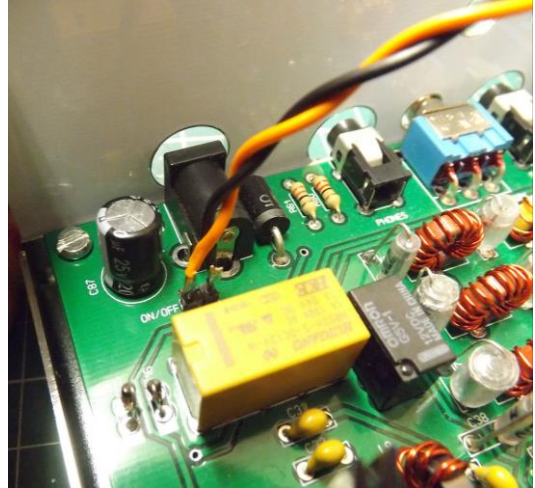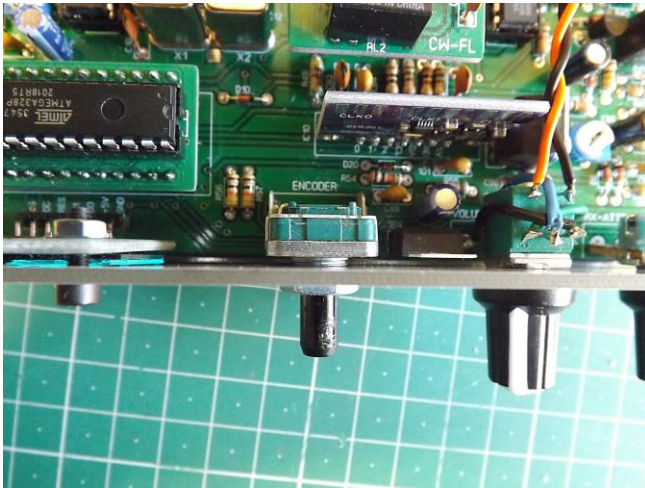## ➲ Volume potentiometer and ON / OFF switch.

Previous note: If you don't want to use the ON / OFF switch, then you can keep the original potentiometer included in the DB4020 / EGV + kit installed.
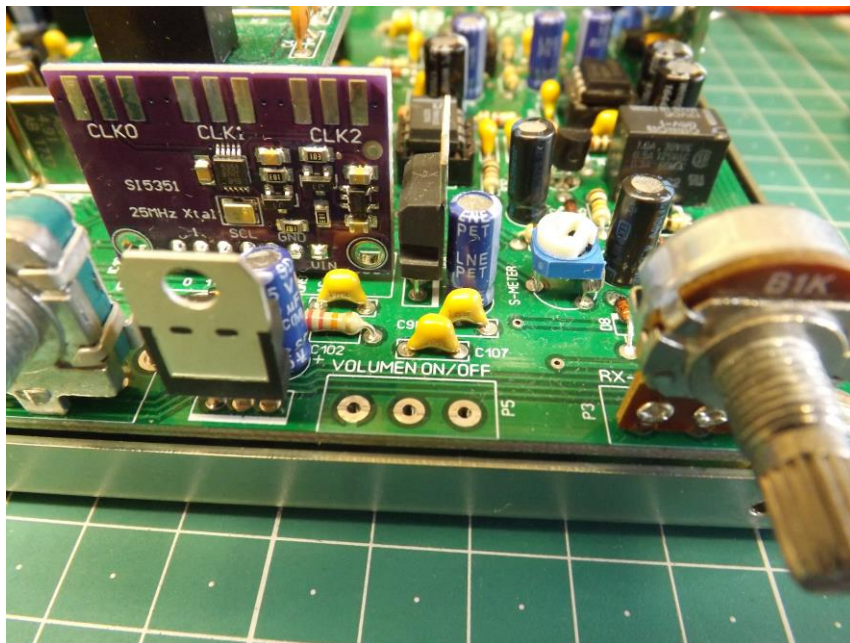
Replace the original potentiometer with the mini potentiometer with switch

Wire the volume potentiometer

Wire the ON/OFF switch to J1 jumper

➲ Potentiometers and Encoder.

- Secure the potentiometers with their nuts (with washers). You don't need to squeeze a lot.
- Cut the bulge under the encoder.
- Cut the bulge of the potentiometers (if they have one)

Do not screw the Encoder. This is sufficiently attached to the DB4020 PCB.
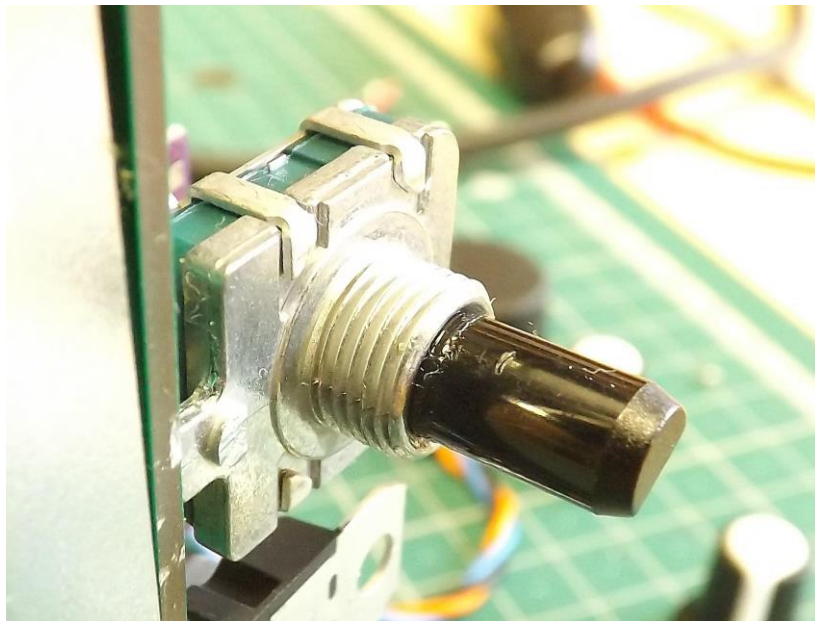
➲ OLED display.

**The OLED display is delicate. Handle with care.**

OLED display placement needs special attention.

You should solder the OLED so that it fits snugly against the front panel (this is important):

- First you must present the display with the front of the box.
- Next, solder two terminals to keep it in that position.
- Now move it to fit the face and finish soldering the terminals.
- You will probably have to move the plastic strip a bit to adjust the distances.
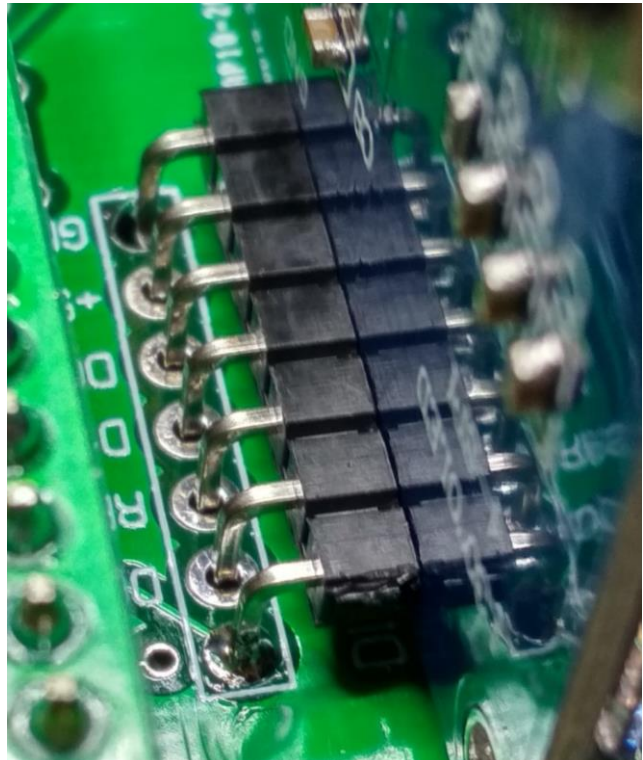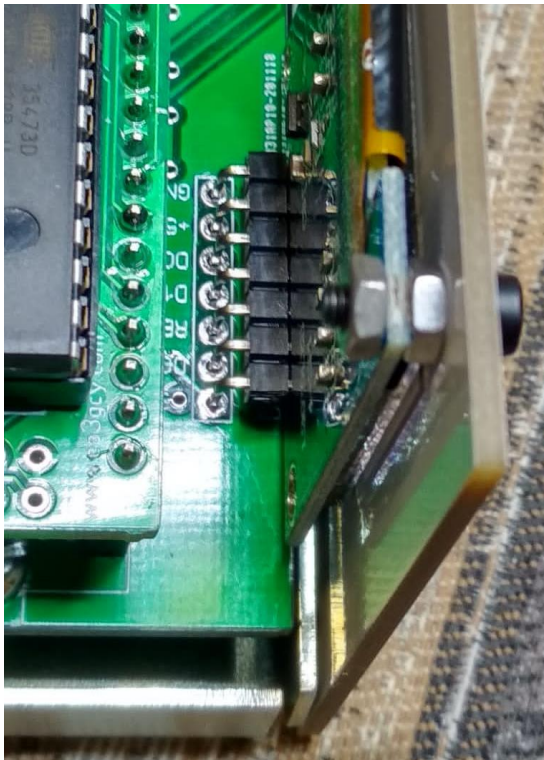
Use two M2.5 screws. It is not necessary that overtighten. Excessive tightening can damage the display. Install a nut to obtain clearance between the panel and the display (see picture).
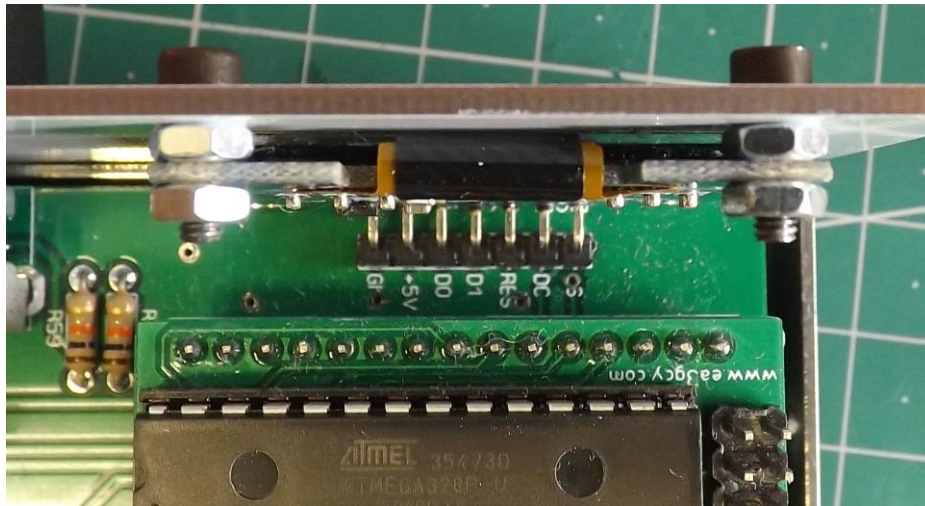
VERY IMPORTANT: cut the connection terminals flush. ¡Avoid touching the front panel!

➲ Rear panel.

Very little has to be said about the rear panel.

- On DB4020 if you use the "CW Interface", you must hold the PCB with the push-button "CMD", the "CW/ SSB" switch and the socket "KEY" for the paddle jack .
- On the EGV+ you must hold the PCB with the push-button "CMD" and the socket "KEY" for the paddle jack (here the SSB / CW switch is not used) .

# SPECIFIC DB4020 NOTES

⮑ Microphone socket wiring.

You must adapt the connector for your microphone.
You can use any combination of cables. There is no standardized wiring planned.
The connector has 5 ways. You can use a microphone with a built-in speaker. It has a spare way for other uses.

IMPORTANT: Always use a suitable micro electret. Everything about this is explained in the DB4020 assembly manual.
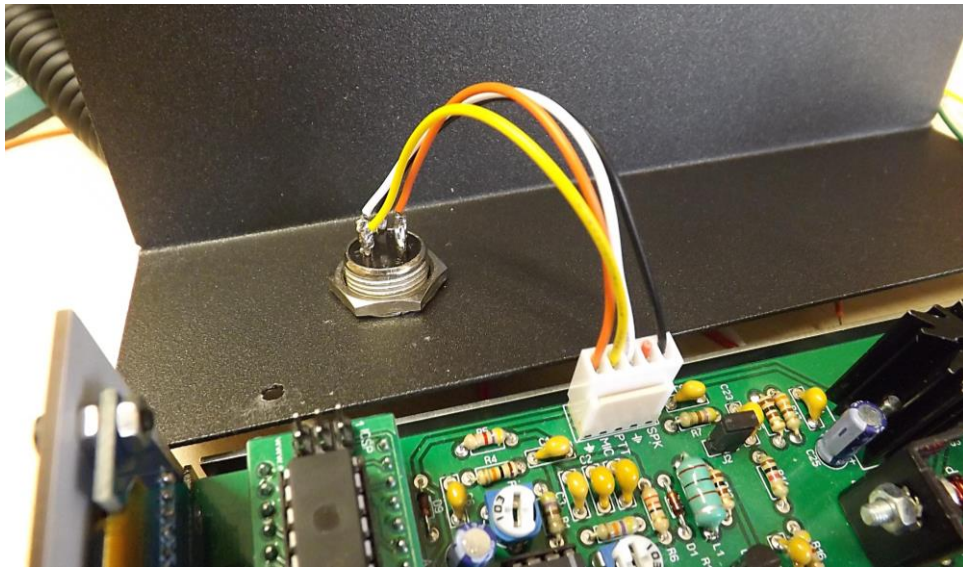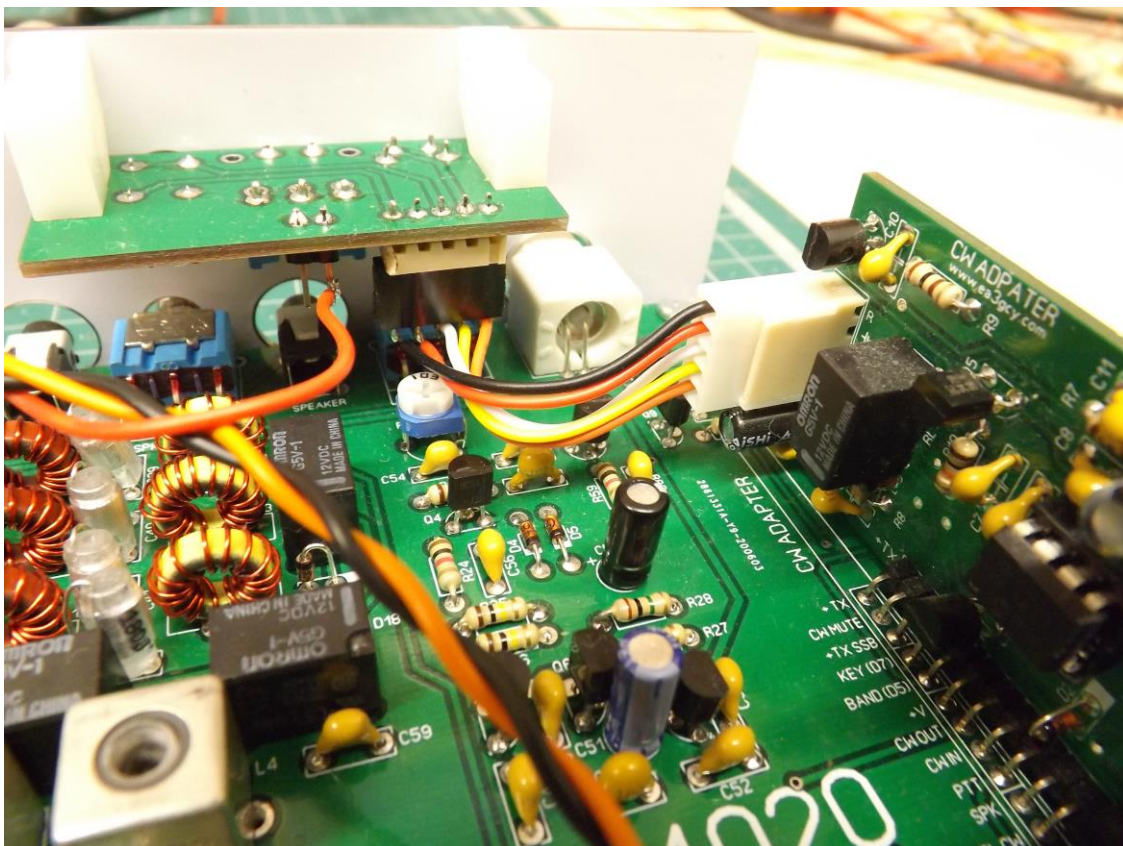
➲ "CW Interface" wiring.

- Attach the exterior control board to the rear panel with the plastic angles.
- Wire the CW Interface module to the control board.
- The exterior control board also has a wire that goes to the + of the power supply.

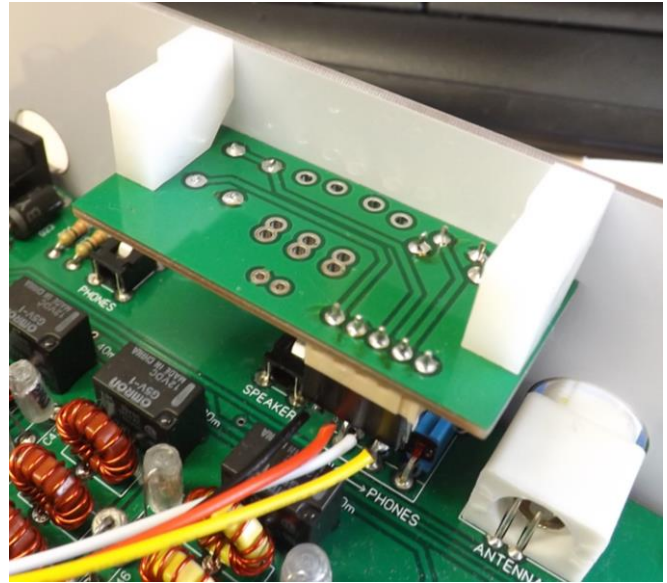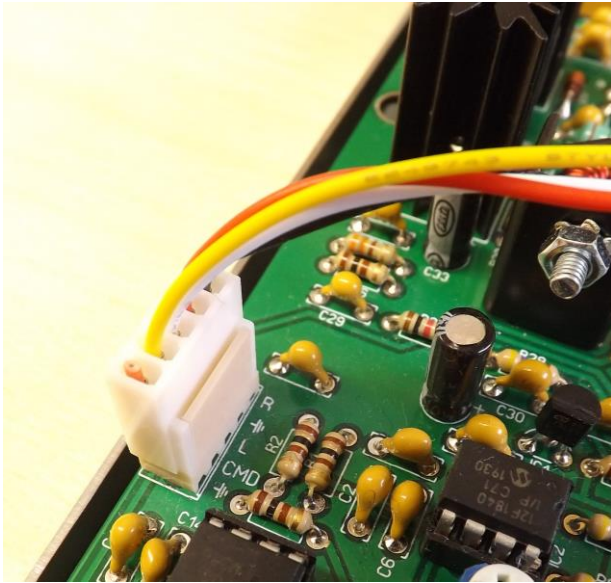(For more technical details, see the "CW Interface" assembly manual).

SPECIFIC EGV+ NOTES

➲ Paddles and CMD push button wiring.

Wire the connector with pins "R", GND, "L" and "CMD" to the external connection board
Note: only one "GND" wire is used.
For more technical details, see the "EGV+" assembly manual.

➲ Band potentiometer wiring.

Wire the Band potentiometer.
For more technical details, see the "EGV+" assembly manual.