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 | Microphone socket |
| 1 | Microphone connector |
| 1 | 10K mini potentiometer w/switch |
| (1) | 50K mini potentiometer |
| 1 | pins strip female |
| 1 | pre-assembled cable 5 poles |
| 3 | 50 cm colored cables |

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

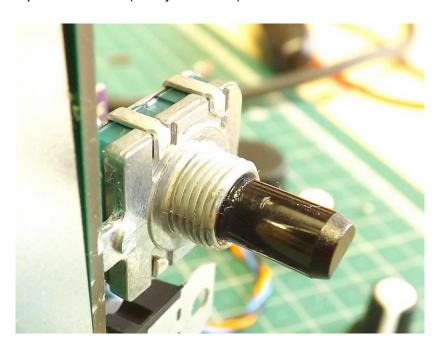




Wire the ON/OFF switch to J1 jumper

⇒ 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.

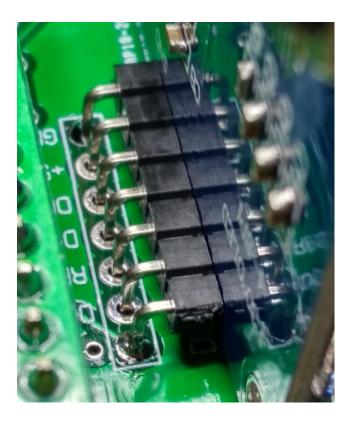
The OLED display is delicate. Handle with care.

OLED display placement needs special attention.

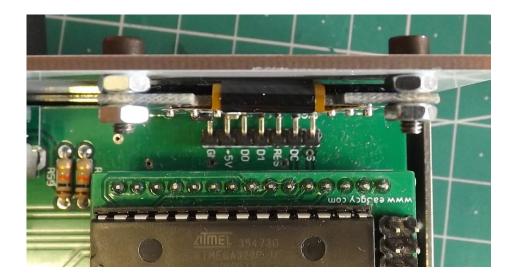
You should solder the OLED so that it fits snugly against the front panel (this is important):

- 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.





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 6 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 <u>DB4020</u> <u>assembly manual.</u>



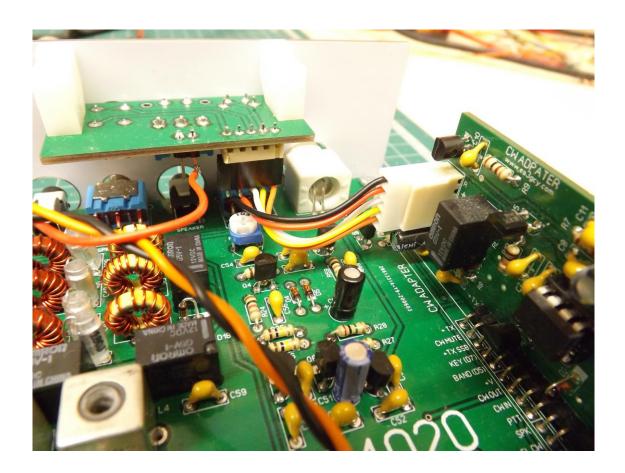




⇒ "CW Interface" wiring.

- 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).



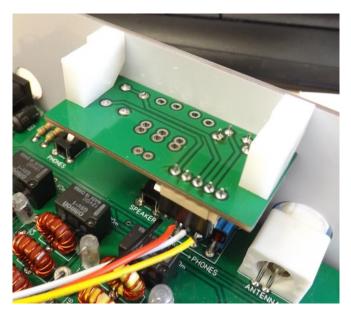
SPECIFIC EGV+ NOTES

⇒ 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.

