

Technical note of 2020-10-01

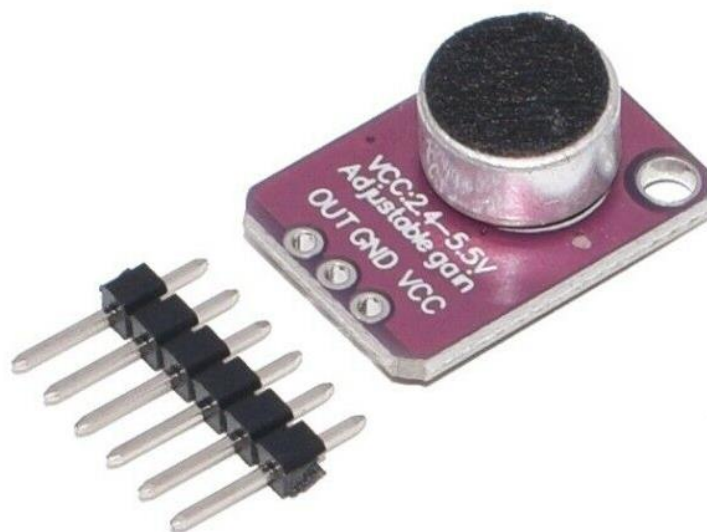
## **MAX4466 Electret microphone module** **for DB4020 and ILERsV3 Transceivers**

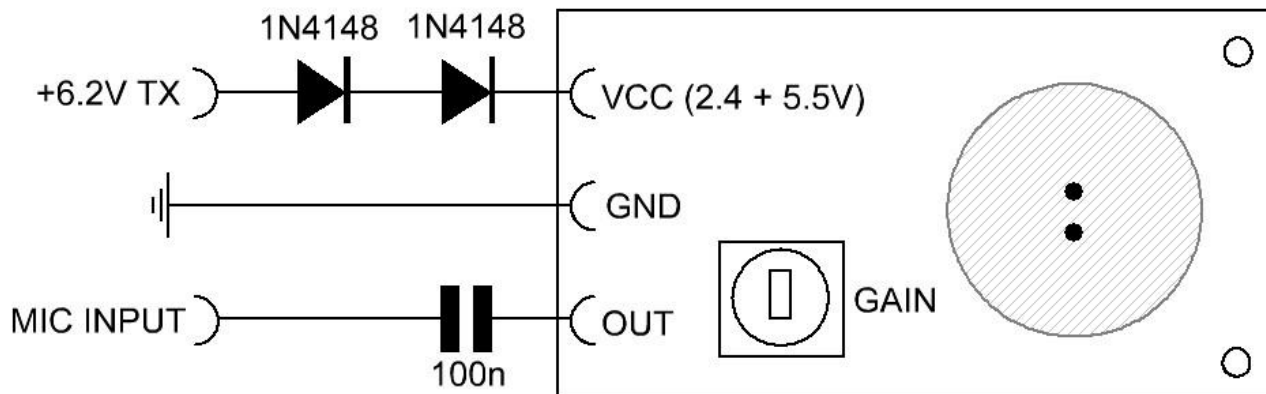
The electret microphone capsule included in the kits has enough gain to drive the DB4020 and ILERsV3 kits. However you may prefer to use some type of preamp to improve modulation when you speak into the microphone.

**It is highly recommended that you pay special attention to the mic type you use.**

It may be advisable to use a mic with a preamp.

We have tested inexpensive module that use MAX4466 Micropower Microphone Preamplifier Maxim © chip with good results.





MAX4466 module

## WIRING

- +6.2V TX The power can be obtained from the voltage + 6.2V in TX through two diodes in series (these reduce the voltage to about 5V).

*DB4020* at the junction of D1, R5 y R7  
*ILERsV3* at the junction of D1, R2 y R3

- GND To the GND connection of the transceiver's microphone input.
- MIC INPUT to the microphone input of the transceiver through a 100n (0.1) capacitor.

## ADJUSTMENT

- Adjust the trimmer of the MAX4466 module to 75% of its travel (clockwise), that is, almost to the end to the right.
- Set the micro “mic-gain” of the transceiver to about half (P1 on DB4020, ILERsV3)

## IMPORTANT NOTES

- From a certain gain level the output power is reduced (the NE602 saturates) the setting of the MAX4466 should be left almost to the minimum and adjusted with the “mic-gain” of the transceiver.
- The gain trimmer of the MAX4466 module goes backwards, increases to the left, decreases to the right).
- It is not recommended to place the MAX4466 module next to the transceiver. Try place it in the microphone container itself.
- Use shielded cable.