

## IC-7760 frequency expansion; MARS mod

After the first investigation concerning the frequency modification the main question was whether the diode matrix is in the RF unit or in the control unit...

**It is in the control unit** and consists of 24 diodes. The picture shows the EUR version without any modification. As it is complicated to access the diodes by detaching all the connectors it would be this time quite difficult to desolder/solder every single diode and attach all the connectors again in order to test the functionality after every step. If you know exactly which one it is, it is of course possible doing it once. But not 16 times... At least not today 😊

Update (2024/12/25): accessing the diode matrix isn't that difficult as expected – by carefully removing the shielding tape on the lower side of the control unit (just remove it on one side) you can solder/desolder the necessary diodes in a convenient way...

Referring to other transceivers the combinations of testing this time are endless as it might be that not just removing one diode will do the „magic“ – it is also possible that it is necessary to add a diode (like in the IC-7300)... So I decided to be a little more patient this time and wait 😊

Final Update (2024/12/28): MARS mod finally done!

BOTH units (RF deck AND control unit) have an equal diode matrix that needs to be modified in the same way by **removing D7315 (control unit) and D4115 (RF deck)**. It opens TX between 100kHz and 60MHz for the EUR model.

Note: take care when disassembling the RF deck that the front and rear panel will not be damaged after having removed all the screws. Place the entire RF deck upside down on a flat surface! It felt like 1000 screws...

