

IC - 705 PTT-Interface



IC-705 PTT-Interface

For operation with GHz transverters, especially for portable operation as e.g. with the BBT, mostly FT290, IC-202 and FT-817 are used. Most of the time they are modified, so that the PTT signal is transmitted as a high impedance "plus" signal over the coaxial cable. The NEW IC-705, which has many advantages compared to the "old" units, cannot easily be modified for this purpose, because the unit is internally built with all boards on top of each other and with shielding plates between the boards. It was therefore considered to realize a small interface, which is plugged on existing sockets of the transceiver. The purely mechanical fixing is done with a M2 screw, which till now was used to fix the rubber cover on the side. The original screw is a M2x4 and is replaced by a M2x8 screw (supplied). The two connectors for power supply and PTT are built on a mechanically stable aluminum plate, also the small electronic board for control. The cover is printed on a 3D printer and is glued onto the aluminum bracket.



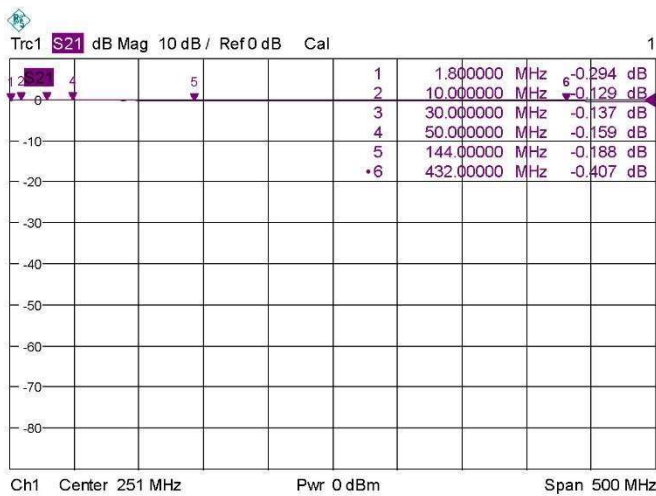
Here you can see the internal structure of the interface. The control board is glued into the angle here, the wiring is done with Teflon stranded wire.

However, the interface only works when the device is operated with an external voltage, because the voltage is not available at any connection when operating with the built-in battery.

A connecting cable to the original BNC RF connector of the IC-705 is attached to the SMA connector, so usually the interface can be kept on (almost) all bands.



Here you can see the bottom of the interface, together with the power supply connector, the PTT connector and the mounting hole.



Here you can see the passband attenuation of the remote feed crossover in the interface.

As you can easily see, the remote feed crossover installed here has a small frequency response, which is 0.4 dB on the 70 cm band. If this attenuation is too large, you should operate the transceiver on 70 cm directly at the RF socket, on all other bands the attenuation values are negligible.

IC – 705 Interface completely ready built (as described above):

Price: 70.-- €, VAT included

Coax connection cable from interface SMA socket to IC-705 BNC socket,

Length plug center to plug center: 270 mm :

Price: 15.-- €, VAT included