

## How to add a TX-inhibit to the IC-275 ?

I was searching for a solution to add a TX-inhibit to the IC-275H. You may ask what is a TX-inhibit ? A TX--inhibit is a connection or a modifications that releases TX after a time when pushed PTT. For what is this needed ? It's really needed to protect your Preamp or LNA against unwanted HF for not destroying the FET.  
Normally this is done by switching the TX-inhibit in combination with a sequencer.

Here is listed what I got as reply for asking in moonnet or vhf-contesting.net

Aloha Erwin,

I put small relay in the PTT on mine. I would be interested if you find the correct internal clamp point...please let me know. The relay works good, but is an addition I too would rather not have to trust.

Jeremy  
www.w7eme.org

It's a long time ago I digged into an IC-275H. I believe your solution for a TX-inhibit lies somewhere in IC14 which is a 4011 that controls the key and PTT input. Just keeping one of the outputs high or low (just switch the state) will do the trick. If you are not getting some other solution via MoonNet I can dig into the schematics to trace it back.

73 Frank/PA4EME

Hi Erwin,

As far as I'm concerned, there is only one way to be sure that the transmitter will not turn on before everything else is properly switched. And, that is to use a sequencer which turns the transmitter PTT on last, after everything else has been switched. The disadvantage of this system is that you cannot use VOX or QSK. The advantage is that you will never blow anything up because something came on before it was supposed to.

Good luck with this!

73,  
Paul, K7CW

Hi, Erwin.

I have this radio also. One way that does not involve modifyng the radio is to build a connectorized jumper that goes between the mic plug and the front panel mic jack. You can pass the audio and bias through but interrupt the PTT line with a switch, insert a footswitch, use the output of a sequencer, etc.

One caution is that the transmitter tends to put out an initial spike at full power even if you have the output dialed down to match the input level of a transverter, for example. I believe there's a mod for that, but I have not done it.

Good luck, and I'd like to hear what you come up with.

73,Marty N6VI

Hi Erwin

You did not mention what your sequencer was doing but if by chance you dont use one, please consider the benefits of knowing your 275 is not transmitting until enabled by the sequencer. Plug mike and key into sequencer and your preamp is protected. Unless you work that way nothing is safe.

73

VK1DA Canberra Australia

Quick and dirty -- (sort of...) Probably would have to get inside the radio and pull out hte PA B+ to an external port. You can then add an "inhibit relay" that is pulled in with your sequencer to enable TX, and send B+ back into the radio.

Shouldn't be a difficult mod.

73,

- Josh / KF4YLM

***DK5EW final solution:***

**I use a 4 stage sequencer and at the last stage I release the TX-inhibit to ground. You have to use the ALC function of the IC-275. Go to connetor ACC1 and use PIN 8 ALC. It is needed that you give there a voltage of ~+13Vdc. As long this +13Vdc is present on PIN 8 the IC-275 is not TXing. Releasing this +13Vdc by sequencer to ground the IC-275H is TXing. Please see your IC-275 manual page 15 (connection of a linear amp.)**

For me this solution is working fine ! Please note that without a sequencer this will not work propper. I also noticed that in FM mode there is a short TX ping when pushing PTT before the sequncer comes in action. For PTT I use also ACC1 plug PIN 3 send switching to ground.

**PLEASE NOTICE:**

All modification you do on your IC-275 is on your own risk !  
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