

## Fan Mod - Cool as ice

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READ ALL OF IT BEFORE PREFORMING THE MOD!

Use a baby thermometer ( the electric kind w/ the digital readout ) and see just how hot your rig is running before preforming the mod, I know most all of my readings were over 106F then the thermometer errored out as the temp was too high.

Tempurature Measurements were made with a baby-tempurature thermometer ( sorry its all I had at the time ).

Heres the Proof!

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top - left front 94.6F  
top - left rear 103.8F  
top - right front N/A (below 85.5F unable to get reading)  
top - right rear 92.7F

Right side front 90.6F  
Right side rear 91.5F

Left side Front 95.0F  
Left side Rear 98.1F

After cw keying for aprox 5 min continous duty the heat generated by the IC-7000 did rise enough to enable to the temp control circuit. Heres the good news!

Once the temp control circuit kicks in, the fan goes into high-rpm mode!!! Then returns to 'normal' operation with the 2W / 100ohm resistor voltage.

So with this mod, you get a dual speed fan without any additional modifications!!

Forgot to mention, when you goto solder the lead to the red wire of the fan, please place a rag or something undeneath the area you will be working in ( its pretty tight ) to prevent any unwanted solder dripping down onto the main board.

When closing everything all up, there is a little pink sticky pad ontop of the cover unit to access the mars/cap and tvro mod. Place your wire so its right on top of the sticky pad. Seemed to be the best place for it at the time.

Options, the Red wire from the fan connecter to the main board could be snipped between the connector and the solder joint to avoid any complications with the temp circuit enabling.

Additionally, the back left of the rig, still feels warm to the touch but its more of a luke-warm, instead of what it was previously which was excessivly hot. The back right, front left and front right all feel cool to the touch.

Im sure there are better ways of preforming this modification, although just stealing 0.14A from the 12v+ DC on the tuner port seemed to make the most sense, since an LDG Tuner only uses 300mA when in operation.

Although I do not know how this will affect the autotuner as I do not have one, I am unable to test this modification with an autotuner, such as the LDG Z11 or Z100.

Your Icom 7000 Running Hot? ... Heres the FAN mod!  
( This has been untested with an inline tuner )

1. Tuner Lead #3 is +12v DC, tap into Tuner Lead #3 with a wire ( theres enough room to simply slip a solid copper wire into the crimp for lead #3 )
2. Add a 100ohm Resistor at the other end of the solid copper wire ( a 100ohm pot will work if you wish to be able to vary the speed of the fan )
3. Strip the insulation of the red wire to the fan back just enough to make a solder connection to the 100ohm resistor / 100ohm pot. We used a lighter to burn away a bit of the insulation in the middle of the wire b/t where it connects to the board and where it connects to the fan itself.

Wrap it all up with some electrical tape to prevent grounding. and Whala! Your Done!!

Tuner Port on back of the IC-7000

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^  
1  
2  
3 +12v DC -> wire -> 100ohm resistor -> fan red wire  
4  
-
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A 100ohm Pot could be used instead of a resistor, values below the 100ohms will increase fan speed.

0 resistance - sounds like an airplane.

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