Icom 7300 Easy Transmitter Settings For Digital Operation

Icom 7300 Easy Transmitter Settings For Digital Operation is a followup article to my last post, Icom 7300 Receiver Settings For Digital Operation. In this post there are some additional receiver settings. I have a couple of YouTube videos on transmitter settings, but I hope to simplify and produce one concise video that includes the transmitter settings in the Icom 7300 menu, operating system and then popular software (WSJT-X and DM780).

Let me mention at the onset, there are many different approaches to doing this. This is a basic tutorial, simple and easy. Follow this and you won't have any complaints about having a wide signal or using too much power.

If you have a suggestion(s), please feel free to comment below.

USB-D

On the Icom 7300 we use USB-D for digital operation. It can be a little tricky at first getting in and out of this mode. Experiment some and you'll see how it works. If you are in USB mode it's very easy. To set: Tap the USB button on the LCD with your finger and when the "MODE" menu comes up, tap the DATA button.

ALC

In digital operation there has always been the issue of ALC causing poor signal quality. With the Icom 7300 it is less of an issue. I've found that I don't have any ALC deflection most of the time and when I do, it isn't a bad thing with this transceiver. For more information on this see Page 4-31 of the full manual. It states, "When operating in the SSB data mode, adjust the device's output level within the ALC zone."

Some more information on this exists at [AB4OJ.com.](AB4OJ.com.) There is no ambiguity in what he says. Good read!

Icom 7300 RF POWER

Back in the days of Windows 95 and my old Kenwood transceiver I didn't set my output power on the radio to 100% or 100 watts. I was too scared of it, but I haven't had any problems using the Icom 7300 and I've used Windows 7,10, MacOS, and Linux. I set the RF POWER on the radio to 100%. To set: Push in the MULTI knob on the radio. Tap RF POWER with your finger, using the MULTI knob again, turn it and and set RF POWER to 100%. Chances are you already have it there.

Icom 7300 Internal Menu Transmitter Settings

Under MENU>SET>Connectors there is an important transmitter setting, but let me mention a receiver setting first.

ACC/USB AF Output Level controls the amount of audio the Icom 7300 sends to your software. Mine is set to 50%. Turn it up too high and the waterfall in DM780 will have too much noise. Turn it down too low and you will have a dark waterfall. It's worth experimenting with. When adjusting, look at your DM780 waterfall and adjust the level up or down. There is a short delay for the adjustment to appear in the waterfall. You won't notice it as much in the WSJT-X waterfall, but you'll see a

difference in the receiver level meter in the bottom left hand corner.

USB MOD Level: This is important to your power output and having it too high will cause problems (possibly too much ALC). Too low and you won't have any power output. Mine is 40%.

The other settings under "Connectors" will be in the video.

Operating System And Transmitter Settings

In the video below I'm using Windows 10 Pro. I almost always use two cables, a CI-V cable for rig control and a USB cable for the digital modes. However, this is not important here because we are mainly dealing with the USB cable, USB Audio CODEC and digital mode operation (audio to and from the 7300).

In Windows 10 "Playback devices" the USB Audio CODEC controls the amount of audio going to the Icom 7300. This is similar to the USB MOD Level in the radio. Too high, it'll be a problem and too low, you won't have power output. Mine is 40.

Let me mention "Recording devices" here also and the USB Audio CODEC. "Recording devices" controls the audio coming from the Icom 7300 to your software. This is similar to the ACC/USB AF Output Level in the radio. Set it too high, your waterfall will have too much noise, too low and it'll be a dark waterfall. Mine is set to 40.

Ham Radio Software For Digital Operation

In the video below there are a couple of examples, WSJT-X and DM780. Setting the power output is fast and simple using just the power slider.

So, if I'm using PSK31 and have my power at 20 watts and I'm not making any contacts, it's very easy to move the slider up and increase power to 30 watts. There is a great example of

this in the video.