

## FreeDV Configuration for IC-7300

### PC:

**OS:** W10 Pro

**FreeDV Audio Sample Rate:** Must be the same throughout Config. Example 44100.

**Headset:** USB is Preferred.

Microphone (#- USB Audio Device)

Speaker (#-USB Audio Device).

### CODEC:

Speakers #- (# - USB Audio CODEC)

Microphone (# - USB Audio CODEC)

**For more information:** <http://rowetel.com/downloads/freedv/>

**FreeDV reporter** <https://freedv-reporter.k6aq.net/>

## **IC 7300 Configuration**

**1) Depress Function Button:**

- a. P.AMP/ATT OFF
- b. AGC Fast
- c. NOTCH OFF
- d. NB OFF
- e. NR OFF
- f. IP+ OFF
- g. VOX OFF
- h. COMP OFF
- i. ¼ OFF
- j. MON1 OFF

**2) Use Preset to select FreeDV or other Digital Modes**

**3) Hit MENU Button (Bottom Left)**

**4) Select “2”**

**5) Select FT8 PRESET**

**6) Select 3 to configure for FreeDV. See settings below. Make sure to follow the last step and select YES to save.**

## IC-7300 Preset 3 Configuration

-----PRESET (3)----- 1/8

Preset Name	FreeDV DigiVoice
<input checked="" type="checkbox"/> Mode	USB-D
<input checked="" type="checkbox"/> Filter	FIL2
<input checked="" type="checkbox"/> Filter BW	1.5K

-----PRESET (3)----- 2/8

<input checked="" type="checkbox"/> Filter Type (HF)	SHARP
<input checked="" type="checkbox"/> Filter Type (50M-)	SHARP
<input checked="" type="checkbox"/> ACC/USB Output Select	AF
<input checked="" type="checkbox"/> ACC/USB AF Output Level	50%

-----PRESET (3)----- 3/8

- ACC/USB AF SQL OFF (Open)
- ACC/USB IF Output Level 50%
- USB MOD Level 50%
- DATA MOD USB

-----PRESET (3)----- 4/8

- SSB-D TX Bandwidth 500-2500
- DATA OFF MOD MIC,ACC
- COMP OFF
- SSB TBW NAR

-----PRESET (3)----- 5/8

- SSB TX Bandwidth 500-2500
- USB SEND OFF
- USB Keying (CW) OFF
- USB Keying (RTTY) OFF

-----PRESET (3)----- 6/8

- Inhibit Timer at USB Connection ON
- CI-V Baud Rate 19200
- CI-V Baud Address 94h
- CI-V Tranceive OFF

-----PRESET (3)----- 7/8



USB Serial Function

CI-V



CI-V USB Port

Unlink from [REMOTE]



CI-V USB Baud Rate

115200



CI-V USB Echo Back

ON

-----PRESET (3)----- 8/8

<<Write>>

Write?

YES

NO

**Run Preset**      Depress IC-7300 Menu Button    Select “2”; Select **FT8 PRESET**; Select **Preset 3**;    Load preset memory? **Select YES**



**Radio File: Save your radio configuration. Example: FDV20200307\_01**

**Radio Settings**      **Mode: Manually change Mode from USB-D to LSB-D for 160, 80 and 40 meters.**

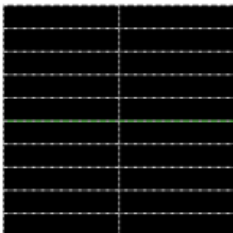
**RF Power: 100%** (Most recommend a power level of 30 watts, but I have found that ICOM engineers limit the power in the IC-7300 in DATA mode to between 30 & 40 watts to prevent damage to the finals.)

# FreeDV – Audio Configuration

Audio Config ×

- Input To Computer From Radio

Device	ID	API	Default Sample Rate
Microsoft Sound Mapper - Input	0	MME	44100
Microphone (5- USB Audio CODEC)	1	MME	44100
Microphone (USB Audio Device)	2	MME	44100
Digital Audio (S/PDIF) (High De	3	MME	44100
none			

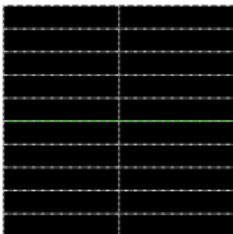


Rec 2s

Device: Microphone (5- USB Audio CODEC) (1)      Sample Rate: 44100

- Output From Computer To Speaker/Headphones

Device	ID	API	Default Sample Rate
Microsoft Sound Mapper - Output	4	MME	44100
Speakers (5- USB Audio CODEC )	5	MME	44100
Speakers (USB Audio Device)	6	MME	44100
VX2376 Series-1 (NVIDIA High De	7	MME	44100
MP59HT-0 (2- NVIDIA High Defini	8	MME	44100
Digital Audio (S/PDIF) (High De	9	MME	44100
none			



Play 2s

Device: Speakers (USB Audio Device) (6)      Sample Rate: 44100

Receive Transmit API Info

Refresh      OK      Cancel      Apply



Audio Config X

Input From Microphone To Computer

Device	ID	API	Default Sample Rate
Microsoft Sound Mapper - Input	0	MME	44100
Microphone (5- USB Audio CODEC)	1	MME	44100
Microphone (USB Audio Device)	2	MME	44100
Digital Audio (S/PDIF) (High De	3	MME	44100
none			

Rec 2s

Device: Microphone (USB Audio Device) (2)      Sample Rate: 44100

Output From Computer To Radio

Device	ID	API	Default Sample Rate
Microsoft Sound Mapper - Output	4	MME	44100
Speakers (5- USB Audio CODEC )	5	MME	44100
Speakers (USB Audio Device)	6	MME	44100
VX2376 Series-1 (NVIDIA High De	7	MME	44100
MP59HT-0 (2- NVIDIA High Defini	8	MME	44100
Digital Audio (S/PDIF) (High De	9	MME	44100
none			

Play 2s

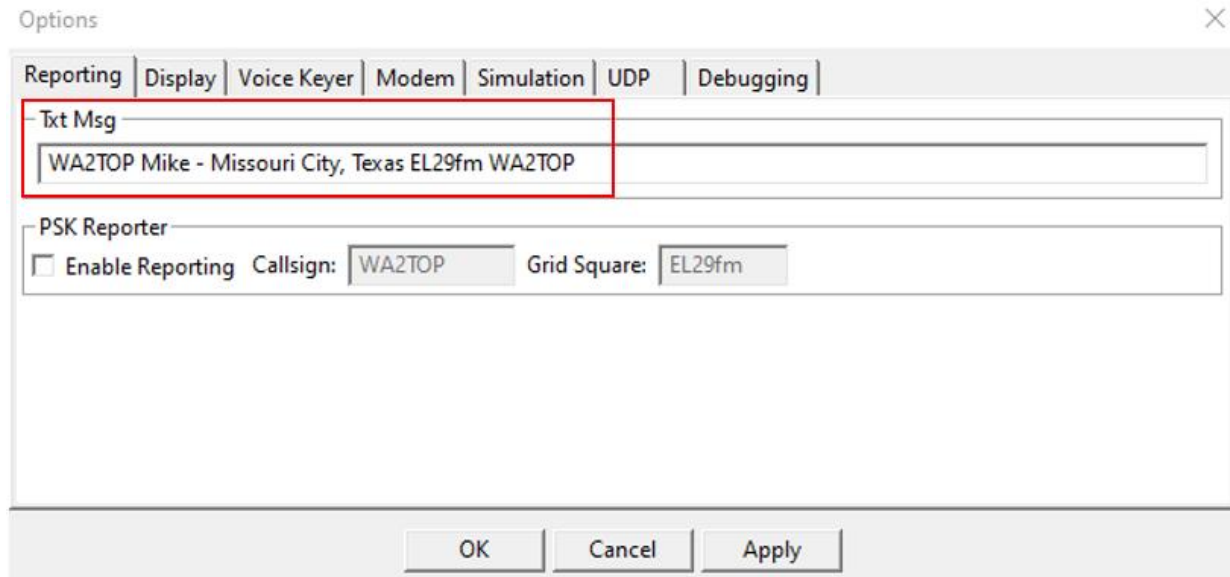
Device: Speakers (5- USB Audio CODEC ) (5)      Sample Rate: 44100

Receive Transmit API Info

Refresh      OK      Cancel      Apply

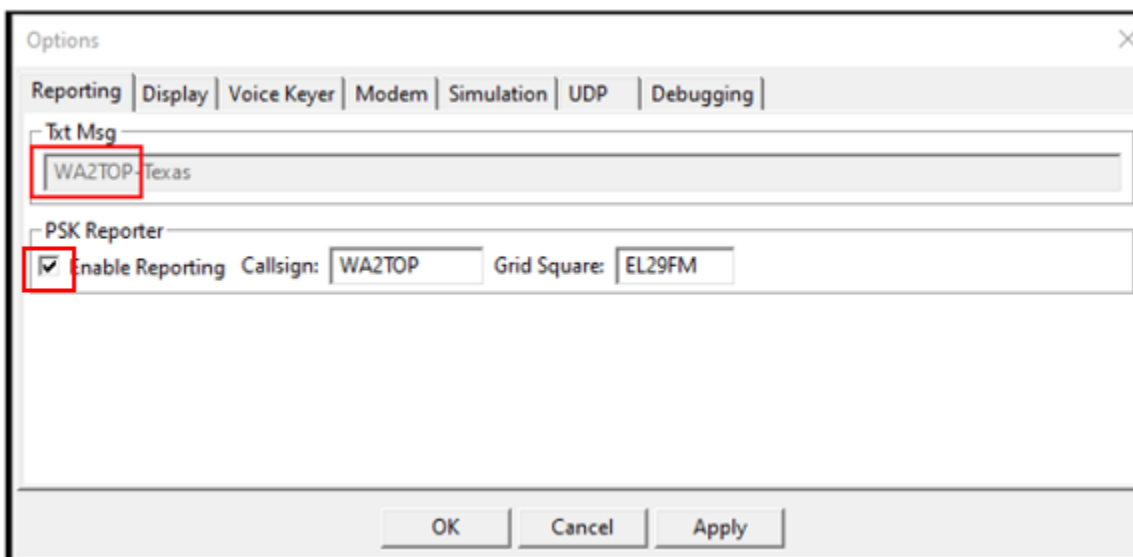
## FreeDV-Options

Transmits Text Msg over the air along with voice

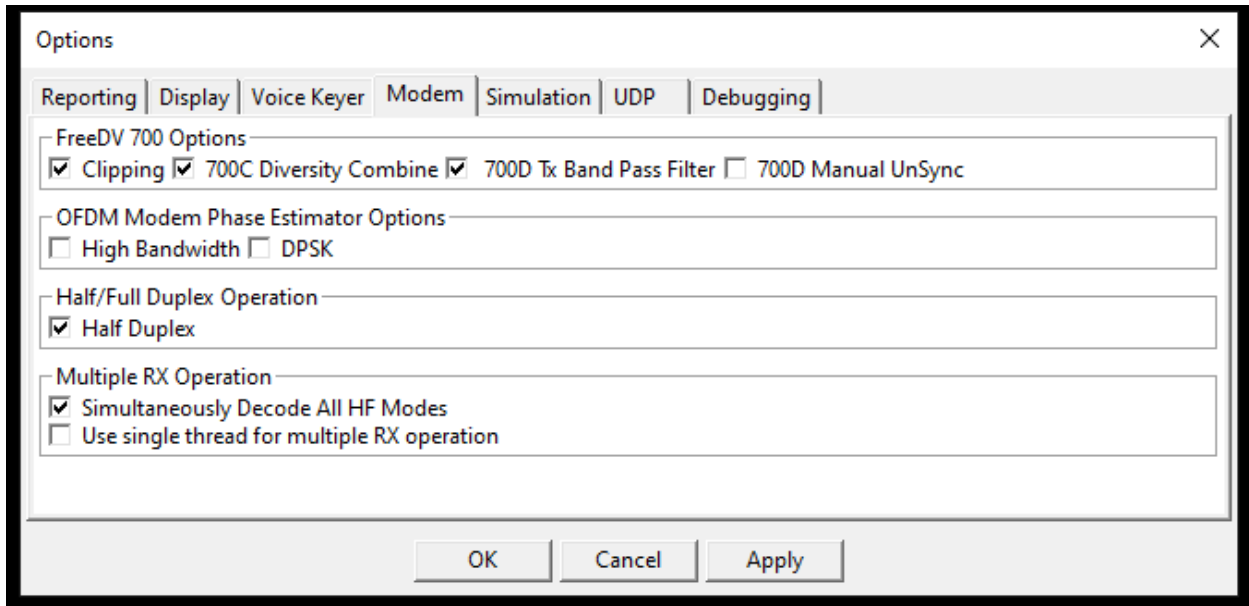


**OR**

- 1) Sends your info to PSK Reporter
- 2) Transmits Voice and Call Sign Only over the air as TEXT

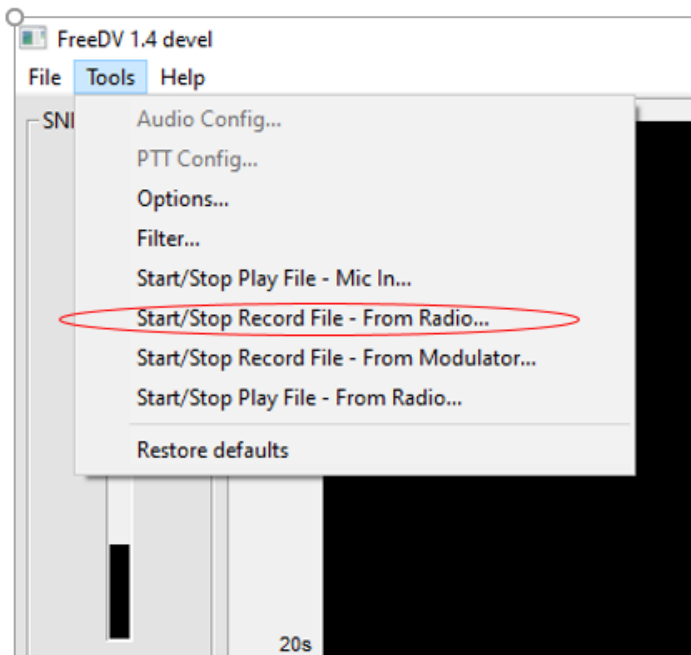


## Check the following boxes



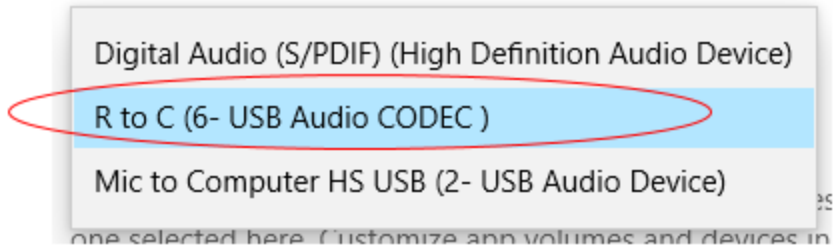
## Start/Stop/Record File – From Radio

Use this file to make a FreeDV or Analog recording for the station you are receiving.

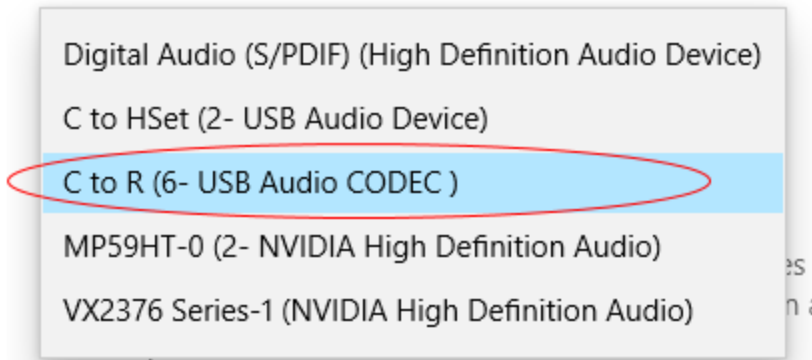


## PC Config

### Input



### Sound



## Check the following boxes

PTT Config ✕

VOX PTT Settings

Left Channel Vox Tone

Hamlib Settings

Use Hamlib PTT

Rig Model: Icom IC-7300

Serial Device (or hostname:port): COM7

Radio Address: 94

Serial Rate: 115200

Serial Params:

Serial Port Settings

PTT Port

Use Serial Port PTT

Serial Device:

Use DTR  DTR = +V

Use RTS  RTS = +V

PTT In

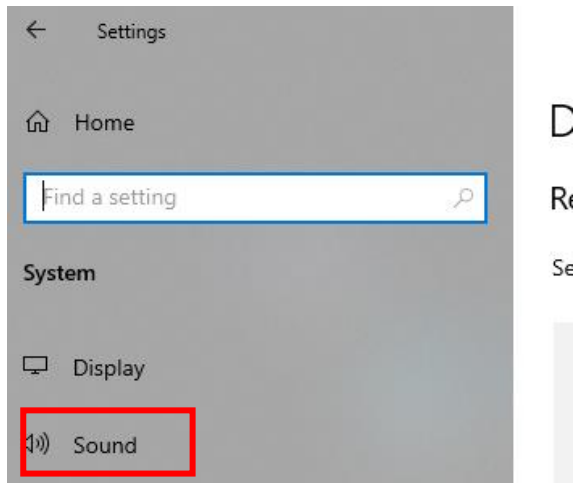
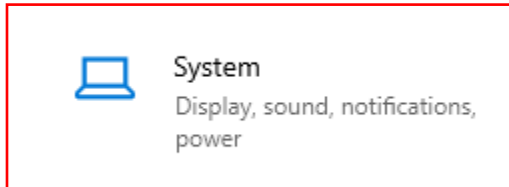
Enable PTT Input

Serial Device:

CTS = +V

## Windows 10 configuration:

Start\Settings\System\Sound Use the drop downs to "Choose your Output and Input devices"



## Sound Output Headphones (Speakers)

Sound

Output

Choose your output device

Headset Earphone (Jabra EVOLVE LI...

Certain apps may be set up to use different sound devices than the one selected here. Customize app volumes and devices in advanced sound options.

[Device properties](#)

Master volume



[Manage sound devices](#)

## Sound Output CODEC

Sound

Output

Choose your output device

Speakers (3- USB Audio CODEC )

Certain apps may be set up to use different sound devices than the one selected here. Customize app volumes and devices in advanced sound options.

[Device properties](#)

Master volume



[Manage sound devices](#)

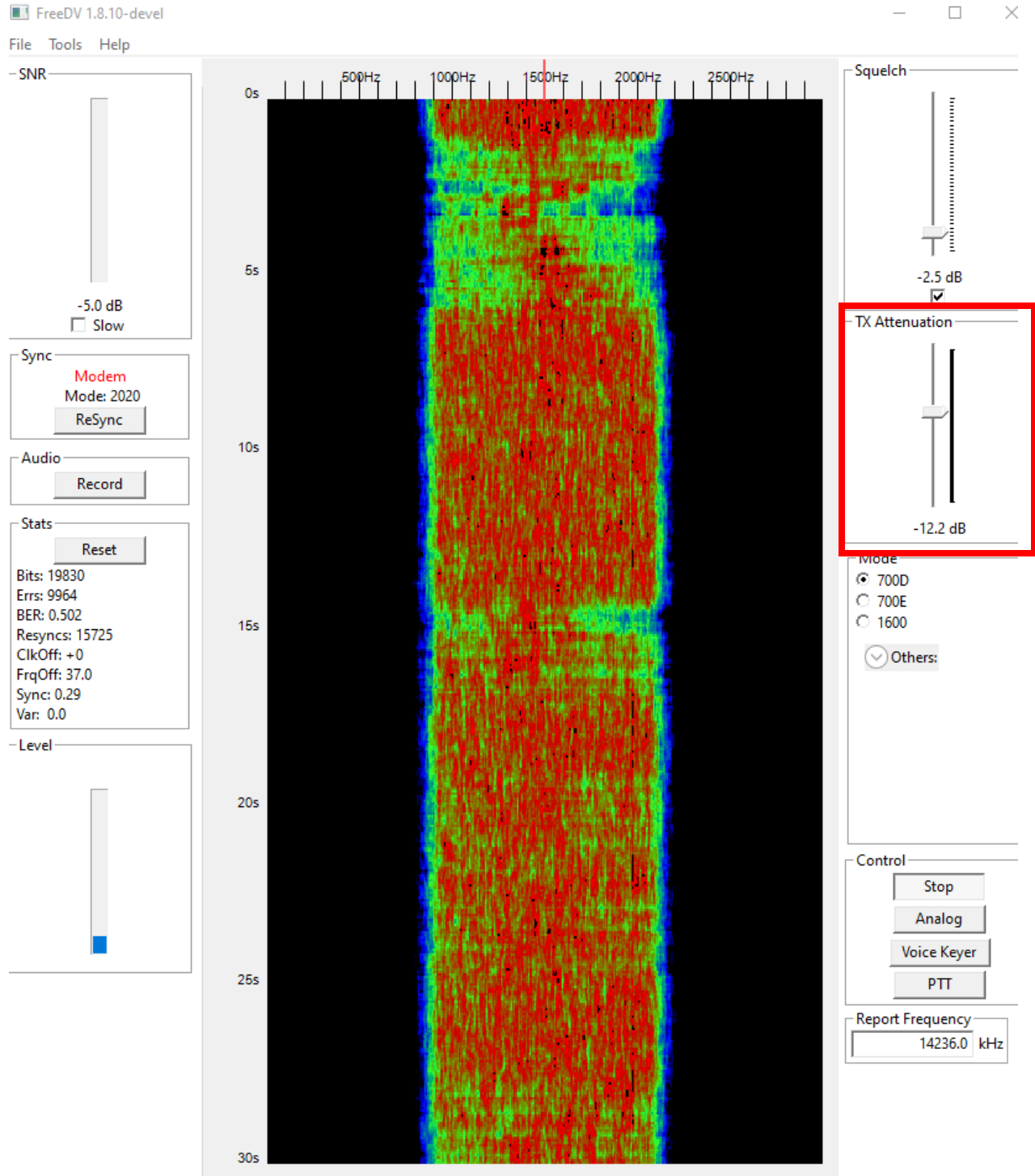
**Transmit into dummy load.**

**Adjust audio level for 1 bar of ALC on the IC-7300.**

**Adjust level for best TX audio level in FreeDV. Level indicator is at the lower left of display.**



or





## **Sound Microphone (3-USB Audio Device)**

### Input

Choose your input device


Headset Microphone (Jabra EVOLVE... ▾)

Certain apps may be set up to use different sound devices than the one selected here. Customize app volumes and devices in advanced sound options.

[Device properties](#)

Test your microphone



 Troubleshoot

[Manage sound devices](#)

## **Device Properties for Microphone (3-USB Audio Device)**

### Device properties



Headset Microphone

Rename



Disable

### Volume




68

Start test

## Sound Microphone (3-USB Audio CODEC)

### Input

Choose your input device


Microphone (3- USB Audio CODEC ) 

Certain apps may be set up to use different sound devices than the one selected here. Customize app volumes and devices in advanced sound options.

[Device properties](#)

Test your microphone



 Troubleshoot

[Manage sound devices](#)

## Device Properties for Microphone (3-USB Audio CODEC)

### Device properties

  Rename

Disable

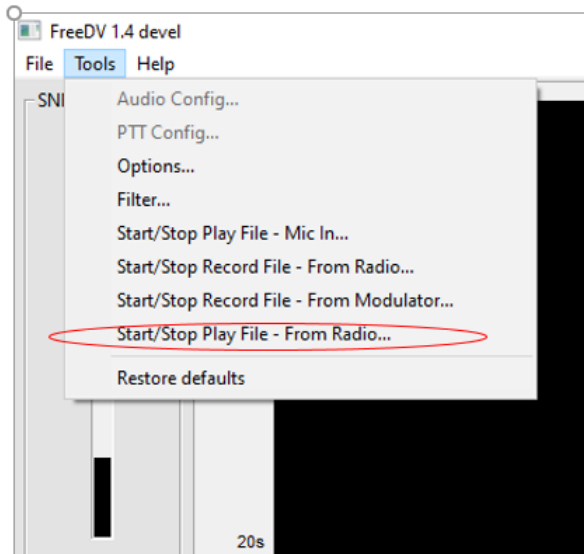
### Volume



Start test

## Start/Stop/Play File – From Radio

Use this option to play a previously recorded file. For example, a recording of one of your transmissions sent to you by another station via email. Format - \*.wav or \*.raw



## Start/Stop/Record File – From Radio

Use this file to make a FreeDV or Analog recording for the station you are receiving.

