



# ELAD Application Notes AN-003

## Using FDM-DUO with WSJT-X (Ver. 1.8.0)

### Contents

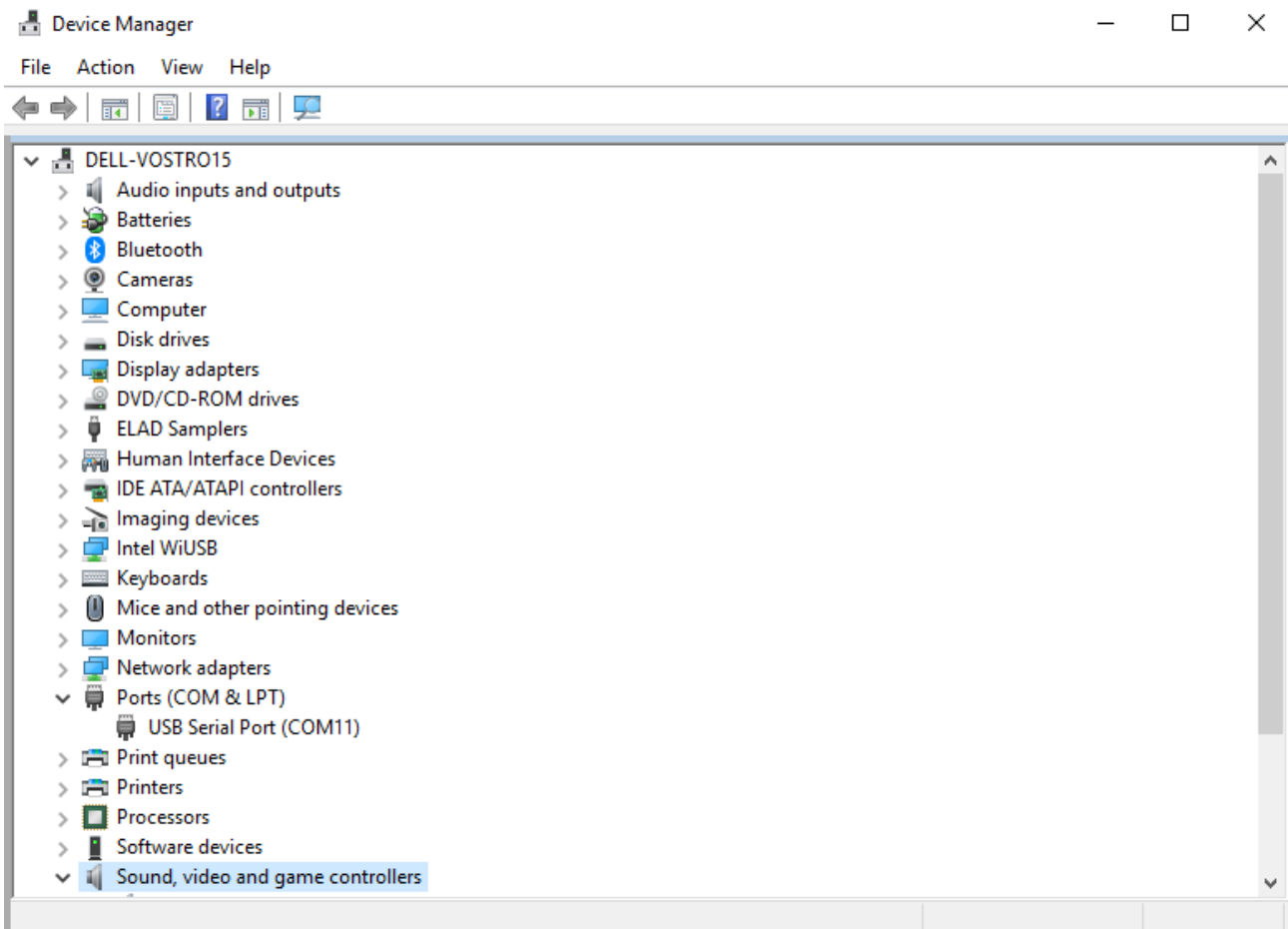
Introduction.....	2
Pre-requirements .....	2
1 WSJT-X first look.....	5
2 WSJT-X settings.....	6
3 Receive and transmit.....	10

## Introduction

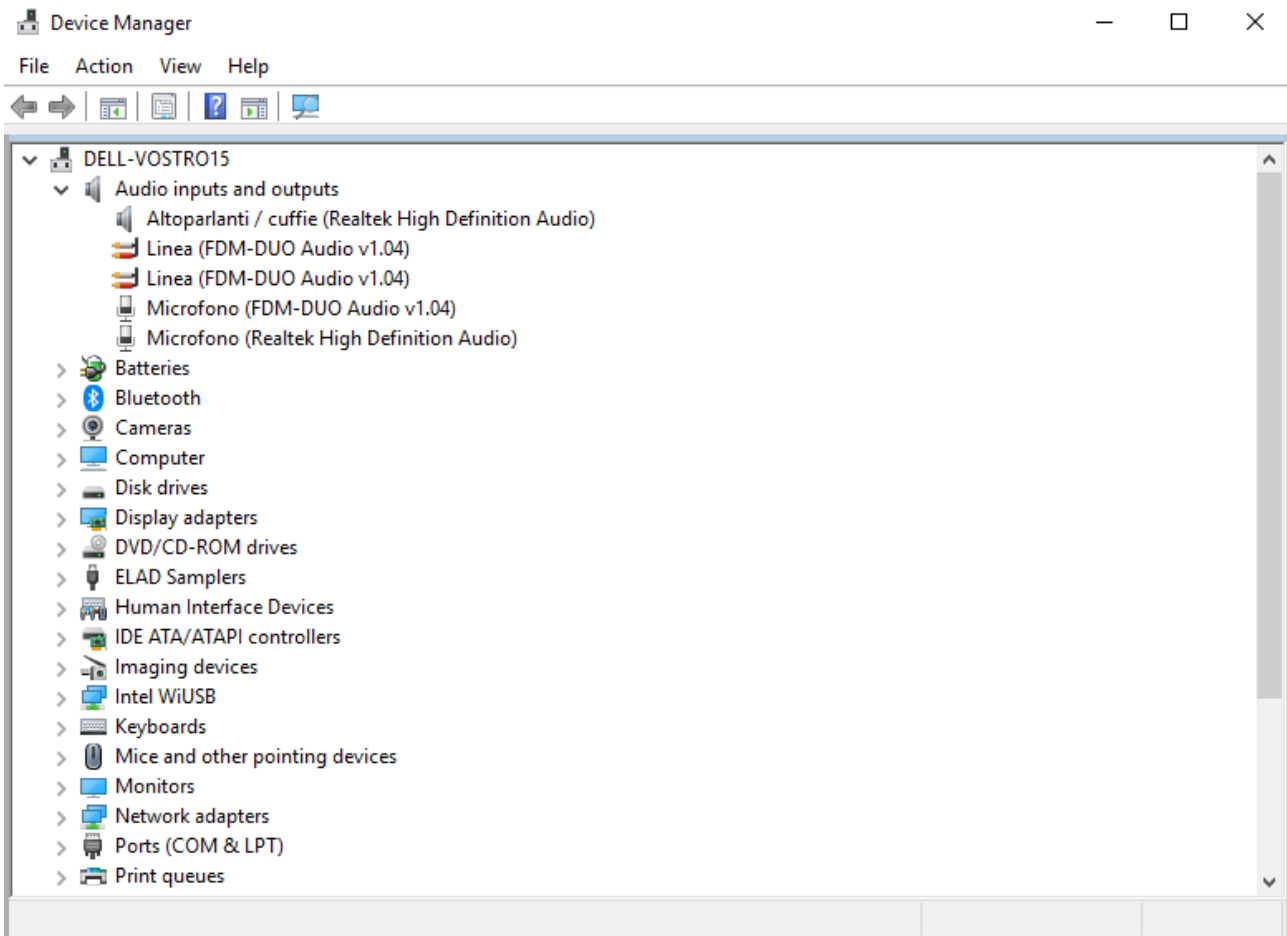
This application note describes how to use FT8 Protocol using WSJT-X and FDM-DUO.

## Pre-requirements

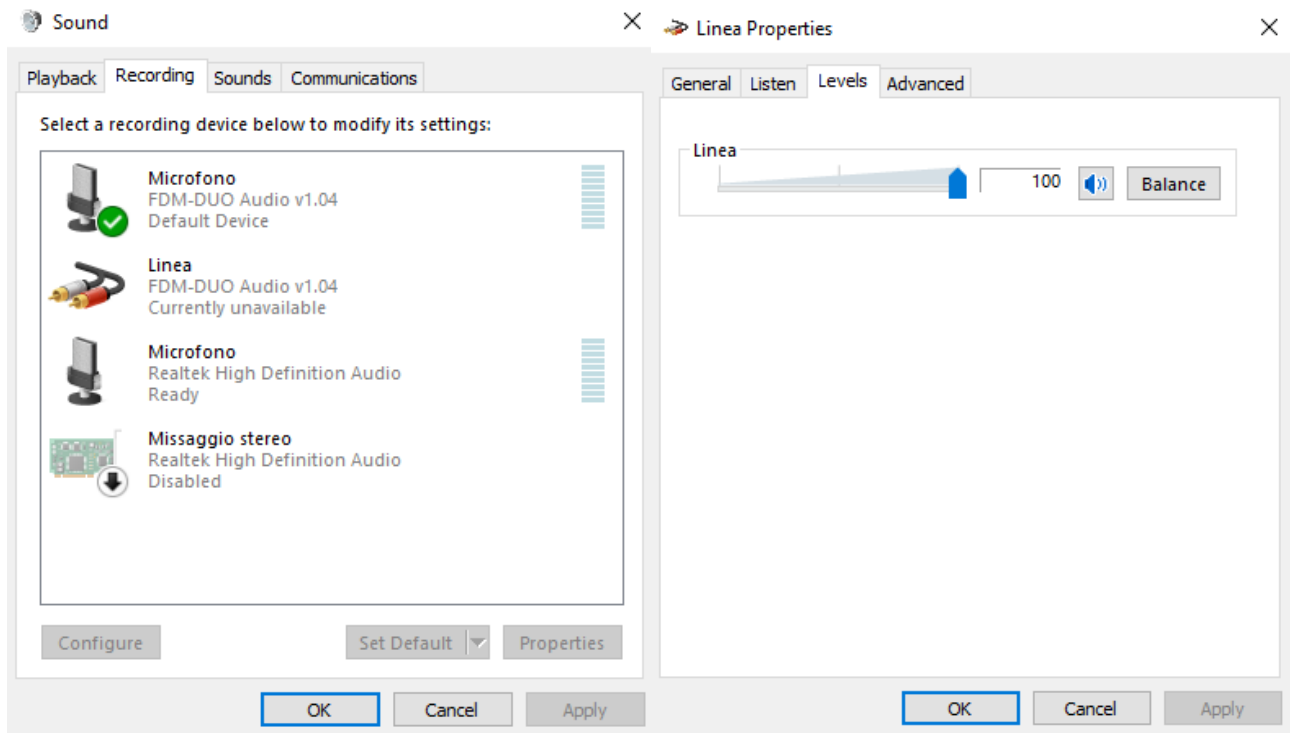
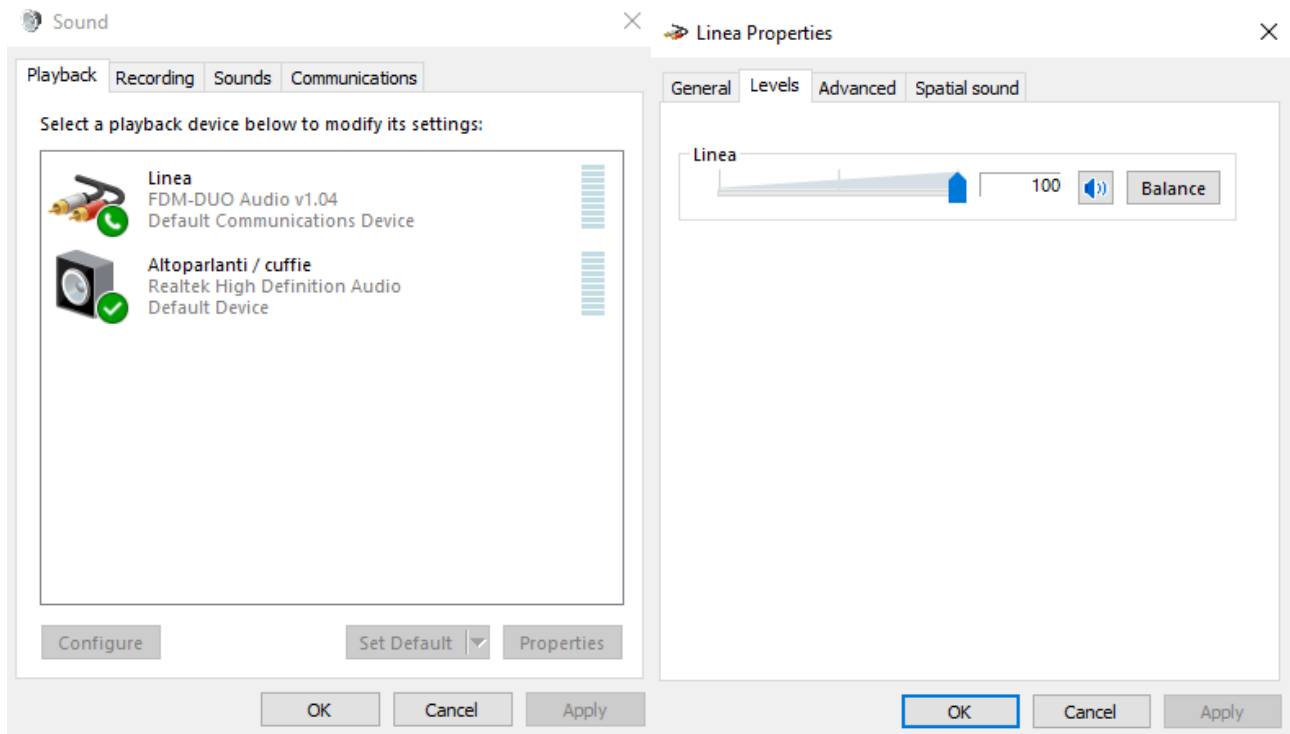
USB CAT drivers has to be installed on the computer you are using, if you have more than one you can disconnect and reconnect the USB CAT cable and find the one for the CAT command:



Check if the computer detects the input and output audio lines of the FDM-DUO:

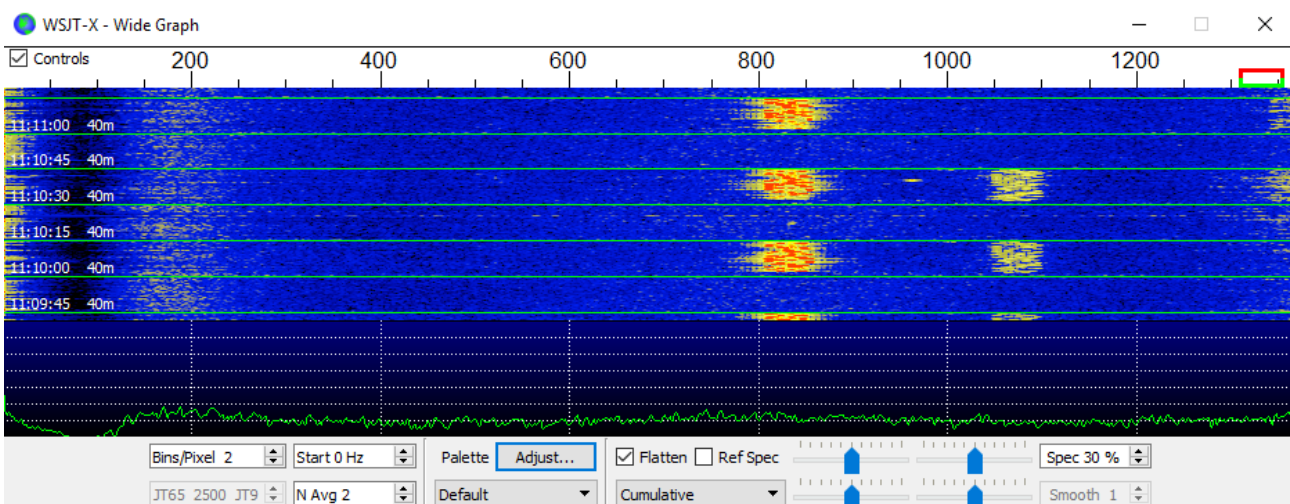
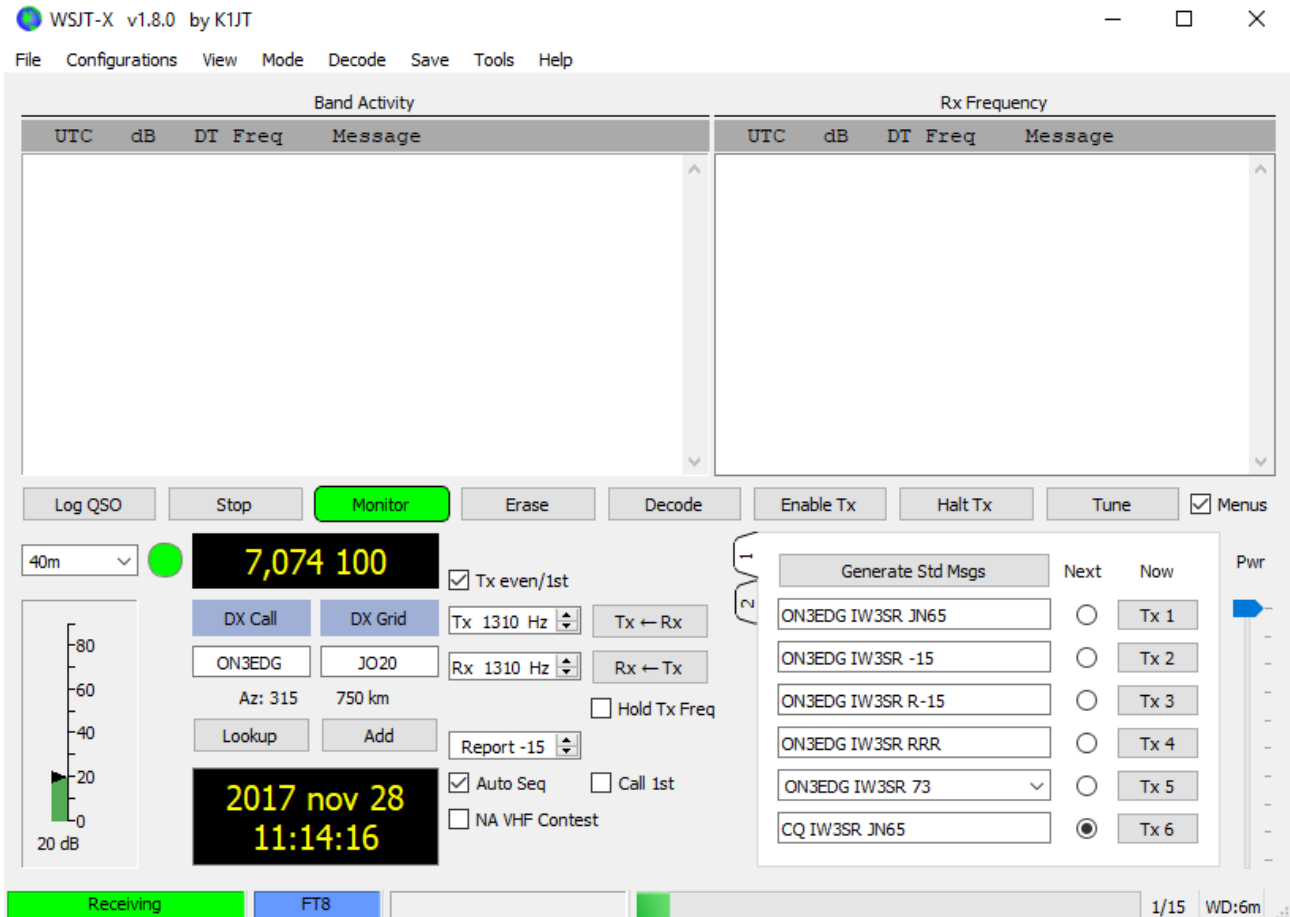


Check also the play and record's volume:



# 1 WSJT-X first look

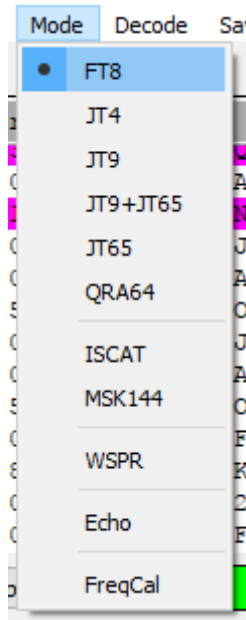
When the installation of the software is finished the software will show this 2 windows:



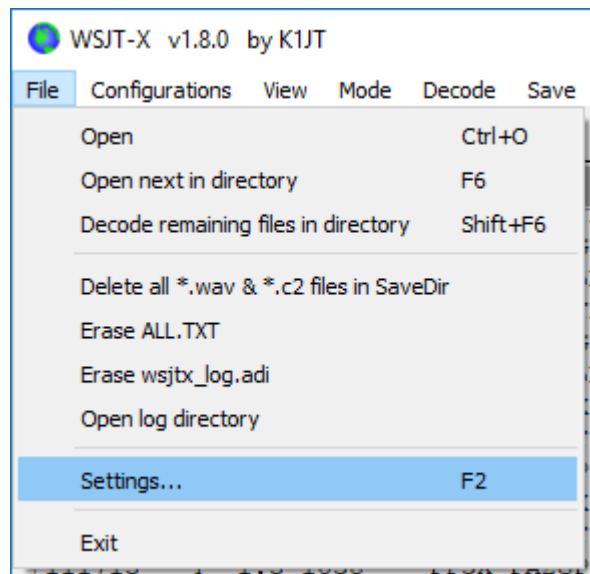
If the software shows these windows you did the installation properly, otherwise it's necessary set WSJT-X up.

## 2 WSJT-X settings

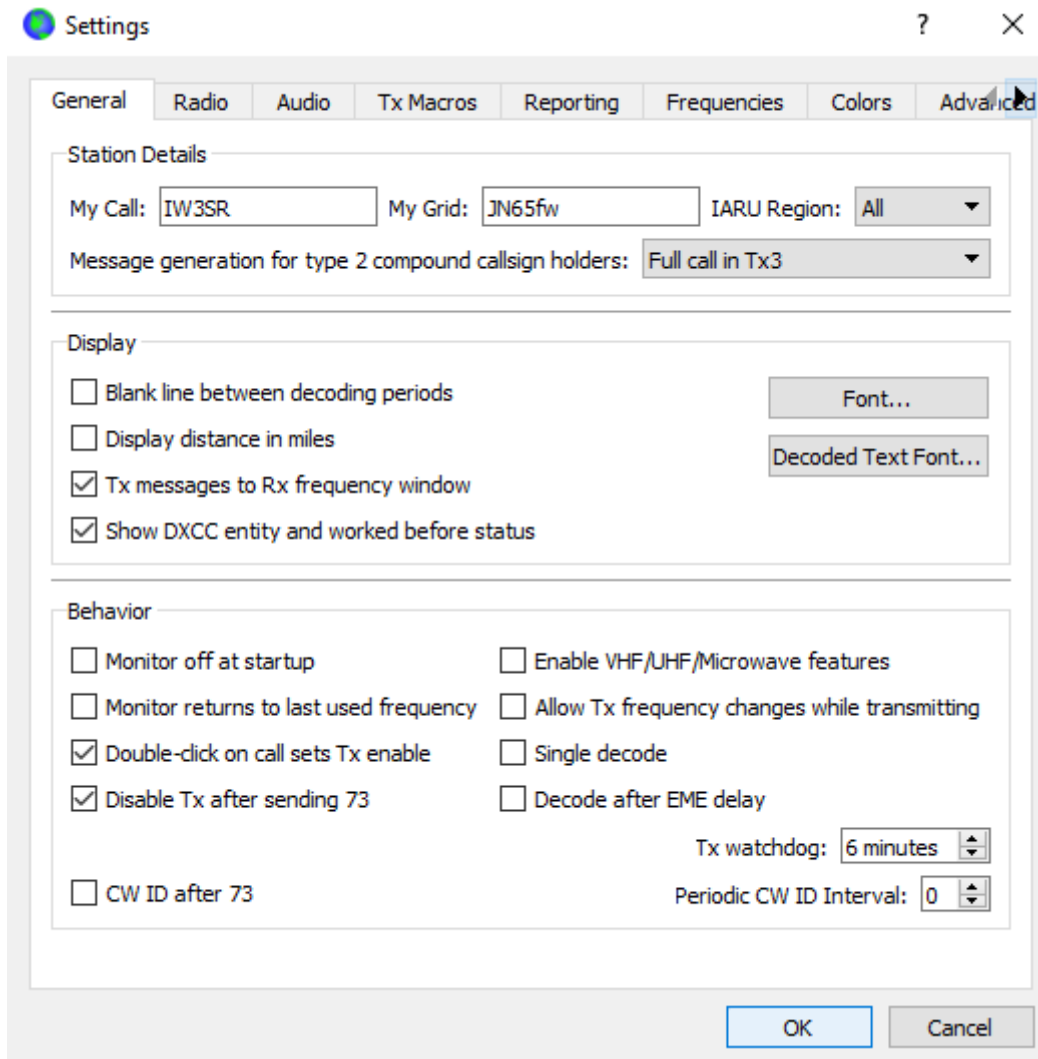
The default transmission mode is JT9, so it needs to be changed into FT8.



After that we have to set the DUO to work with the program. To do this we have to go to settings:

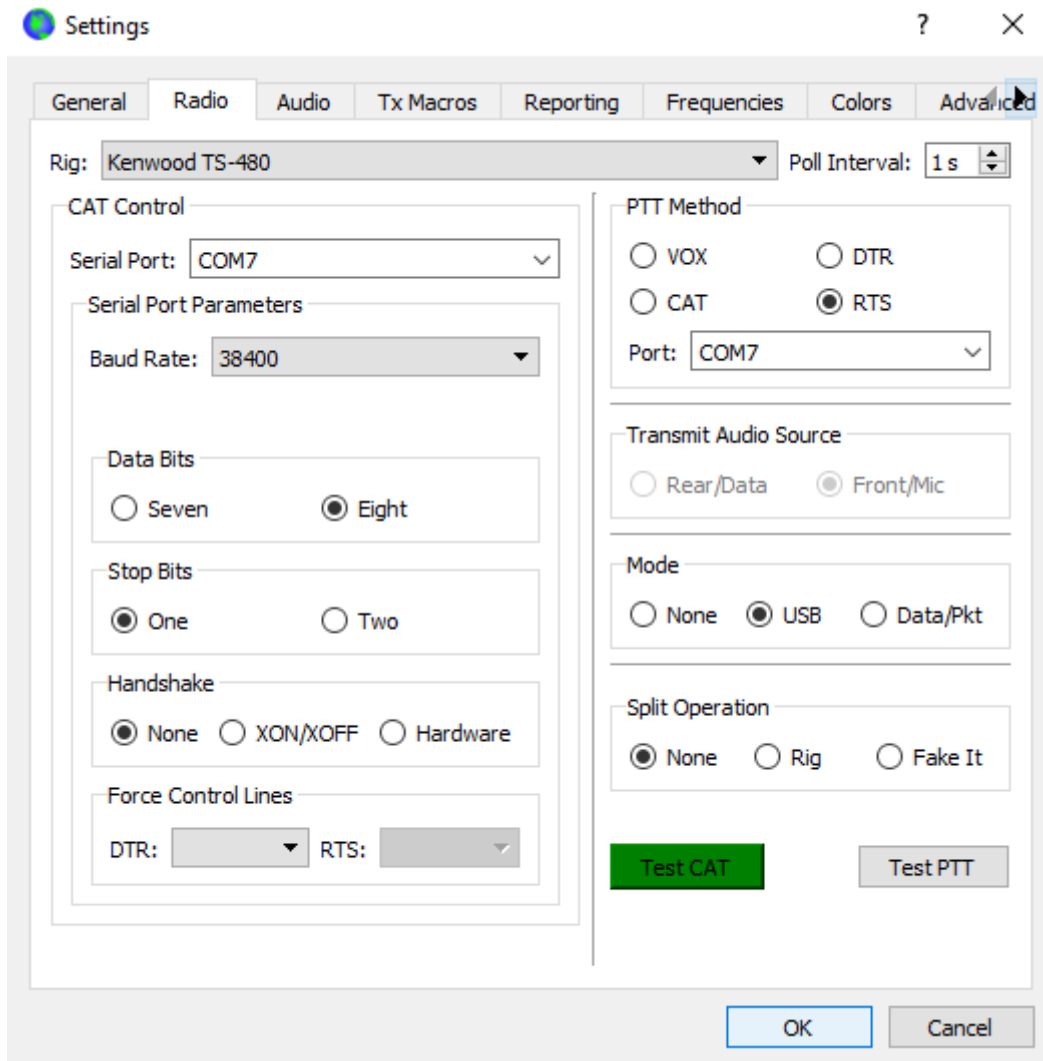


A window will show up and it will show several tabs and in the “General” one we have to set as it follow:



Note: “My Call” and “My Grid” have to be set with the personal information.

After this quick set up of the general information, we have to set the radio configuration:

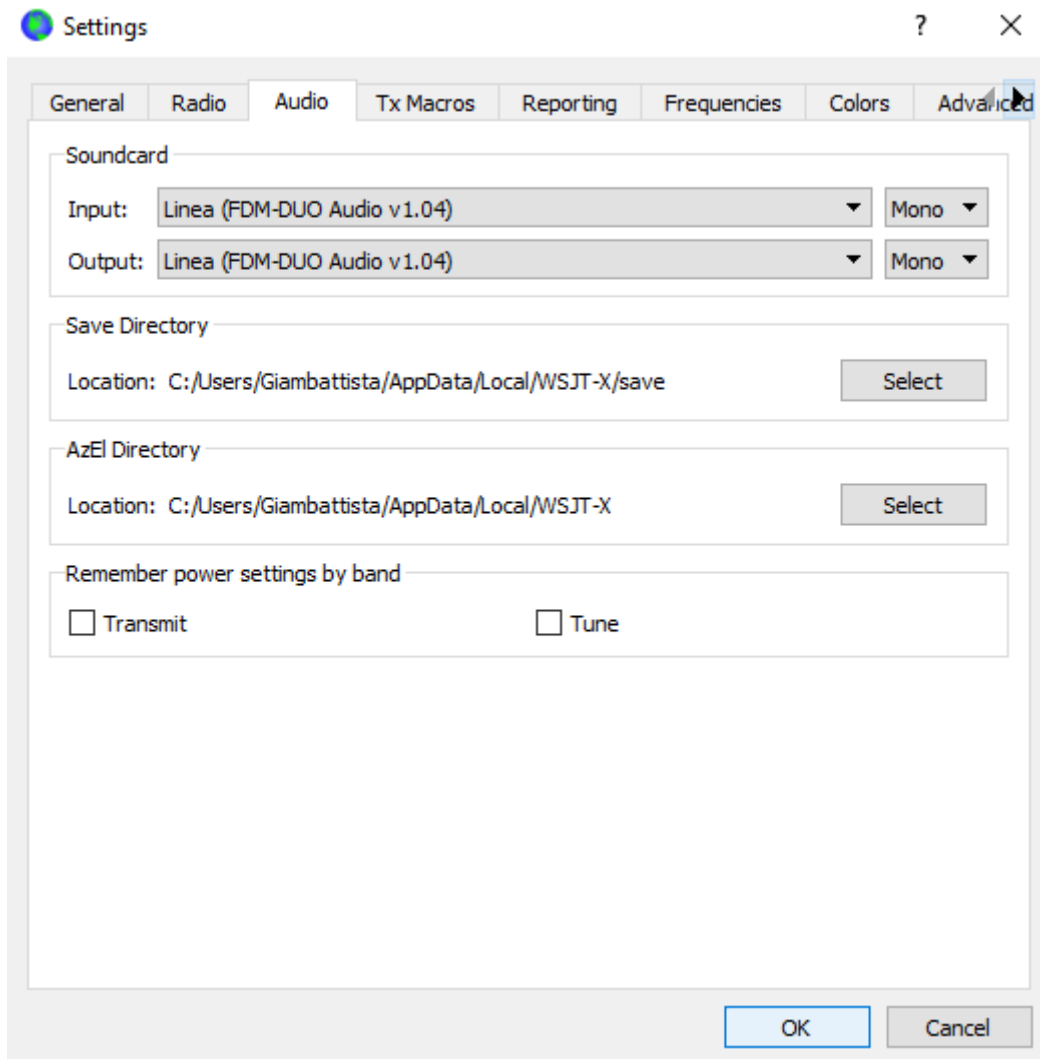


Before continuing is helpful to test is using the button “Test CAT”, if it is all good it will turn green and the button “Test PTT” will unlock, verify also this if it works correctly.

Note: In the FDM-DUO settings the PTT (menu 54) has to be set as “IN+RTS”.



When it's all working we can go on and set the "Audio" tab, if you want to use the FDM-DUO as a speaker you have to set as it follow:



If you want to listen in some other device such as headphones or speakers you can easily set them in the output list.

### 3 Receive and transmit

When we come back to the main window the “Band Activity” space will begin to show the messages and the requests from other people.

Band Activity				
UTC	dB	DT	Freq	Message
110745	0	-0.1	1297	~ CQ I2CZQ JN55 !Italy
110800	-18	0.7	503	~ BG7BDB OG5N KP00
110800	10	1.2	911	~ G7KFQ DJ7TH RRR
110800	-14	0.0	1201	~ ON3EDG DG0OS R+07
110815	-13	0.8	1202	~ DG0OS ON3EDG RRR
110815	-9	0.8	1256	~ CQ SP1HN JO73 !Poland
110815	-17	0.1	1297	~ CQ I2CZQ JN55 !Italy
110830	11	1.4	911	~ G7KFQ DJ7TH 73
110830	-10	0.7	1052	~ CQ SP6TRW JO71 !Poland
110830	-12	0.0	1201	~ ON3EDG DG0OS 73
110845	-13	0.7	1202	~ DG0OS ON3EDG 73
110845	-12	0.8	1256	~ CQ SP1HN JO73 !Poland
110845	-16	0.0	1297	~ CQ I2CZQ JN55 !Italy

We can answer to a request by double clicking on their name:

Rx Frequency				
UTC	dB	DT	Freq	Message
110145	-6	0.8	1310	~ CQ ON3EDG JO20
110202	Tx		1310	~ ON3EDG IW3SR JN65
110215	-2	0.8	1310	~ IW3SR ON3EDG -07
110230	Tx		1310	~ ON3EDG IW3SR R-02
110245	4	0.8	1310	~ IW3SR ON3EDG RRR
110300	Tx		1310	~ ON3EDG IW3SR 73
110315	-7	0.8	1309	~ IW3SR ON3EDG 73
110415	-7	0.8	1309	~ CQ ON3EDG JO20
110445	-12	0.8	1310	~ CQ ON3EDG JO20

Generate Std Msgs	Next	Now
ON3EDG IW3SR JN65	<input type="radio"/>	Tx 1
ON3EDG IW3SR -15	<input type="radio"/>	Tx 2
ON3EDG IW3SR R-15	<input type="radio"/>	Tx 3
ON3EDG IW3SR RRR	<input type="radio"/>	Tx 4
ON3EDG IW3SR 73	<input type="radio"/>	Tx 5
IW3SR JN65	<input checked="" type="radio"/>	Tx 6

A sequence of messages will start and if you selected  Auto Seq on the main screen the program will send those messages automatically.