DRTTALK version 1.8 Copyright Spencer (DJ0HF) 2007/8

When I bought the 'Sat Schneider' DRT-1 software defined radio I was impressed by it's performance. Initially I tested it with the free software DDS9951 which can be downloaded free of charge from the Sat Schneider web site. However this is a very basic program which is only meant as an initial test program to tune the DRT-1. I also tried the program from G8JCF which offers considerably more comfort and includes both tuning and audio decoding but the way it worked didn't really meet all my requirements.

There are a number of SDR program's which handle the audio decoding of the 12KHz IF really well and my favourite is that from M0KGK but like most of these programs it isn't able to tune the DRT-1. And rather than use the DDS9951 I wrote my own program to do the tuning which I am making available free of charge to anyone who would like to use it, on the condition that no-one distributing it makes any charge for it, that it is always distributed together with this pdf documentation file and that it is not modified in any way. As always with free programs you use the program at your own risk.

So what is DRTTALK and what can it do ?

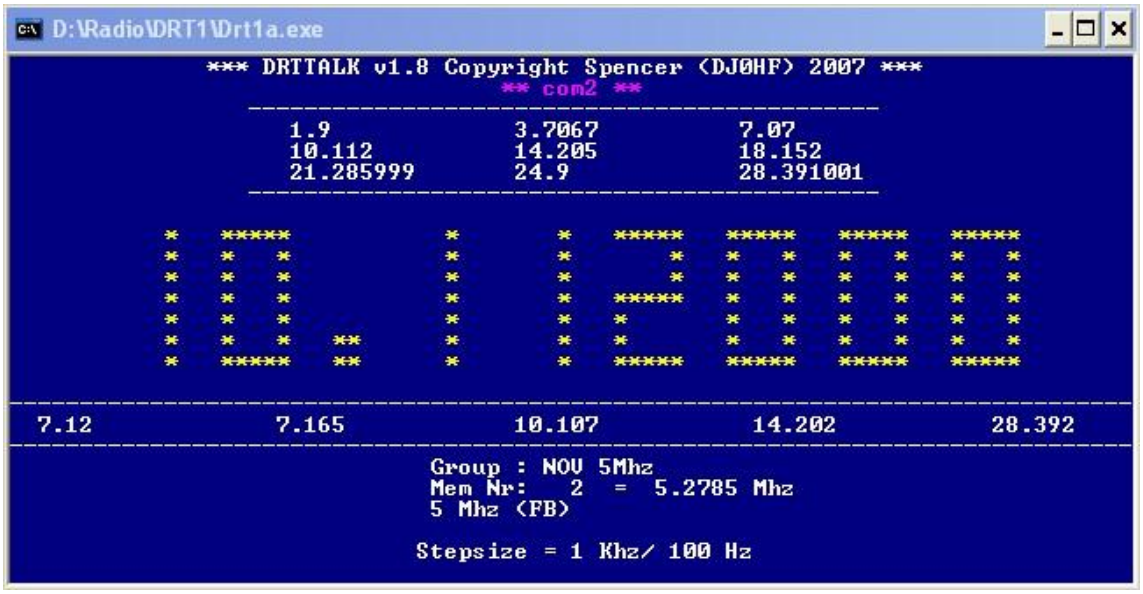
DRTTALK is at the moment a 16 bit application meaning it should run just fine on all systems from DOS to Windows XP. I plan to shortly recompile this program as a true 32 bit windows application.

DRTTALK does not need any installation, simply copy drttalkvxx.exe and drttalk.pdf into any directory and double click on drttalkvxx.exe to start the program. Though you might want to create a .pif link on your desktop to make life easier, if you do then it can be useful to set the Eigenschaften/sonstige/leerlauf auf Hoch. Sorry don't know what this is called in English, something like 'properties/extras/idle to High'.

Important:
If you are updating from an earlier version (v1.7 or lower) then you MUST delete the **drt.dat** file and let DRTTALK create a new one.

When you start DRTTALK for the first time it asks you whether you want to use COM1,2,3 or 4 to communicate with the DRT-1 and then asks for the speed of your computer in GHz. This second question is not critical, if you have a fast computer and enter a low value then data will be transferred faster than normal to the DRT-1 and a point will eventually be reached where the data is too fast for the DRT-1 to accept. Following these questions the program then creates a **drt.dat** file with your parameters and space for your memories.

The main screen is now displayed :-



On the top line is the name of the program and below this the selected com port identity.

Below this the last frequency you were using on each of the amateur bands is displayed.

Then comes the main display in yellow which is the current frequency which the program has set up in the DRT-1 (the program always returns to the last frequency you used before you last terminated the program).
This main frequency is called the ‘VFO’ frequency.

Below this are the 5 ‘Quick Memory’ frequencies, more about these is a minute. And below that the current memory group (there are 9 memory groups 1 to 9) and current memory channel, initially empty. A memory group can have any number of memory channels but the maximum total number of memory channels is 200. You could use for example, one group for SW AM broadcast stations, another group for DRM and so on.

Tuning the DRT-1

Pressing various keys on the keyboard will change the received frequency, for example :-
Pressing the '**f**' key you will be asked for a frequency in Mhz to tune to, enter a frequency between 0.01 and 30Mhz (you can enter any frequency with up to 1Hz accuracy)

Pressing '**u**' will move up to the next higher amateur band
Pressing '**d**' will move down to the next lower amateur band

Pressing the '**+**' and '**-**' keys will move up or down 1Mhz

Pressing '**Cursor up**' or '**Cursor down**' will move up or down 1Khz/5Khz/9Khz or 10Khz as shown at the bottom of the screen (changed with the '**i**' key)

Pressing '**Cursor right**' or '**Cursor left**' will move up or down by the step value shown at the bottom of the screen (Normally 100Hz but can be changed with the '**z**' key)

Note: holding a key will cause it to repeat.

Pressing the "**i**" key will change the Khz step value between 1Khz, 5Khz, 9Khz and 10Khz
Pressing the '**z**' key will change the Hz step value between 100Hz, 10Hz and 1Hz

Pressing any key '**1**' to '**5**' copies the relevant 'Quick Memory' to the VFO
Holding the **shift** key and pressing any key '**1**' to '**5**' writes the VFO to the relevant 'QM'

Using the main memories

Pressing the '**g**' key will increment the selected memory group
Pressing the '**m**' key will increment the selected memory channel
Pressing the '**r**' key will transfer the memory channel to the VFO
Pressing the '**n**' key will transfer the next memory channel in the group to the VFO
Pressing the '**w**' key will write the VFO into the next free memory location in the memory Group currently selected (If the memory bank hasn't been used before you will be asked for a Group Name) and a title for the channel (max 20 characters each)
Pressing the '**e**' key or the '**Delete**' key will delete the current memory channel

General commands

Pressing the '**h**' or '**?**' key will call up the help screen
Pressing the '**b**' key steps through the various background colours
Pressing the '**x**' key will exit the program (Saving all of your memories and parameters).

To change the 'com' port at some later stage, you can either delete the **drt.dat** file and start again or use any simple text editor to change the first line of the **drt.dat** parameter file.

I have found this program really useful and hope you will too. If you find any problems or have any comments or suggestions I can be contacted at dj0hf@spencerweb.net. You can also download the latest copy of this program from the amateur radio section of http://spencerweb.net/Ian_and_Julie/Hobbies/Amateur_Radio/DRT_TALK/drt_talk.html