

INSTALLING AND USING SIMPLE RADIO STANDALONE (SRS) – Ver 1.3.2.0

Initial Installation

SRS is a free application for use with DCS, and can be downloaded as a zip file from the DCS Forum (Mods and Apps/DCS-SimpleRadio Standalone - Post No 1).

After unzipping into a suitable Folder, run the File 'Installer', as Administrator. You will then find the main program installed as shown:

```
C:\Program Files\DCS-SimpleRadio – Standalone\DCS-SimpleRadioStandalone.lua
\DCS-SRS-AutoConnectGameGUI.lua
\DCS-SRSGameGUI.lua
\DCS-SRS-Overlay.dlg
\DCS-SRS-OverlayGameGUI.lua
\Opus.dll
\SR-ClientRadio.exe
\SR-Server.exe
```

You can ignore (or even delete) the file 'SR-Server.exe'; as the name suggests this is only required if you are setting up a server. You will be using 'SR-Clientradio.exe', and you should put a shortcut on your desktop pointing to 'C:\Program Files\DCS-SimpleRadio – Standalone\SR-ClientRadio.exe'.

You will need to start SRS before starting DCS in each session in which you plan to use SRS, and it is easier to do this by means of a simple desktop shortcut

Also note that after running the program you will find one other file in this folder – 'clientlog.txt' which can be useful to sort out problems.

Saved Games Folder

You should now check in your Saved Games Folder where you should find:

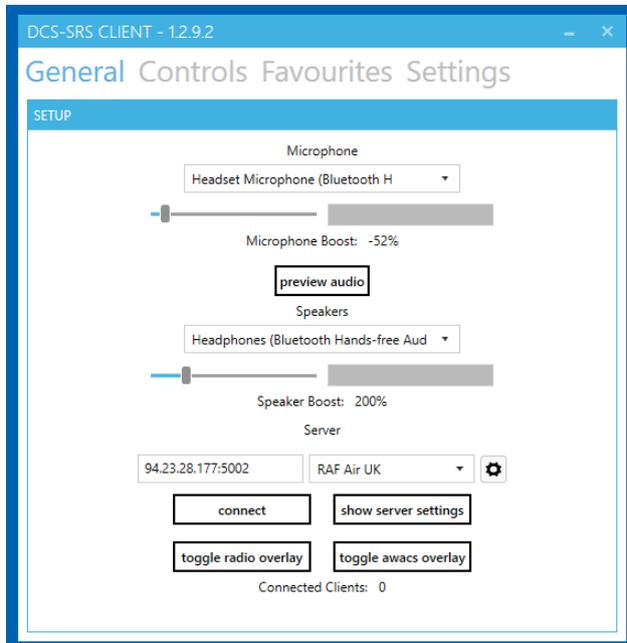
```
... Users\yourname\SavedGames\DCS\Scripts\DCS-SimpleRadioStandalone.lua
\DCS-SRGameGUI.lua
\DCS-SRS-Overlay.dlg
\DCS-SRS-OverlayGameGUI.lua
\Export.lua
```

The 'export.lua' file is one used by several DCS programs, with each user program adding lines to this file according to its needs. It should not be necessary to look further into this unless your set-up does not work properly, in which case seek additional advice from a member of RAF Air (UK) who will be able to advise you what to look for. In simple terms SRS adds the following line to the bottom of Export.lua (after first creating the file if it does not already exist).

```
local dcsSr=require('lfs');dofile(dcsSr.writedir()..[[Scripts\DCS-SimpleRadioStandalone.lua]])
```

Starting and Initial Set-up of SRS

Before starting SRS, ensure that your headset, or speakers and microphone, are connected and working. Then click on the short-cut for SRS that you have created and the 'General' window, as shown below, should appear (you may need to confirm that you do wish to run it, depending on your computer settings). We will now go through what is included on this first page



Microphone. The box below the 'Microphone' label shows the current microphone connected, with below it the input level slider-bar (Microphone Boost), and below that the value set by the bar. In the diagram above the setting is -52%. You can adjust this by using the slider. Too high a setting will produce distortion (over-modulation), and around -50% has been found to be a good value for most set-ups. However you may need to change this in response to comments from fellow SRS users.

Speakers. Similarly the box below the 'Speakers' label shows the current speakers or headset connected, with the Speaker Boost setting slider and current value below it. Because I am a little deaf, mine is set to 200%, as against the recommended average value of around 150%.

Server. Below the 'Server' label is the IP address and Port Number of the Server being used for SRS. Enter the RAF Air (UK) Server IP and Port Number (94.23.28.177:5002) into the left hand box. We will cover the use of the box on the right later.

Preview Audio. The 'preview audio' box allows you to check that the microphone and speakers are working (strangely, after use this box label changes to 'audio preview' but works just the same). Click on it and speak into the microphone (operate the microphone switch first if necessary), and you will hear your voice, with a slight delay through the speakers. The volume heard will be quite low - testing can cause feedback if either of the boost settings is too high. When the test is complete press the button again (it will have changed to 'stop preview' while the preview is enabled)

Lower Four Boxes. The 4 lower boxes may now be pressed in turn, just to see their operation:

connect Connects you to the Server (it changes to 'Disconnect' on selection). With it connected, try the Audio Preview again – it should work as before but this time the signal is going via the Server. If you cannot connect this shows that either the Server IP address is incorrect, or the Server is not available for the moment. Finally press it again to disconnect.

show server settings. This shows various settings for SRS installed at the Server, and can be ignored for the present – Press CLOSE to return to the General page.

toggle radio overlay. Pressing this will bring up the display which you will later see in your cockpit. It is termed the 'Radio Stack', and shows the 3 radio displays, one above the other, with an Intercom panel below and a 'transparency' slide at the bottom. Because you are not connected to a DCS aircraft at present, the only part of this which will be currently operational is the transparency slide. Try using the mouse to move this bottom slider and you will see that it varies the transparency of the Stack. When in a DCS aircraft this stack can be dragged to any point you wish (using the mouse) and its transparency can be adjusted to prevent it obscuring whatever it is over. The remainder of this display will be explained more fully later. To hide it completely press 'toggle radio overlay' again, or the X in the top RH corner of the Stack.

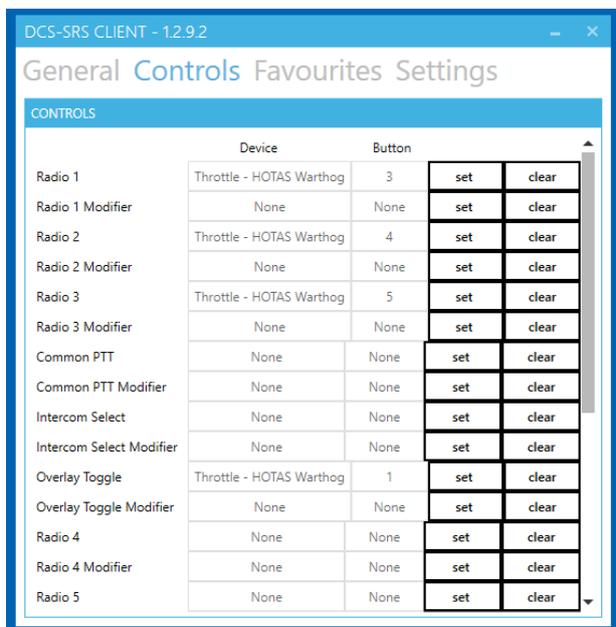
toggle awacs overlay. Pressing this will produce a similar panel to the previous button, but with 10 radios displayed. As the name suggests it is for use with an AWACs or ATC set-up, giving access to up to 10 different radios. We do not currently use this facility – press the button again to remove this display.

Finally, at the bottom of this page you will see a read-out of how many 'clients' are currently connected. In fact this only reads correctly when you are connected. Try connecting and disconnecting again and you will see that the figure will change to at least 1 – that is you; it will be more if there are already other people using the SRS system on our server. However, for the present you will not be able to talk to them.

Controls Window

If you now click on 'Controls' at the top of the main General window, you will see the Controls window, shown below. In fact this is just the top half and you can scroll down to see the remainder if you wish. However, the lower part is of no interest to us, since we will only be setting up a maximum of 3 radios for the present.

For most of the radio controls we shall use the in-aircraft cockpit controls. All we will do on this page is allocate the transmit buttons, and the button to show and hide the radio stack display. You will see that this page shows a Device and Button listed, against Radios 1, 2, and 3, and the Overlay Toggle. You may select any buttons (or key) for any radio, but, since I use a HOTAS Warthog, I will allocate the appropriate buttons as used in the A-10C. These are all controlled by the circular 'hat' button at the top right hand side of the Warthog Throttle. If you use any other controller you will need to identify the 3 most suitable buttons for the A-10C's 3 radios, plus one to toggle the radio stack overlay on and off.



First click on the 'Set' Button opposite Radio 1 – the caption will go grey: now press the control button you wish to use to transmit on Radio 1 (VHF AM – Hat switch FWD) – The device and button will now appear alongside Radio 1. If you make a mistake, simply press 'clear' and do it again.

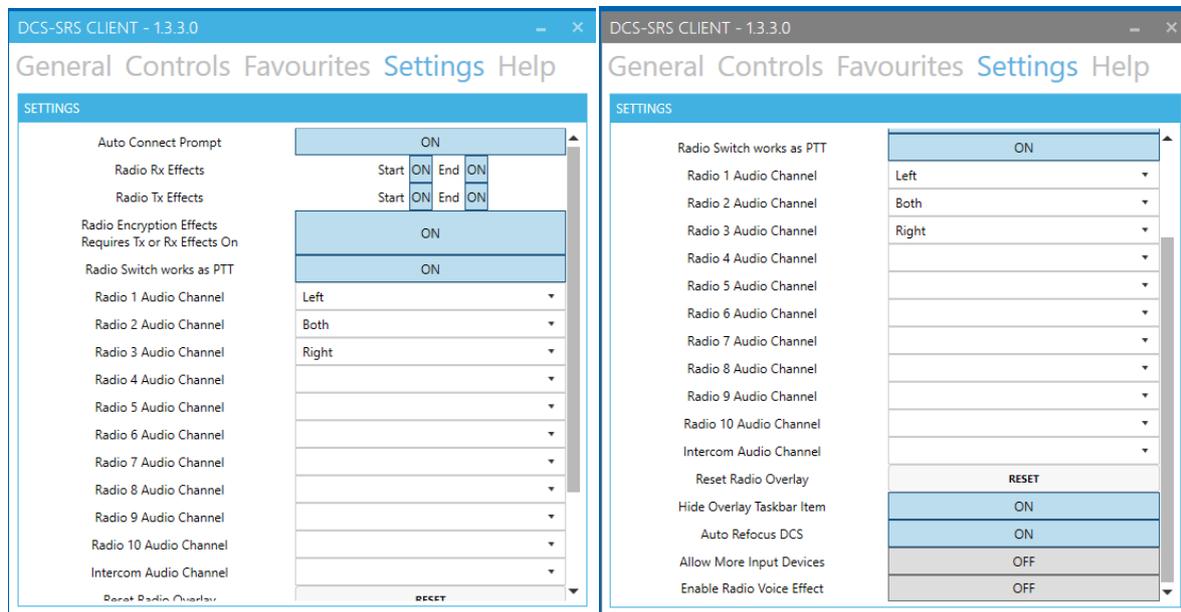
Repeat for Radio 2 (UHF – Hat switch DOWN), and for Radio 3 (VHF FM – Hat switch AFT).

Finally select a button to toggle the Overlay – I use the same Warthog Throttle Hat switch, pressing it IN – this is Button 1. (I also use the final Warthog Throttle Hat switch – UP for the Teamspeak transmit.)

In fact these button presses only select the appropriate radio, we need to set one further control to select and transmit. This is the PTT switch, found on the Settings page and I will deal with it there.

Settings Window

Now click on 'Settings' at the top of the Window. The upper and lower parts of the Settings Window are shown below – use the scroll bar to move up and down in the usual way.



Auto Connect Prompt. This should be set to ON. That way, when you connect to the Server, you will get an automatic prompt to connect to SRS, which you should accept. However, this may be hidden by the main screen and so I find it best to press the 'Connect' button on the General window before starting DCS.

Radio RX Effects, Radio TX Effects, and Radio Encryption Effects. These are not critical to the operation of SRS. The Rx and Tx Effects add 'clicks' to the start and end of transmissions – helping to confirm that the radio is working. Radio Encryption is not currently used by RAF Air UK. They can normally be selected ON, unless they are found to be obtrusive.

Radio Switch works as PTT. As explained earlier, the operation of the transmit switches, actually selects the radio on which the transmission is to be made. The selection of ON for this 'Common PTT' option will cause the pressing of any of the radio selection buttons to simultaneously act as a Press-To-Transmit (PTT) switch and will actually cause the transmission to go out while the button is pressed. Thus this option should be selected to ON.

Audio Channels. This allows reception from each of the radios to be routed to different headphones/speakers, if you wish. You will see that, with the settings shown, VHF AM will be heard in the left earphone, VHF FM in the right earphone, and UHF in both. This is an optional setting, and you may, if you prefer, route all receptions to both earphones. In the cockpit, it will be apparent from the overlay which radio is receiving, as the frequency display will turn from green to white.

Other Settings. The other settings are not critical and will not be covered here. It is recommended that you set the lower four as shown in the diagram above for the time being.

Use of SRS in Flight

Before entering DCS itself, ensure that you start SRS, press connect, and confirm that your audio set-up is working by using the 'preview audio' button. As explained earlier, with SRS running and connected all radio operations are controlled by the in-aircraft controls. These include for each radio: the rotary mode switches (On/Off etc); the frequency settings (both Manual and Preset); and the reception volume. It also means that once you are in the cockpit, you will not be able to use any of the radios until you get power to them and switch them on. Power will not be available until you get the APU running and the APU Generator selected. Alternatively you can ask for external power from the ground crew – to do this operate any of the transmit switches and the Comms Menu options will appear. Select Ground Crew (F8) - Ground Power (F2)- On (F1) ; you will hear the ground crew reply and after a few seconds you will have power.

With aircraft electrical power available, switch on each of the 3 radios, and toggle the radio stack overlay ON. It should appear on top of the main display and you can move it to a suitable position, adjust the size (by dragging the corner), and set the transparency. You will see a display similar to the one shown below.

