

Lorby “Axis And Ohs” DCS World Plugin Documentation

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Installation

- Extract the Plugin

Drag the folder “**DCSBridge**” from the ZIP file into
\Documents\LorbyAxisAndOhs Files\Plugins

- Install DCS-BIOS

This plugin is based on the DCS-BIOS fork. Please note that only aircraft supported by the DCS-BIOS fork can be accessed by the Plugin!

[GitHub - DCS-Skunkworks/dcs-bios: DCS-BIOS DCS-Skunkworks Fork](https://github.com/DCS-Skunkworks/dcs-bios)

The latest version of DCS-BIOS is included in the plugin ZIP file, make sure to install it first:

(Quote from the DCS-BIOS user guide)

1.1 ... extract the DCS-BIOS_...zip file somewhere on your hard drive

1.2 Open a new Explorer window (for example by opening "My Computer"), paste the following into the address bar and press return:

```
%USERPROFILE%\Saved Games\DCS
```

This should take you to your DCS configuration folder (it has several subfolders including Logs and Missions).

1.3 If there is no **Scripts** subfolder in your **Saved Games\DCS** folder, create it.

1.4 Copy the **Scripts\DCS-BIOS** folder from the DCS-BIOS download to your **Scripts** folder.

1.5 **If you do not have an existing Export.lua file** in your **Scripts** folder, copy **Scripts\Export.lua** from the DCS-BIOS download to your **Scripts** folder. Then continue with step 2.

1.6 **If you already have an Export.lua file**, open it in a text editor (we recommend [Notepad++](#)) and append the following line to the end:

```
dofile(lfs.writedir()..[[Scripts\DCS-BIOS\BIOS.lua]])
```

You should never use any word processing software to edit text files. Word processing software saves formatting information in the file which will render it unusable.

If you use the Raygun Software from [Buddyfox](#) (A-10C UFC), his entry must stand above the DCS-BIOS entry in the **Export.lua** !!!

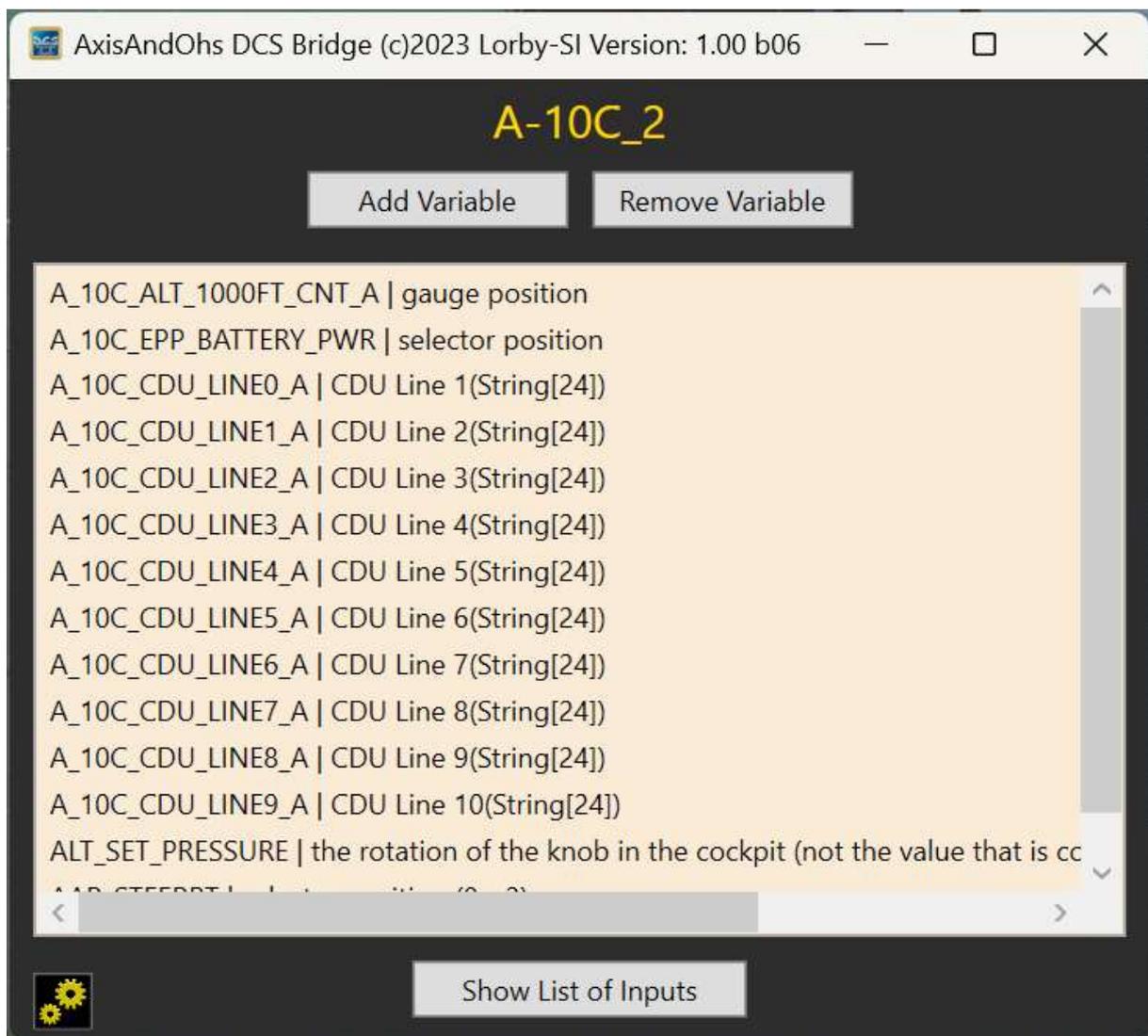
The AAO Plugin

When the plugin is in place, AxisAndOhs will start it automatically. Plugins can be enabled or disabled in AAO with “Tools-> Enable/Disable Plugins”. The plugin main dialog will briefly show up on your Desktop, then minimize to the task bar automatically. You can recall the dialog from there.

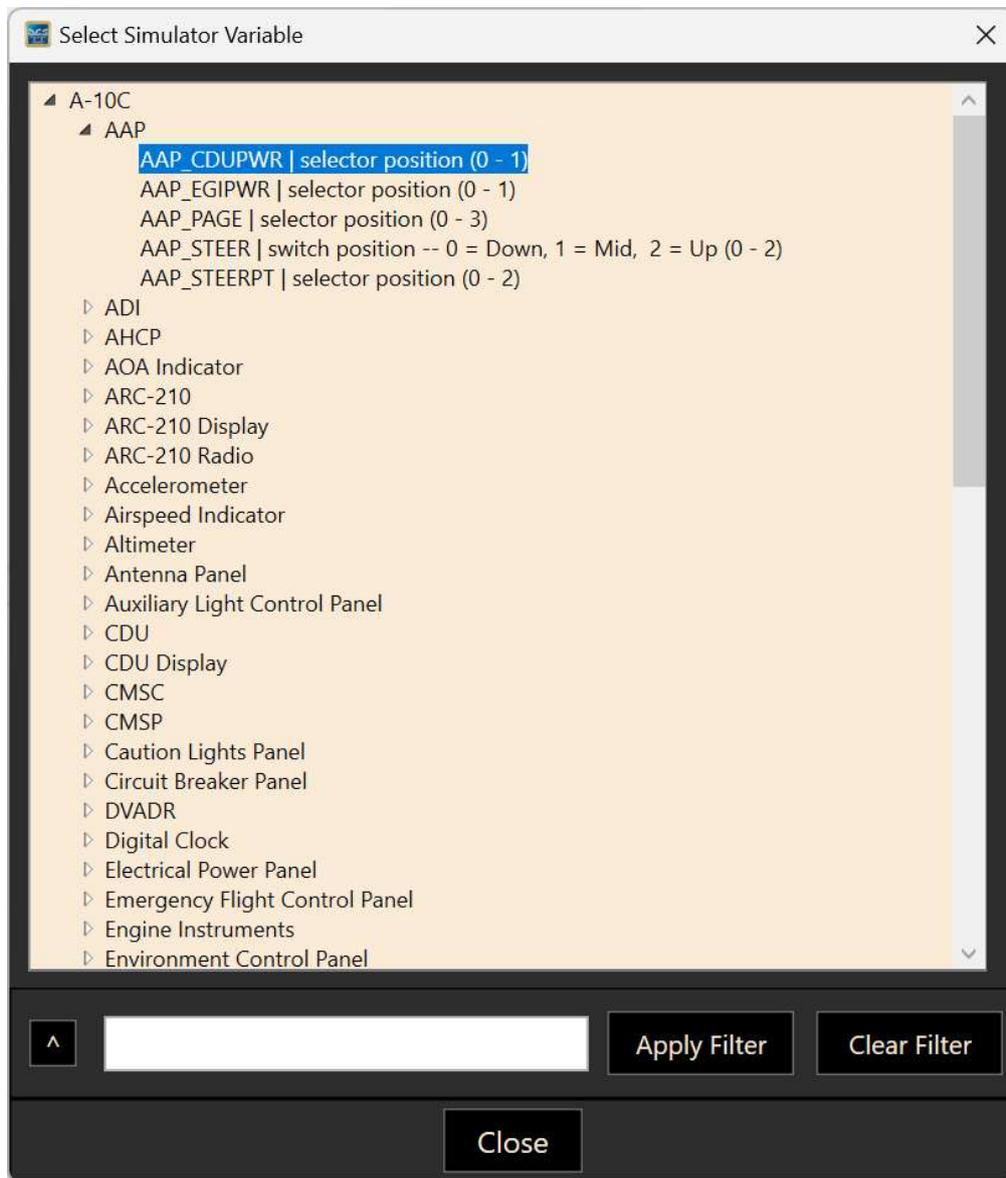
Make sure to run AAO in “Offline Mode” – it is advisable to create a configuration just for DCS first time you start it.

Important: when you are using MSFS as your main simulator, the DCS plugin must be disabled when using AAO with MSFS.

When DCS is running and you have started a flight, the Plugin will detect your current aircraft.



You must then supply the desired variables that you want to read from DCS using the “Add Variable” dialog.



Double click on a variable to add it to the list for this aircraft.

The variables that you have selected will show up in AAO as LVars like this:

(L:A_10C_EPP_BATTERY_PWR)

for numeric values

(L:A_10C_CDU_LINE0_A, String)

for strings

Hard coded variables

Some variables from the “CommonData” section are always active and can be queried in AAO without additional configuration

- (L:CommonData_ALT_MSL_FT_A)
- (L:CommonData_HDG_DEG)
- (L:CommonData_IAS_US_A)
- (L:CommonData_LAT_DEG)
- (L:CommonData_LAT_SEC)
- (L:CommonData_LAT_SEC_FRAC_A)
- (L:CommonData_LON_DEG)
- (L:CommonData_LON_SEC)
- (L:CommonData_LON_SEC_FRAC_A)

The variable

(L:CommonData_AIRCRAFT, String)

is always active to tell AAO which aircraft you are currently flying.

This can be used for example to switch AAO to a different profile when using an autoscript like this one:

```
(L:CurrAc, ·String) ·slen·0 ·==·(L:CurrAc, ·String) ·  
(L:CommonData_AIRCRAFT, ·String) ·scmp·0 ·==·or·if{·  
(L:CommonData_AIRCRAFT, ·String) ·(>L:CurrAc, ·String) ·  
(L:CommonData_AIRCRAFT, ·String) ·(LOAD_AAO_CONFIG:%s1) ·}
```

When added to AAO as an automated script, it will try to call an AAO configuration that corresponds to your current aircraft in DCS. If it can't find the config, it will create an empty new one.

Adding variables dynamically

Instead of using the “Add Variable” dialog, you can register variables in the plugin using an AAO RPN Command:

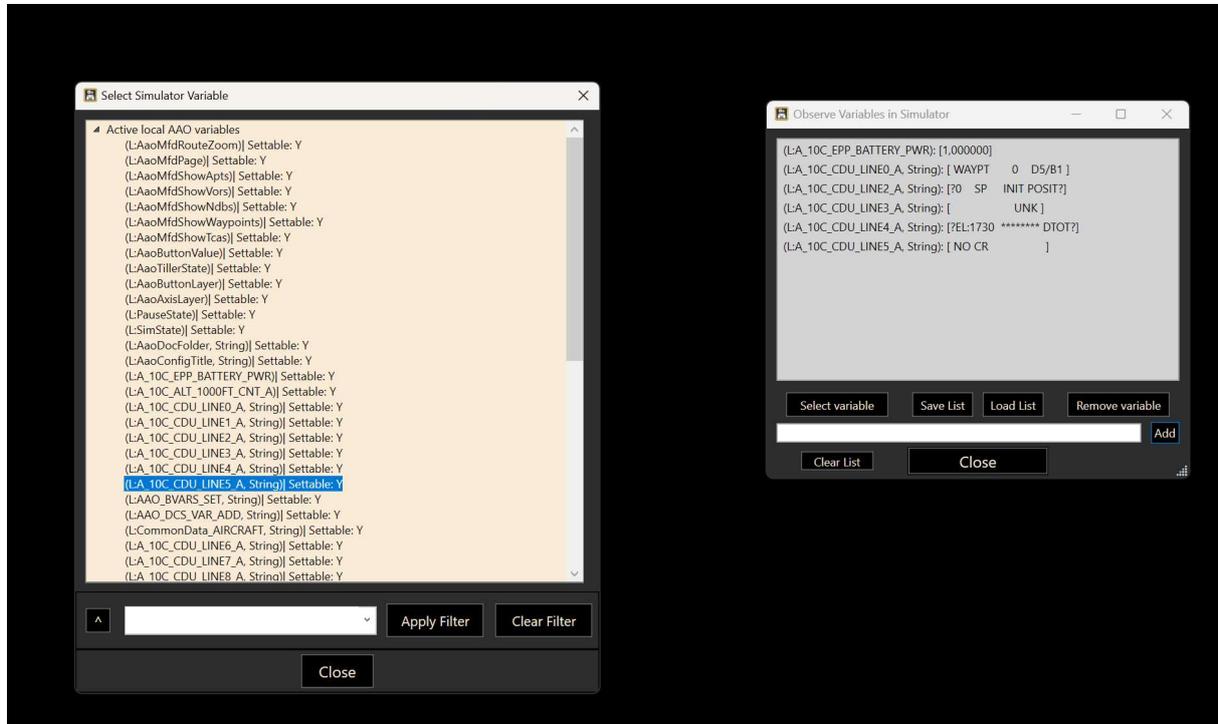
(REGISTER_DCS_VAR:A_10C_CDU_LINE4_A)

Supply only the pure name of the DCS variable as it appears in the lists on the “Add Variable” dialog.

You can copy the AAO variable name to the clipboard by right-clicking on the it in the treelist of the “Add Variable” dialog.

Viewing variables in AAO

The variables can be seen in AAO on the “Scripting->Watch simulator variables” dialog:



Open the “Select variable” dialog, the DCS LVars will be in the first group from the top “Active local AAO variables”.

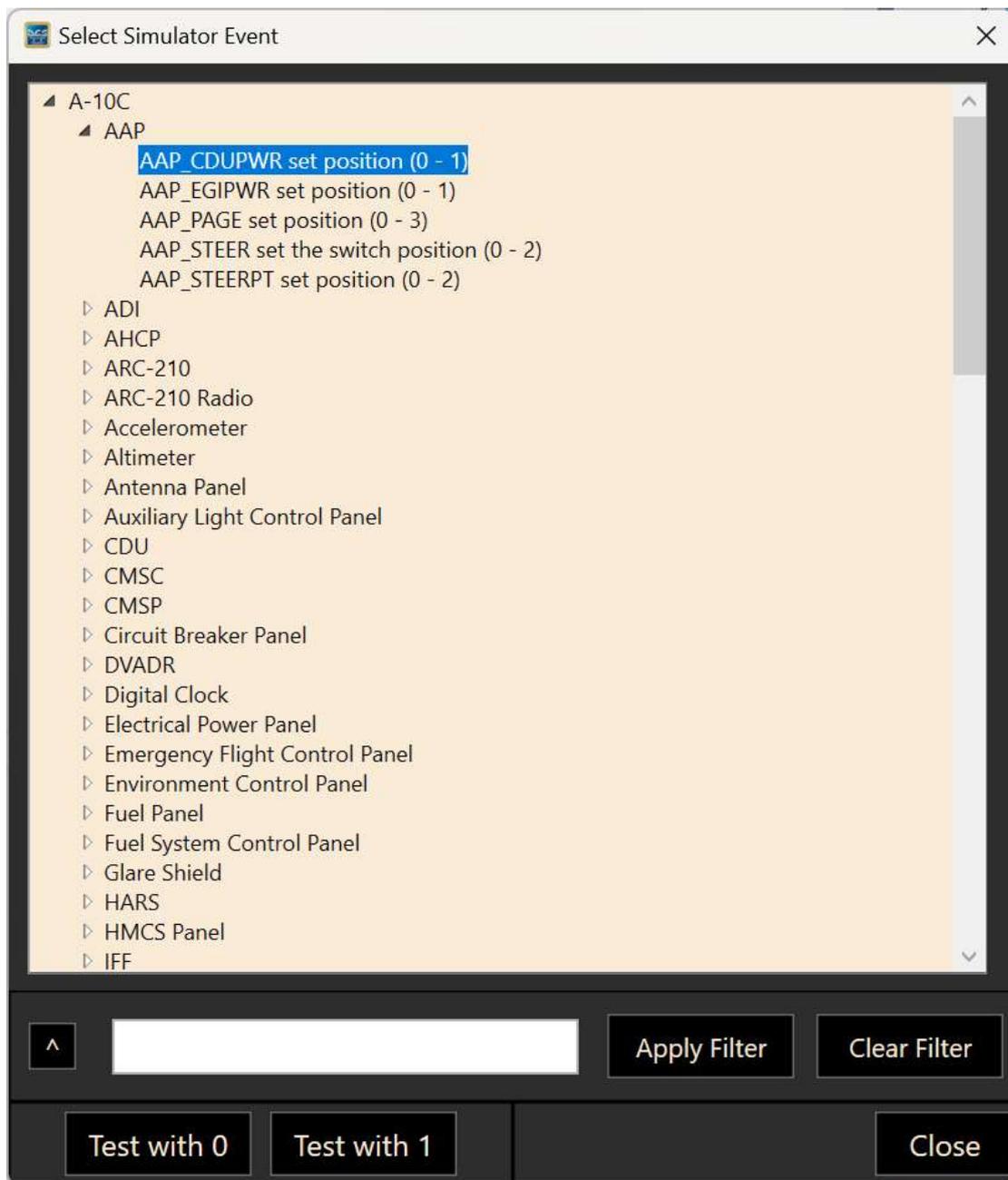
Hold down Left Shift and double click on a variable to transfer it to the observer window.

Sending commands to DCS from AAO

You can send commands to DCS from AAO as BVars.

To find the correct command name, open the “Show List of Inputs” dialog

This will list all command definitions available in DCS-BIOS.



You can test a command right on this dialog by selecting it and then pressing “Test with 0” or “Test with 1”

To transfer it into AAO, double-click the command. This will put the proper BVar code into the clipboard and you can Ctrl&V it into AAO, so you only have to supply the desired value to send to the command:

1 (>B:AAP_CDUPWR)

Example: toggle script for the battery switch in the A-10C II:

```
(L:A_10C_EPP_BATTERY_PWR) ·0 ·== ·if{ ·1 ·(>B:EPP_BATTERY_PWR) ·} ·el  
s{ ·0 ·(>B:EPP_BATTERY_PWR) ·}
```

Example: turning the altimeter knob in the A-10C II:

Up:

```
3200 ·(>B:ALT_SET_PRESSURE)
```

Down:

```
-3200 ·(>B:ALT_SET_PRESSURE)
```

Example: STEER PT knob in the A-10C II:

Right:

```
(L:AAP_STEERPT) ·++ ·2 ·min ·(>B:AAP_STEERPT)
```

Left:

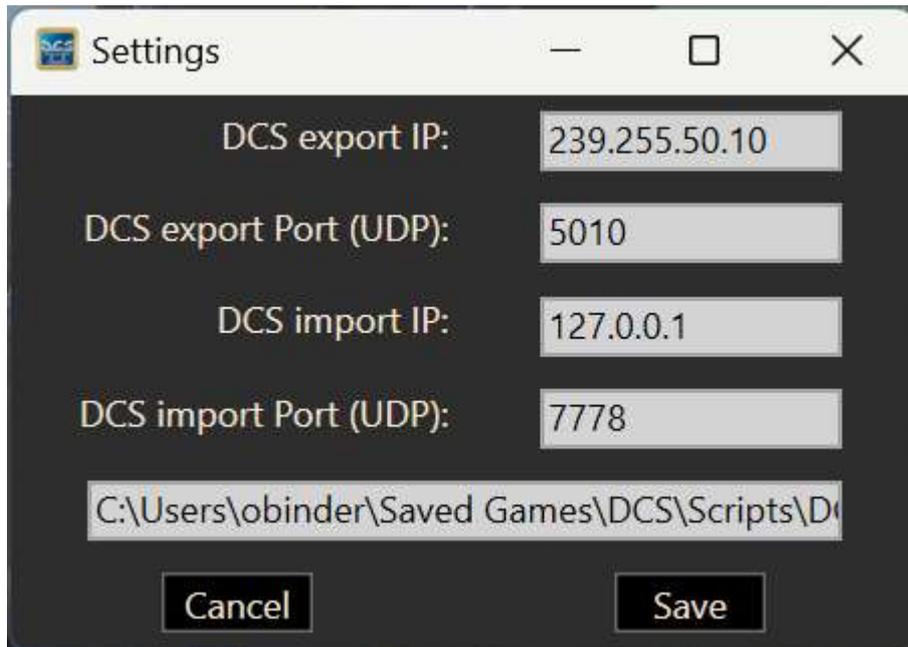
```
(L:AAP_STEERPT) ·-- ·0 ·max ·(>B:AAP_STEERPT)
```

Toggle:

```
0 ·1 ·2 ·1 ·(L:AAP_STEERPT) ·(L:AAP_STEERPT_IDX) ·4 ·iseq ·(>B:AAP_STE  
ERPT) ·(>L:AAP_STEERPT_IDX)
```

The `_IDX` LVar is an invented variable, it contains the index of the `iseq` in this script – see AAO documentation about RPN scripting and the `iseq` operator.

The Settings Dialog



On this dialog you can configure the DCS-BIOS IP settings and the location of the jsonp files that this Bridge program needs to build the Variables and Inputs lists (doubleclick on the textbox with the path in it)