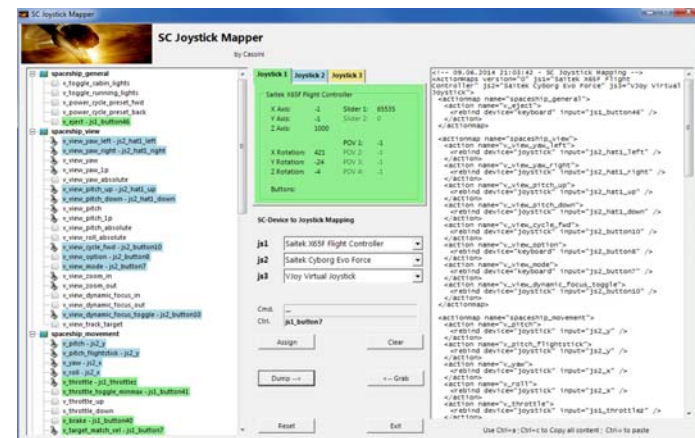


# SC Joystick Mapper Quick Reference Guide V 1.2

20140610 – Cassini  
ChangeLog: see ReadMe.txt

Disclaimer:  
Usual stuff – no warranty whatsoever..  
Freeware – made for the SC community  
Hope it helps and does not suck.  
Have fun in the verse ...



# Workflow

- Connect the joystick devices to the PC
- Start from scratch or load an existing map from a file
- Make or refine mappings
- Save the new map to an XML file
- Use it in the game: e.g. pp\_rebindkeys C:\maps\Layout\_hotas\_x65\_Cyb\_T

Note: the predefined actions are the ones found in the AC game default profile – it is likely that some of them will not work at all as the game is not finished. There is no proper description for which one does what – you may get help in SC Forums.

As I had my issues with missiles here a finding..

To reallocate the missile fire command you should map the following 4 actions to the same joystick button:

- *v\_target\_missile\_lock\_focused*
- *v\_target\_toggle\_lock\_selected*
- *v\_target\_missile\_lock\_selected*
- *v\_weapon\_launch\_missile*

# The GUI ...

Action tree and mappings

XML dump of the mappings used

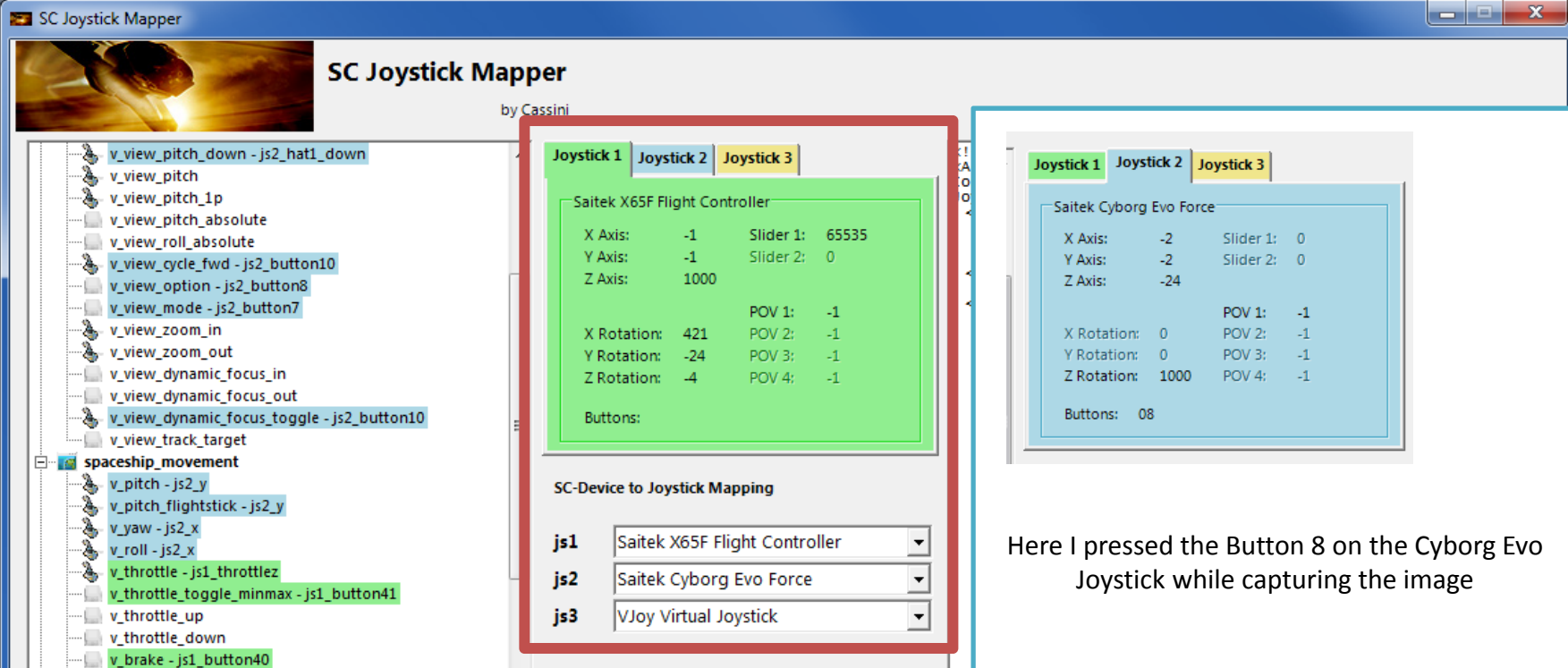
The screenshot shows the SC Joystick Mapper application window. The title bar reads "SC Joystick Mapper" and "by Cassini". The main interface is divided into several sections:

- Left Panel (Action tree and mappings):** A tree view showing a hierarchy of actions. The root is "spaceship\_movement", which includes "v\_pitch - js2\_y", "v\_throttle - js1\_throttlez", "v\_strafe\_up - js1\_button21", "v\_strafe\_down - js1\_button23", "v\_strafe\_left - js1\_button24", "v\_strafe\_right - js1\_button22", "v\_strafe\_forward - js1\_button26", "v\_strafe\_back - js1\_button28", "v\_newtonian\_yaw - js2\_x", "v\_newtonian\_pitch - js2\_y", "v\_newtonian\_brake - js1\_button40", "v\_ifcs\_toggle\_safety - js1\_button27", and "v\_afterburner - js1\_button6".
- Top Center (Detected Joystick devices):** A list of detected devices: "Joystick 1", "Joystick 2", and "Joystick 3". Below this, the properties for "Saitek X65F Flight Controller" are shown, including X, Y, and Z axes, and X, Y, Z, and POV rotations.
- Bottom Center (SC-Device to Joystick Mapping):** A table for mapping joystick devices to actions. It shows "js1" mapped to "Saitek X65F Flight Controller", "js2" to "Saitek Cyborg Evo Force", and "js3" to "VJoy Virtual Joystick". Below the table are "Assign" and "Clear" buttons. At the bottom are "Reset" and "Exit" buttons.
- Right Panel (XML dump of the mappings used):** A text area displaying XML code for action maps. It includes sections for "spaceship\_general" and "spaceship\_movement".

Callouts point to various elements:

- Joystick properties (greyed out ones are not available):** Points to the joystick properties table.
- Joystick device map (the default is usually OK):** Points to the dropdown menus in the mapping table.
- Current mapping:** Points to the "Cmd." and "Ctrl." fields in the mapping table.
- Action Mapping Buttons:** Points to the "Assign" and "Clear" buttons.
- XML Area Buttons:** Points to the "Dump -->" and "<-- Grab" buttons.
- Other Buttons...:** Points to the "Reset" and "Exit" buttons.

# The Joystick Area...



The screenshot shows the SC Joystick Mapper interface. On the left is a tree view of game variables, with some highlighted in blue and green. The main area displays two joystick configuration panels. The first panel, for the Satek X65F Flight Controller, shows axis and rotation values. The second panel, for the Satek Cyborg Evo Force, shows similar values. Below these is a mapping section with dropdown menus for js1, js2, and js3. A red box highlights the joystick configuration area, and a blue box highlights the Satek Cyborg Evo Force configuration.

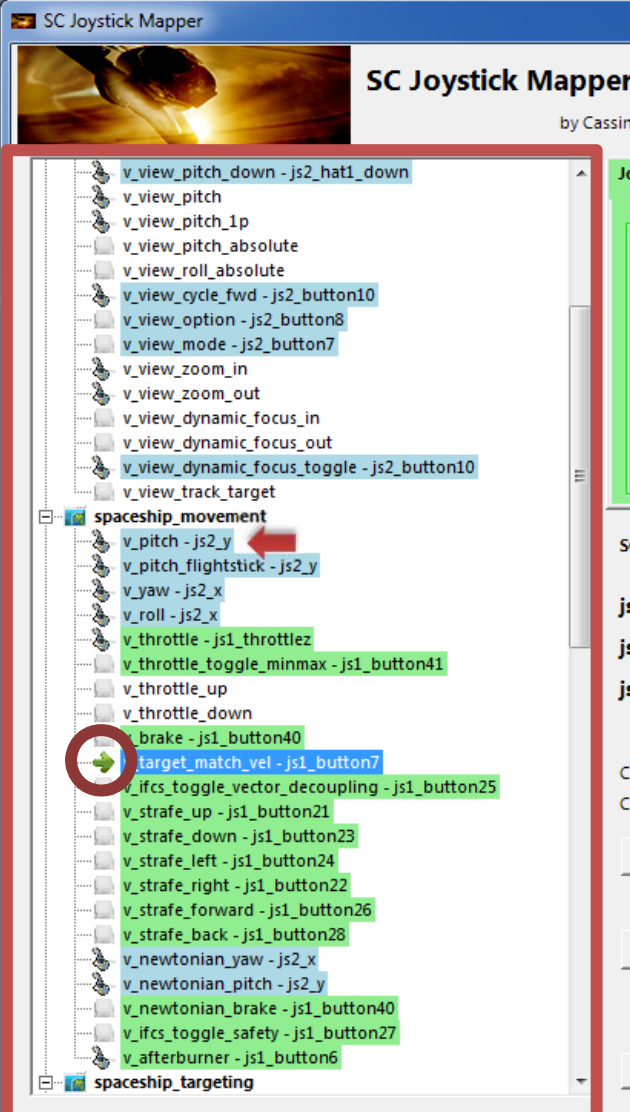
Here I pressed the Button 8 on the Cyborg Evo Joystick while capturing the image

The tabs represent the joystick devices found connected to the PC also the number 1..3 shows the order the PC reports them which is crucial to the mapping as this will result in the js\_1, js\_2 .. Names used to build the command name.  
The elements are the ones the joystick seems to support – greyed ones are not available for this device.

The *SC-Device to Joystick Mapping* can be used if the default assignment “Joystick 1 -> js\_1” does not match what the CryEngine is using. – Usually the default should work.

Just hit any button, Axis and see how things are changing.

# The Action Tree ...



The tree is initially built from the known actions which are grouped along 'actionmaps' e.g. 'spaceship\_movement'. Each action is either a predefined joystick or keyboard action – this is given by the SC default profile.

By 'rebinding' or mapping and action with a different controls one does **replace** the default one i.e. **overwriting keyboard actions will result in not having them available on the keyboard once you load the map in the game!**

However no damage is done! This mapping is only valid until you exit the game.

If actions are mapped (as shown) the color indicates to which joystick the mapping goes.

**v\_pitch – js2\_y** then means that the action v\_pitch (joystick per default) is rebound to the joystick 2 (blue) and there the Y-axis control.

If the background is white - there is no current mapping given. Unmapped actions are ignored.

Click on any action to make it the used action in the mapping area. Once selected it is marked with the green arrow.

# The Mapping Area...

Whenever you click on an action in the Action Tree it is copied into Cmd. and can be mapped to a Control.

The Control (Ctrl.) is the last joystick item you activated on the currently shown joystick tab.  
I.e. if you want to map it for a control on the second joystick you have to select the "Joystick 2" Tab first.

Once you have a mapping that should be used, hit the "Assign" button.  
The new mapping will be shown in the Action Tree – where it gets the back color of the joystick it is assigned to.

To clear a mapping – select it in the ActionTree and Click "Clear" - it gets a neutral color and no control in the ActionTree – it is now unmapped.

**To clear all mappings and start from scratch hit the 'Reset' button!**

```
<action name="v_pitch_dynamic_focus_toggle">
  <rebind device="joystick" input="js2_button10" />
</action>
</actionmap>

<actionmap name="spaceship_movement">
  <action name="v_pitch">
    <rebind device="joystick" input="js2_y" />
  </action>
  <action name="v_pitch_flightstick">
    <rebind device="joystick" input="js2_y" />
  </action>
  <action name="v_yaw">
    <rebind device="joystick" input="js2_x" />
  </action>
  <action name="v_roll">
    <rebind device="joystick" input="js2_x" />
  </action>
  <action name="v_throttle">
    <rebind device="joystick" input="js1_throttlez" />
  </action>
</actionmap>
```

Use Ctrl+a ; Ctrl+c to Copy all content ; Ctrl-v to paste

# The XML Area...

SC Joystick Mapper

by Cassini

Mappings are sent to the game using XML formatted files.  
The XML Area is where you may find the mapping after hitting the 'Dump' button.  
Rightclick opens a menu where you may choose from:  
Copy, Paste, PasteAll, Select All, Open..., Save As...

The usage is rather common here. Once you dumped the mapping you want to "Save" it as "filename.xml" somewhere.

To refine any mapping "Open" the file – the content is shown in the XML Area, then "Grab" it into the ActionTree.  
Once the refinement is finished – again Save it to a file.

**Note: only use properly formatted ActionMaps here. The program may just break if it encounters something unexpected!**

```
<!-- 09.06.2014 21:03:42 - SC Joystick Mapping -->
<ActionMaps version="0" js1="Saitek X65F Flight Controller" js2="Saitek Cyborg Evo Force" js3="VJoy Virtual Joystick">
  <actionmap name="spaceship_general">
    <action name="v_eject">
      <rebind device="keyboard" input="js1_button46" />
    </action>
  </actionmap>

  <actionmap name="spaceship_view">
    <action name="v_view_yaw_left">
      <rebind device="joystick" input="js2_hat1_left" />
    </action>
    <action name="v_view_yaw_right">
      <rebind device="joystick" input="js2_hat1_right" />
    </action>
    <action name="v_view_pitch_up">
      <rebind device="joystick" input="js2_hat1_up" />
    </action>
    <action name="v_view_pitch_down">
      <rebind device="joystick" input="js2_hat1_down" />
    </action>
    <action name="v_view_cycle_fwd">
      <rebind device="joystick" input="js2_button10" />
    </action>
    <action name="v_view_option">
      <rebind device="keyboard" input="js2_button8" />
    </action>
    <action name="v_view_mode">
      <rebind device="keyboard" input="js2_button7" />
    </action>
    <action name="v_view_dynamic_focus_toggle">
      <rebind device="joystick" input="js2_button10" />
    </action>
  </actionmap>

  <actionmap name="spaceship_movement">
    <action name="v_pitch">
      <rebind device="joystick" input="js2_y" />
    </action>
    <action name="v_pitch_flightstick">
      <rebind device="joystick" input="js2_y" />
    </action>
    <action name="v_yaw">
      <rebind device="joystick" input="js2_x" />
    </action>
    <action name="v_roll">
      <rebind device="joystick" input="js2_x" />
    </action>
    <action name="v_throttle">
      <rebind device="joystick" input="js1_throttlez" />
    </action>
  </actionmap>
</ActionMaps>
```

Use Ctrl+a ; Ctrl+c to Copy all content ; Ctrl-v to paste

spaceship\_targeting

v\_strafe\_forward - js1\_button26  
v\_strafe\_back - js1\_button28  
v\_newtonian\_yaw - js2\_x  
v\_newtonian\_pitch - js2\_y  
v\_newtonian\_brake - js1\_button40  
v\_ifcs\_toggle\_safety - js1\_button27  
v\_afterburner - js1\_button6

Dump --> <-- Grab  
Reset Exit

# MappingVars.csv file

- The file contains the list of actions to rebind which are loaded into the ActionTree when the program starts
- Items are separated by a semicolon (;) or a comma (,)
- For each 'actionmap' there is one line
- The first item is the 'actionmap' name
- Further items are built from a single uppercase letter following the command as given in the defaultProfile
- The first uppercase letter is from J, K, P, X which is the actual binding to use  
J = joystick, K=keyboard, P=ps3pad, X=xboxpad
- The second part is e.g. "v\_attack1\_group1" the action name given in the defaultProfile
- A complete item is then "Jv\_attack1\_group1" means that the program rebinds the **joystick** command for "v\_attack1\_group1"
- There are no Blanks, Tabs etc. allowed but semicolons or commas at the end don't harm.
- I use Excel to maintain the list and save the Sheet as CSV file