# SC JOYSTICK MAPPER QUICK REFERENCE GUIDE V 2.18

#### 20160102 - Cassini

- https://github.com/SCToolsfactory/SCJMapper-V2/releases
- Change Log: see ReadMe.txt

SC Joystick Mapper	i - par conta i ca ana	
SC Joystick Man	oper - V 2.18.0.51 beta	For information and updates visit us @ Github
	·	
by	Cassini pp_rel	pindkeys layout_my_x55_abox_a3
spaceship_general	Joystick 1 Joystick 2 Joystick 3	<pre><!-- 25.12.2015 16:19:15 - SC Joystick Mapping - 1 <ActionMaps version="1" optionsVersion="2" rebindv</pre--></pre>
v_eject - js3_ralt+button24	Saitek Pro Flight X-55 Rhino Stick	js2="Saitek Pro Flight X-55 Rhino Stick" js2G="6( js3="Arduino Micro" js3G="b3e7a1d0-8ca2-11e4-800:
v_exit - js3_button23	Salter Pro Flight X-55 Killito Suck	
w_self_destruct w_toggle_cabin_lights - js3_button18	# Axis: 3 # POV: 1	<customisationuiheader de:<br="" label="my_x55_abox_a3"><devices></devices></customisationuiheader>
v_toggle_running_lights - js3_button22	# Buttons: 17	<keyboard instance="1"></keyboard>
e gaceship_view	Joystick State	<mouse instance="1"></mouse> <joystick instance="2"></joystick>
- & v_view_yaw_left	N Ashara A Stidarda A	<joystick instance="3"></joystick>
- v_view_yaw_right	X-Achse: -1 Slider 1: 0 Y-Achse: -38 Slider 2: 0	<categories></categories>
	Z Axis: 0	<category label="@ui_CCSpaceFlight"></category>
	Mehrwegescl -1	
	X Rotation: 0 POV 2: -1	<pre><options instance="2" type="joystick"></options></pre>
	Y Rotation: 0 POV 3: -1	<pre><flight_move_pitch exponent="1.00"></flight_move_pitch></pre>
v_view_cycle_fwd - js3_button13	Z-Rotation: -1 POV 4: -1	<pre><nonlinearity_curve>   <point in="0.182" out="0.028"></point></nonlinearity_curve></pre>
v_view_cycle_internal_fwd	Buttons: 15	<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>
v_view_option	Buttons: 15	<pre></pre> //> //> //>
v_view_mode - js3_button17	jsN - Assignment	<pre> </pre>
v_view_zoom_in	This device is listed as: is2	
v view_zoom_out	Jac	<pre><options instance="2" type="joystick"></options></pre>
v view ovde headlock mode is a hutton?		<pre><flight_move_yaw exponent="1.00">     <nonlinearity_curve></nonlinearity_curve></flight_move_yaw></pre>
		<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>
- v_view_dynamic_focus		<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>
- v_view_dynamic_focus_in	5	
- & v_view_dynamic_focus_out	Cmd	 
v_view_look_behind - js2_hat1_down	Ctrl. js2_lalt+	<pre><options instance="2" type="joystick"></options></pre>
spaceship_movement		<pre><flight exponent="1.00" move="" roll=""></flight></pre>
	Assign Throttle Find 1st.	<pre><nonlinearity_curve>    <point in="0.182" out="0.028"></point></nonlinearity_curve></pre>
	Blend 🚴 JS / Kbd Clear	<pre><pre> <pre> &lt;</pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre>
v_yaw_right		
v_yaw - js2_x		→ →
	Dump XML> < Grab XML	Inv. Aim Pitch Inv. Strafe lateral
- & v_roll_right	Comp AME> Call AME	
	Dump List>	Inv. View Pitch Inv. Strafe longitudinal
- & v_throttle_toggle_minmax		Inv. Aim Yaw
v_throttle_zero - js3_button42	Dump Log>	Inv. View Yaw
v_throttle_100		
v_throttle_up		Inv. Throttle
v_throttle_down	Device Tuning	Inv. Strafe vertical
x throttle abc _ ic3 clider1	o crite running	
🛿 Joystick 🔲 Gamepad 📄 Keyb. 🦳 Mouse 📄 Mapped		Mapping name: layout_my_x55_abox_a3
Action Filter: Clear Filter	Js Reassign	
	Settings Exit	Dump and Save my Mapping
rofiles: 🕋 Reset Support: profile version="1" options\	/ersion="2" rebindVersion="2" Mappir	ngs: layout_my_x55_abox_a3 → 🔛 Load →

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



# **General Information**

- Connect the game control devices to the PC
- Start from scratch or load an existing map from a file
- Make or refine mappings
- Save the new map as an XML file
- Use it in the game: e.g. pp\_rebindkeys layout\_my\_joystick
- You may load and save the map directly from your game folders so next time you just use pp\_rebindkeys layout\_my\_joystick

Note: the predefined actions are the ones found in the SC 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.

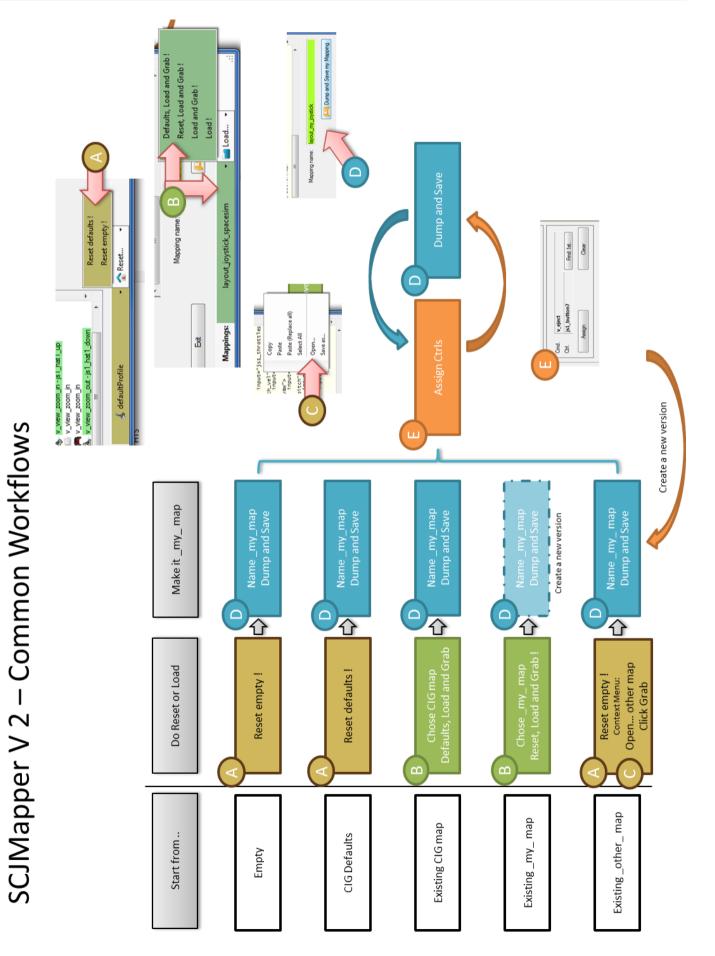
BTW: if you copy e.g. "pp\_rebindkeys layout\_my\_joystick" from notepad you may use Ctrl-V to paste it in-game into the console – saves you some typing...

Console .. Opens with the top left key usually right below the "Esc" key - depends on your keyboard

If you encounter an error or crash then read on...

- You will find 'log4net.config.OFF' in the distribution zip.
- Rename it to 'log4net.config' and run the program.
- Then look for a file named 'trace.log' in the program folder and
- send this to cassini@burri-web.org along with a description of the problem and your system i.e. OS, CPU, Graphics card, Joystick(s)
- we may then finally solve the issue ...

# The Workflow



# The GUI

The user interface is all laid out for direct access — there are no menus

🔁 SC Joystick Mapper		
	pper - V 2.18.0.51 beta Cassini pp_rebin	For information and updates visit us @ Github dkeys layout_my_x55_abox_a3
<pre>&gt; v_eject -js3_rait+button24 v_exit -js3_button23 v_self_destruct v_toggle_cabin_lights -js3_button18 v_toggle_running_lights -js3_button22 spaceship_view v_view_yaw_left v_view_yaw_left v_view_yaw_ov v_view_pitch_up v_view_pitch_down v_view_pitch v_view_ovcle_fwd - js3_button13 v_view_cycle_internal fwd</pre>	Joystick 1 Joystick 2 Joystick 3 Saitek Pro Flight X-55 Rhino Stick # Axis: 3 # POV: 1 # Buttons: 17 Joystick State X-Achse: -11 Slider 1: 0 Y-Achse: -26 Slider 2: 0 Z Axis: 0 Mehrwegescl -1 X Rotation: 0 POV 2: -1 Y Rotation: 0 POV 3: -1 Z-Rotation: -1 POV 4: -1	<pre><!-- 25.12.2015 16:19:15 - SC Joystick Mapping - 1 ^ <ActionMaps version="1" optionsversion="2" rebindy js2="Saitek Pro Flight X-55 Rhino Stick" js26="66" js3="Arduino Micro" js36="b387a1d0-8ca2-1le4-800" <CustomisationulHeader label="my_X55_abox_a3" det</th--></pre>
Action tree and mappings	Cmd Crd Ctrl. js2_lait+x Assign Throttle Find 1st. Blend & IC / Kbd Clear Mapping	<pre>  <options instance="2" type="joystick"> <flight_move_yaw exponent="1.00"> <flight_move_yaw: exponent="1.00"> <flight_move_yaw: exponent="1.00"> <flight_move_yaw: exponent="0.028"></flight_move_yaw:> <point in="0.629" out="0.235"></point> </flight_move_yaw:></flight_move_yaw:></flight_move_yaw></options>  <flight_move_yaw: <="" options="">  </flight_move_yaw:>  </pre>
v roll_left v roll_icit v roll_siz_rotz v throttle_toggle_minmax v throttle_zero_js_button42 v throttle_up v throttle_up v throttle_up v throttle_down v throttle_d	Dump XML> < Grab XML Dump List> Dump Log> Conversions Device Tuning Settings	Inv. Aim Pitch Inv. Strafe lateral Inv. View Pitch Inv. Strafe longitudinal Inv. Aim Yaw Inv. View Yaw Inv. Throttle Inv. Strafe vertical Mapping name: layout_my_x55_abox_a3
Action Filter: Clear Filter	Js Reassign Settings Settings Exit	Load / Save Dump and Save my Mapping
Profiles: The Reset   Support: profile version="1" options\	/ersion="2" Mappings	ayout_my_x55_abox_a3 🔹 🖬 Load 👻 📑

- ⇒ Action tree and mappings shows the tree of action maps and actions derived from the defaultProfile directly from the game folders
- $\Rightarrow$  There are some filters where you can limit the items shown in the tree
- $\Rightarrow$  The program detects game devices each one has its own tab
- ⇒ The XML area shows the outcome of the mapping and is what can be imported in the game directly
- ⇒ The Mapping area is where profile actions can be mapped individually to create the action mapping YOU want to use in the game

# Game Devices

oystick 1 Joyst	ick 2 🗍	oystick 3		<br <act< th=""></act<>
Arduino Micro	Saitek	Pro Flight X-5 20-03b7-11e4	5 Rhino Stic -8001-4445	:k 53540000
# Axis: # Buttons:	7 48	# POV:	2	<
Detected Device	es shov	vn as Tabs		

Joystick 1 Joys	tick 2 Joy	stick 3			
-Saitek Pro Flig	ht X-55 Rh	ino Stick			
# Axis:	3	# POV:	1		
# Buttons:	17				
Joystick State					
X-Achse:	-16	Slider 1:	0		
Y-Achse:	-28	Slider 2:	0		
Z Axis:	0	Mehrwege	scl -1		
X Rotation:	0	POV 2:	-1		
Y Rotation:	0	POV 3:	-1		
Z-Rotation:	-1	POV 4:	-1		
Buttons: 15					
-jsN - Assignme	jsN - Assignment				
This device is	listed as:	js2			
Device Tab for the	e 'blue' Joy	vstick	_		

The tabs represent the game devices found connected to the PC. The program can show up to 9 devices.

The sequence 1..8 shows the order the PC reports them which is crucial to the mapping as this will result in the default js1\_, js2\_ .. Names used to build the command name.

A summary of the capabilities is show in the top area.

A tooltip indicates the real name of the device - move and point the mouse to any Tab to show the indicator.

The elements shown in 'Joystick State' are the ones the device seems to support – greyed ones are not available for this device.

You will see the actual jsN assignment - or 'not assigned'.

The SC-Device to Joystick Mapping is a separate window accessed by hitting the 'Js Reassign' button.

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

Note: the range for Axis is set to -1000 .. +1000 by the program and is not what other applications may show you.

# Action Tree and mappings

# Action Tree

The action tree is initially built from the games defaultProfile - so these are the known actions which are grouped along 'action maps' e.g. 'spaceship\_movement.

Each action is predefined for a specific device.

There are joystick, keyboard, mouse, and gamepad actions indicated by the icon.

 This is given by the SC default profile and cannot be changed. An action may e.g. not be available for the joystick.

# **Rebinding:**

By 'rebinding' or mapping and action with a different control one does replace the default one.

Overwriting a keyboard action will result in having it available with a different command in the game.

You can only map actions using the same device as in the profile i.e. a keyboard action cannot be mapped with a joystick control.

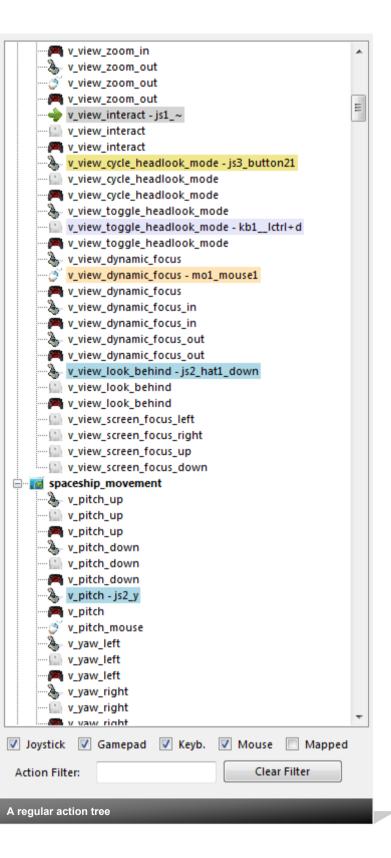
If actions are mapped (as shown) the color indicates which device is mapped. The device tab colors match the entries, keyboard and mouse have distinct colors.

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

# Selecting an Action:

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





# Action Tree Filters

	Action Tree Filters
<pre>spaceship_general spaceship_view spaceship_movement v_throttle_zero - js3_button42 v_throttle_abs - js3_slider1 spaceship_targeting spaceship_targeting</pre>	The action tree has a vast number of en- tries. So for convenience you may filter the shown items to the one you are inter- ested in.
spaceship_turret         spaceship_weapons         spaceship_missiles         spaceship_defensive         spaceship_auto_weapons         spaceship_power         spaceship_radar	<b>Device Filter</b> With the checkboxes at the bottom you may restrict the shown item to a particu- lar category.
spaceship_hud zero_gravity_general zero_gravity_eva IFCS_controls multiplayer singleplayer invite player flycam wehicle_general	<ul> <li>Joystick Gamepad Keyb. Mouse</li> <li>Check categories you want to see</li> <li>Mapped Only</li> <li>Restricts to show only mapped items</li> </ul>
vehicle_driver	Action Filter Accepts text entry to match parts of the
	Action Filter: thro Clear Filter
	<b>Clear Filter</b> To empty the field
Joystick     Gamepad     Keyb.     Mouse     Mapped       Action Filter:     thro     Clear Filter	NOTE: Filters only restrict the items shown in the tree
Filtered action tree - showing mapped joystick items with "thro"	

# Working with Profiles

### Working with profiles

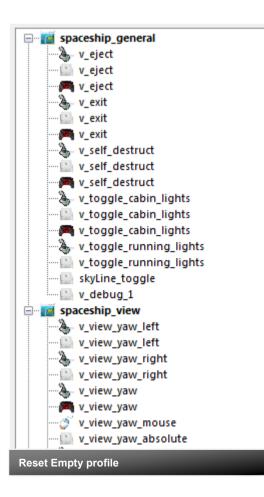
The program gets the actions from the real game asset – so you are always up to the actual values.

From here you may Reset the action list to the following

-RESET EMPTY reverts to just an action list without any mappings

-RESET DEFAULTS loads the Joystick actions mapped with what CIG is providing

Action	Filter:		
	Reset d	efaults	! · · · ·
	Reset er	mpty !	
Profiles:	🟫 Reset	-	Support:
Loading a pro	ofile		





# Mapping

Cmd. v_pitch	
Ctrl. js2_y	
Assign Throttle Blend JS / Kbd	Find 1st.
Device Mode	
Cmd. v_pitch Ctrl. np_5 Assign Throttle Blend U JS / Kbd	Find 1st.
Keyboard and Mouse Mode	

oystick 1 Joy	stick 2 Joy	/stick 3	
-Saitek Pro Flig	ght X-55 Rh	ino Stick	
# Axis: # Buttons:	3 17	# POV:	1
- Joystick State			
X-Achse:	-16	Slider 1:	0
Y-Achse:	-28	Slider 2:	0
Z Axis:	0	Mehrwege	scl -1
X Rotation:	0	POV 2:	-1
Y Rotation:	0	POV 3:	-1
Z-Rotation:	-1	POV 4:	-1
Buttons:	15		
- jsN - Assignm	ent		
This device is	i listed as:	js2	
Device Tab for th	_		_

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 item you activated on the currently shown device tab. You may also map keyboard and mouse actions.

### Devices vs. Keyboard/Mouse

To switch between game devices and keyboard/mouse us the 'JS/Kbd' toggle. Note: keyboard entries are accepted when the Ctrl. Field has the focus

### Select the device

To map a device control first select the device tab i.e. if you want to map a control of the second joystick you have to select the 'Joystick 2' Tab first.

# Assign

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 device it is assigned to.

# Throttles

To make any axis a Throttle axis – check the 'Throttle' box ! It is often the Z-Axis. A throttle gets a name like js2\_throttlez.

# **Clear Actions**

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.

### Find a mapping

You may use "Find 1st" to find the first action where the currently shown Ctrl.

# Blending

If you wish to blend a single item from the defaultProfile i.e. hide it from use select an item and then hit the 'Blend' button.

~~ v\_view\_zoom\_out ~~ v\_view\_interact - js1\_~ ~ v view interact

# **Advanced Mapping**

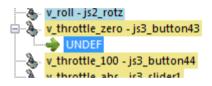
### **Context Menu**

Right click an action opens a context menu giving a choice of functions that are possible right now.

Assign, Blend, Clear behave like the buttons in the main GUI

### Add Mapping

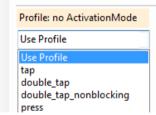
Will add a binding to the selected item to use a second control for this item. Such an addition can be mapped like the main entry - also deleted to remove it. (Note: this does not work in SC2.0/2.1)

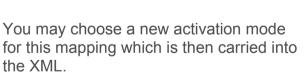


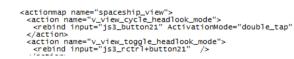
### **Activation Modes**

Starting from Profile: there are activation modes listed. Profile indicates what is in the profile as default or 'no ActivationMode' if the profile does not apply .. .

one



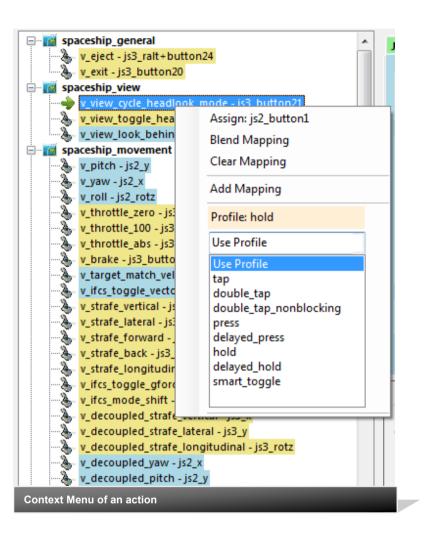


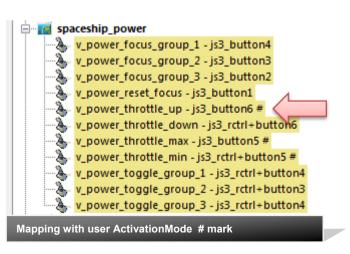


Most notable are double taps which may be applied by CIG in the profile sometimes and are then carried into the mapping if not changed here.

#### V2.18 added:

Mappings with ActivationMode changes are marked with "#"





# Joystick mapping with Modifiers

Cmd.	v_pitch
Ctrl.	js2_lalt+y
Ass Ble	
Device n	nodifier

Cmd.	v_pitch	
Ctrl.	lshift+lctrl+np_2	
Ble		Find 1st. Clear
Combine	ed modifiers	

#### **Keyboard Modifiers**

Controls can be extended with a Modifier. Right now only keyboard modifiers can be used for joysticks.

Modifiers are preset: Left/right Shift / Alt / Ctrl keys Modifiers can be combined.

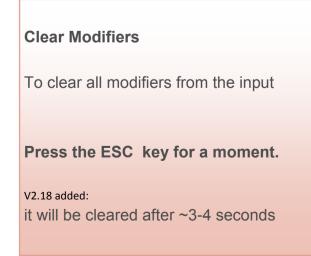
If you press a modifier it will show up like 'lshift+lctrl+key'

For devices the notation is different - it is prepended by the device tag E.g. js2\_lalt+y (js2\_y is the control that is modified here)

For keyboard input press all keys and release them at once.

Sometimes a second attempt is needed to create the proper key sequence.





# Mouse Mapping

#### V 2.18 added:

#### Adding Mouse Commands

Switch to Kbd Mode

🕒 JS / Kbd

#### **Context Menu**

Right clicking the 'Ctrl' entry field opens a context menu giving a choice of mouse commands that are possible right now.

The number of buttons is taken from the current mouse input setting - you may need to find out which one is 1,2 ...

Cmd. v_yaw_mouse		<pre> <point <="" <point="" flight_="" nonlir="" options=""> </point></pre>
	X-Ax	s (horizontal)
Assign Throttle Fin	Y-Ax	is (vertical)
Blend 🔛 JS / Kbd C	Whee	el Up
	Whee	el Down
	Butto	on 1
Dump XML> < Grat	Butto	on 2
	Butto	on 3
Dump List>	Butto	on 4
Dump Log>	Butto	on 5
	Butto	on 6
	Butto	on 7
Device Tuning	Butto	on 8
Ctrl - Context Menu - Mouse Commands		

	v_yaw_mouse	
Ctrl.	mo1_maxis_x	
Assig	n 🔲 Throttle	Find 1st.
Blen	d 📃 JS / Kbd	Clear
	nmand assigned	

#### Modifiers from keyboard

Can be used to extend mouse commands

Cmd				
Ctrl. mo1	lshift+mouse1			
Assign	Throttle	Find 1st.		
Blend US / Kbd Clear				
Mouse command with modifier assigned				

# XML Dump

#### **XML** Format

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.

Dump XML-->

<-- Grab XML

#### The Context Menu

Right click 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!

<options type="joystick" instance="2"> . <flight\_move\_roll exponent="1.00" > <nonlinearity\_curve>
 <point in="0.182" out="0.028"/>
 <point in="0.629" out="0.235"/>
 <point in="0.895" out="0.629"/> </ri></right\_move\_roll> </options> Ξ <deviceoptions name="Saitek Pro Flight X-55 Rhind <option input="x" deadzone="0.025" 1> </deviceoptions> <deviceoptions name="Saitek Pro Flight X-55 Rhind <option input="y" deadzone="0.025'
</deviceoptions> <deviceoptions name="Saitek Pro Flight X-55 Rhind <option input="rotz" deadzone="0.025" /> </deviceoptions> <actionmap name="spaceship\_general"> action name="v\_eject">
 <rebind input="js3\_ralt+button24" /> </action> <action name="v\_exit"> <rebind input="js3\_button23" /> </action> <retion name="v\_toggle\_cabin\_lights">
 <rebind input="js3\_button18" /> </action> <action name="v\_toggle\_running\_lights">
 <rebind input="js3\_button22" /> </action> </actionmap> <actionmap name="spaceship\_view"> <action name="v\_view\_cycle\_fwd"> <rebind input="js3\_button13" /> 1> </action> <action name="v\_view\_mode">
 <rebind input="js3\_button17" /> </action> • 111 XML Dump of an action map

# Action maps

# Working with action maps

(Maps, Mapping etc..)

The program gets the action maps from the USERS game asset – so you are always up to the actual values.

(...\StarCitizen\Public\USER\Controls\Mappings)

From here you may first chose a map, then 'Load' the action map – this will overwrite you XML window in any case

-LOAD loads the map into the XML window only

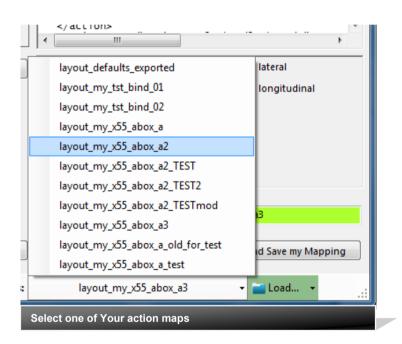
-LOAD and GRAB loads the map into the XML window and clicks Grab i.e. merges the existing mapping with the one loaded

-RESET, LOAD and GRAB first Reset (empty) the action list (all mappings cleared) then it loads and grabs the new map

-DEFAULT, LOAD and GRAB first Reset (defaults) the action list then it loads and grabs the new map and merges them with the defaults

See page 3 for some common workflows And how to handle them easily.





,	Mapping name:	layout_my_x55_abo	Reset, Load and Grab !		
s:	layout_my_x55_	abox_a2 •	Coad • .::		
Actio	Action map loading options				

# Your Actionmaps

### Working with your own actionmaps

The program not only gets the actionsmaps from the real game asset – but also can save your maps there.

(...\StarCitizen\Public\USER\Controls\Mappings)

### 1.Type a name

2.Hit the button – it will then Dump and Save your map into the game folder (asking you to overwrite it if it exists)

Remark: your map name has always to start with '**layout\_my\_**' to prevent conflicts with CIGs own actionmaps Lowercase only, no spaces, tabs allowed else you see the red flag ..

A successful Save will show the green flag

Your own maps will then show up like the game provided maps pp\_rebindkeys layout\_my\_joystick

should load it into the game

Note: For your convenience each Save also makes a copy of into your personal "My Documents\SCJMapper" folder – no work is lost if there is an update that cleans the Mappings folder.

Mapping name: layout_my_x55_abox_a3
Dump and Save my Mapping
layout_my_x55_abox_a3 🛛 👻 🔛 Load 👻 🤐
Mapping name: ayout_any
Invalid name indication
Mapping name: layout_my_joystick3
Dump and Save my Mapping
Success !!

# Settings

ettings	
Ignore Buttons - enter button numbers which should be ignored separated by spaces (e.g. 24 25)	Ignore Actionmaps - check the ones to hide
	multiplayer
	singleplayer
Joystick 1	invite
Joystick 2	player
50550CR 2	flycam
Joystick 3	vehicle_general
	vehicle_driver
Joystick 4	vehicle_gunner
Joystick 5	spaceship_general
	spaceship_view
Joystick 6	spaceship_movement
Joystick 7	spaceship_targeting
50550CK /	spaceship_turret
Joystick 8	spaceship_weapons
	spaceship_missiles
Path to the Star Citizen Installation (e.g. C:\Games\StarCitizen)	spaceship_defensive
	spaceship_auto_weapons
E:\G\StarCitizen	spaceship_power
	spaceship_radar
Advanced Options	spaceship_hud
Use Gamepad Use PTU folders	zero_gravity_general  zero_gravity_eva
	zero_gravity_eva
Note: Accepting changes will clear the action tree to apply the ne Cancel now if you want to save your work first.	w settings; Accept Cancel

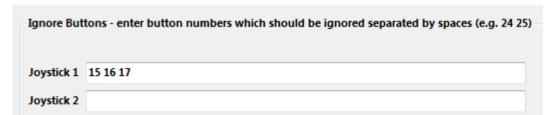
There are a number of setting you may need to do for efficient working..

Settings...

### **Ignore Buttons**

Some devices have buttons pressed to switch modes. I may be needed to 'ignore' them to get proper readouts for mapping.

Enter the numbers with a space between - like in the example below



#### **Ignore Action maps**

You may not want to deal with all the maps provided by the game - check the ones you want to ignore those maps are hidden from you and will not be processed once ignored.

multiplayer	
singleplayer	
invite	
player	
flycam	
vehicle_general	
vehicle_driver	
vehicle gunner	

# Settings (2)

### Providing a path to the game

In general the program finds the path to the game on its own, however if not, you may direct it to use a given path

Pat	h to the Star Citizen Installation (e.g. C:\Games\StarCitizen)	
✓	E:\G\StarCitizen	

The path should be the top folder of the SC installation

Make sure to check the left box to use the path

🛯 퉬 StarCitizen	*	Name
<ul> <li>Client</li> <li>Launcher</li> <li>Patcher</li> <li>StarCitizen</li> <li>StarCitizen</li> <li>Bin64</li> <li>Data</li> <li>Engine</li> <li>LogBackups</li> <li>ScreenShots</li> <li>USER</li> </ul>		<ul> <li>Client</li> <li>Launcher</li> <li>Patcher</li> <li>StarCitizen</li> <li>CIGLauncher.exe</li> <li>LauncherState</li> <li>loginData.json</li> <li>PatcherInstall.zip</li> <li>uninst.exe</li> <li>uninstall.exe</li> </ul>

### Use Gamepad

The gamepad needs special treatment - if you want to use a gamepad you have to check the box.

Advanced Options		
Use Gamepad		

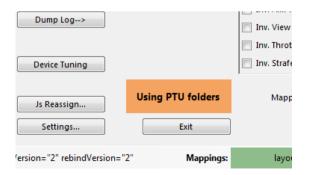
# **Using PTU Folders**

In general the program finds its files in the Public subfolder of the Game installation path. If you are running PTU and want to work with the Test environment - check this box

Advanced Options Vse Gamepad	Use PTU folders	Settings Notification

Changing to and from PTU requires a restart!

Once in PTU mode the program indicates this as shown below



# Joystick Assignment

k Numbers		EX
ment		
vJoy Device	n.a.	•
Saitek Pro Flight X-55 Rhino Stick	js2	•
Arduino Micro	js3	•
		•
		•
		•
		•
		•
Accept	Cance	I
	Saitek Pro Flight X-55 Rhino Stick Arduino Micro	wloy Device n.a.   Saitek Pro Flight X-55 Rhino Stick js2   Arduino Micro js3

### (re) assign the joystick devices to the wanted js - number

Js Reassign...

Go here if you wish to assign a device to a particular js – number or to re-assign the devices to other numbers.

Per default the devices found are assigned along the sequence 1..8 but SC may remap them so here is the place to fix this without having to go through all commands and reassign them.

Notes: The color of the assigned items will not change as it is still the same device but js1 will become js2 for example.

You can leave this dialog with "Accept" only if each device is either assigned to a unique number or to n.a. (not assigned) otherwise an error pops to ask you to fix it or Cancel.

Related SC console commands are:

i\_DumpDeviceInformation

pp\_ResortDevices joystick 1 2

pp\_rebindkeys export joystick
pp\_rebindkeys export xboxpad

# Device Tuning 1/3

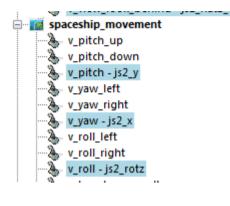
# There are options provided to tune the reaction of a game device

Use 'Device Tuning' to optimize it, it supports:

- Deadzone
- Sensitivity
- Invert
- either Exponent or NonLinearCurve

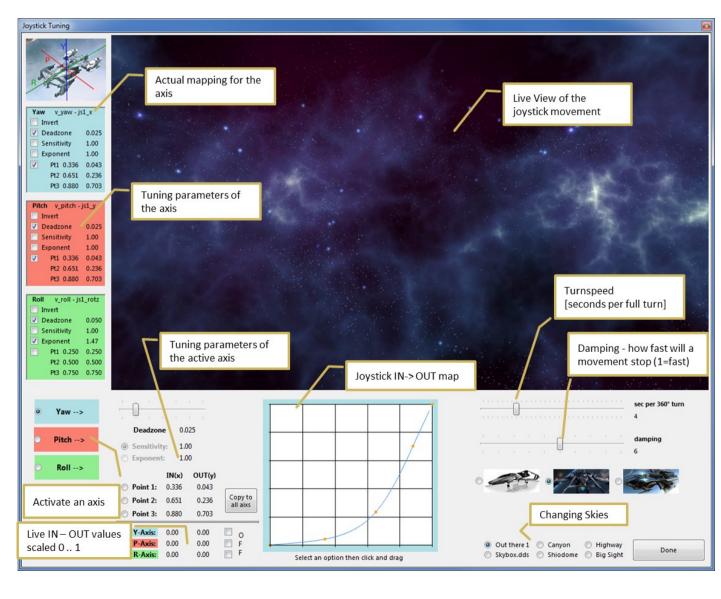
independently for the Yaw-, Pitch-, and Roll- axes.

Note: Tuning will only recognize mapped controls

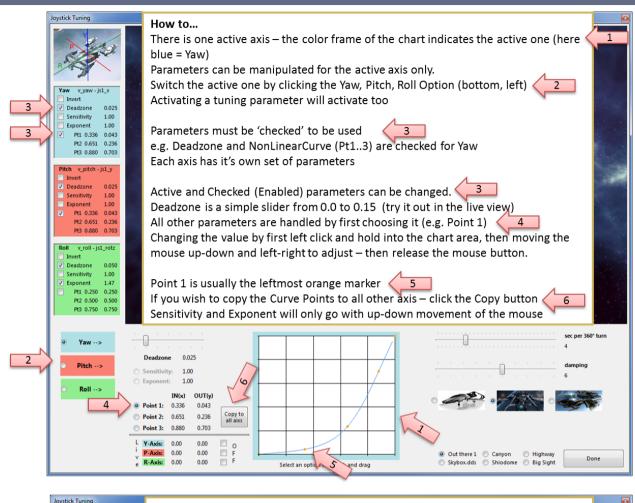


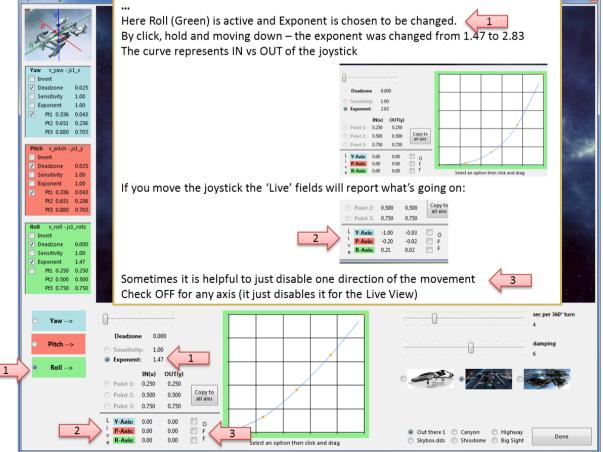
Device Tuning

Hit the 'Device Tuning' button to open the tuning window



# Device Tuning 2/3





# Device Tuning 3/3

SC Joystick Mapper			
Once back from Tuning	For information and updates visit us @ Github		
Ũ	eys layout_my_x55_65test		
With "Dump" or "Dump and Save" you will get the new Tuping values	<pre><!-- 22.12.2014 17:59:09 - SC Joystick Mapping--> _ <actionmaps <="" ignoreversion="1" pre=""></actionmaps></pre>		
With "Dump" or "Dump and Save" you will get the new Tuning values	)53="Saitek Pro Flight X-55 Knino Stick" )536="6		
into the XML area – if you don't want to apply the new settings, just	<customisationuiheader area.<="" device="joystick" from="" grab"="" label="N =&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;hit " restart="" settings="" td="" the="" to="" with="" xml=""><td><pre><options instance="3" type="joystick"></options></pre></td></customisationuiheader>	<pre><options instance="3" type="joystick"></options></pre>	
	<pre><flight_move_pitch exponent="1.00">     <nonlinearity_curve>     <pre>cpoint in="0.182" out="0.028"/&gt;</pre></nonlinearity_curve></flight_move_pitch></pre>		
With "Dump" the prog will maintain the parameters using the	<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>		
following 2 XML tags	<pre><options instance="3" type="joystick"></options></pre>		
<ul> <li><options></options></li> </ul>	<pre> <flight_move_yaw exponent="1.00"></flight_move_yaw></pre>		
<ul> <li><deviceoptions> (Deadzone only)</deviceoptions></li> </ul>	<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>		
One set for each axis	<pre><pre> <pre> &lt;</pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre>		
	<pre><options instance="3" type="joystick">     <flight_move_roll exponent="1.00"></flight_move_roll></options></pre>		
	<pre><nonlinearity_curve>   <point in="0.182" out="0.028"></point>   <point in="0.629" out="0.235"></point></nonlinearity_curve></pre>		
Note: the program will automatically apply Exponent="1" if the	<pre><pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre></pre>		
Exponent is not used – if not set to 1 the game will use something like			
2.3 and reshape any setting to an unexpected outcome	<pre><options instance="2" type="joystick">     <flight_throttle invert="1"></flight_throttle></options></pre>		
	<deviceoptions deadzone="0.025" name="Saitek Pro Flight X-55 Rhind&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;If you have a 2 monitor setup – you may want to try to have the tuning&lt;/td&gt;&lt;td&gt;&lt;pre&gt;&lt;option input=" x"=""></deviceoptions>		
window open while running AC – the joystick input is then applied to			
both applications – getting into the console will let you the mouse to	Inv. Flight Pitch Inv. Flight Roll		
interact with the tuning window, create a new tuned map and you	Inv. Aim Pitch 📝 Inv. Throttle		
may apply it immediately via console rebind to try it out	Inv. View Pitch Inv. Strafe vertical		
(You may need a fast computer – but then AC needs this anyhow)	Inv. Flight Yaw		
(Tou may need a just computer – but then Ac needs this anyhow)	Inv. Aim Yaw Inv. Strafe longitudinal		
Uevice luning	Inv. View Yaw		
	Manning same. Invoit my vEE 65tart		
Action Filter: Clear Filter Js Reassign	Mapping name: layout_my_x55_65test		
Settings Exit	Dump and Save my Mapping		
Profiles: 💪 defaultProfile 🔹 🥎 Reset 🔹 Mappings: layout_	my_x55_65test • 📥 Load •:		

### How to get a list of <u>all</u> game commands when using a map file?

٠	Load a map using	'Defaults'	Exit	Mapping name: layout_my_lo	Defaults, Load and Grab ! Reset, Load and Grab ! Load and Grab ! Load !
•	Hit 'Dump List'	Dump List>	Mappings:	layout_joystick_spacesim	• 🔁 Load •:!

... Gets you the complete list of commands in use if you load that map in game

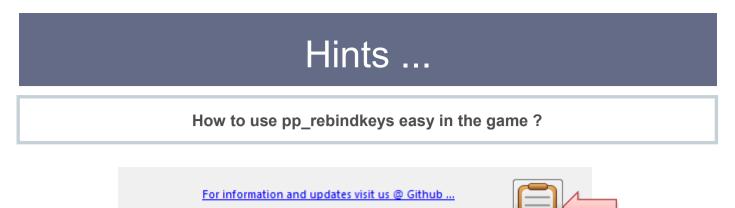
- Right click in the listing to get a context menu to Copy / Paste or Save As..
- The mapping filter checkboxes can be used to limit the listed items

		Joystick	<b>V</b> Gamepad	🔽 Keyb.	🔽 Mous	e 📝 Mapped	
*** spaceship_auto_weapons v_weapon_toggle_ai	. kb1 _	slash			[1] Us	e Profile	*
<pre>*** spaceship_power v_power_focus_group_1 v_power_focus_group_2 v_power_focus_group_2 v_power_focus_group_3 v_power_focus_group_3 v_power_reset_focus v_power_reset_focus v_power_throttle_up v_power_throttle_up v_power_throttle_down v_power_throttle_down v_power_throttle_down v_power_throttle_max v_power_throttle_max v_power_throttle_min v_power_throttle_min v_power_toggle_group_1 v_power_toggle_group_2 v_power_toggle_group_2 v_power_toggle_group_3 v_power_toggle_group_3</pre>	. kb1 _ + js3 _ . kb1 _ + js3 _ + js3 _ . kb1 _ . kb1 _ + js3 _ + js3 _ . kb1 _ + js3 _ + js3 _ + js3 _ + js3 _ + js3 _ + js3	button3 2 button2 3 button1 0 button6 np_add rctrl+butt np_subtrac button5 np_add rctrl+butt 4 rctrl+butt 5	ton5 tt ton4 ton3		[1] US [1] ST [1] ST [1] ST [1] ST	e Profile e Profile ess uble_tap uble_tap uble_tap art_toggle art_toggle art_toggle art_toggle	m
<pre>*** spaceship_radar v_radar_toggle_onoff v_radar_toggle_active_or_passive v_radar_toggle_active_or_passive v_radar_cycle_mode_fwd v_radar_cycle_zoom_fwd v_radar_cycle_zoom_fwd v_radar_cycle_focus_fwd v_radar_toggle_view_focus</pre>	+ js3 _ . kb1 _ + js3 _ + js3 _ . kb1 _ + js3 _ + js3 _	button15 button14 comma		-	[1] US [1] US [1] US [1] US [1] US [1] US	e Profile e Profile e Profile e Profile e Profile e Profile e Profile e Profile	
<pre>*** spaceship_hud v_hud_cycle_mode_fwd v_hud_cycle_mode_back v_hud_focused_cycle_mode_fwd v_hud_focused_cycle_mode_back v_hud_open_tab1 V2.18 added:</pre>	. kb1 _ . xi1 _	apostrophe semicolon shoulderr shoulderl f1		-	[1] Us [1] Us [1] Us	e Profile e Profile e Profile e Profile e Profile e Profile	

V2.18 added:

For bindings and activation:

- . indicates a profile entry i.e. a default setting
- + indicates a user mapping
- # indicates a user ActivationMode setting



pp\_rebindkeys layout\_my\_x55\_abox\_a3

-- 27.12.2015 21:34:12 - SC Joystick Mapping --

 Clicking the Notepad icon top right copies the pp\_rebindkeys command into the Clipboard – from there just Ctrl-V it into the SC console..

Note: if you want to be sure to apply only your new map first type pp\_rebindkeys without a file and then Enter - the response of the game should be - loaded factory defaults ... Then use the command with your mapname (without the .xml extension)

How to apply keyboard commands and modifiers ?

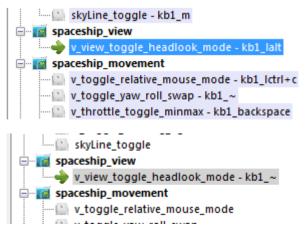
### Sometimes your command is not recognized with the first try

Check the Ctrl field each time and if it does not yet capture what you want – try once more. Also releasing all controls currently pressed **together** helps to get successful Ctrl. Entries.

# What about commands you really don't want to be mapped in game ?

# Sometimes default commands from CIG annoyingly interfere with your game style

- Load a Profile with defaults and filter if needed to find the problematic action
- If you find that this single kbd leftalt command is disturbing your use of the left alt modifier
- Reload your own map and 'Blend' that action for the keyboard to ignore it in the game





Changelog:

V2.18 - update Hints - List Commands - add description for + and =, add joystick modifier timeout description, add mouse commands