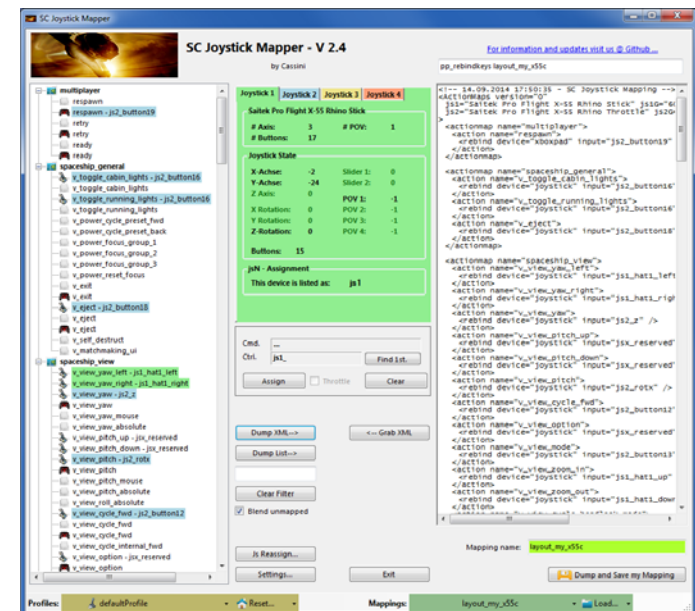


SC Joystick Mapper Quick Reference Guide V 2.4

20140914 – 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 ...



Updating from V 2.x to V 2.4:

- If you not have used 2.3 already:
Check the jsN assignment and maybe de-assign unused devices
See the new '**js Reassign**' feature on page 17.
Note: You may need to do this twice for each of the "VJoy virtual joystick" devices.
- 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 ...

Contents

- Page 2 Version Upgrade and Issue Handling
- Page 3 Contents (this one...)
- Page 4..10 General GUI and how to's
- Page 11..14 **V2.0 new features**
- Page 15 **V2.1 new features**
- Page 16 **V2.2 new features**
- Page 17 **V2.3 new features + V2.4 refinement**
- Last Page Common Workflows - Cheat sheet

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_my_joystick`
- **V 2.0: 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 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 2 actions to the same joystick button:

- `v_target_missile_lock_selected`
- `v_weapon_launch_missile`

BTW: if you copy e.g. “`pp_rebindkeys C:\maps\layout_my_joystick`” from notepad you may use Ctrl-V to paste it in-game into the console – saves you some typing...

The GUI ...

Action tree and mappings

XML dump of the mappings used

The screenshot shows the SC Joystick Mapper V 2.4 interface. On the left is a tree view of actions, including 'spaceship_movement' and 'v_pitch'. The center displays 'Detected Joystick devices' for a 'Saitek Pro Flight X-55 Rhino Stick', showing its axes, buttons, and joystick state. Below this is a 'Joystick device map' and 'Action Mapping Buttons'. The right side shows an 'XML Area' with a dump of the mappings. At the bottom, there are buttons for 'Dump XML', 'Grab XML', 'Dump List', 'Clear Filter', 'Js Reassign...', 'Settings...', 'Exit', and 'Dump and Save my Mapping'. The 'Mappings' section at the bottom right shows 'layout_my_x55c' selected.

Detected Joystick devices
(up to 8 are shown)

Joystick properties
(greyed out ones are not available)

Joystick device map

Selected mapping

Action Mapping Buttons

XML Area Buttons

Dump nice List

V2: filter the action tree

V2.1: Blend unmapped option

V2.3, 2.4: Js Reassignment

V2: New Reset with options

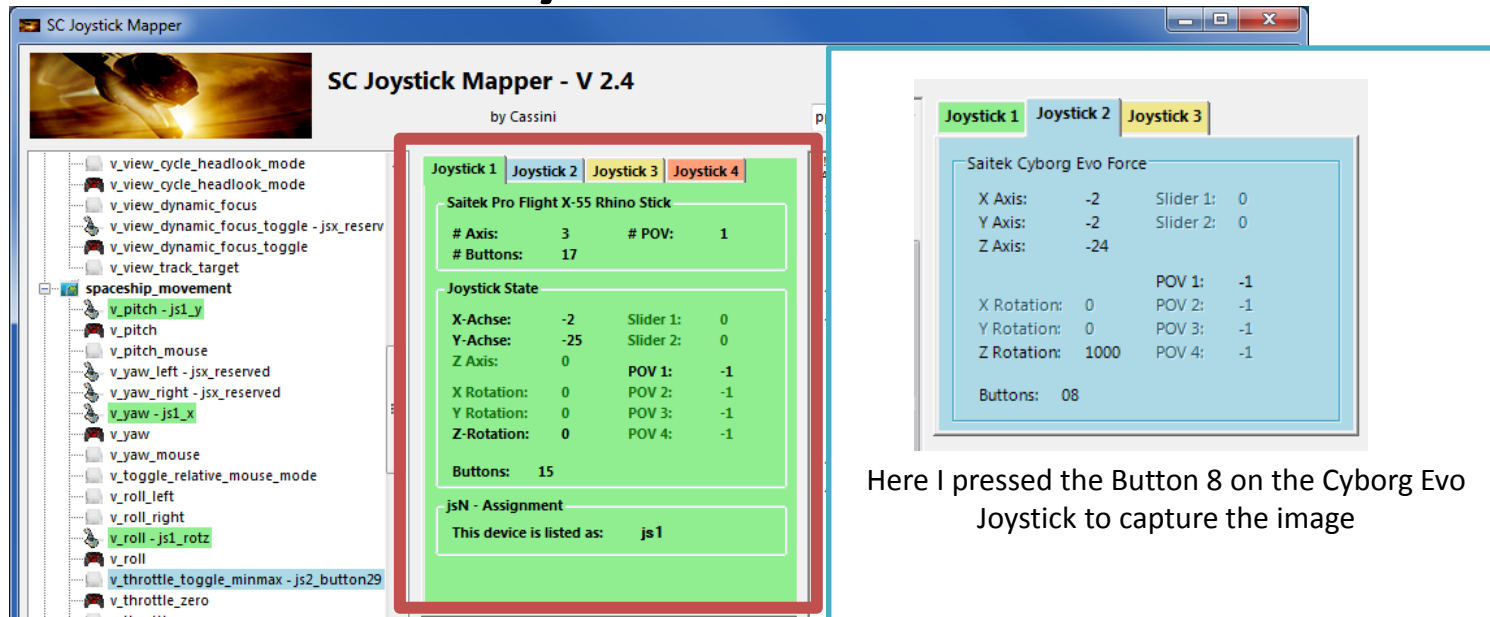
V2: Load from game folders

V2: Save into game folders

V2: Resize the window

V2.3 Update here

The Joystick Area...



Here I pressed the Button 8 on the Cyborg Evo Joystick to capture the image

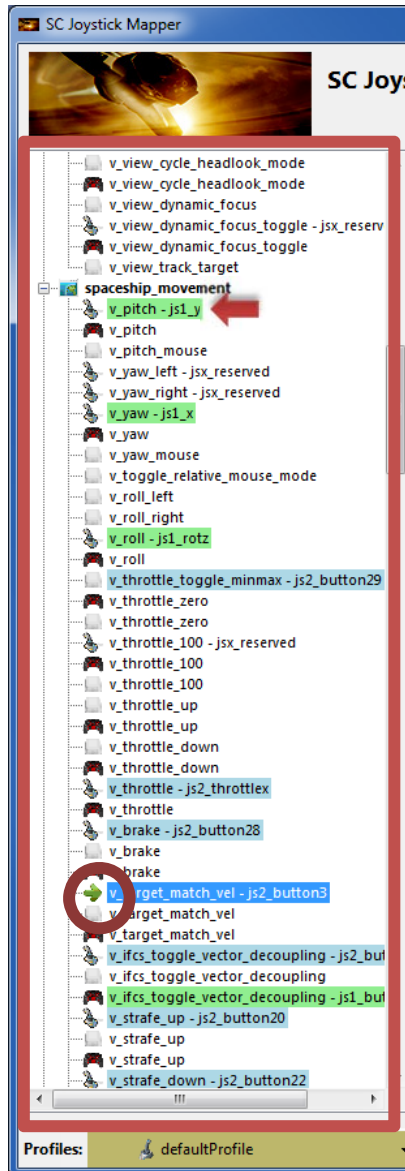
The tabs represent the joystick devices found connected to the PC also the number 1..8 shows the order the PC reports them which is crucial to the mapping as this will result in the default js_1, js_2 .. Names used to build the command name. The elements are the ones the joystick seems to support – greyed ones are not available for this device.

V 2.4: you will see the actual Js assignment - or 'not assigned' – see page 17

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

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 or type *pp_rebindkeys* without a name

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

v_pitch - js1_y then means that the action v_pitch (joystick per default) is rebound to the joystick 1 (green) 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.

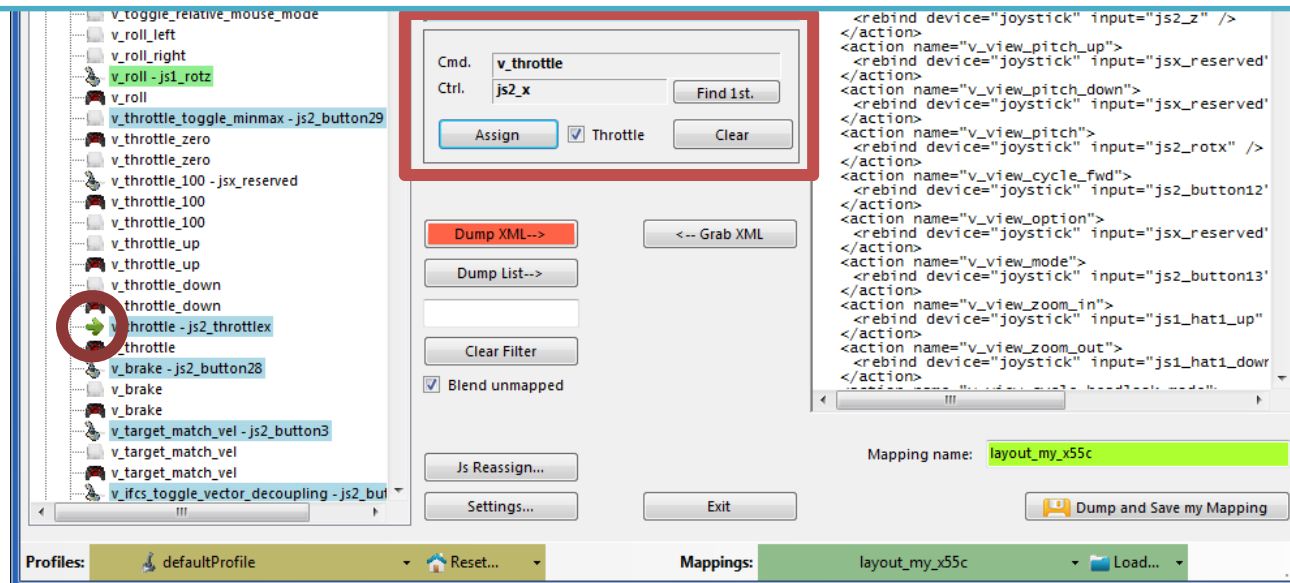
Once you have a mapping that should be used, hit the "Assign" button.

The new mapping will be shown in the Action Tree – where it gets the back color of the joystick it is assigned to.

V2: To make any axis a Throttle axis – check the 'Throttle' box ! It is often the Z-Axis but the Rhino has it e.g. on js2_y.
If you do so the control assigned in changed to a throttle control (here js1_throttlez)

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.

You may use "Find 1st" to find the first action where the currently shown Ctrl. (js1_z or if checked as shown js1_throttlez) is mapped.



The XML Area...

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.

Load and Save much easier ... read V2 Feature pages

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

The screenshot displays the SC Joystick Mapper interface. On the left, the Action Tree lists various actions such as v_throttle_100, v_throttle_up, v_throttle_down, v_throttle - js2_throttlex, v_throttle, v_brake - js2_button28, v_brake, v_target_match_vel - js2_button3, v_target_match_vel, and v_ifcs_toggle_vector_decoupling - js2_bu. A red box highlights the 'Dump XML-->' button in the Action Tree panel. The main XML Area on the right shows the XML content for the selected mapping, 'layout_my_x55c'. The XML includes metadata like 'ActionMaps version="0"', joystick identifiers, and several actionmap blocks. A red box highlights the XML content. At the bottom, the 'Mapping name:' field is set to 'layout_my_x55c', and the 'Dump and Save my Mapping' button is visible.

The XML Area...

If you hit “Dump List” a formatted list of the mapped actions is written into the XML area.

You may use the “Save As..” menu to save it e.g. as TXT file.

The image displays the SC Joystick Mapper interface. The main window shows a list of mapped actions on the left and a large XML area on the right. A red box highlights the "Dump List-->" button in the center. Below the main window, a "Speichern unter" (Save As) dialog box is open, showing a file named "T2Mapping.txt" selected, with a red box around the filename and file type fields. The XML area contains the following content:

```
pp_rebindkeys layout_my_x55c

-- 14.09.2014 17:55:29 - SC Joystick Mapping --
** js1 = Saitek Pro Flight X-55 Rhino Stick
** js2 = Saitek Pro Flight X-55 Rhino Throttle

*** multiplayer
respawn - js2_button1

*** spaceship_general
v_toggle_cabin_lights - js2_button1
v_toggle_running_lights - js2_button1
v_eject - js2_button1

*** spaceship_view
v_view_yaw_left - js1_hat1_le
v_view_yaw_right - js1_hat1_ri
v_view_yaw - js2_z
v_view_pitch - js2_rotx
v_view_cycle_fwd - js2_button1
v_view_mode - js2_button1
v_view_zoom_in - js1_hat1_up
v_view_zoom_out - js1_hat1_do

*** spaceship_movement
v_pitch - js1_y
v_yaw - js1_x
v_roll - js1_rotz
v_throttle_toggle_minmax - js2_button2
v_throttle - js2_thrott1
v_brake - js2_button2
v_target_match_vel - js2_button3
v_ifcs_toggle_vector_decoupling - js2_button2
v_ifcs_toggle_vector_decoupling - js1_button3
v_strafe_up - js2_button2
v_strafe_down - js2_button2
v_strafe_left - js2_button2
v_strafe_right - js2_button2
v_strafe_forward - js2_button2
v_strafe_back - js2_button2
v_afterburner - js2_button1

*** spaceship_targeting
v_target_cycle_all_fwd - js2_button5
v_target_cycle_friendly_fwd - js2_button4
v_target_toggle_pinned_focused - js1_button1
v_target_missile_lock_focused - js1_button6
v_target_cycle_hostile_fwd - js1_button1
v_target_nearest_hostile - js1_button1
v_target_pin_reticule - js1_button1

*** spaceship_turret

*** spaceship_weapons
v_attack1_group1 - js1_button1
v_attack1_group2 - js1_button5
v_attack1_group3 - js1_button4
v_attack1_group4 - js1_button4
```

V2 – Features - 1

The screenshot shows the SC Joystick Mapper interface. On the left, a tree view of actions is displayed, with a search filter 'thr' applied. The filtered list includes actions like 'v_throttle_toggle_minmax - js2_button29', 'v_throttle_zero', 'v_throttle_100 - jsx_reserved', 'v_throttle_up', 'v_throttle_down', and 'v_throttle - js2_throttlex'. Below the tree, there are buttons for 'Dump List-->', a search input field containing 'thr', 'Clear Filter', and a 'blend unmapped' checkbox. At the bottom, there are buttons for 'Js Reassign...', 'Settings...', 'Exit', and 'Dump and Save my Mapping'. The status bar at the bottom shows 'Profiles: defaultProfile' and 'Mappings: layout_my_x55b'.

You may filter the action tree now

Start typing and the tree is reduced to the actions and controls that contain the characters typed

e.g. I typed 'thr' to see my throttles only
Try button and you get all your assigned buttons only etc.

Click 'Clear Filter' to get back to the complete list again.

Note: this will not change, remove or modify any of your mappings, it just reduces the tree to the ones you are interested in.

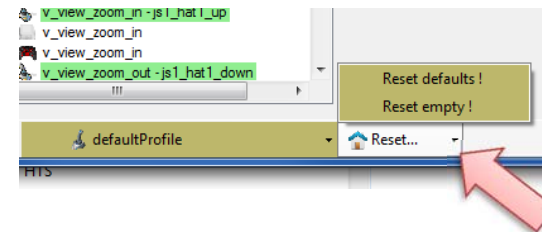
V2 – Features - 2

New working with profiles.

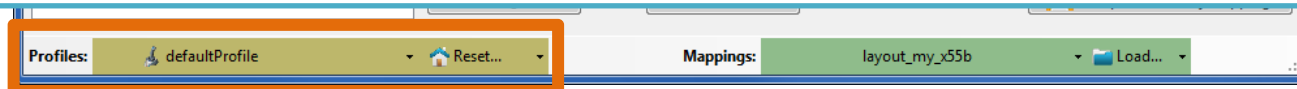
The program gets the actions from the real game asset – so you are always up to the actual values.

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



Note: as CIG is providing a number of defaultProfiles you may chose one of those – however using the **defaultProfile** is usually the best option
(This may be work in progress by CIG...)



V2 – Features - 3

New working with actionmaps (Maps, Mapping etc..)

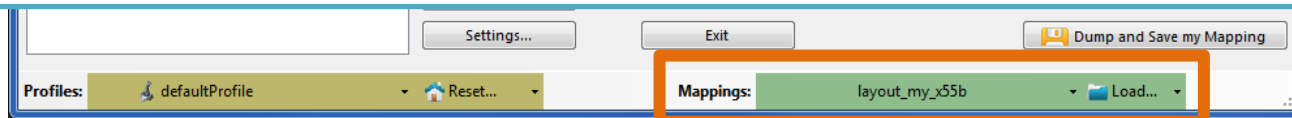
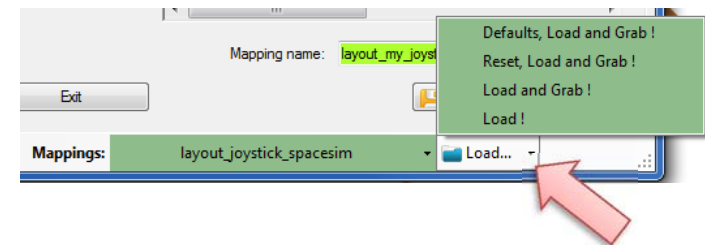
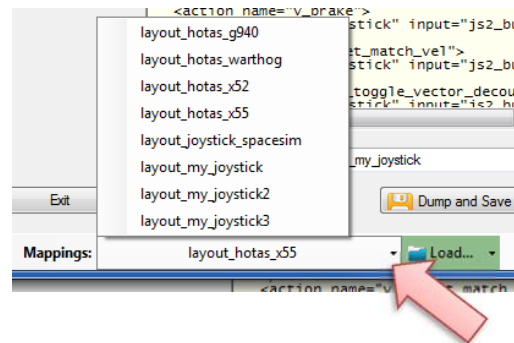
The program gets the actionsmaps from the real game asset – so you are always up to the actual values.

(..\StarCi ti zen\Ci ti zenCl i ent\Data\Control s\Mappi ngs)

From here you may first chose a map, then 'Load' the actionmap – 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 last page for some common workflows
And how to handle them easily



V2 – Features - 4

New working with your own actionmaps

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

(...\StarCitizen\CitizenClient\Data\Control s\Mappings)

1. Type a name (limitations see note)
2. Hit the button – it will then Dump and Save your map into the game folder (well asking you to overwrite it if it exists)

NOTE: your map name has always to start with 'layout_my_' to prevent modifying CIGs own actionmaps

Lowercase only, no spaces, tabs allowed else you see the red flag ..

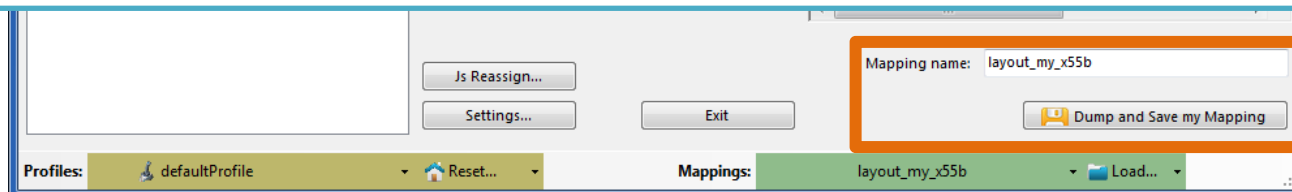
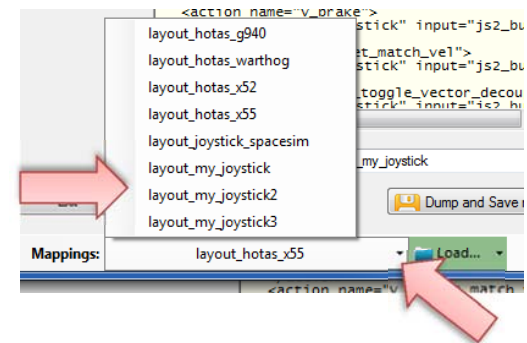
Mapping name: layout_any

A successful Save will show the green flag

Mapping name: layout_my_joystick3
Dump and Save my Mapping

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.



V2.1 – Features

New possibility to blend the unmapped joystick entries

If you wish to hide all the joystick actions that you don't use – to make sure they are not active – check “Blend unmapped”

The program will then map all unmapped actions with 'jsx_reserved' preventing any profile settings on the joystick. This is fully reversible – just uncheck the option and Dump the contents again.

New Settings window

As many are concerned about steady ON buttons that might interfere with assigning the proper control to an action we included a setting to IGNORE specific buttons.

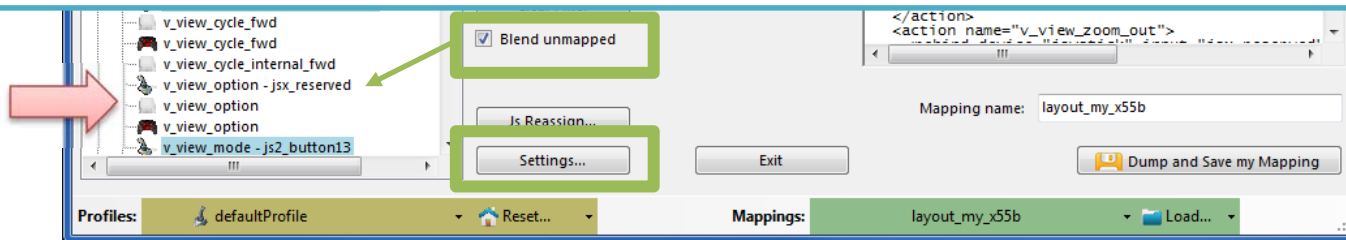
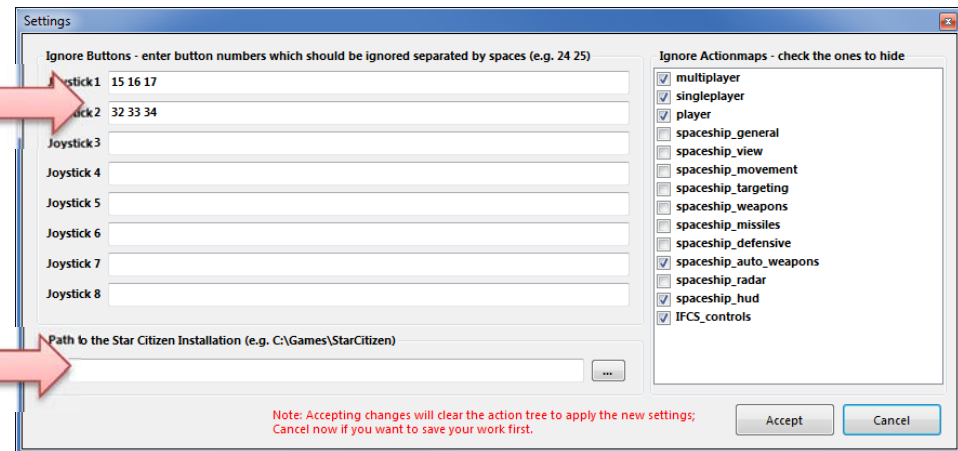
Just enter the button numbers to ignore separated by a Space.

Make sure you enter the numbers for the right Joystick.

Numbers are the same as in the main window.

There is also way to override the programs own detection of the Star Citizen install folder.

Make sure to use the Checkbox if you want to override!



V2.2 – Features

New possibility to ignore unwanted actionmaps

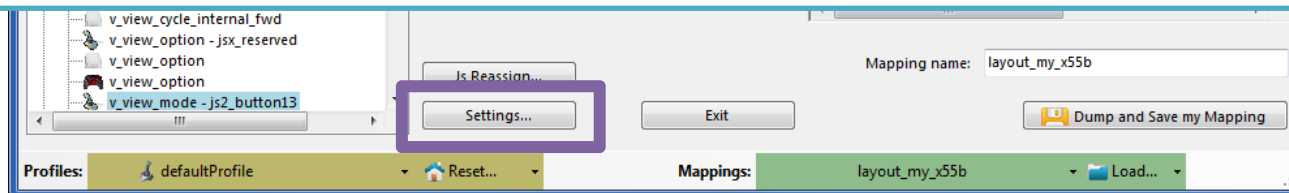
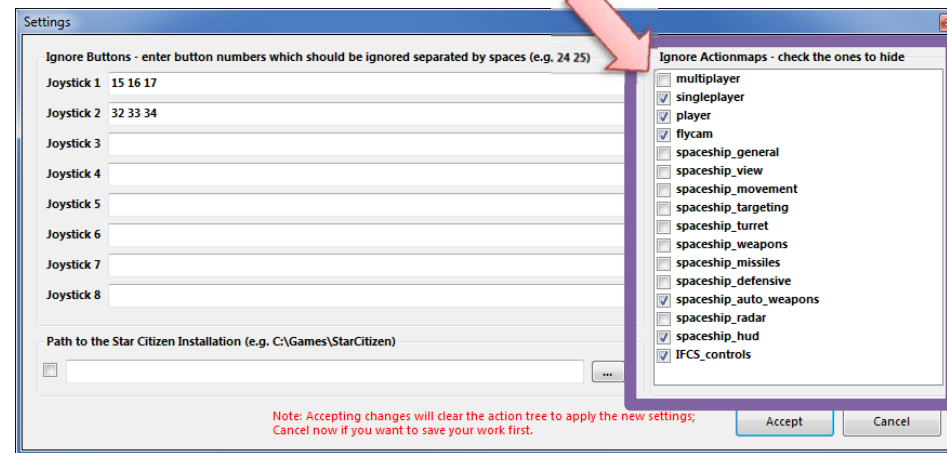
If you wish to ignore some maps to unclutter the GUI

If you wish to use the default ignored new actionmaps *multiplayer*, *singleplayer*, *player*

The program will ignore all actionmaps that are **checked**

In the example *multiplayer*, *singleplayer*, *player* and *IFCS_controls* are completely ignored and will not show up.

Just uncheck any to use it again.



V2.3, 2.4 – Features

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

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.

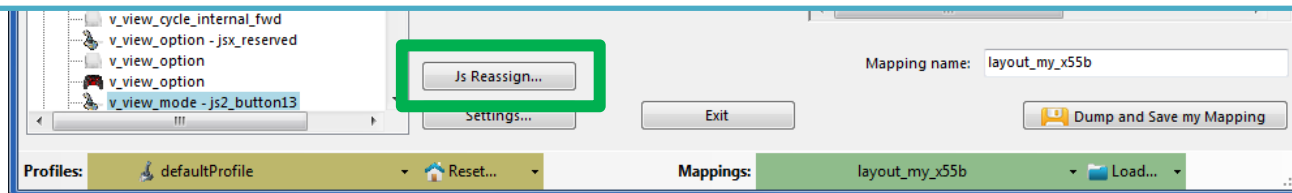
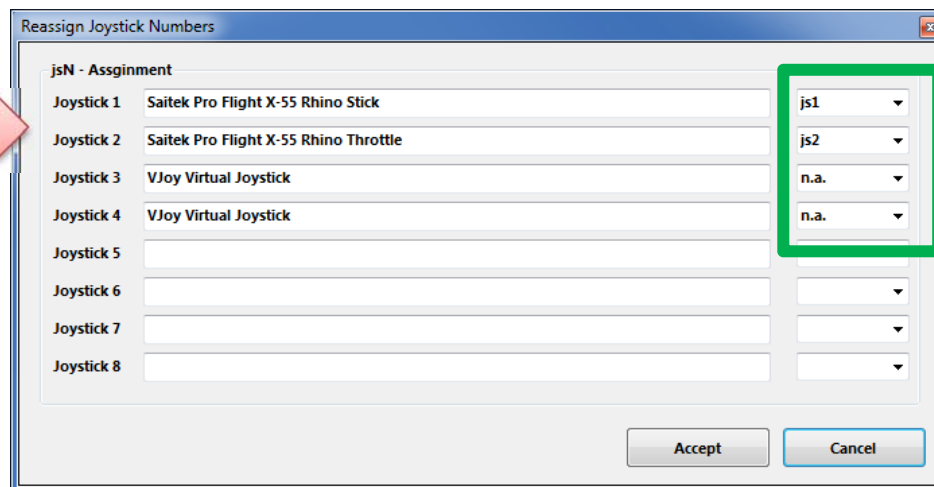
Notes: The color of the assigned items will not change as it is still the same device but js1 will become js2 for example. You can leave this dialog with “Accept” only if each device is either assigned to a unique number or to n.a. (not assigned) otherwise an error pops to ask you to fix it or Cancel.

V2.4 allows to assign js1 .. Js8 now

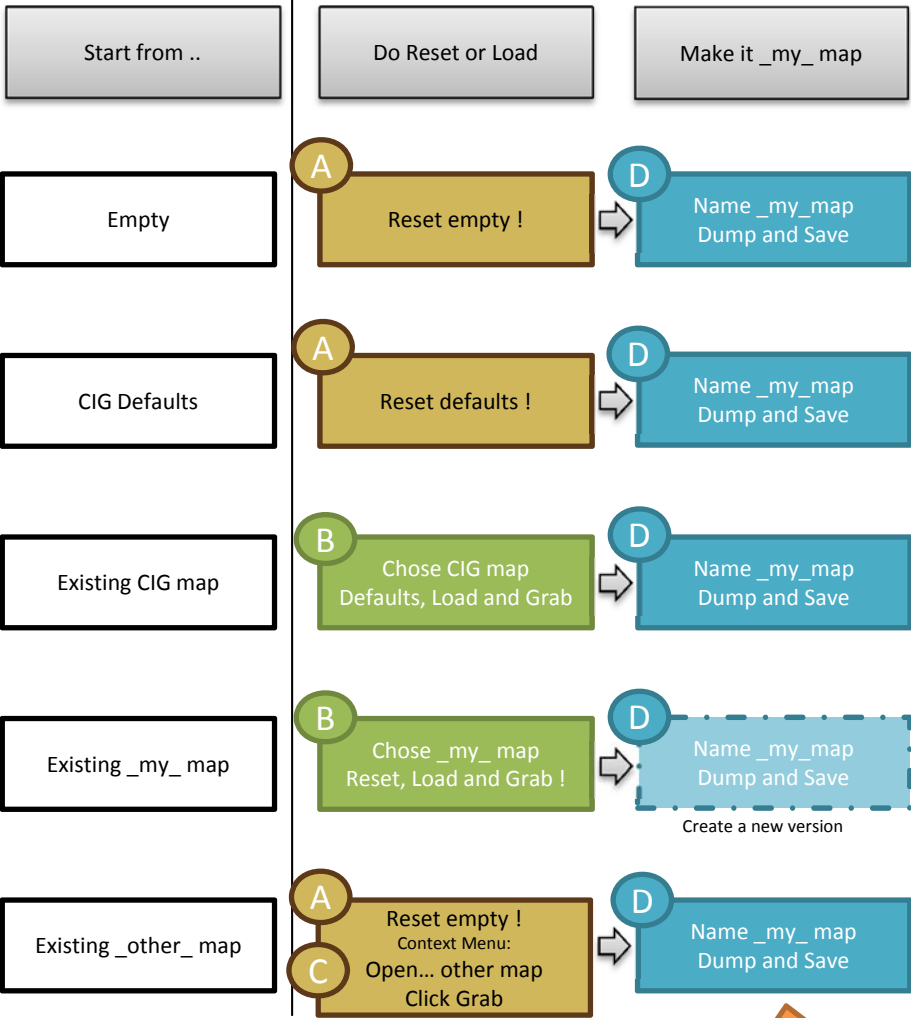
Related SC console commands are:

i_DumpDeviceInformation

pp_ResortDevices joystick 1 2



SCJMapper V 2 – Common Workflows



The screenshots illustrate the following workflow steps:

- A:** Screenshot of the 'Reset defaults!' and 'Reset empty!' buttons in the software interface.
- B:** Screenshot of the 'Mapping name:' dialog box with a context menu open, showing options like 'Defaults, Load and Grab!', 'Reset, Load and Grab!', 'Load and Grab!', and 'Load!'.
- C:** Screenshot of a context menu over a code editor showing options like 'Copy', 'Paste', 'Paste (Replace all)', 'Select All', 'Open...', and 'Save as...'.
- D:** Screenshot of the 'Dump and Save my Mapping' dialog box.
- E:** Screenshot of the 'Assign Cntrl' dialog box showing 'Cmd: v_eject' and 'Cntrl: js1_button7'.

Flow arrows connect these steps: A → B → C → D → E → D → E → D.