LEA USER GUIDE

Notice:

To use LEA you have to buy the client and download the free server at:

https://www.leaextendedinput.com/download.php

The Client is available in the App Store for IOS and Android device.

To use the **keyboard emulation**, you must activate it in the **tray icon menu** (see 2.6 Enable keyboard emulation)

Contents

1 Quick Start

1) Install the Server on your computer.
2) Install the client on your tablet.
3) Lunch the Client application, the standard password is: 123456
4) Optional: select your PC name in the list then click “Ok”
5) The “Select Game” window will be displayed. Click on “new”.
6) Type the name of the game you are creating a UI for and press “OK”
7) The “Select Project” window appear, click on “new”.
8) Type the name of your UI project and then click on “Ok”.
9) Click on “Edit” (top-right screen corner). The “Template panel” will open
10) To show the different types of controls that are available click on the required type in the scroll list
11) Do a drag & drop of the violet button at the top-right corner of the element you want to add on screen.
12) Customize the control’s parameters by keeping one finger pressed anywhere on the screen + press the control’s drag button with another finger.
13) Press “Save”.
14) Lunch the PC game that you want to play.
15) Set the PC game to wait for the input of a game controller to be assigned to an in game action.
16) On the tablet Press the “Assignment” Tab on the right side of the template panel scroll list.
17) Click anywhere on a control.
18) Click on the required emulated game controller output in the template panel scroll list.

Congratulation, it’s done! Now your tablet can now be used as a game controller.

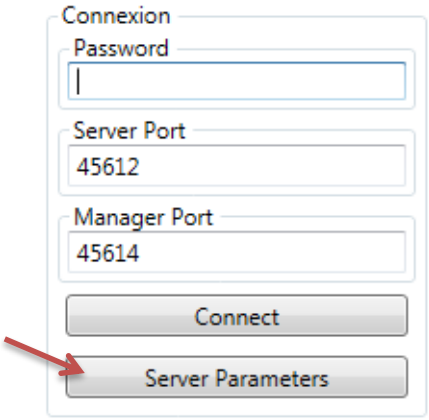
2 Server /Manager

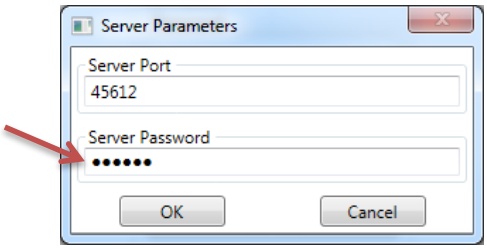
2.1 Installation

2.2 Modify Password / Pin number

Important notice: Make sure to have saved your project before changing your password.

To change the Password /PIN you must execute the Resources Manager that was installed on your PC. And then click on the “Server Parameters” button, a new window will appear, type your new password in the “new Password” field and then press “OK”, a message will pop up click “OK”, it’s done !

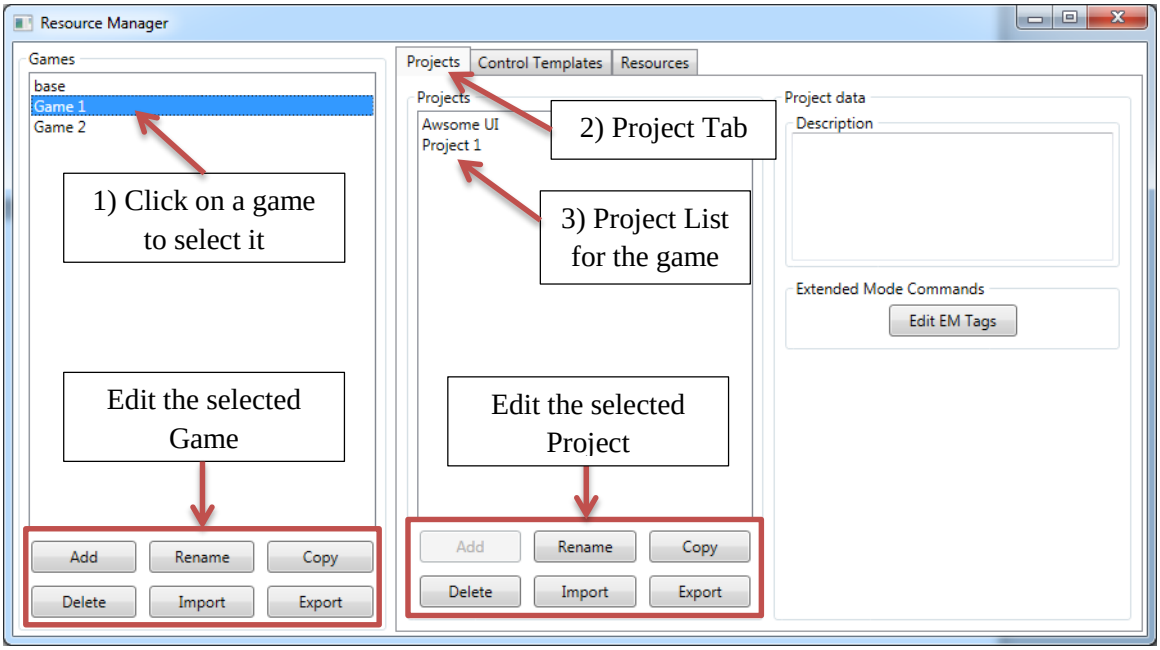




2.3 Project Management

You must execute the Resources Manager that was installed on your PC, type your Password, and then click on the “Connect” button.

To be able to edit a project a “Game” must be selected then make sure that the tab “Project is active”



2.3.1 Add a project

Select a Game (See 2.3 Project Management), select the project and Click on “Add” in the Project panel.

You can also use the client application (see 3.5 Load / create a project at runtime).

2.3.2 Delete a project

Select a Game (See 2.3 Project Management), select the project and Click on “Delete” in the Project panel.

2.3.3 Export a project

Select a Game (See 2.3 Project Management), select the project and Click on “Export” in the Project panel.

2.3.4 Copy a project

Duplicate a Project.

Select a Game (See 2.3 Project Management), select the project and Click on “Copy” in the Project panel.

2.3.5 Import a project

Select a Game (See 2.3 Project Management) and Click on “Import” in the Project panel.

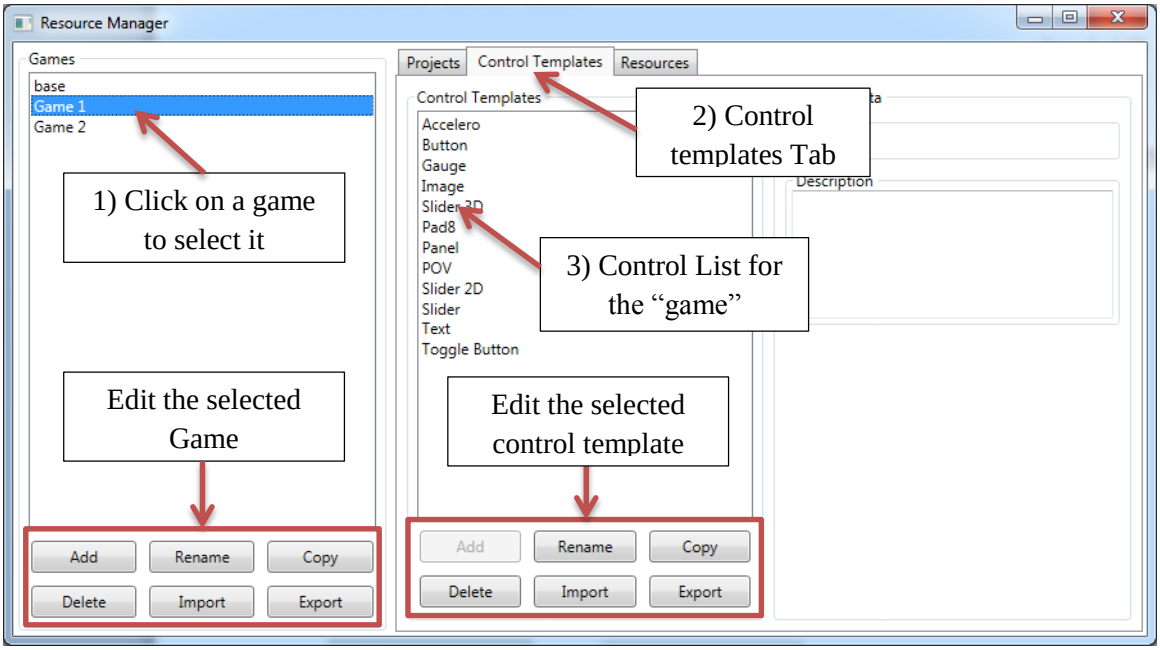
2.3.6 Extended Mode Commands (For Modder)

Select a Game (See 2.3 Project Management), select the project and Click on “Edit EM Tags” in the Project panel.

2.4 Control template

You must execute the Resources Manager that was installed on your PC, type your Password, and then click on the “Connect” button.

To be able to edit a Control template a “Game” must be selected then make sure that the tab “Control templates” is active



2.4.1 Add a control template

Control template can’t be directly added to a “game” with the resources manager, but you can import one.

To add Control template to a “game” you must do it with the Client application (see 3.4.4.2 Add to template).

2.4.2 Delete control template

Select a Game (See 2.4 Control template), select the control template and Click on “Delete” in the Control templates panel

2.4.3 Export / Import control template

Select a Game (See 2.4 Control template), select the control template and Click on “Export” or “Import” in the Control templates panel

2.4.4 Rename control template

Select a Game (See 2.4 Control template), select the control template and Click on “Rename” in the Control templates panel

2.4.5 Copy control template

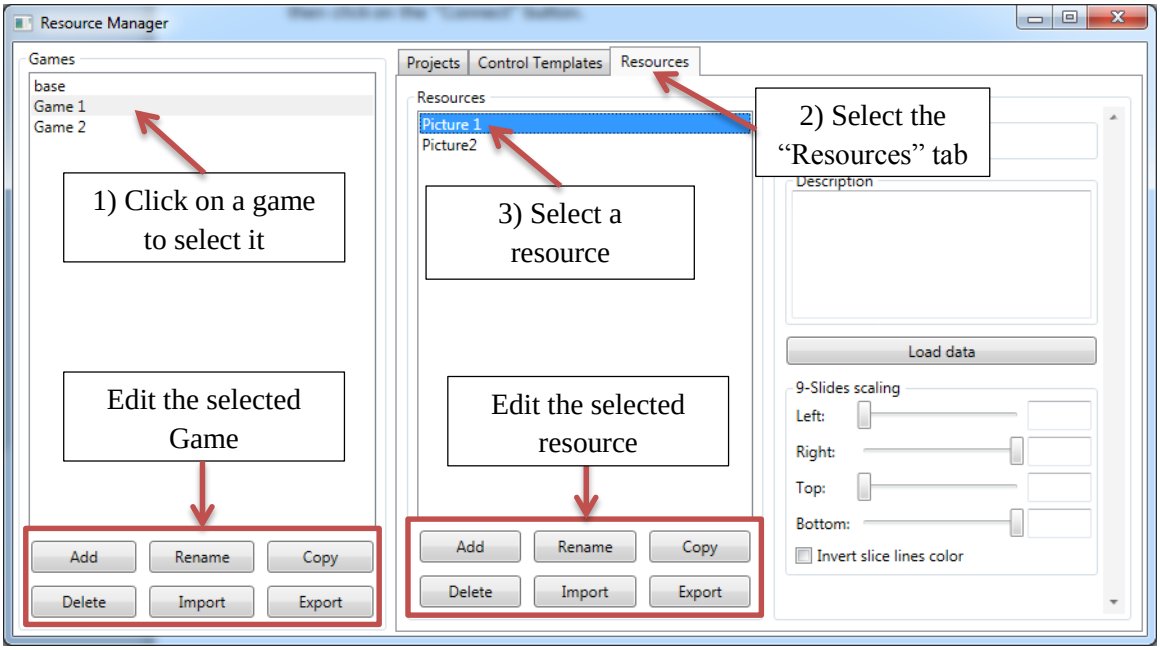
Duplicate a Control template.

Select a Game (See 2.4 Control template), select the control template and Click on “Copy” in the Control templates panel

2.5 Resources Management

You must execute the Resources Manager that was installed on your PC, type your Password, and then click on the “Connect” button.

To be able to edit resources a “Game” must be selected then make sure that the tab “Ressources” is active

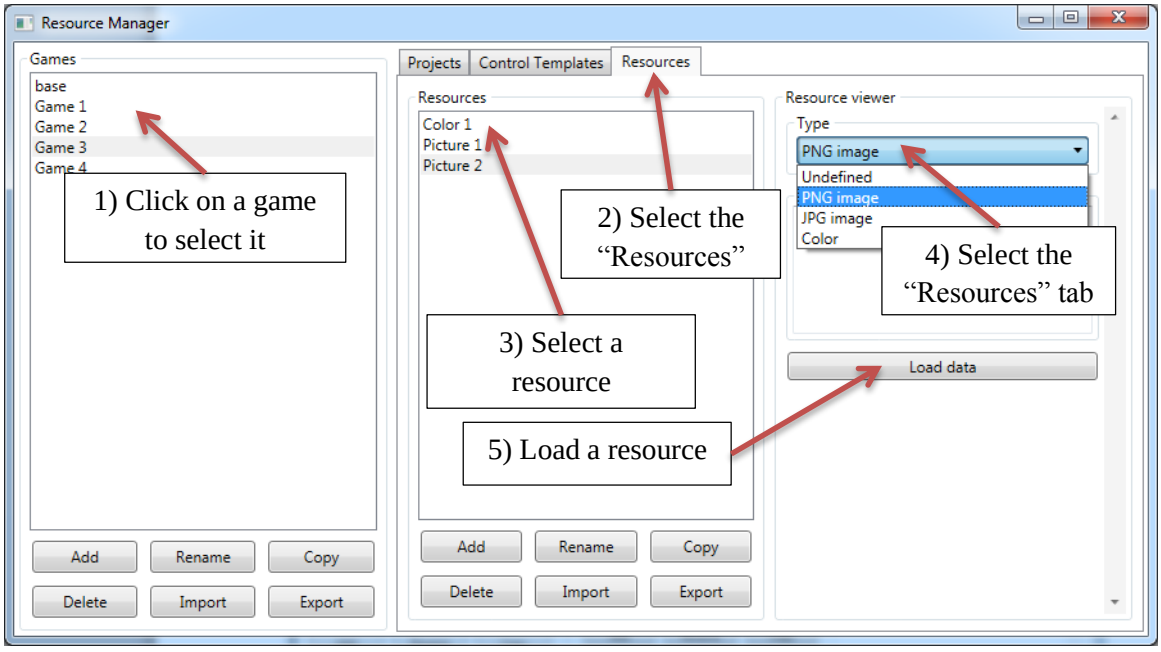


2.5.1 Add a resource

Select a Game (See 2.5 Resources Management), select the “resources” tab and then click on “Add” in the resources panel. Then select the type of resource you want to import in the type combo-box button. Then you must load a resource from the HDD into your newly created resource by clicking on “Load data” then browse to the desired picture then click “open”.

The Picture height and width, in pixel, must be of any power of 2 (32x32; 128x32; …).

In order to optimize the performance of the Client application, use the smallest possible picture size.



2.5.1.1 Power of 2 list (in pixel)

1	32	1024
2	64	2048
4	128	4096
8	256	
16	512	

2.5.2 Delete a resource

Select a Game (See 2.5 Resources Management), select the resource and then click on "Delete" in the resources panel.

2.5.3 Export / Import a resource

Select a Game (See 2.5 Resources Management), select the resource and then click on "Export" or "Import" in the resources panel.

2.5.4 Rename a resource

Select a Game (See 2.5 Resources Management), select the resource and then click on "Rename" in the resources panel.

2.5.5 Copy a resource

Duplicate the resource.

Select a Game (See 2.5 Resources Management), select the resource and then click on "Copy" in the resources panel.

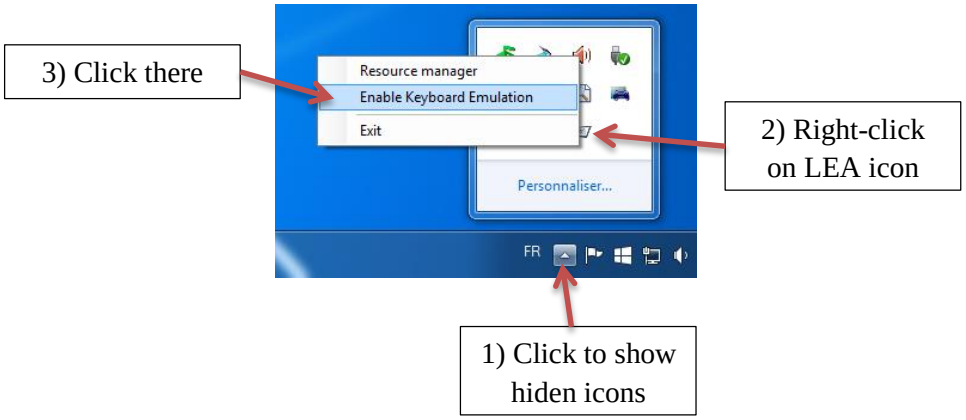
2.5.6 9-Slices scaling

Slice in 9 parts the image where the lines are drawn. The positions of the lines are defined with the sliders in the "9-Slices scaling" part.

The 4 Corners won't be stretched; all the others parts will be stretched. Good for special shaped corners buttons or others controls.

2.6 Enable keyboard emulation

To enable keyboard emulation, process as follows:



To disable keyboard emulation, process as above until "Enable Keyboard Emulation" is unchecked.

3 Client

3.1 Password / Pin number

3.1.1 Login

After Entering the PIN number (standard PIN: 123456) or password that you have created see (2.2 Modify Password / Pin number), the application will automatically connect to your PC and allow you to choose what UI template you want to run. In case there is another server using the same PIN/ Password on your local network the application will ask you to choose onto which PC you want to log.

3.1.2 Change Password / PIN

Important notice: Make sure to have saved your project before changing your password.

To change the Password /PIN you must execute the Resources Manager that was installed on your PC. And then click on the "Server parameters" button, a new window will appear, type your new password in the password field and then press "OK", a message will pop up click "OK", it's done !

3.1.3 Ports Parameters (Advanced users)

To change the client and server ports you must access the network parameters, either, directly from the PIN/Password window or from the Main window.

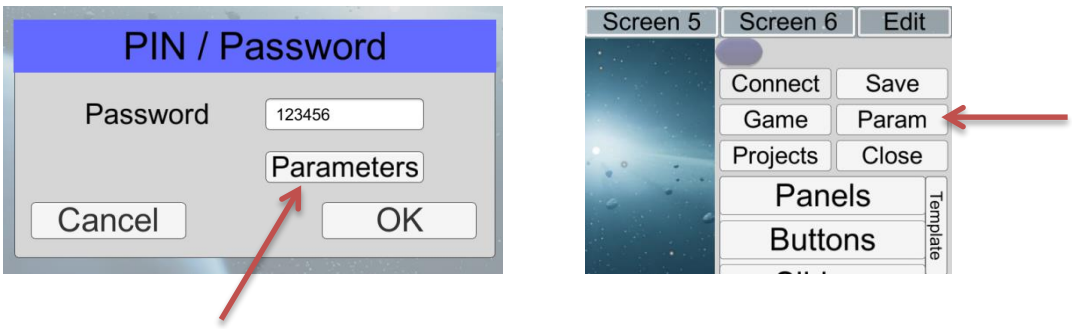


Fig 1 - Access network parameters

The server port corresponds to the Port on which the server listens.

The Client port corresponds to the port on which the application listens.

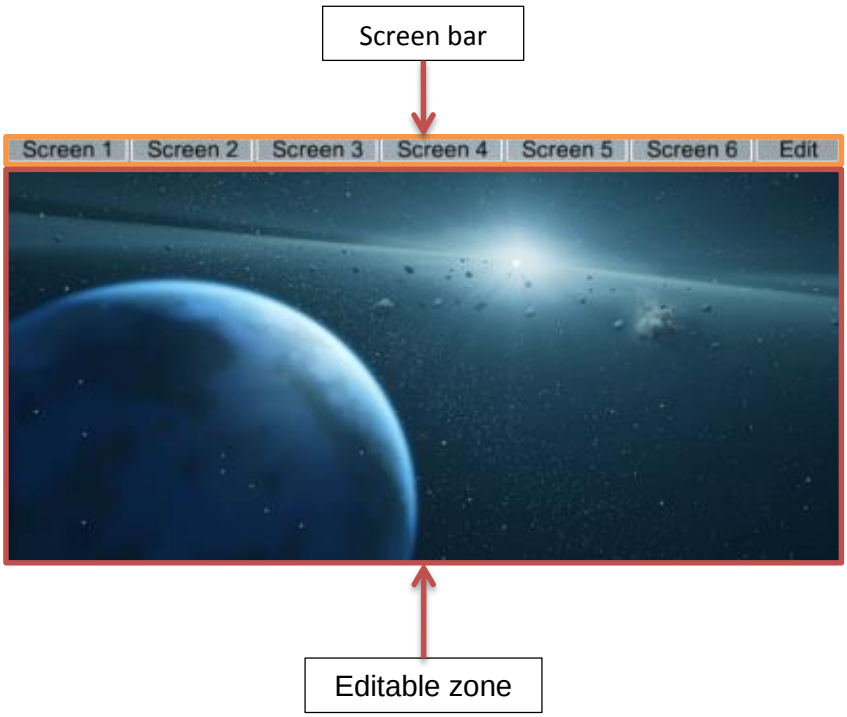
3.2 Project Selection on application lunch

In order to ease the sorting of your projects, they are organized by games. The selection of a Project is done in 2 steps. First, select the game in the list by clicking on it or create a new game and select it, then click on “Select”. Finally, select or create a project in the list, then click on “Select”.

3.3 LEA Interface & Modes

LEA Interface is composed of 2 parts:

- The screen bar (on top)
- The editable zone



The editable zone is where you will lay the controls such as buttons, sliders and much more to create your perfect custom UI.

The Screen selection Bar allow you to switch on the fly between 6 different editable zones allowing you to create dedicated action UI such as for fighting, sneaking, crafting, manage your engine or power plant and anything you want !

LEA Interface has 2 Modes:

- The edit mode that allow user to create their projects
- The normal mode that allow the user to use their customized UI

To switch between modes you have to click on the “Edit” button located in the top-right hand corner of the screen.

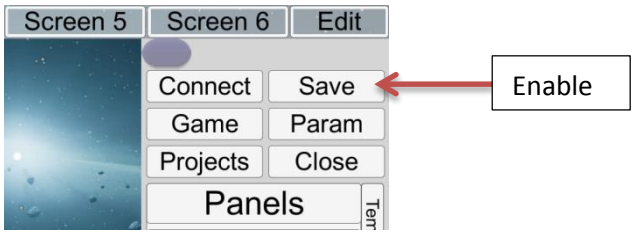
In Edit mode the Application will not trigger any action on the emulated joystick in order to let you try the ergonomic of your UI without messing with the game running on your PC.

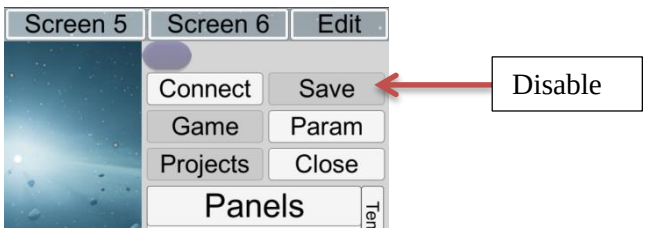
So if you want to assign your UI with the PC game, in Edit mode, use the Assignment tab (see 3.6.2 In game Assignment assistance).

3.4 UI Customization

3.4.1 Instantiate Control template

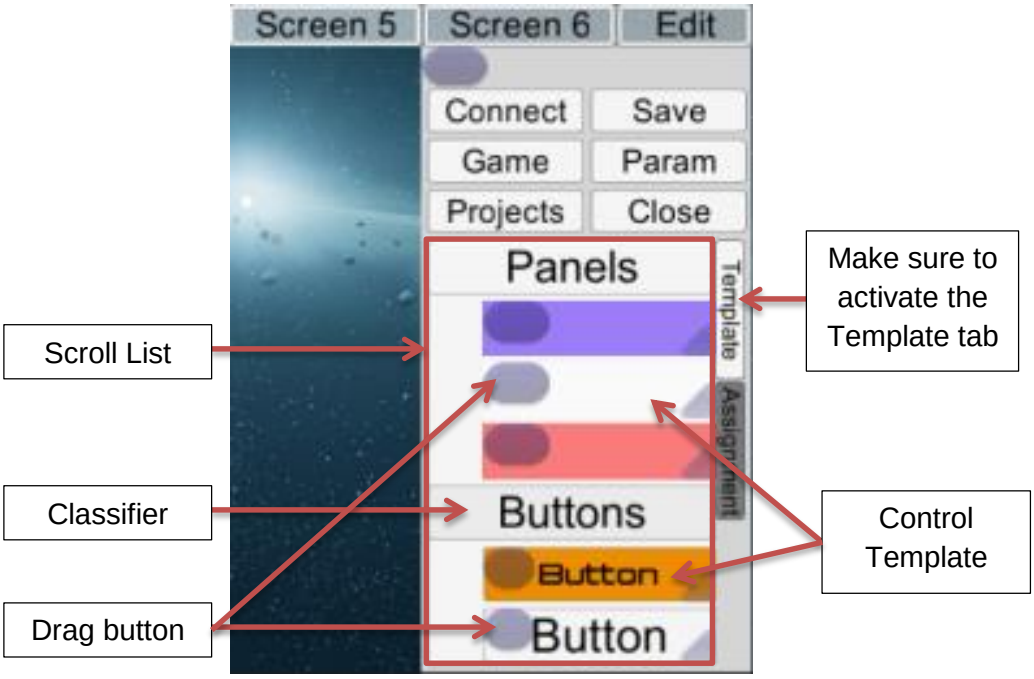
To be able to Edit and customize your UI you must be connected to a project. You are connected to a project when the “Save” button is enable





If “Save” is disable, click on “Connect” and follow the steps.

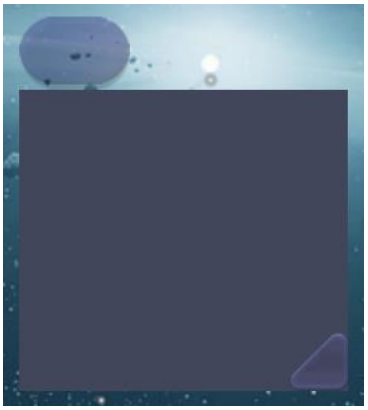
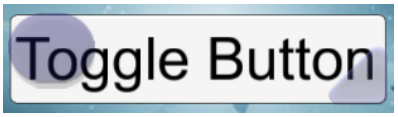
When you are connected to a project, the control template of the Game are loaded in the scroll list in the edit panel.

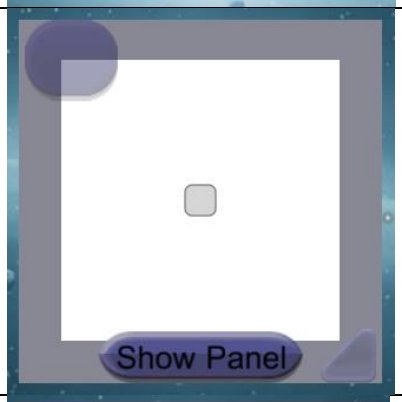
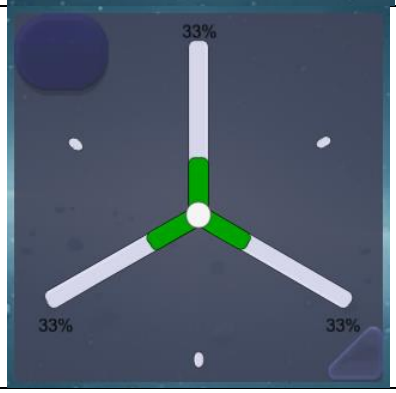


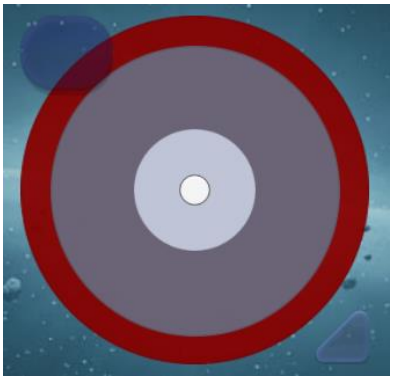
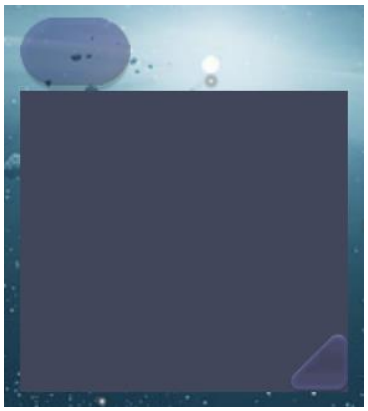
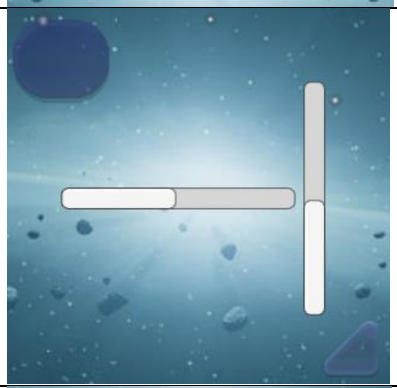
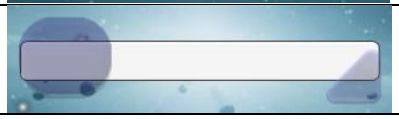
The Control Templates are classified into their type. To show all the controls of a type that are available for a certain type, you must click on the type classifier in the scroll list.

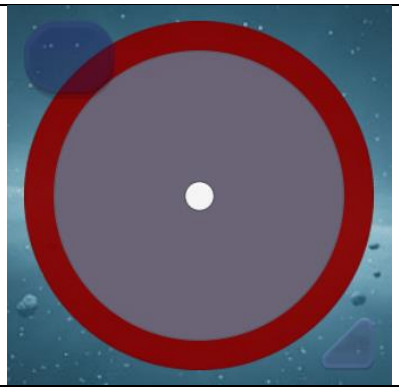
The next step is to instantiate the control template in a screen off your project. To do so you must select the screen in which you want to add the control by clicking onto the relevant screen button at the top of the screen. Then do a drag & drop of the Drag button (violet button) on the editable Zone.

3.4.2 Template type

Template Type	Name	Screenshot	Description
Panels	Panel		Used for encapsulate other controls allowing you to drag and resize multiple element easily. Integrate different auto layouts option that will automatically organize all the child controls in a fashionable way. Allow Toggle group. It is used when you want only one toggle in the panel to be activated at a time.
Buttons	Button		Standard button. Trigger one action when pressed.
	Safety Button		This button can be locked and unlocked in order to avoid unintended push on the button. To unlock the button, you must press it and drag until the handle that has appeared in the center of the button hits one of the sides. The parameters allow locking the button after a period of inactivity and/or after one Click.
	Toggle		Standard Toggle. Press one time to keep the action triggered and press a second time to deactivate. When multiple Toggles are in a panel the panel can be configured to allow only one activated toggle at a time.

Sliders	Slider		Standard axis.
	Slider 2D		A 2 axis Slider (equivalent to a joystick) With a panel that follows your finger in order to allow the use of other control with the same hand easily.
	Slider 3D		The Sum of the 3 axis always make 100% Can be set to spring back to 33% on the 3 axis when the handle is released. The spring back force can be adjusted.

POVs	Point Of View		The POV consist of 3 Zones, the center the middle and the outer zones. If you drag the handle in the middle zone the POV will send the relevant angle to the game. If you reach the outer zone the POV will trigger a button pressed action (fast POV movement). If you press and release the center zone it will trigger an action that can be mapped to the in game POV center view.
Images	Image		Display a customizable image.
Texts	Text		Display a customizable text.
Accelero	Accelerometer 2D		If the device is equipped of accelerometer. It converts the angle of inclination of the device into 2 axes. Great for controlling vehicle!
Gauges	Gauge		Allows a game to send back information to the application and display a value.

Pad	Pad8		Standard directional Pad allowing 8 directions with 4 buttons.

3.4.3 Move and resize a control

To move or resize a control the Edit mode must be enabled (press “Edit” in the top-right screen corner).

Moving control is done by dragging the Drag button (violet button in the top left of the element).

Resizing control is done by dragging the triangle in the bottom right of the element.

3.4.4 Control’s contextual menu

To activate the contextual menu the Edit mode must be activated (press “Edit” in the top-right corner), and then:

- On Touch screen device the contextual menu is displayed by touching the screen anywhere + tapping the Drag button or the body of the control.
- On device with a mouse, you can right-click the drag button or the body of the control.

3.4.4.1 Edit Parameters (of the control)

The different parameters are categorized under different classifiers. To show the parameters click on the relevant classifier.

3.4.4.1.1 Edit Text Parameters

Allow you to customize text content, font, font size, color and type.

3.4.4.1.2 Color Picker

The color piker is displayed each time the button “picker” is pressed. The color picker has 2 modes: RGBA and one that allows you to copy / apply color. To switch between modes press the “Mode” button in the top-right corner of the color picker.

The “A” of RGBA comes for the transparence of the edited Image or font. So if you want to turn an image or font fully opaque the “a” channel must be set to 255.

Note only for .pnj image: The “a” channel of the color picker is multiplied by the “a” channel of the .pnj image so if your image is transparent the picker won’t be able to turn it opaque.

3.4.4.1.3 Select an Image

To use a customized Image it must be of either format: .jpeg or .pnj, an its height and width are in power of 2 and it must be imported on the server via the PC “Resources Manager” that comes with the server installation.

Just select the image name in the list on the left, a preview will be loaded in the right panel then press “Select”.

3.4.4.1.4 Control’s specific parameters

See 3.4.2

3.4.4.1.5 Rotation

Rotation is available from the Parameters window see 3.4.4 Control’s contextual menu. You can set the angle formed with its parent or the angle formed with the screen. The first is useful when the parent is it rotated.

3.4.4.1.6 Command

Allows you to check and edit which button, axis or POV are triggered on the emulated joysticks. To edit any of those parameters you must click on it and then select the new configuration in the list that pop up.

It also allows you to create macro see 3.7 Macro edition.

3.4.4.2 Add to template

Send the edited control in the Template list. Don’t forget that the template list is different for each “Game” folder created on the server. If you want to use the same control template in different “game” you must export and then import the template with the “Resource Manager” installed on the PC.

3.4.4.3 Duplicate

Simply duplicate the control.

3.4.4.4 Send to background (Send to Backgrd)

Send the edited control to the background of its parent.

3.4.4.5 Delete

Permanently delete the edited control.

3.4.4.6 Delete template

Permanently delete the template of the server “Game” folder.

3.5 Load / create a project at runtime

Important notice: you must save your work before changing project if you want to keep your changes!

To load a project at runtime simply click on the “Project” button when in Edit mode (if you don’t see the Project button click on the “Edit” button at the top-right hand screen corner). It will open the project window, you must then select your project by clicking on its name and then press “select” or simply press “Add” to create a new project.

If the “Project” button is disabled it means you are not connected to a PC or you don’t have selected a game. So if the “Project” button is disabled and:

- If the “Game” button is enabled, click on it, it will open the Game window then select a game in the list by clicking on its name and then press “Select”, then it will open the project selection window.
- If only the “Connect” button is enabled, click on it, the Password / PIN window will show, enter your password, and then follow the steps.

3.6 General Parameters

General parameters are available only in edit mode (press the “edit” button in the top-right corner).

Once in “edit” mode press the “Param” button of the template window.

This will open the general parameters window.

Don’t forget to save your project after you have edited the parameters

3.6.1.1 Change resolution

The resolution is available in 3 different configurations:

- High (max resolution of the screen)
- Normal
- Low

3.6.1.2 Grid

The magnetic grid can be turned on/off in the parameter window (access it in edit mode by clicking on “Param”) by checking the toggle button “Grid”.

You can also modify the step size of the grid in the field “Grid step”.

3.6.1.3 Ports Parameters

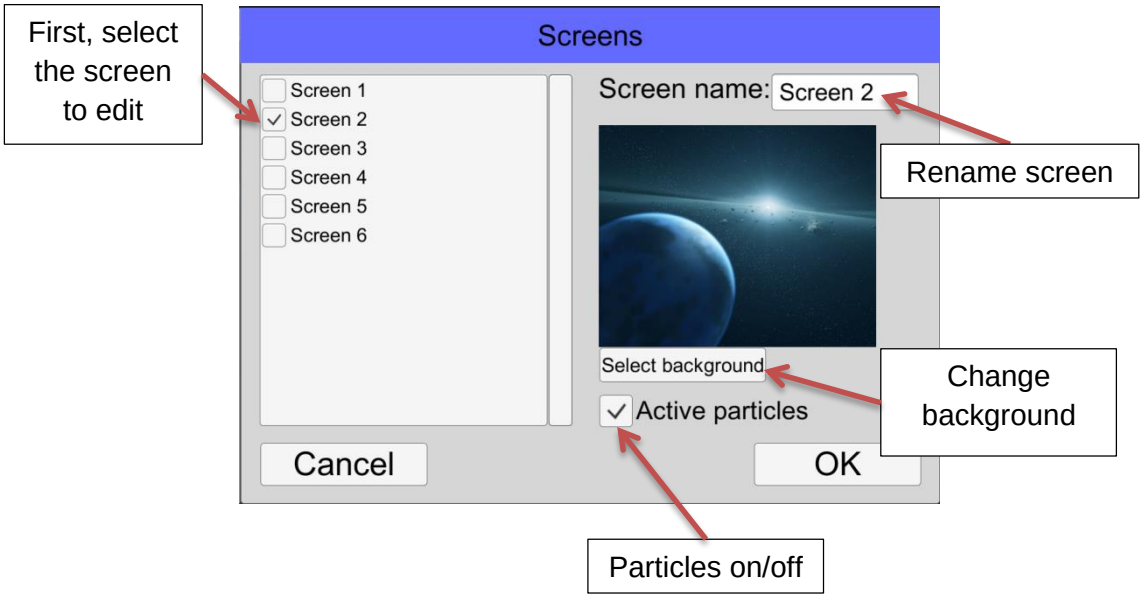
See 3.1.3 Ports Parameters (Advanced users)

3.6.1.4 Screens Parameters

The Screens Parameters allow you to change:

- The displayed text off each screen buttons in the screen bar.
- The editable zone background image for each screen.
- The moving particles.

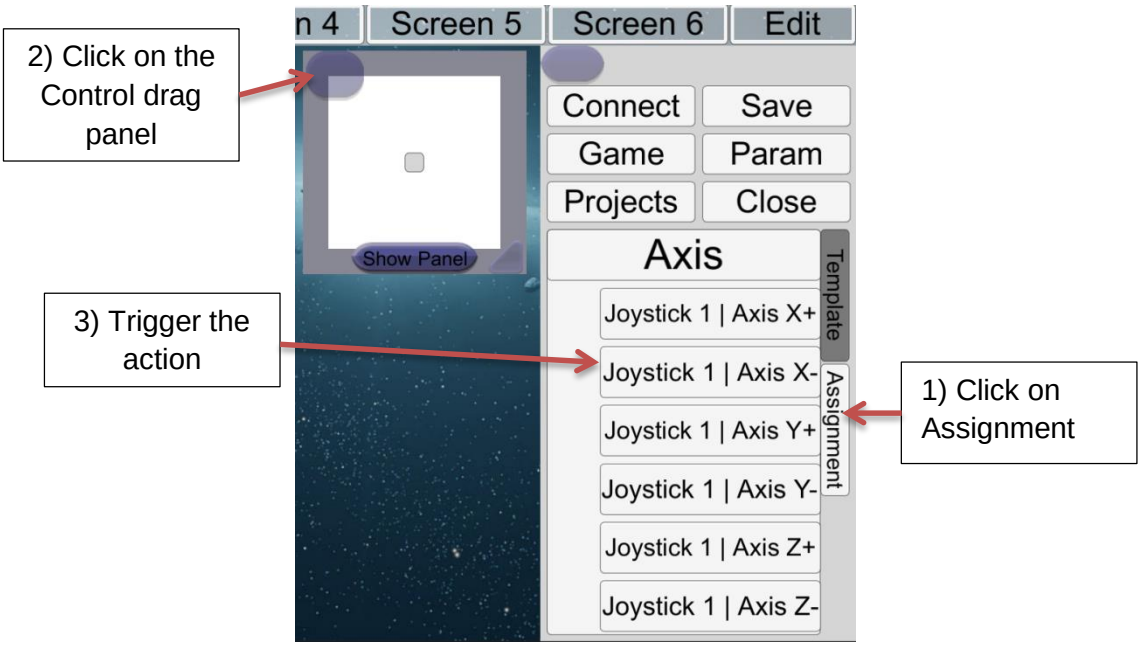
Open the General Parameters windows by clicking on “Param” in edit mode, then Open the Screens parameters window by clicking on the “Screens” button in the General parameters



3.6.2 In game Assignment assistance

To assign command to in game action switch to edit mode if you are not already in (press the “Edit” button in the top-right screen corner), then press the Assign Toggle button (see below).

Then click on the control drag panel and the list of all buttons, axes and POVs that the control triggers will be showed in the template window scroll list. Then when you click on the corresponding buttons it will trigger the corresponding button, axis or POV during one second.


2) Click on the Control drag panel
3) Trigger the action
1) Click on Assignment
n 4
Screen 5
Screen 6
Edit
Connect
Save
Game
Param
Projects
Close
Show Panel
Axis
Template
Assignment
Joystick 1 | Axis X+
Joystick 1 | Axis X-
Joystick 1 | Axis Y+
Joystick 1 | Axis Y-
Joystick 1 | Axis Z+
Joystick 1 | Axis Z-

3.7 Macro edition

3.7.1 What macros are for?

Macros are custom sequences of action that are triggered when, on the application, a button is pressed or an axis reaches a value and much more. The actions that can be triggered are buttons, axis value, and POV.

You can also change axis curves, and setter parameters. All controls use macro, but the minimum macro settings to use the control normally is automatically settled when dropping a control on a screen. So for the beginners, or for a standard control, no extra work is required!

3.7.2 How macros work?

Macro controls most of the data flow from and to server, or from and to other controls. The following figure show the simplified macro data flow.

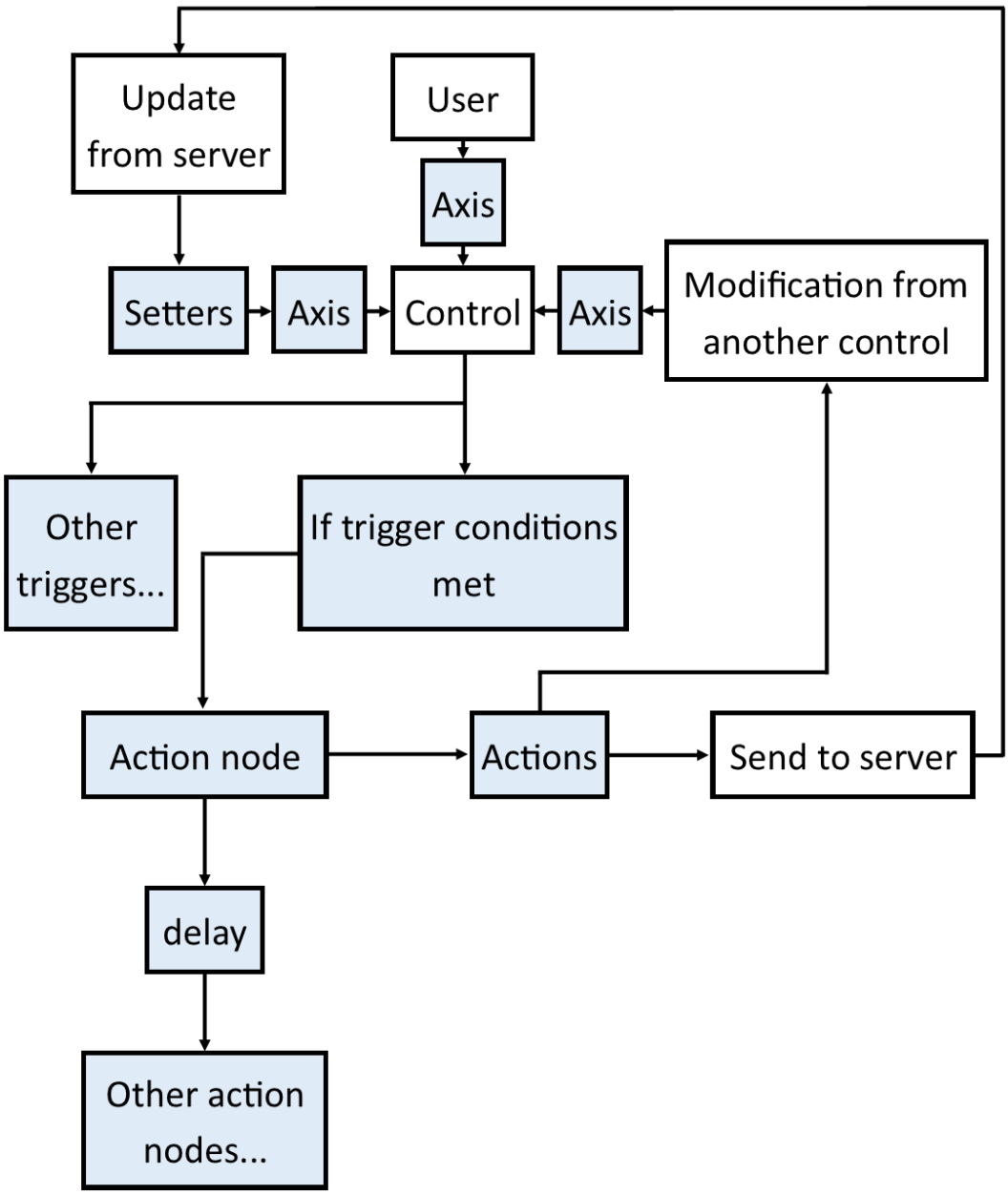


Figure 1: Program data flow. You can control setters, axis (if apply), triggers, action nodes and actions with macros. Macros control the blue blocks. The axis block only applies on slider like or accelerometer like controls.

3.7.3 General considerations about macros

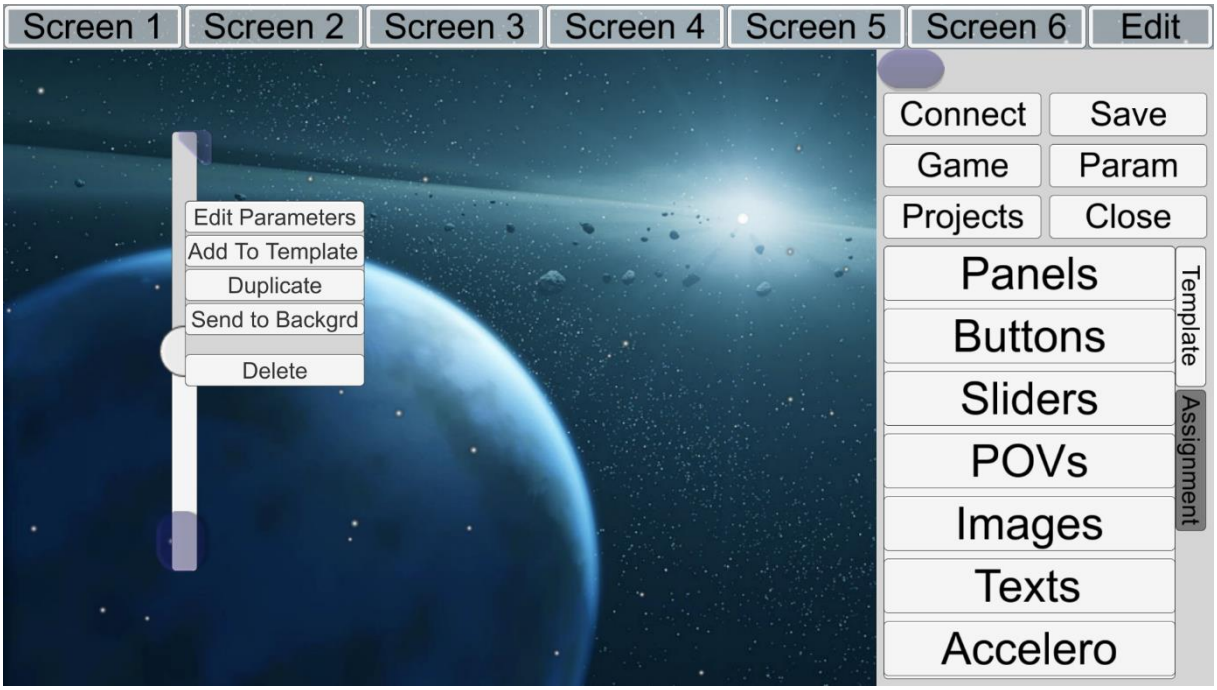
Macros use floats to operate. So keep in mind that very small calculation errors occur. For example 1 x 1 with float will not be equals to 1 but to 0.99999… This is why when comparing a float value to an integer, please use preferably a small range (for example is value is between 0.99 and 1.01).

The order matters! The macro will be executed sequentially.

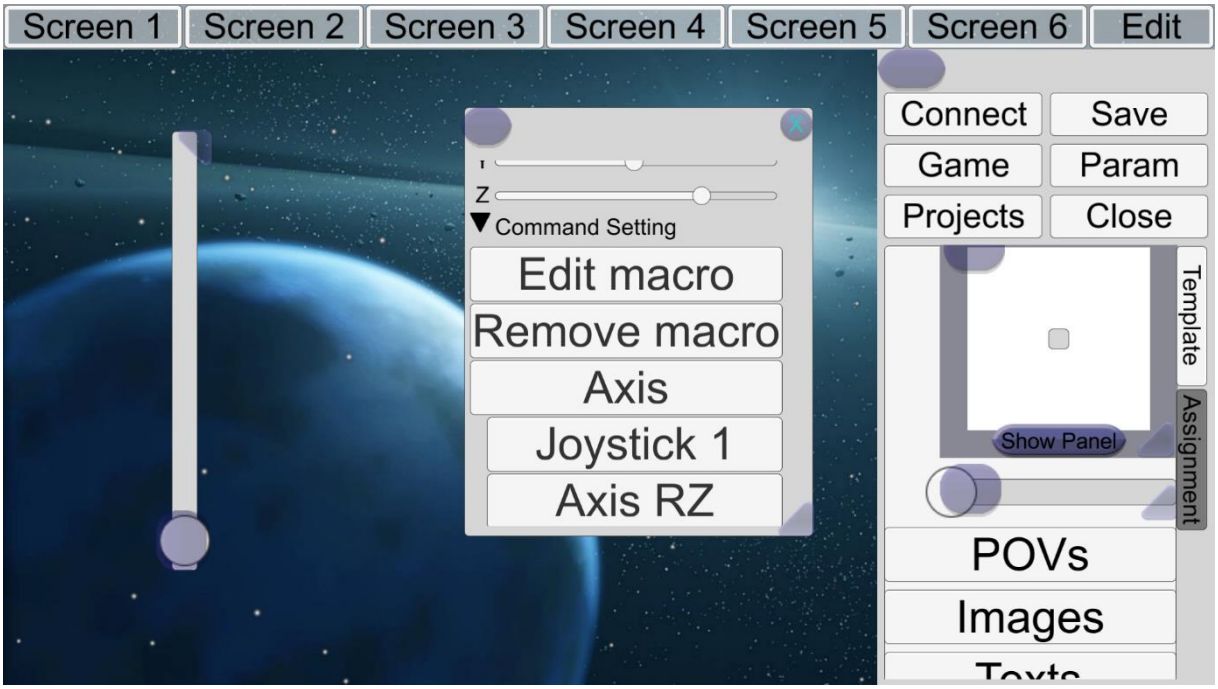
Don't forget to save before closing your application! As a newly set macro will work perfectly without saving, it will be saved only if you save the project.

3.7.4 How to access macros?

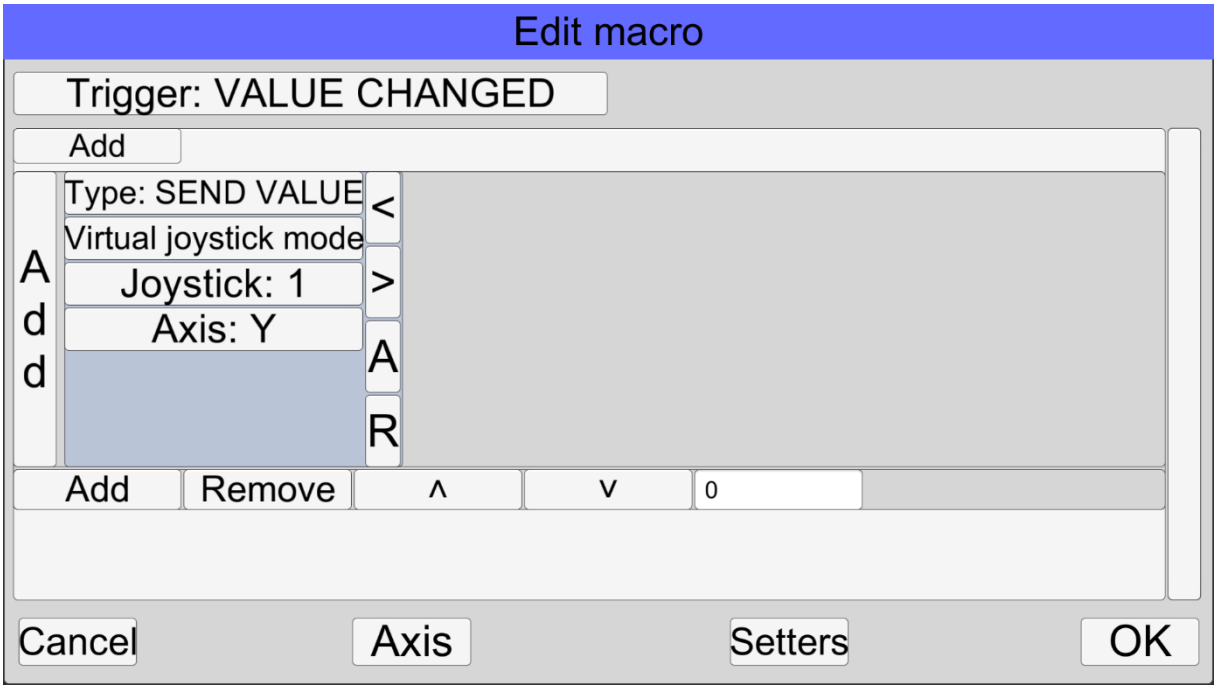
In edit mode, right click on any controls or for tactile screen tap anywhere, maintain, tap on the control. Then select edit parameters.



Deploy the command setting block and click on edit macro.



3.7.5 The macro main window



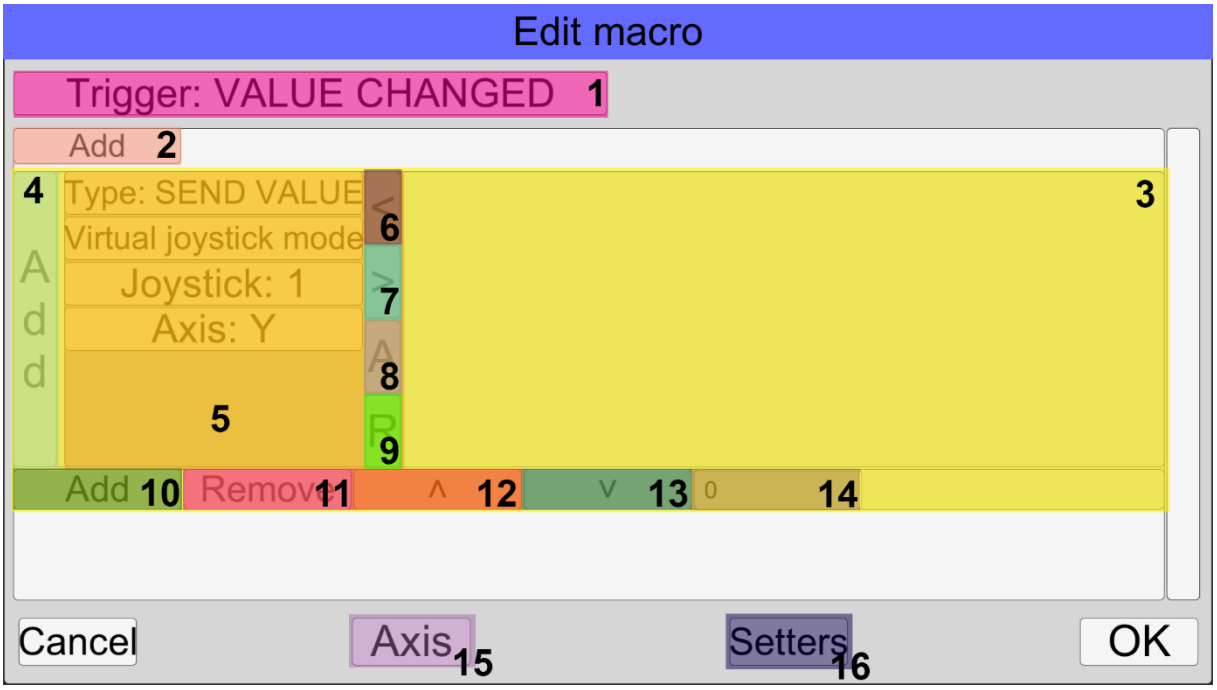
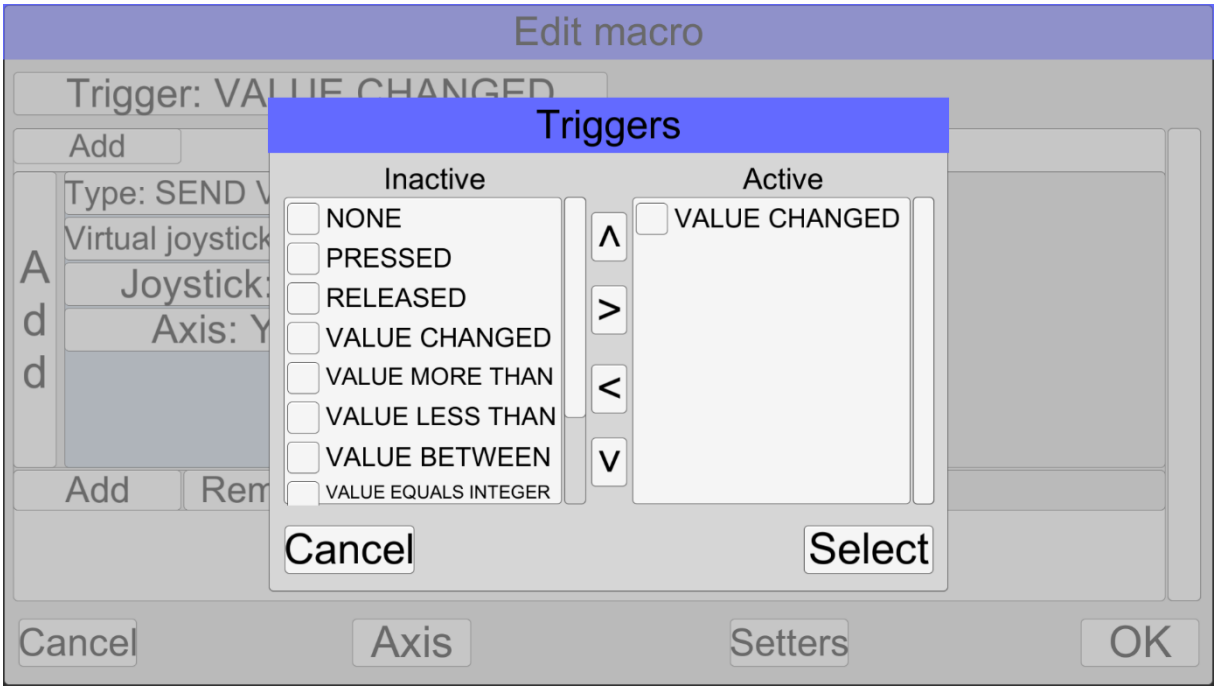


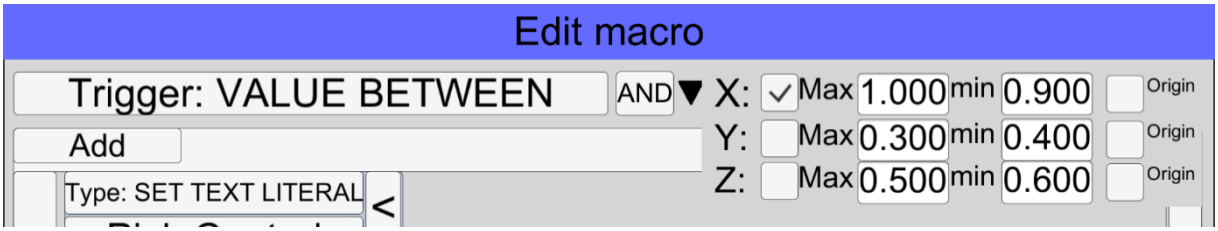
Figure X: 1 trigger button, 2 prepend action node, 3 action node, 4 prepend action, 5 action, 6 move action left, 7 move action right, 8 append action, 9 remove action, 10 append action node, 11 remove action node, 12 move action node up, 13 move action node down, 14 time in ms before executing next action node, 15 axis window, 16 setter window.

3.7.5.1 The triggers

On top, the Trigger button, allows to set and select the triggers for the current control. The triggers describe the root conditions allowing a block of action nodes (and subsequently actions) to be executed. In this example, the following action node will be executed if the value is changed (useful for slider like controls).



Select the triggers on the inactive list, and enable them by clicking on the “>” button. You can inactive some by selecting them on the active list and clicking on the “<” button. To modify the underlying actions of a specified trigger, select it on the active list and click select. You can active more than one trigger of a specified type; it can be useful in complex controls. Plus, you can order trigger the way you want with selecting a trigger in the active list, and clicking on the “^” and “v” buttons. Keep in mind that the triggers are checked (and possibly executed) in the displayed order of the active list.



On some triggers you may have to use options. You can change the gate type (AND = all conditions are met/OR = one condition is met), select the axis you want to check, specify the min/max value to activate the condition. The origin checkbox specify to use the raw value of the control, instead of the one modified by the axis modifiers (see The Axis button).

3.7.5.2 The action nodes

This is a block (sequence) of actions to execute. There can be more than one action node to be executed. It can be useful in case you want some actions to be delayed. Please note that there is a field where you can input a number, this value is the delay before executing the next action block in millisecond. Be aware that this delay is based on a number of ticks that occurs every 20ms, so it cannot be less that 20ms, and will be rounded in a 20ms basis.

3.7.5.3 The actions

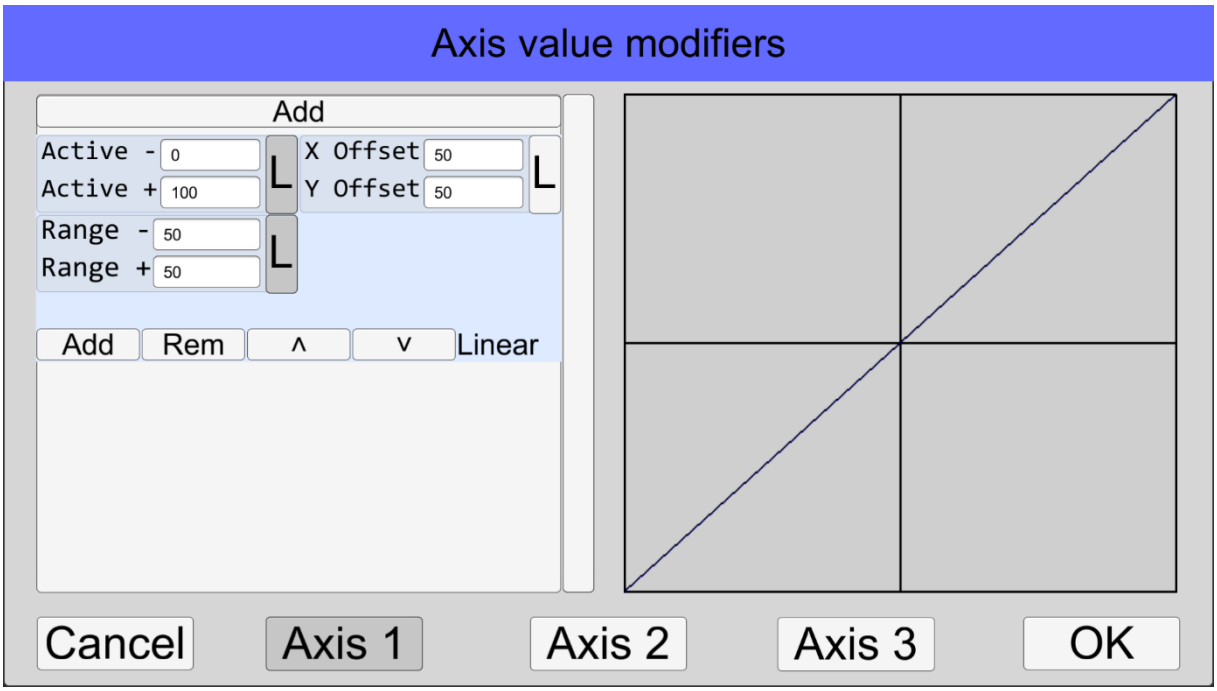
There is two types of actions: the send ones that send data to the computer on which the server is installed, and the set ones that modify the status or interaction with the controls locally (note that modifying a control status will send data to the server). You need to fill all the asked data for the action to be able to work.

The pressed and released triggers are mainly for buttons and toggle buttons.

The values triggers are for the sliders (1D, 2D, multiaxis), POV, accelerometers and pad. Please note the axis values (sliders and accelerometers) range from -1 to +1. For the POV values range from -1 (inactive) to 360, and for the pad from 0 (inactive) to 8 (1=N, 2=NE, 3=E, 4=SE, 5=S, 6=SW, 7=W and 8=NW).

3.7.5.4 The Axis button

This will open the axis window, for modifying the axis response curves.



There is several types of block that can be used for designing the curvature response: the linear axis block, the curved axis block, the dead zone block and the invert zone block. They will be processed in the order they have been added. You can switch between axis with the Axis X buttons if the control have several axis.

The common properties are the active zone (between which values the current block works), the range (bounds for the full block), and the offset (to move the curve left/right or top/down). The “L” button links symmetrically the values.

The units given in the block are in %. The bottom left is the origin, the x axis is the output and the y axis is the input.

The active zone represent the input bound values between the block is active. If the “L” button (for link) is active, the values will be set symmetrically around 50%. For example if you set 5% in the active- field, the active+ field will become 95%.

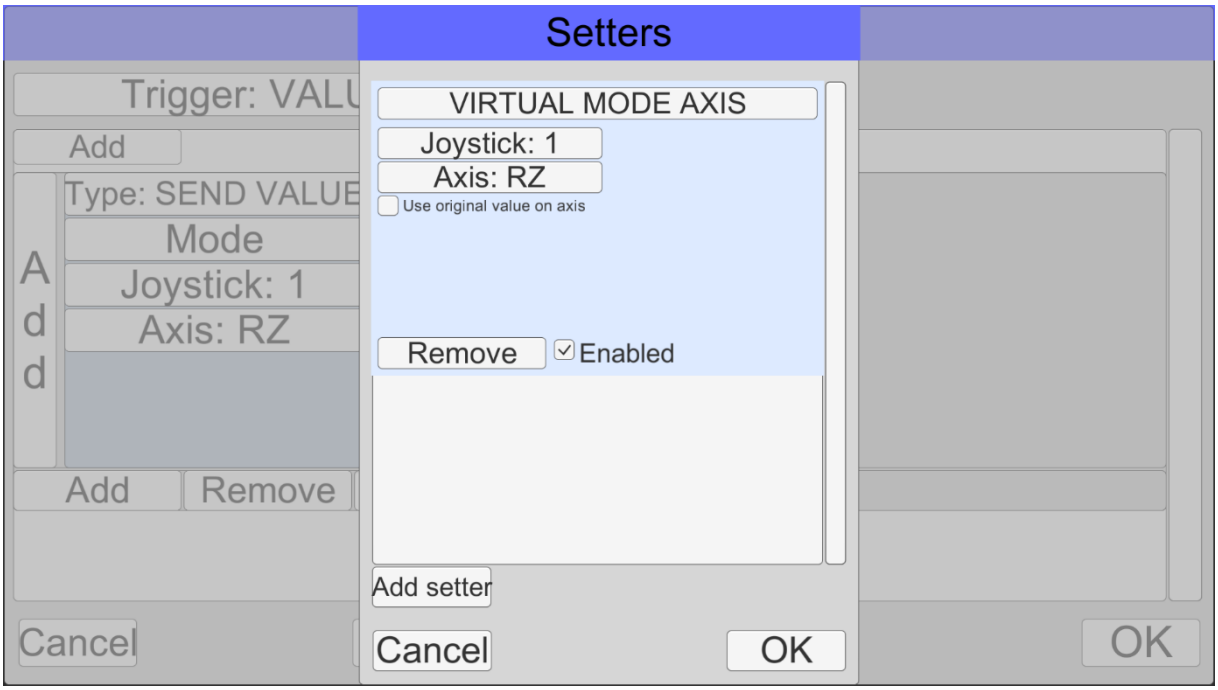
The range zone represents the range between which the output value goes from 0 to 100%. It’s quite similar to a slope. The range is centered at 50%, so a range- set to 50 and a range+ set to 50 is a full range value.

The offset values allows to move the response curve higher/lower (y) and/or to the right/to the left (x).

The curve value (for the curved axis block) allows increase/decrease the curvature of the response. Note that 1 is a linear response, any more than 1 values will induce a lower response in the center of an axis (this is the standard way to use it) and a between 0 and 1 value will induce a higher response in the center of an axis (this is a very strange response curve, but maybe it can be useful in some cases).

3.7.5.5 The setters button

This will open the “setters” window, for modifying the update behavior of the control. When a control set a new value, the server synchronize values between clients, and this window show what value the control will use to update itself. Be very careful with modifying the setters; be well aware that each type of control can only use a specified setter (sliders will react to axis for example).



3.7.6 Tutorial example, a thruster slider with boost and brakes

What do I want?

Basically a slider with:

- At 0% “press” the brake button
- Between 0-5% move back the cursor to 0% (first part of the brake crank)

- Between 5-20% move the cursor to 20% (second part of the brake crank)
- Between 20-80% normal thrust control, but rescaled between 0 and 100% of thrust
- Between 80-95% move back the cursor to 80% (first part of the boost crank)
- Between 95-100% move the cursor to 100% (second part of the boost crank)
- At 100% “press” the boost button

Step 1: create a slider

Create a slider and enter the macro editor by right click on it, deploy command setting on the parameter panel and click on “Edit macro” (see How to access macros?). The default trigger is a “value changed” trigger, and is fired when the slider is moved. You can change if you wish the axis and the joystick number in the “send value” action.

Step 2: the “reset” trigger

It is important to note that the triggers will be executed in order. The first trigger you want to create is a trigger that is always true, and “releases” the brake and boost buttons. Without this, these buttons will never be released. For this, click on the trigger button on top of the window, active an “always” trigger, select it and press select. Add a new action in the automatically added empty action node. Set the type to “send release”, choose the virtual joystick mode, and set the correct joystick and button number for the brake button. Add one more new action, set the type to “send release”, choose the virtual joystick mode, and set the correct joystick and button number for the boost button.

Step 3: create the trigger for the 0% value handling

Now we will set a trigger to “press” the brake button when the slider is completely at 0. Click on the trigger button on top of the window, active a “value between” trigger, select it and press select. On the right of the trigger button some trigger parameters appears, use the checkbox to enable the trigger parameter, enter 0.01 in max value (1%) -0.01 in min value (-1%) and check the origin checkbox to specify we want to use the original value of the control, as the modified one will interfere. Please note we use a range including the value we want to consider (here 0) because LEA use floats, and due to small cumulative errors due to floats operations the value might not be exactly the desired one (the error is often less than a 10 thousandth). As it is not significant, it’s still not exactly the same value, and the trigger may fail to fire. Add a new action in the automatically added empty action node. Set the type to “send pressed”, choose the virtual joystick mode, and set the correct joystick and button number for the brake button.

Step 4: create the trigger for the 0 to 5% value handling

Now we will set the first part of the brake crank. The handle of the slider will fall back the slider to 0% if the current position is less than 5%. Click on the trigger button on top of the window, active a “value between” trigger, select it and press select. On the right of the trigger button some trigger parameters appears, use the checkbox to enable the trigger parameter, enter 0.05 in max value (5%) 0.01 in min value (1%) and check the origin checkbox to specify we want to use the original value of the control, as the modified one will interfere. Add a new action in the automatically added empty action node. Set the type to “set value literal”, Click on “pick control”, on the list of target choose

“Add” and click on the trigger you are currently editing. Finally click on the OK button. Enter 0 in the first field. Only the first field will be used for a standard slider.

Step 5: create the trigger for the 5 to 20% value handling

Now we will set the second part of the brake crank. The handle of the slider will fall back the slider to 20% if the current position is more than 5% and less than 20%. Click on the trigger button on top of the window, active a “value between” trigger, select it and press select. On the right of the trigger button some trigger parameters appears, use the checkbox to enable the trigger parameter, enter 0.19 in max value (19%) 0.05 in min value (5%) and check the origin checkbox to specify we want to use the original value of the control, as the modified one will interfere. Add a new action in the automatically added empty action node. Set the type to “set value literal”, Click on “pick control”, on the list of target choose “Add” and click on the trigger you are currently editing. Finally click on the OK button. Enter 0.2 in the first field.

Step 6: create the trigger for the 80 to 95% value handling

Now we will set the first part of the boost crank. The handle of the slider will fall back the slider to 80% if the current position is more than 80% and less than 95%. Click on the trigger button on top of the window, active a “value between” trigger, select it and press select. On the right of the trigger button some trigger parameters appears, use the checkbox to enable the trigger parameter, enter 0.95 in max value (95%) 0.81 in min value (81%) and check the origin checkbox to specify we want to use the original value of the control, as the modified one will interfere. Add a new action in the automatically added empty action node. Set the type to “set value literal”, Click on “pick control”, on the list of target choose “Add” and click on the trigger you are currently editing. Finally click on the OK button. Enter 0.8 in the first field.

Step 7: create the trigger for the 95 to 100% value handling

Now we will set the second part of the boost crank. The handle of the slider will fall back the slider to 100% if the current position is more than 95%. Click on the trigger button on top of the window, active a “value between” trigger, select it and press select. On the right of the trigger button some trigger parameters appears, use the checkbox to enable the trigger parameter, enter 0.99 in max value (99%) 0.95 in min value (95%) and check the origin checkbox to specify we want to use the original value of the control, as the modified one will interfere. Add a new action in the automatically added empty action node. Set the type to “set value literal”, Click on “pick control”, on the list of target choose “Add” and click on the trigger you are currently editing. Finally click on the OK button. Enter 1 in the first field.

Step 8: create the trigger for the 100% value handling

Now we will set a trigger to “press” the boost button when the slider is completely at 100%. Click on the trigger button on top of the window, active a “value between” trigger, select it and press select. On the right of the trigger button some trigger parameters appears, use the checkbox to enable the trigger parameter, enter 0.99 in max value (99%) 1.01 in min value (101%) and check the origin checkbox to specify we want to use the original value of the control, as the modified one will interfere. Add a new action in the automatically added empty action node. Set the type to “send

pressed", choose the virtual joystick mode, and set the correct joystick and button number for the boost button.

Step 9: change the axis modifiers

Now we want to re-range the output value of the control for running between 0 and 100% with the input value of the control running between 20 and 80%. Basically we will add two dead zones on the axis on each extremity of the axis response curve. Click on the Axis button on the bottom of the window. Prepend a dead zone by clicking on the "Add" button on the top of the window. Unlink the dead zone active range by clicking on the "L" button and set the active- to 0 and the active+ to 20. Set the dead level to 0. Append a new dead zone after the previously added dead zone modifier by clicking on the "Add" button at the bottom of the dead zone modifier. Unlink the active zone by clicking on the "L" button and set the active- to 80 and the active+ to 100. Set the dead level to 100. On the linear modifier (that should be at the end now) change the active zone to 20-80 (as the active zone is linked, changing the 0 to 20 will automatically change the 100 to 80). Change the range to 30-30 (as they are linked changing one value will automatically change to other). Click on the OK button to validate your changes.

Step 10: (Optional) if you changed the axis or the joystick in step 1, update the setters

For the axis being driven by external stimuli, you must indicate which axis to watch for change. This is why setters exists in LEA. To do that it's easy: click on setters at the bottom of the window, and replace the joystick and axis values on the default setter.

Step 11: exit macro editor and save

Click on the OK button to exit the macro editor. Don't forget to save you project by pressing the "save" button on the edit panel. As the project will work perfectly without saving, all your hard work will be lost if you exit without saving, as any other software.

3.7.7 Trigger details

PRESSED: Executed when a control is pressed.

RELEASED: Executed when a control is released.

VALUE CHANGED: Executed when a slider like or a POV like control has an axis value changed.

VALUE MORE THAN: Executed when a slider like or a POV like control has an axis value changed and more than the specified value.

VALUE LESS THAN: Executed when a slider like or a POV like control has an axis value changed and more than the specified value.

VALUE BETWEEN: Executed when a slider like or a POV like control has an axis value changed and more than the specified value.

ALWAYS: Always executed.

POV CENTER CLICKS: Executed when the POV center is pressed.

VALUE EQUALS INT: Executed when a value rounded to the nearest integer equals the specified integer. It is used in the pad like controls.

3.7.8 Action type details

3.7.8.1 Send types:

SEND PRESSED: Send a pressed command to the server.

SEND RELEASED: Send a released command to the server.

SEND VALUE: Send the value of the specified axis or POV to the server.

SEND LITERAL VALUE: Send the literal axis value to the server.

3.7.8.2 Set types:

SET PRESSED: Set a control to the pressed status (buttons and toggle buttons).

SET RELEASED: Set a control to the released status (buttons and toggle buttons).

SET LITERAL VALUE: Set a literal value to a slider and POV like control axis.

SET VALUE OF CONTROL: Set the values of a control to another control of the same type.

SET TEXT LITERAL: Set the text of a text control.