

TSW2_Controller Anleitung

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How do I select a train and activate it?

Click on the drop-down menu ("Select train"). There you get the selection of all trains.
To activate it, you only have to check "Active".

How to adapt a train to my joystick?

Go to "Settings" -> "Controls" and select your train. From there you can adjust either the buttons or the sliders.

[Change buttons](#)

[Change sliders](#)

How do I add a new train?

Go to "Settings" -> "Controls" and enter the name for the train at "Select Train". Then click on "add" and you can configure the [buttons](#) or [sliders](#) of the train.

!!But you have to make sure that the [text indicator](#) of the train is already entered. If not, you have to add it!!

Settings

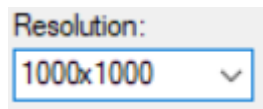
Language

To change the language of the program, click on "Settings" / "Einstellungen" and then on "English" / "German"

Resolution (for text recognition)

To change the resolution for text recognition, click on "Settings" and then select the desired resolution under "Resolution".

If you have a different / not given resolution, you can simply write your desired resolution into the text field.



Debug information

Displays a text field with debug information on the standard window

Show screenshot

Displays on the standard window 2 fields showing the area that has just been read by the program.

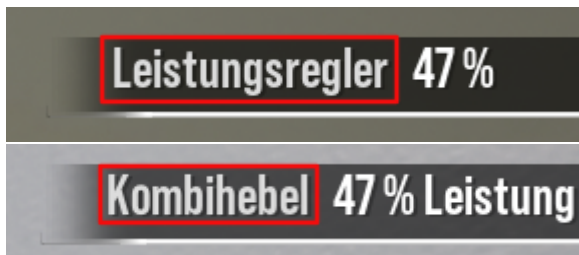
Text indicators

The text indicators are the words that tell the program what the text from the screen means.

Throttle/Brake

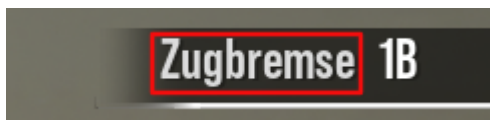
Throttle:

As the text indicator for throttle, you enter what is in front of the information about the current throttle.



Brake:

As a text indicator for the brake, you enter what is in front of the information about the current brake state.



Master Controller

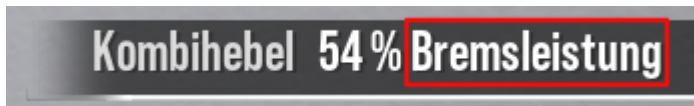
Throttle area:

As text indicator for the throttle area of the master controller you enter what is behind the information about the current position of the master controller.



Braking area:

As text indicator for the braking area of the master controller you enter what is behind the information about the current position of the master controller.



Controls

_Global

The function of "_Global" is that the buttons that have been added there apply to all trains. If you want to deactivate this function for certain trains, you can simply check "Deactivate Global" in the train selection of the main window.

Add a train

To add a train, you just need to enter a name for a train under "Select Train" and then click "Add".

Edit and add buttons

Here you can edit the buttons for certain trains.

In the dropdown menu you can add an existing button, or create a new one (just enter a different name there).

Normal button

A normal button is (usually) any push button or switch on the joystick.

If a button is not recognized, you should check if it is not considered as a controller.

Controller as button

A controller is for example the joystick itself. So if you would like to have the spacebar pressed when you push your joystick forward, you can do that with this setting.

How do conditions work?

Conditions only exist for "controller as button".

The action or shortcut from the controller is not executed until the condition is met.

You can use the characters "< > =" as a condition. It is important to always write the character, and then the number. So if I want the space bar to be pressed when the slider is in the negative range, you would have to write:

Bedingung	Aktion
<0	space

You can also use several conditions. You only have to separate them with a space.

It is always the case that both "greater than" and "less than" conditions must be true, or the equal condition is true.

Bedingung
>10 <20 =100

Example:

(If greater than 10 and less than 20 or equal to 100)

Keyboard shortcut editor

Press onces:

Drückt die Taste einmal runter und lässt sie sofort wieder los

Hold:

Holds the key down for the given time

Press down:

Presses the key down

Release:

Releases the key, that was being pressed by "Press down"

Wait:

The time to wait after one of the actions above. (actions that are too fast could become inaccurate, so I would recommend about 80ms)

Steps to add or edit a normal button

1. Enter a name
2. Select „normal button“
3. Click on " Detect" and press the button you want on the joystick
 - If the program does not recognize anything, you can manually search for the joy no. and button no. in the main window.
4. Select action / keyboard shortcut
 - Action:
Behaves in the same way as the keystroke on the keyboard
 - [Keyboard shortcut](#):
Performs a series of commands once when the key is pressed.
5. Click on "Add / Replace"
6. Done!

Steps to add or edit a controller as a button

1. Enter a name
2. Select "Controller as button"
3. Move the joystick you want to use and search for it in the white box.
4. Find the Joy No. in the white box and enter it.
5. Find the Joy name in the white box and enter it.
(pay attention to upper/lower case!)
6. enter the condition (">number" or "<number" or "=number")
Conditions have been explained [here](#)
7. Action / Keyboard shortcut
 - a. Action:
Behaves in the same way as the keystroke on the keyboard
 - b. [Keyboard shortcut](#):
Performs a series of commands once when the key is pressed.
8. Click on "Add / Replace"
9. Done!

Edit and add controllers

Inverted

100 becomes -100 and -100 becomes 100

Other Joy-Mode

[100 to -100] becomes [0 to 100]

Reassign joy states

Here you can override certain values from the joystick.

Example:

„3=5“ means:

If the joystick is at position 3, the program interprets it as position 5.

„1|5=5“ means:

If the joystick is between 1 and 5, the program interprets it as position 5.

It is also possible to enter more than one of these conversions. You just have to separate them with a space.

1|5=5 10|20=10 100=0

Convert special cases

If there is no number but text in some places in the simulator, you can tell the program here how to interpret the text.

You can also enter several of these special cases. You only have to separate them with a space.

(if a special case needs the use of a space, use " _").

Example:

"Off=0" "Min.=5" "Max.=100" "Full_power=9"

Time factor

To find the time factor you can click on "Find time factor".

For the time factor, you don't need the "hold key" area.

For a continuously variable controller, the time factor is the amount of percent you move if you hold the button down for one second.

For a notch controller, the time factor is the amount of time you have to hold down the button to move from one notch to the next.

Long press

"Long press" are positions where you have to hold down a key longer than usual in the simulator. For example, it is often the case that you have to press the key longer to get in or out of the "Off" position.

You can also enter several of these long press positions. You only have to separate them with a space.

Example:

"0|5:500" means that to go from position 0 to 5 (and reverse), the program should hold down the corresponding key for 500ms.

Steps to add a controller

1. Select whether it is a throttle, brake or master controller lever.
2. Is this controller continuously variable or does it have multiple notches?
3. Move the joystick you want to use and search for it in the white box.
4. Find the Joy No. in the white box and enter it.
5. Find the Joy name in the white box and enter it.
(pay attention to upper/lower case!)
6. (Notch controller) enter the number of notches.
7. Check in the simulator whether certain numerical values cannot be reached and enter them in "[Reassign joy states](#)".
8. Check in the simulator whether it displays text instead of a numerical value. Then enter this text in "[Convert special cases](#)".
9. Enter time factor with the help of "[Find time factor](#)".
10. Test in the simulator if you can only reach some places by holding down a key. If this is the case, enter these positions in "[Long press](#)".
11. Add a description.

Where are my settings stored?

Buttons and trains:

C:\Users\{Your user}\AppData\Local\TSW2_Controller\TrainConfig.csv

Settings:

C:\Users\{Your user}\AppData\Local\TSW2_Controller\TSW2_Controller.exe_Url_.../{version}/user.config

Potential problems

A button does not work as it should

Check the following

- The button must not exist twice (e.g. if it is entered in _Global and in the train).
- Joy-No. is correct
- Button-No. is correct/ Joynome is written correctly
- By mistake something is written incorrectly in the keyboard shortcut
- (controller as button) Conditions not true or mistyped in the field

A controller does not work as it should

It does not respond at all

If the controller does not respond at all to the joystick movements, it may be that the joy no. is wrong or you have made a mistake with the joy axis. It could also be that no time factor has been entered.

It jumps back and forth

Then it is possible that the program recognizes a value incorrectly (A1 is often recognized as 14). Then simply add e.g. 14=1 to the special cases). It can also be that you have assigned a special case twice, or you have set a "Long press" position incorrectly.

The controller is inaccurate or does not find the position

If the controller has to constantly correct itself or is simply too inaccurate, it may be due to the fact that the time factor is wrong.

If the program does not find the controller position from the simulator, it may be because the [text indicator](#) of the train does not exist.

It can also be that you have selected the "Invert" or "Other Joy Mode" incorrectly when creating the controller.

Your problem is not included or has not been solved?

Then you can describe your problem [here](#) and I will try to help you.

It would help if you send me your **TrainConfig.csv** which is located under

C:\Users\{Dein Benutzer}\AppData\Local\TSW2_Controller