



a product of the company Bozzio AG

Universal Evaluator Manual

EN_Universal_Evaluator_Manual_2_V04-170531.docx



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Hauptsponsor



Schweizer
Paraplegiker
Stiftung

Sponsoren



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Stiftung für technologische Innovation
Fondation pour l'innovation technologique
Foundation for technological innovation



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1 General

This document describes the joysteer® system.

The handling and installation is to take place by trained personnel **exclusively**, whereby all points need to be carried out as described.

This document describes all **non**-vehicle specific installation steps. Refer to the corresponding vehicle specific manuals for details.

This document applies to the joysteer® system generation 2.0.

The main change from generation 1.0 to generation 2.0 is as following:



Display module

joysteer® generation 2.0



Alarm module

joysteer® generation 1.0

2 Disclaimer

Bozzio AG refuses their product liability if one or more of the following facts are given:

- Driving the system by users who do not possess an appropriate driving licence
Exception: driving accompanied by an authorized driving instructor
- Driving with accompanying driving instructor without installation of an Instructor switch
- Installation/ maintenance/ repairs by companies not trained by Bozzio AG
- Installation/ maintenance/ repairs by personnel not trained by Bozzio AG
- Installation/ maintenance/ repairs not according to the manuals
- Installation/ maintenance/ repairs of components/ modules, which are not mentioned in the part list
- Installation/ maintenance/ repairs of any MMI (Man Machine Interface), which has not been released by Bozzio AG in written form
- Usage of parameter-sets which do not correspond to the “rules” of the Servicemanager
- Any modifications to the cable harness

Important:

- By opening the modules any warranty of the manufacturer is omitted
(Exception: EnergyAlarm module).

3 Disconnection and reconnection of steering actuator

For some cars, a mechanical disconnection device is installed in the vehicle. This allows evaluations without the use of joysteer; e.g. for hand controls or Gas-/ Brake Systems. The steering wheel is used in a conventional way and the steering actuator is disconnected completely.



How to disconnect:

- Park the vehicle in a straight forward position, control if the wheels are straight ahead.
- Switch off the joysteer System; Ignition OFF, Engine OFF.
- Remove the MMI to prevent malpractice.
- Remove the steering wheel.
- Disconnect the steering actuator by unscrewing the 7 screws of the adapter piece.
- Store the disconnect device (or the 7 screws) in a safe place.
- Remount the steering wheel.

How to reconnect:

- Park the vehicle in a straight forward position, control if the wheels are straight ahead.
- Remount the MMI.
- Switch on joysteer and initialize.
- Position the MMI in the straight forward position.
- Switch off the joysteer System; Ignition OFF, Engine OFF.
- Remove the steering wheel
- Align the holes of the 7 screws with the disconnecting device. Mount the 7 screws.
- Remount the steering wheel.
- Make a test drive with low speed with a figure of 8 manoeuvre. Assure, that the full lock to lock ratio is given.

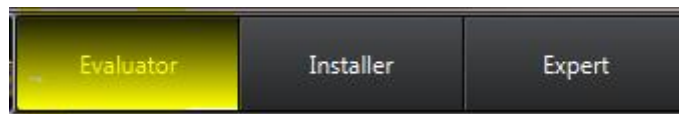
Important:

Reconnect without following this procedure may damage the potentiometer of the steering actuator. The evaluator is responsible for a proper reconnection.

Please contact the producer or distributor in case of uncertainties.

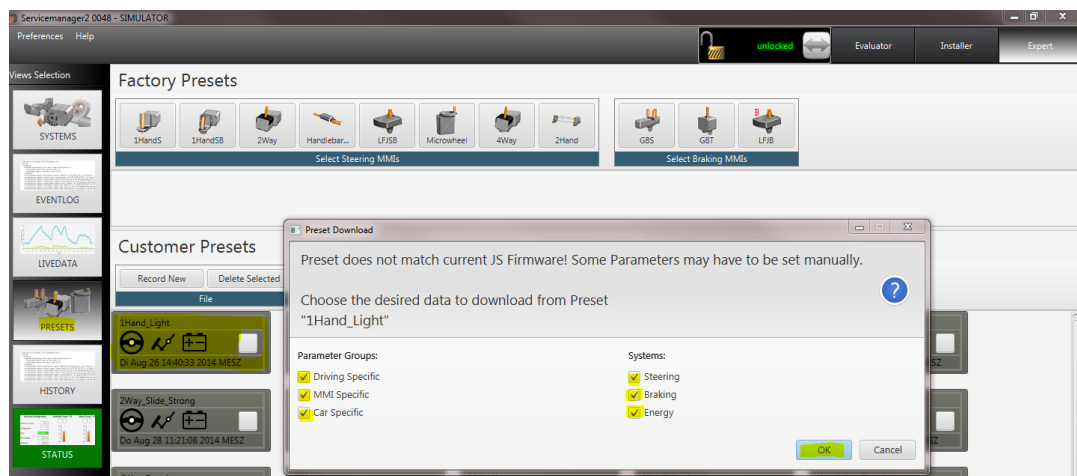
4 User Tab for Evaluator

In order to reduce the adjustment parameters for Evaluators and Instructors, the Servicemanager has a special user tab for this purpose. Just switch the Servicemanager to the user 'Evaluator'.



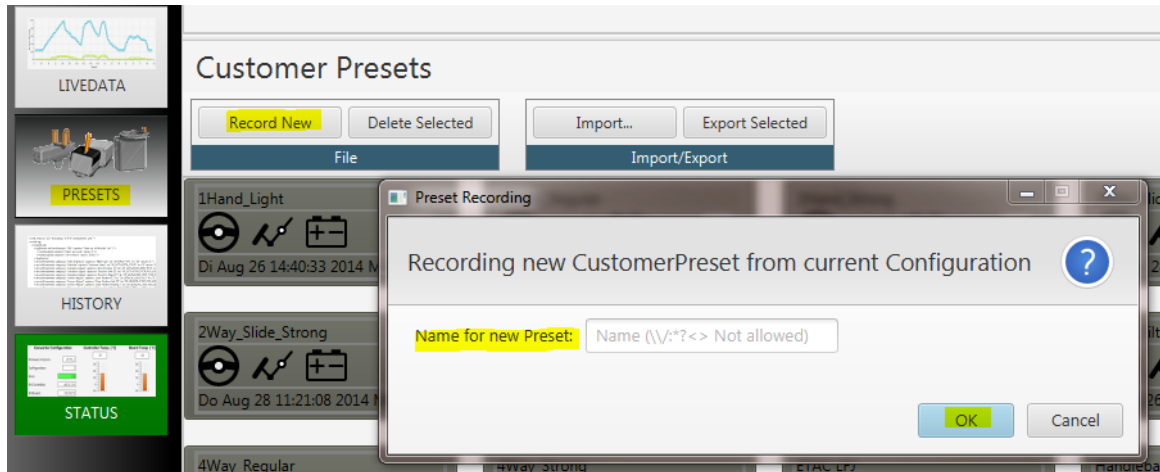
5 Change MMI and load a customer preset

- Switch off the joysteer system.
- Mount the braking MMI in the car and connect the 4 gas/brake sensors to the instructor plug or plugs X51-X54.
- Mount the steering MMI in the car and connect it to plug X10 (Handlebar, LFJ or steering sensor module SSM).
- Restart the system and do NOT initialize it yet!
- Connect the Servicemanager, go to the menu 'Presets' and unlock it.
- Select the corresponding customer preset and load it.
 - LFJ (Low Force Joystick): After you loaded the right preset, you need to restart the system again.
- Now Initialize the system
 - Handlebar: Before you can use the gas from the handlebar, you need to press the OEM pedal first to activate the gas.



6 Create a new customer preset

- Go to the menu 'Presets' and unlock it.
- Press 'Record New'
- Enter the name for this new customer preset.
Note: if you have several different settings for this customer, write also specific details in the name of the preset (like: Johnson_4WJ_strong).



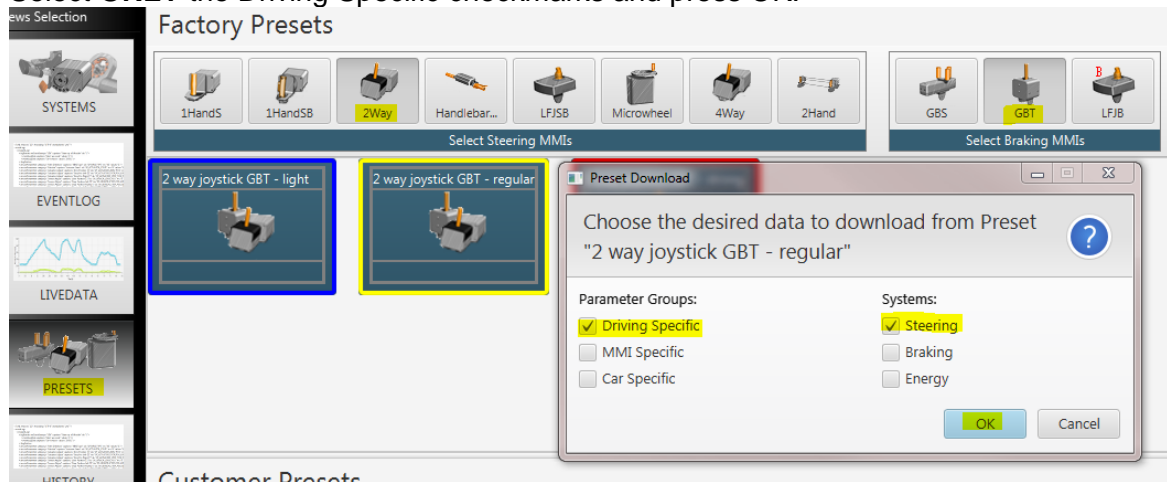
7 Import / Export or delete customer presets

- Go to the menu 'Presets' and unlock it.
- For export, select the files you like export to a folder (like on a USB drive). Then press 'Export Selected' and choose the path.
- To delete them, select the files you like delete. Then press 'delete'.
- To import a new file from somebody else, press on 'Import...' and choose the file you like. Make sure that you choose the correct file format



8 Change the force feedback to light, regular or strong

- Be sure that you have already a running preset on the system.
- Go to the menu 'Presets' and unlock it.
- Select the combination of MMIs you have installed (one for steering and one for braking).
- Choose between light, regular or strong.
- Select **ONLY** the Driving Specific checkmarks and press OK.



9 Change some key settings of the MMI

You are able to define or adjust the following settings with this Servicemanager program:

- The "Zero position" of your joystick or micro-wheel
- The number of rotations with the micro-wheel or the joystick travel by setting the "Left end stop" and "Right end stop" position
 - Go to the Systems section of the Servicemanager
 - Go to the "Sensor adjust" section under Steering
Attention! Make sure you are not in "Actuator adjust". These values should not be modified by an instructor.
 - Set first the "zero position" and then the end stops
- The same can be done for the Gas-Brake MMI by setting the "Zero position", the "Max gas position" and the "Max Brake position"
 - Go to the Systems section of the Servicemanager
 - Go to the "MMI adjust" section under Gas-/brake
 - Set first the "Zero position" and then the "Max positions"
- The speed of return to the zero position (retraction) of an MMI can also be adjusted, we advise to do this - if needed - with the help of your certified workshop.

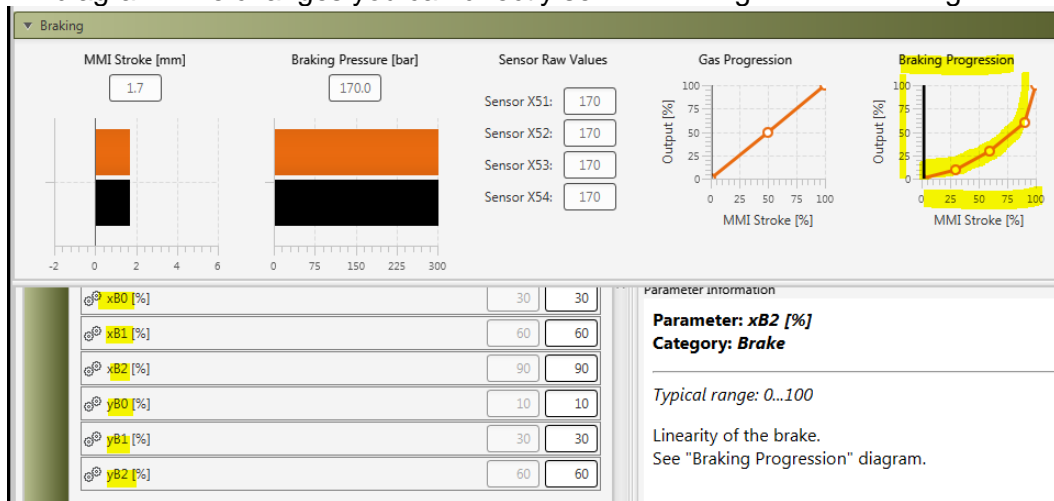
10 Fine tuning

10.1 Fine tuning – steering

- Adjust the Force Feedback when the customer presets are not satisfactory.
 - Start with one of the three customer presets as a base (light, regular or strong).
 - For a **stronger Force feedback increase the parameter ‘Force Feedback’**
 - For a **weaker Force feedback decrease the parameter ‘Force Feedback’**
- Adjust the Steering linearity when the customer presets are not satisfactory.
 - For a **more linear steering increase the ‘V dependency – Steering linearity’** V-min and V-max (for lower and higher speed). The max value is 8192.
 - For a **more progressive steering decrease the ‘V dependency – Steering linearity’** V-min and V-max (for lower and higher speed). The Min value is 1024.

10.2 Fine tuning – gas and brake

- Adjust the Brake curve when the customer presets are not satisfactory.
 - Adjust the values xB0/yB0, xB1/yB1 and xB2/yB2. The values work like in a normal XY diagram. The changes you can directly see in the diagram ‘Braking Progression’



- Set a limit on the max gas output.
 - If a driver uses the joysteer System the first time, it can be useful to limit the gas output to a certain percentage.
 - Set the amount of Gas in percent for the parameter ‘Gas limitation’. Standard is 100%.

