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Function overview BR111

* Prototypical traction and braking behaviour
* Prototypical monitoring of important systems
  Traction Motor Blower / FML, Current etc
* Brake modes R / P / G available
* High braking rate in mode R
* Prototypical PZB with train type O / M / U
* Regulator with Z-Regulation / Z-Steuerung
* PZB Advisory System
* SiFa Vigilance System
* Switchable instrument and cab lights
* Windscreen wipers slow / fast
* Manual Light Cone Regulation
* TS camera position and weather effects
* vR Ebula system
* vR ZZA / Destination signs
* Prototypical soundscape

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Vehicles included

111 066-7
BR111 with Scherenpanto and round buffer plates

111 066-7 Cold
BR111 with Scherenpanto and round buffer plates

111 DynNr 3
BR111 with Scherenpanto and round buffer plates

111 DynNr 3 Cold
BR111 with Scherenpanto and round buffer plates

111 103-8
BR111 with Einholmpanto and round buffer plates

111 103-8 Cold
BR111 with Einholmpanto and round buffer plates

111 DynNr 4
BR111 with Einholmpanto and round buffer plates

111 DynNr 4 Cold
BR111 with Einholmpanto and round buffer plates

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1. Regulator
2. Reverser
3. EBula
4. PZB command / Free / Caution
5. Pantograph / TMB (FML) / Wiper I - II
6. Compressor / Main Switch
7. Current
8. Overhead wire voltage

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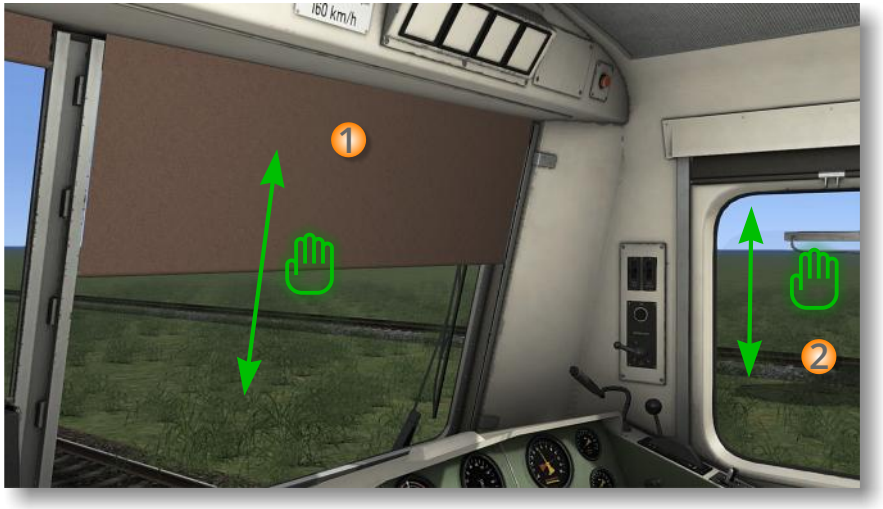
1. Sander
2. Brake quick release
3. Cab light
4. Console light
5. Tractionmeter
6. Speedometer
7. Warning light test
8. MFA / Warning lights / Notches / PZB

9. Train brake
10. Dynamic Brake
11. Loco direct air brake
12. Door control
13. Horn
14. Brake gauges



1. Sun visor left / right
2. Cab side window left / right

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1 Regulator

The power of the locomotive's traction motors is regulated via the regulator. The lever has four positions in the lower area: **Zero** - **Down** - **Drive** - **Up**
The regulator sets the speed levels from 0 - 28.

A	Regulator up
D	Regulator down

Zero	- Notches down to zero
Down	- Notches down
Drive	- Notches unchanged
Up	- Notches up

2 Z-Control / Z-Steuerung

In the upper area, the Z-Control is activated by the regulator lever. A movement in the Z control area moves a small pointer in the traction display. If the pointer stops for about a second, the value becomes accepted, the regulator switches to the drive position and the notches switch up.
The Z-Control is only available in the BR111.

3 Notch Display

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1 High Braking

The BR111 will use a high braking rate when the braking mode R is active. This means that when active system pressure will increase up to 7 bar.

The indicator light will illuminate when the high braking is active.

High braking is active from about 55 km/h.

2 Electric Brake

In addition to the air braking system the BR111 has an electric braking system installed. This can be activated together with the train brake by using the train brake lever.

3 The eletric brake can be decoupled by clicking on the knob of the electric brake lever or by using Shift-D.

When the electric brake is active and applied the indicator light at the MFA will illuminate.

The electric brake can be used in all brake modes starting from zero up to 160 km/h.

Controlling the brakes

[/] Loco direct air brake

; / ´ Train brake

, / / E-Brake

Shift D Decouple E-Brake

Ctrl Shift / Brake mode R/P/G

Brake operation

When using the various braking system of the BR111 it should be noted that applying the electric brake will automatically cut out traction power.

Traction power may only be regained by retourning the regulator and the electric brake lever to zero.

If you wish to only brake with the train air brake in high brake mode you should decouple the electric brake from the train air brake by using Shift-D.

Cab Camera

The height of the cab camera can be adjusted with the keyboard.

U	Camera up
J	Camera down

Light Settings

Shift + Home	Increase brightness
Shift + End	Decrease brightness
L	Cab light switch
I	Instrument light switch
H	Switch on head/tail lights
Shift + H	Switch off head/tail lights

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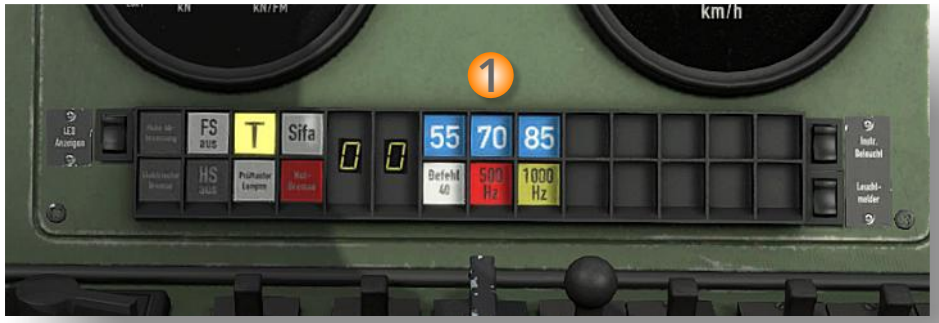

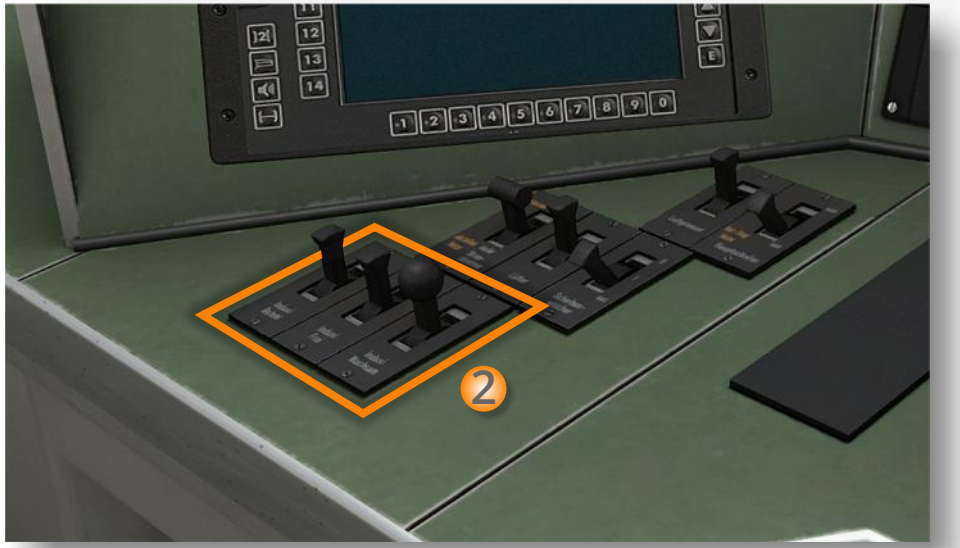

1 PZB

PZB is a security system used to ensure that trains are running at correct speeds in certain controlles sections and also ensure that no train can pass a signal at danger without permission.

http://www.tf-ausbildung.de
http://www.sh1.org/eisenbahn/rindusi.htm

Shift	8	PZB on / off
Strg	8	Select train type O/M/U
Shift	ß	PZB Help on / off
Ctrl	9	Show PZB Info

2

Pgdn	PZB Caution
End	PZB Free
Del	PZB Befehl40

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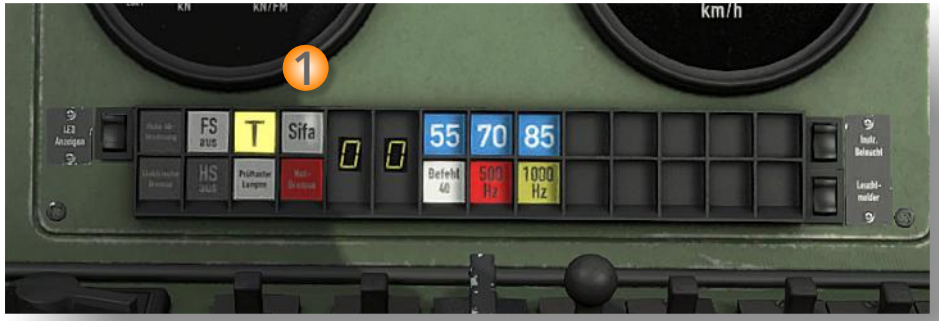
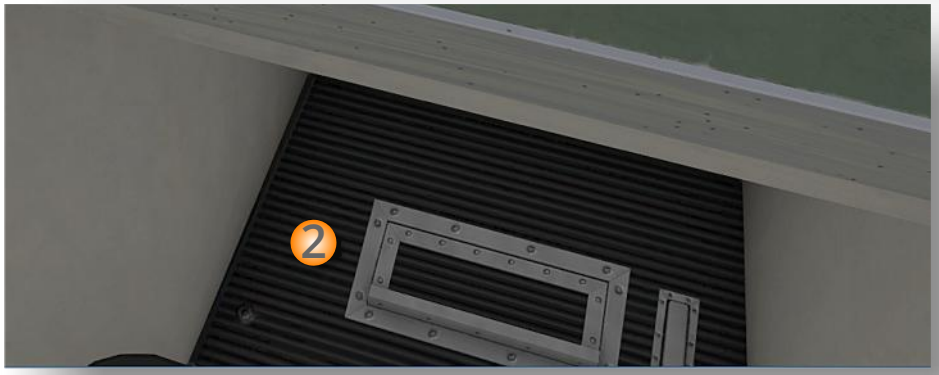




1 SiFA / Timed vigilance device

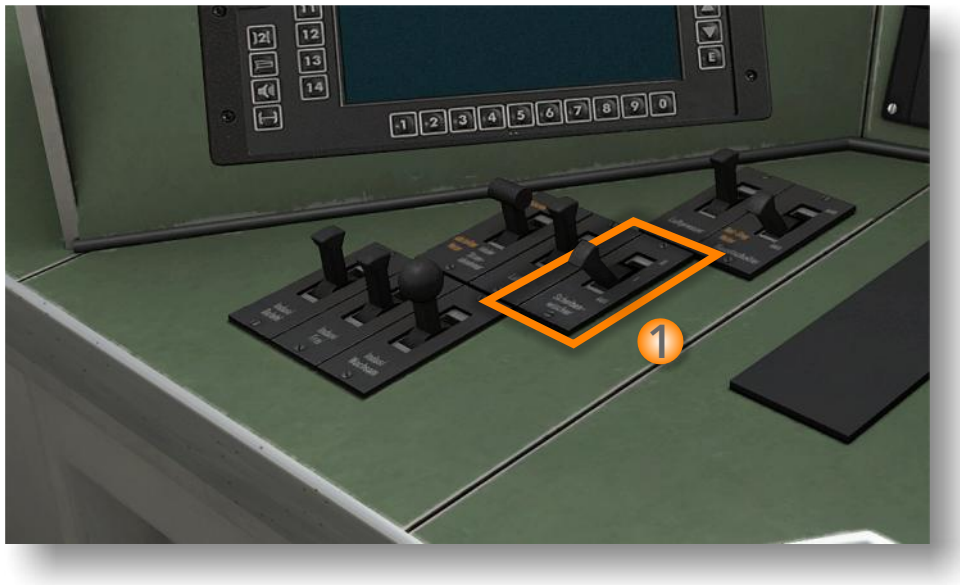
Once activated the sifa reset switch must be operated every 30 seconds whilst driving in order to prevent an emergency brake application.

If it is not reset, the sifa light will illuminate for 4 seconds. If still not reset after a further 2 seconds, an emergency brake application will be initiated.

Sifa is not active in the exterior view.

Shift + 7 — SiFa on / off

2 Space — SiFa reset



1 Windscreen wipers

The speed of the windscreen wipers can be controlled with the keyboard in two different steps.

V	Wipers on / level up
Strg + V	Wipers off / level down

EBula

The loco is equipped with an electric book timetable.
Corresponding timetables for current routes can be found in the railway simulations forums.
The EBula can only be controlled by the mouse.

1. EBula on / off
2. EBula day / night mode
3. EBula change page
4. EBula change plan

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P Pantograph up / down

Shift P Pantograph selection

1 Pantograph

Selecting which pantograph to raise can only be done by keyboard.

- Both pantographs up
- Both pantographs down
- Front pantograph up
- Back pantograph up

When driving in double traction, the second loco will copy the pantograph settings from the leading loco.

When setting up scenarios the field for the loco number can be used to select the pantographs at scenario start. Use it like this: **SA-XY 11122233**

- **X** is the front pantograph with 0 or 1
- **Y** is the back pantograph with 0 or 1
- **11122233** is the placeholder for the number.

To ensure that the preselection is working, place the loco with cab 1 in driving direction.

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Monitoring functions

The BR111 is one of the first modern locomotive in the inventory of the DB and thus has some monitoring functions helping you to drive the locomotive.

1 Current limit

To protect electrics and electronics from damage the upper current limit may not be more than 420 amperes in single traction and 320 amperes in double traction.

The current can be read on the corresponding gauge on the left of the cab. If the value is exceeded, the notches will switch down automatically until the current value has decreased under the limit.

2 Traction motor blower / FML

The FML is important for cooling the electrical traction motors. If the FML is not switched on, it will automatically switch on at 8 km/h.

Shift + F — Traction motor blower on / off

Starting Up

To start up the locomotive the following steps are necessary:

- Switch on the battery
- Select which pantograph to raise
- Raise the selected Pantograph
- Switch on the main switch

After that you can switch on the safety systems like Sifa and PZB. You should also switch on the traction motor blower (FML) before driving.

Shift + B	Battery on / off
Z	Main switch on / off
P	Pantograph up / down
Shift + P	Pantograph selection
Shift + F	FML on / off

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Additional keyboard commands

	B	Horn
	I	Instrument lights on / off
	L	Cab lights on / off
Shift	´	Compressor on / off
	0	Dest. Sign / ZZA +
Shift	0	Dest. Sign / ZZA -
Ctrl	9	Train / loco info