



Norddeutsche-Bahn

Kiel - Lübeck

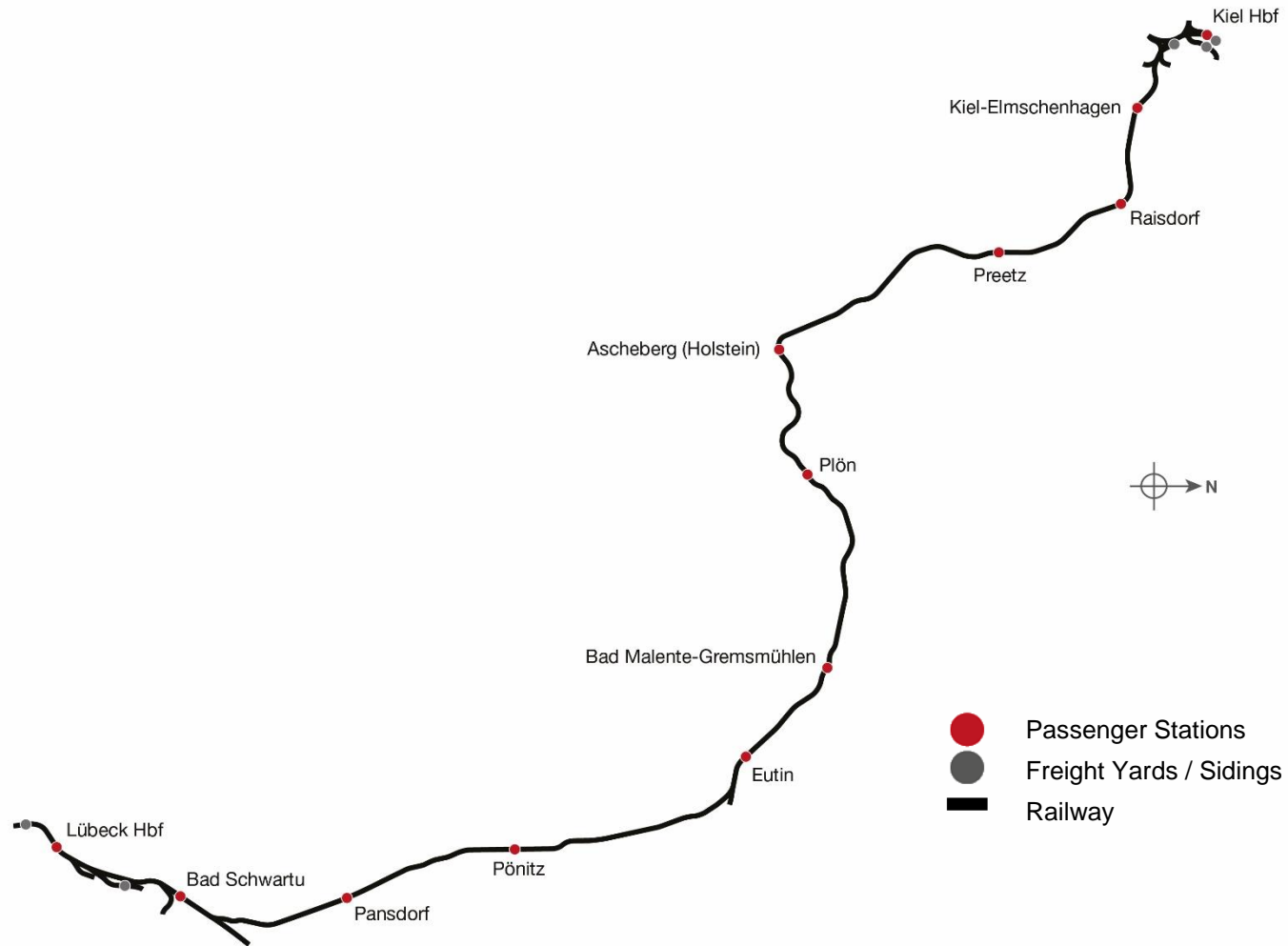


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Whilst we do our utmost to reproduce sounds that are accurate and true-to-life, sometimes these sounds may not completely tally with the user's expectation. Due to the nature of the simulation, it is often not possible to reproduce a completely accurate soundscape for a variety of reasons such as limitations with our current technology and occasional inability to gain meaningful access to the locomotives being created. You should therefore regard the audio reproduction for our locomotives as authentic interpretations rather than perfect recreations.

1 Route Map



2 Rolling Stock

DB BR 648



DB BR 218



DB BR 261 'Voith Gravita'



3 Driving the DB BR 648

Cab Controls



1	Radio On/Off	5	Override
2	Screen Key	6	Free
3	Reverser	7	Acknowledge
4	Windscreen Wipers	8	Headlight Switch



9	Instruments Lights	12	Train Brake
10	Desk Light	13	Emergency Brake
11	Power Handle		

Key Layout

Function	Key	Key
Increase or Decrease Throttle.	A	D
Move reverser control Forward or Backward.	W	S
Increase or Decrease Train Brake.	;	'
Increase or Decrease Locomotive Brake.	[]
Load/Unload. Press once to load/unload passengers or freight.		T
Headlights. Repeatedly pressing will cycle through headlight states where appropriate.		H
Instrument Lights. Press to toggle instrument lighting on and off.		I
Cab Lighting. Press to toggle the cab lighting on and off.		L
Windscreen Wipers. Press once to switch on and again to switch off.		V
(Expert) Engine Stop/Start. By default engines will already be running at the start of a scenario. Press this button to stop and then again to restart the engine.		Z
(Expert) Sander. Causes sand to be laid on the rails next to the wheels to assist with adhesion. Press and hold to activate sander, let go to stop.		X
Horn. Press once to sound the Horn.		Space
Handbrake. Press to toggle the train Handbrake on and off.		/
Couple manually.	Ctrl + Shift +	C
Request authority to pass a signal at danger.	Tab	Ctrl + Tab

4 DB BR 648 Destinations

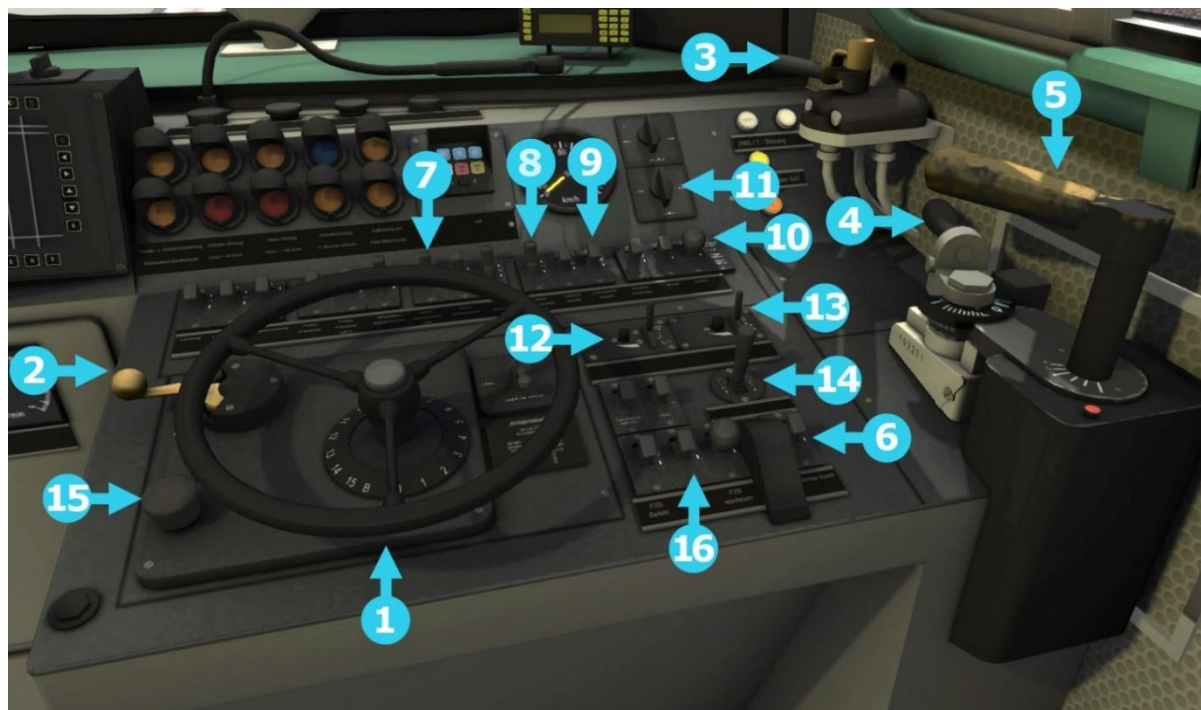
Destinations

Number and Destination codes for BR 648 are as follows:

A - RE4 Bad Kleinen
B - RE4 Lübeck Hbf
C - RE72 Eckernförde
D - RE72 Flensburg
E - RE72 Kiel Hbf
F - RB73 Eckernförde
G - RB73 Flensburg
H - RB73 Kiel Hbf
I - RE74 Husum
J - RE74 Kiel Hbf
K - RE74 Rendsburg
L - RB75 Husum
M - RB75 Kiel Hbf
N - RB75 Rendsburg
O - RE83 Büchen
P - RB83 Hamburg Hbf
Q - RE83 Kiel Hbf
R - RE83 Lübeck Hbf
S - RE83 Lüneburg
T - RB84 Hamburg Hbf
U - RB84 Kiel Hbf
V - RB84 Lübeck Hbf
W - RB84 Preetz
X - RB85 Fehmarn-Burg
Y - RB85 Hamburg Hbf
Z - RB85 Lübeck Hbf
aa - RB85 Neustadt (Holstein)
bb - RB85 Puttgarden
cc - RE85 Hamburg Hbf
dd - RE85 Lübeck Hbf
ee - RE85 Neustadt (Holstein)
ff - RE85 Puttgarden
gg - RE85 Fehmarn-Burg

5 Driving the DB BR 218

Cab Controls



1	Throttle Wheel	10	Sander
2	Direction Controller	11	Startup/Shutdown
3	Straight Air Brake Handle	12	Wiper and Wiper Speed (Left Side)
4	Train Brake Handle	13	Driver Wiper and Wiper Speed
5	Dynamic Brake	14	Horn Lever
6	Train Brake Release	15	SIFA Reset
7	Headlight Control	16	PZB Controls
8	Cab Light Switch		
9	Instrument Lights		

Key Layout

Function	Key	Key
Throttle. Increase or Decrease Throttle.	A	D
Train Brake. Increase or Decrease Train Brake.	'	;
Direct Brake. Increase or Decrease Direct Brake.	[]
Dynamic Brake. Increase or Decrease Dynamic Brake.	,	.
Reverser. Move reverser control Forward or Backward.	W	S
Signals. Request Permission to Pass Signal Ahead.		Tab
Signals. Request Permission to Pass Signal Behind.		Ctrl + Tab
Junction. Change state of Junction Ahead / Behind.	G	Shift + G
Horn. Press once to sound the Horn.		Space
Load/Unload. Press once to load/unload passengers or freight.		T
Headlights. Turn headlights On / Off.	H	Shift + H
Emergency Brake		Backspace
Windscreen Wipers. Press once to switch on and again to switch off.		V
Couple manually		Ctrl + Shift + C
SIFA Toggle		Shift + Enter
SIFA Acknowledge		Enter
PZB. Activate/deactivate PZB.		Ctrl + Enter
PZB Acknowledge ("PZB Wachsam")		Page Down
PZB Release ("PZB Frei")		End
PZB Override ("PZB Befehl40")		Delete
Cab Lights. Toggle the Cab lights on and off.		L
Handbrake. Press to toggle the train Handbrake on and off.		/
(Expert) Sander. Causes sand to be laid on the rails next to the wheels to assist with adhesion. Press and hold to activate sander, let go to stop.		X

6 DB BR 218 Destinations

Destinations

Number and Destination codes for BR 218 and Doppelstock are as follows:

1 - Number 1	A - ProbeFahrt
2 - Number 2	B - RE7 Hamburg Hbf
3 - Number 3	C - RE7 Neumünster
4 - Number 4	D - RE7 Kiel Hbf
5 - Number 5	E - RE8 Hamburg Hbf
6 - Number 6	F - RE8 Lübeck Hbf
7 - Number 7	G - RE70 Hamburg Hbf
8 - Number 8	H - RE70 Neumünster
9 - Number 9	I - RE70 Kiel Hbf
10 - Number 10	J - RE72 Eckernförde
11 - Number 11	K - RE72 Flensburg
12 - Number 12	L - RE72 Kiel Hbf
13 - Number 13	M - RE74 Husum
14 - Number 14	N - RE74 Kiel Hbf
15 - Number 15	O - RE74 Rendsburg
16 - Number 16	P - RE80 Hamburg Hbf
17 - Number 17	Q - RE80 Lübeck Hbf
18 - Number 18	R - RE83 Kiel Hbf
19 - Number 19	S - RE83 Lübeck Hbf
20 - Number 20	T - RE83 Büchen
21 - Number 21	U - RE83 Lüneburg
22 - Number 22	V - RE83 Hamburg Hbf
23 - Number 23	W - RE85 Hamburg Hbf
24 - Number 24	X - RE85 Lübeck Hbf
25 - Number 25	Y - RE85 Puttgarden

7 Driving the DB BR 261

Cab Controls



1	Override	7	Sander
2	Free	8	Cab Light
3	Acknowledge	9	Train Brake
4	Display Lights	10	Windscreen Wiper
5	Combined Throttle/Brake	11	Independent Brake
6	Forward/Reverse	12	Horn



13	Headlights	16	Handbrake On/Off
14	Slow/Fast Gear	17	Emergency Brake
15	Eco Mode	18	Engine Start/Stop

Key Layout

Function	Key	Key
Increase or Decrease Tap Control.	A	D
Move reverser control Forward or Backward.	W	S
Increase or Decrease Train Brake.	;	'
Increase or Decrease Locomotive Brake.	[]
Load/Unload. Press once to load/unload passengers or freight.		T
(Expert) Sander. Causes sand to be laid on the rails next to the wheels to assist with adhesion. Press and hold to activate sander, let go to stop.		X
Headlights. Repeatedly pressing will cycle through headlight states where appropriate.		H
Windscreen Wipers. Press once to switch on and again to switch off.		V
(Expert) Circuit Breaker. Trips the Circuit Breaker on and off.		Z
Horn. Press once to sound the Horn.		Space
Handbrake. Press to toggle the train Handbrake on and off.		/
Couple manually.	Ctrl + Shift +	C

8 DB BR 261 Eco Mode

Eco Mode

The Voith Gravita features Eco Mode. Eco Mode is an environmentally friendly system that monitors the drivers input on the engine and will initiate a shutdown if the locomotive is idling and no input is detected within five minutes.

To enable or disable the system press the Eco button on the center console. This will then activate the monitoring mode made apparent by the Eco light on the driving desk lighting up. After four minutes the light will begin to flash, indicating there is one minute left before the locomotive will shut down. If the driver sets off at any point before the shutdown the timer is reset and will resume once the locomotive has stopped.

9 SIFA

SIFA is short for Sicherheitsfahrschaltung or “Safety Driving Switch”.

The SIFA vigilance alerter is disabled at startup, but can be activated or deactivated by pressing ‘Shift+Enter (Numpad)’. While activated the SIFA light on the cab dashboard is normally switched off. While the train is moving the driver is required to confirm an alarm every 30 seconds.

When the 30 second alarm is triggered the SIFA light on the cab dashboard will illuminate, after an additional 4 seconds an audible alert will sound. After a further 2.5 seconds the emergency brake will be applied. This can be avoided by acknowledging the alarm at any stage by pressing the ‘Enter (Numpad)’ key.

SIFA Key Controls

Function	Key	Key
Activate/Deactivate	Shift +	Enter (Numpad)
Alarm Acknowledge		Enter (Numpad)

10 PZB

PZB stands for Punktförmige Zugbeeinflussung, loosely translated to English this means “Spotwise Train Control”.

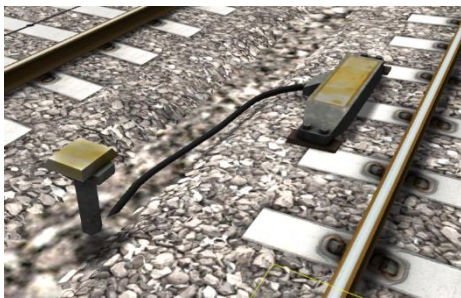
Safe distances between trains are managed conventionally through the use of block-based systems.

A given line is broken up in to a series of blocks, and trains are permitted (via green or yellow) signals to enter a block. While a train is present in a block the signal permitting entry is set to red, preventing any more trains to enter.

As railways have developed, more complex control systems and in-cab signalling have been implemented to improve the safety of the railways and to ensure that drivers are fully aware of what is happening around them by requiring them to react in certain ways according to what is happening.

PZB is a complex system and requires that you understand the varying speed limits and the requirement to respond promptly to the signalling system.

PZB Track Interface



The PZB system incorporates in-cab signalling, this is where the control desk has indicators, alarms and buttons that will react according to the signalling status on the railway. The mechanism by which this works is a series of “balise” magnets placed on the side of the track. An example of one of these magnets is shown in the image on the left.

PZB Cab Controls

There are also three controls on the cab desk that you will need to use in order to interact with the PZB system.

These three controls, to the left of the control desk, item 2 in the cab control diagram above, are named as follows:

- **Override**
- **Release**
- **Acknowledge**

PZB Key Controls

Function	Key	Key
Activate/Deactivate	Ctrl +	Enter (Numpad)
PZB Acknowledge (“PZB Wachsam”)		Page Down
PZB Release (“PZB Frei”)		End
PZB Override (“PZB Befehl40”)		Del

11 Scenarios

Career Scenarios

- [648] 1. A Winter's Return (Part 1)
- [648] 2. A Winter's Return (Part 2)
- [648] 3. A Winter's Return (Part 3)
- [218] 4. Summer Slip (Part 1)
- [218] 5. Summer Slip (Part 2)
- [648] 6. The Lonely Wanderer
- [218] 7. Wintery Lake

Railfan Mode Scenarios

Railfan Mode provides a unique chance to observe and enjoy the operations of trains without the pressure and involvement of driving them. Railfan Mode scenarios are positioned at various key points along the route and provide camera functionality to sit back and watch the action unfold.

The following scenarios are located on the Drive screen under the **Career** tab:

- [Railfan] Kiel
- [Railfan] Plön

12 Acknowledgements

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Route Builder

Dovetail Games Beta Testing Team

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