

RhB Enhancement Pack 2



1 THE GE 4/4 II LOCOMOTIVE.....	3
1.1 Locomotive History	3
1.2 Design & Specification	3
1.3 Cabin Controls - Refer to the illustrations on page 4	3
1.4 Additional Keyboard Controls.....	3
1.5 Driving Control Wheel (3)	5
1.6 Basic Linear Throttle Override	5
1.7 Fans Mode Switch and Fault/Off Lamp (27)	5
1.8 Fans Standstill Mode Button (23)	5
1.9 Parking Mode Button (22).....	5
1.10 ZSI-90 Safety System	6
1.11 Running Numbers.....	6
1.12 Locomotives in Multiple	7
2 EWII TYPE PASSENGER COACHES.....	8
2.1 Second Class EWII (B) Coach with Passenger View	8

2.2 First and Second Class EWI (AB) Coach	8
2.3 Baggage Coach.....	9
2.4 Interior Coach Lighting and Opening Windows	9
2.5 Coach numbering and removing passengers from static consists	9
3 WAGONS	10
3.1 Haik-v Sliding Door Wagons	10
3.2 Animated Handbrakes	10
4 CONTENT CREATORS - TERMS AND CONDITIONS	11
4.1 End User License Agreement (EULA)	11
4.2 Commercial Add-ons and Scenario Packs	11
4.3 Workshop and Freeware Scenarios.....	11
5 ACKNOWLEDGEMENTS	12

I The Ge 4/4 II Locomotive

I.1 Locomotive History

The Ge 4/4 II locomotives entered service in 1973 (first series) and 1984 (second series). The locomotives were built to replace the Ge 6/6 I (Crocodile), which was becoming less reliable due to age. The Ge 4/4 II is utilised for both passenger and freight services. From 1997 the class has also served on the Arosa Line following the line's conversion to 11 kV AC. The Ge 4/4 IIs can work in pairs using multiple-unit train control operation. From 2004, all 23 locomotives were fully modernised involving the installation of modern computer controlled instrumentation.

I.2 Design & Specification

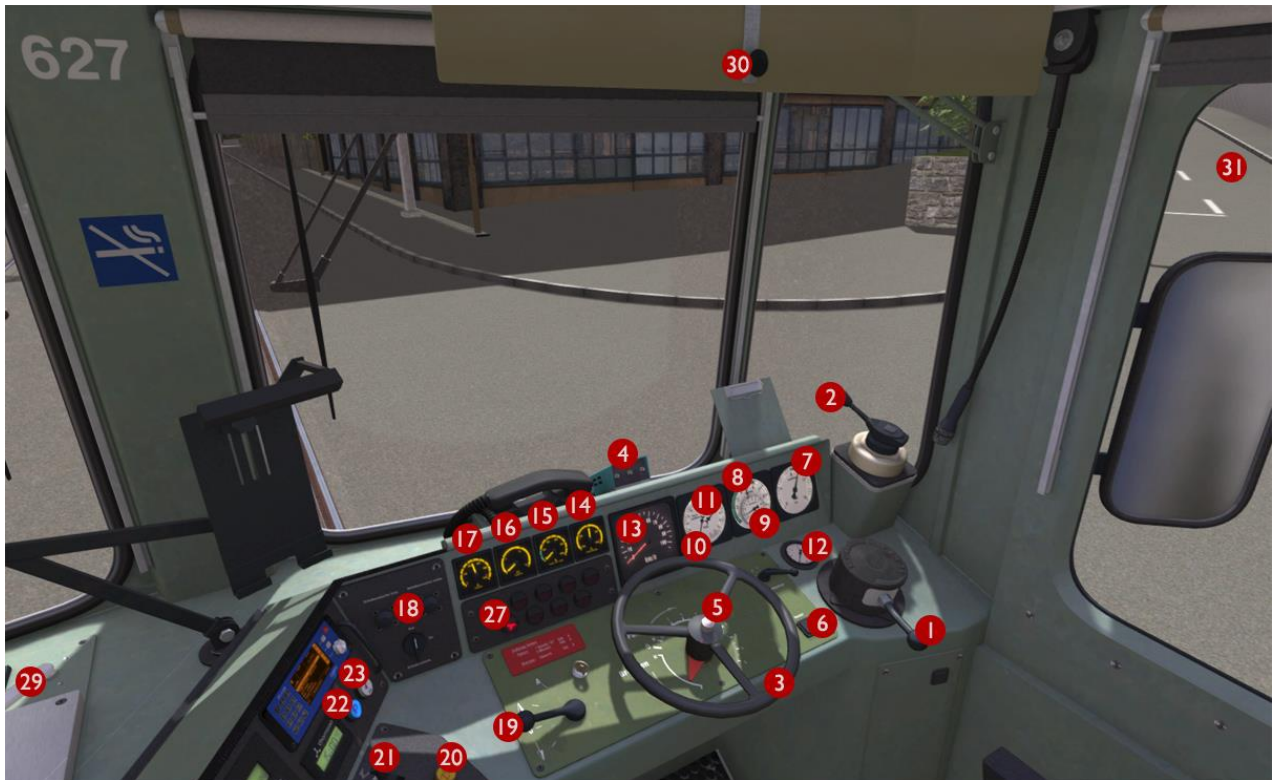
Number Range	611 - 633
Wheel Arrangement	Bo-Bo
Weight	50 tonnes
Length	12.96m
Width	2.65m
Power at Rail	2,210hp (1,650kW)
Max Speed	90km/h

I.3 Cabin Controls - Refer to the illustrations on page 4

1	Train Vacuum Brake	17	Train Heating Load Indicator
2	Locomotive Brake	18	Wiper Switches Left and Right
3	Driving Control Wheel	19	Reverser
4	ZSI Safety System Lamps	20	ZSI Acknowledge Button
5	Warning Horn	21	Pantograph Raise / Lower Switch
6	Sander Button	22	Parking Mode Button and Lamp
7	Main Reservoir Pressure Needle	23	Fans Standstill Mode Button and Lamp
8	Brake Cylinder Pressure Needle	24	Cabin Lights Switch
9	Brake Pipe Pressure Needle	25	Instrument Lights Dimmer Control
10	Vacuum Brake Pressure Needle	26	Headlight Mode Selector Switch
11	Vacuum Control Pressure Needle	27	Manual Fans Selector and Fault/Off Lamp
12	Axle Load Compensation Pressure Needle	28	Line Volts Indicator
13	Speedometer KPH	29	Handbrake
14	Train Braking Force Indicator	30	Visor
15	Differential Traction Force Indicator	31	Opening Windows
16	Catenary Voltage Indicator	32	Opening Door

I.4 Additional Keyboard Controls

L – Toggle Cab Light On / Off	Q – ZSI Acknowledge
O – Toggle Fans Standstill Mode	V – Toggle Right Wiper On/Off
J – Toggle Parking Mode	SHIFT+V – Toggle Left Wiper On/Off
I – Increase Instrument Lights	F – Increase Fans Switch
SHIFT+I – Decrease Instrument Lights	SHIFT+F – Decrease Fans Switch



Note: controls that are not identified above have no function even if they are animated.

1.5 Driving Control Wheel (3)

The wheel is divided into two zones - Bremsen and Fahren. The Bremsen zone controls the locomotive dynamic brake. The Fahren zone controls the power supplied to the traction motors and also acts as a speed selector. The numbers around the Fahren zone relate to speed (km/h x 10) and cut the power to the traction motors automatically when the selected speed is reached. For example if you turn the control wheel to select 4 in the Fahren zone then the power will be supplied to the traction motors until the train speed approaches 40km/h. When travelling up a gradient this is useful as a method of automatic speed control. However this system does not automatically control any of the train brake systems and you must manually brake the train at all times.

1.6 Basic Linear Throttle Override

We have worked hard to design an intelligent throttle Fahren zone for this locomotive featuring speed selection and power cut-off as described above. This system also evaluates the total train weight and track gradient to deliver the best throttle power for the current situation.

However if you wish to bypass this system and use a basic linear scale throttle without speed selection then select setting “3” using the Vakuumpumpe lever. This will change the way the Driving Control Wheel operates. Settings 0, 1 and 2 will revert to the default intelligent system.



1.7 Fans Mode Switch and Fault/Off Lamp (27)

You can manually control the speed of the locomotive fans (Blowers) using this switch. When the fans are not running the fault/off lamp illuminates to draw your attention to the fact that no cooling is being supplied to the locomotive.

1.8 Fans Standstill Mode Button (23)

This button activates the “Fans Standstill Mode”. When this mode is active the button illuminates and the locomotive fans automatically run down and stopped when the Reverser is returned to the neutral (0) position.

1.9 Parking Mode Button (22)

This button activates “Parking Mode”. When moving between cabins you should return the Reverser to the neutral (0) position before activating this mode. When this mode is active the button illuminates. You can then move to the other end of the locomotive, turn parking mode off and resume your activities. Note: you cannot activate parking mode if the reverser is not returned to the neutral (0) position first.

1.10 ZSI-90 Safety System

You are alerted by the ZSI safety system when you pass a distant signal (Vorsignal) that is displaying a warning. The ZSI Acknowledge Button and ZSI Warning Lamp will start to flash accompanied by an audio beep. You must press the ZSI Acknowledge Button immediately otherwise the emergency brakes will be applied automatically. Once pressed there will be five further lamp and audio alerts to remind you that you are driving under a distant signal caution. **A ZSI alert will also be activated when you pass a main signal displaying Aspect 6 (Short Journey – Expect Obstruction).**

1.11 Running Numbers

When creating scenarios running numbers for the locomotives are generated randomly including a letter that controls the display of the correct crest on the side of the loco corresponding to the generated number.

The twenty three valid running numbers for the RhB red livery locomotives are as follows:



611a	Landquart	623m	Bonaduz
612b	Thusis	624n	Celerina/Schlarigna
613c	Domat/Ems	625o	Küblis
614d	Schiers	626p	Malans
615e	Klosters	627q	Reichenau-Tamins
616f	Filisur	628r	S-chanf
617g	Ilanz	629s	Tiefencastel
618h	Bergün/Bravuogn	630t	Trun
619i	Samedan	631u	Untervaz
620j	Zernez	632v	Zizers
621k	Felsberg	633w	Zuoz
622l	Arosa		

1.12 Locomotives in Multiple



When operating Ge 4/4 II locomotives in pairs the automatic multiple working mode will be activated. This mode enables the front pantograph on the leading locomotive for use instead of the rear pantograph. Once uncoupled the locomotives will return to standard operation.

This system has been developed to operate for both player and AI trains in Train Simulator.

2 EWII Type Passenger Coaches

2.1 Second Class EWI (B) Coach with Passenger View



This coach includes a passenger view. This view is accessible during a scenario by pressing “5” on the keyboard or by selecting the Passenger View button on the F4 HUD as shown below:



If there are multiple vehicles with passenger views in the train then you can move between passenger views using the Next Vehicle and Previous Vehicle buttons as shown below:



2.2 First and Second Class EWI (AB) Coach



2.3 Baggage Coach



2.4 Interior Coach Lighting and Opening Windows

Interior lighting is activated by illuminating the locomotive headlights. If the locomotive headlights are turned off then the coach lighting is deactivated and any open windows are closed.

When interior lighting is active, windows are also randomly opened based on an intelligent system that takes season, time of day and weather conditions in to account. If it is cold, wet or late at night then windows will be closed. However, if it is a pleasant day then each coach in the train will have different windows opened by varying amounts at random.



2.5 Coach numbering and removing passengers from static consists

EWI B and AB coaches have running numbers suffixed by a letter “W” by default. During scenario creation change the letter “W” to a “U” to remove passengers from static coaches in sidings.

3 Wagons

3.1 Haik-v Sliding Door Wagons



3.2 Animated Handbrakes

These wagons feature animated handbrake levers that can be viewed operating when you apply and release vehicle handbrakes using the F4 HUD.

4 Content Creators - Terms and Conditions

4.1 End User License Agreement (EULA)

This product is published by Railsimulator.com Ltd (trading as Dovetail Games) and distributed by Valve through their “Steam” online stores and distribution system. By purchasing and using this product you are bound by Valve’s Software License. In addition to these terms, Thomson Interactive Ltd prohibits any commercial use or involvement of their products in third party commercial products unless prior written consent is sought and granted.

4.2 Commercial Add-ons and Scenario Packs

Thomson Interactive Ltd. do not allow the development or sale of any commercial add-ons or associated products including but not limited to:

- Scenario Packs
- Route Enhancement Patches
- Audio Enhancement Packs

If you are interested in working with us please contact us through our web site.

4.3 Workshop and Freeware Scenarios

We encourage the non-commercial creation of scenarios for our routes. We prefer these to be distributed through the Steam Workshop so that they are easily available to all players. However non-commercial (Freeware) scenarios may be distributed via other channels as long as there is no commercial charge or gain for the author.

5 Acknowledgements

We would like to thank the Rhaetian Railway for their assistance in developing this product and for permission to use their branding.

We also wish to thank the Dovetail Games third party partner team and beta testers for their help and support.

- end -