



Add-on for TS 2017 RAILWORKS from DTG

Manual

and

Task Documentation

Please read:

Quick Start Information



Duty Schedules for Train Driver Services in Prättigau and the Davos Countryside

Copyright by simtrain.ch / mailsoft GmbH

Witzbergstr.5g, CH-8330 Pfäffikon /ZH Switzerland

The data storage device and the software saved on them are protected by copyright and is for personal use only. No responsibility is assumed for consequential damage: simtrain.ch and the development team is not liable for any damage that may occur when using this product. Commercial use, rental, leasing, repurchase, transmission on networks, copying or reproduction or publishing is not permitted without the written permission of the manufacturer.

Important: Linking Heidi Express files to any other project is forbidden. Files or parts of this Heidi Express product may not be used for other routes or locomotives.

The developers

Allegra train Urs Mayer

Allegra driver's cab Simon Bühlmann

Ge 44 II train Simon Bühlmann

Goods wagons Lukas Klimczyk

Scenery design Urs Mayer

Object building, houses Urs Mayer, Lukas Klimczyk, Patcharaphan Audthawudwong

Scenarios Ernst Triet

Signal systems Mathias Gundlach, Ernst Triet, Urs Mayer

Vegetation Jakob Skov RLB-Team, Urs Mayer

Photos & plans RhB, Gleis-Tech Groebli

Beta testing Walter Götz, Walter Ramp, Ernst Triet, Urs Mayer

Manual Ernst Triet
French translation Martial Burdet
English translation Richard Donaldson

Project work Alex Brander

Project work Alex Brander

Photographers Walter Götz, Klaus Rohrer, Alex Brander, Florian Brander

RhB logo: Courtesy of the Rhaetian Railway, Chur

Packshot 618 Malans www.bahnfotoschweiz.ch With kind permission

Support: Ernst Triet: webmaster@bahnsimulation.ch

Manufacture and distribution:

simtrain.ch Witzbergstr.5 g

CH-8330 Pfaeffikon ZH Switzerland www.simtrain.ch • info@simtrain.ch



Duty Schedules for Train Driver Services in Prättigau and the Davos Countryside

Table of contents:

1.	System re	quirements and installation		
	1.1	PC requirements	-	<u>page 5</u>
	1.2	Installation procedure	-	page 5
2.	The "Heid	i Express" route – short description		
	2.1	The landscape and places along the route	-	page 6
	2.2	The trains in the Prättigau and Davos regions	-	page 7
3.	The vehicl	es in the "Heidi Express" package		
	3.1	The "Allegra" multi-current unit, a top-class train	_	page 8
	3.1.1	Description of the vehicle		
	3.1.2	Destination marking and vehicle numbers		
	3.1.3	The driver's cabin – functions		
	3.1.4	Startup procedure and driving		
	3.2	The "Allegra" multiple unit of the Chur suburban train	-	page 9
	3.2.1	Description of the vehicle		
	3.2.2	Destination marking and vehicle numbers		
	3.3	The Ge 4/4" – a versatile RhB engine	-	page 10
	3.3.1	Description of the vehicle		
	3.3.2	Destination marking and vehicle numbers		
	3.3.3	The driver's cabin - functions		
	3.3.4	Startup procedure and driving		
	3.4	The passenger carriages in the Heidi package	-	page 11
	3.5	The goods wagons in the Heidi package	-	page 11
4.	Driving th	e "Heidi Express" for Railworks		
	4.1	What you need to look out for	-	page 12
	4.2	Operating the Allegra	-	<u>page 13</u>
	4.3	Vigilance device and its operation	-	<u>page 13</u>
	4.4	Operating the doors and stopping at stations	-	<u>page 13</u>
	4.5	The duty timetable, an essential document for		
		the engine driver	-	<u>page 14</u>
	4.6	The station layout plans, help for shunting	-	page 15
5.	The signal	ls in Heidi Express		
	5.1 The s	signals along the route		page 15
		signals along the route I departure instructions and ground signals	_	page 15
		ng past red signals (shunting operations)	_	<u>page 16</u> <u>page 16</u>
	الاااط د.د	ny pasereu signais (shuhung uperaduns)	_	hade 10



Duty Schedules for Train Driver Services in Prättigau and the Davos Countryside

6. T	he tasks / Engine driver duties (short description)		
6	.1 Driving according to the timetable	-	<u>page 17</u>
6	.2 Stopping points, opening doors and departure instructions	-	<u>page 17</u>
6	.3 Stop times and drive-through times	-	<u>page 18</u>
6	.4 Shunting tasks	-	page 18
6	.5 Short description of the scenarios	-	page 19
7. T - -	-	page 25	
-	Duty schedules for the engine driver duties Signal charts with explanation of the meaning Station layout plans		
8. S	upport / Help on scenarios	-	page 25
Appen	dix:		
10.1	Keyboard assignments and engine startup procedure	-	page 26

⇒ <u>To table of contents</u>



Duty Schedules for Train Driver Services in Prättigau and the Davos Countryside

1. System requirements and installation

1.1 PC requirements

The "Heidi Express" route and its vehicles do make any special demands on the PC. The following is required for operation

- Working Train Simulator 2012-2017 (Railworks)
- PC, 3.0 GHz or other dual core processor
- 8 GB RAM
- Direct X 9.0c compatible graphic card with 1024 MB video memory or more
- 3.5 GB free hard disk space
- Keyboard and mouse
- If necessary, a working Raildriver operating panel

1.2 Installation procedure

DVD: Insert the DVD into the drive and run setup.exe. Make sure you have the registration code and follow the instructions. Installation is automatic and additional registration is not necessary.

Download: Unzip the Heidi Express ZIP file and run setup.exe. The code is in the confirmation email that was sent to you automatically.

Run the Train Simulator and select the main menu at the top right of the "SETTINGS" menu.

The important settings in the simulator are:

In order for the displays and weather to work properly, A "V" must be set in the Dynamic /Dynamic Clouds fields under the "Graphics" tab in the train simulator. "Automatic coupling" and "All coupling types" should be activated in the "Game" tab as well as "Expert" for train control. "Mouse/Keyboard" should also be active in the "Control" tab.

Tip: If the simulation does not run smoothly, you can reduce the resolution in the settings to 1280x720 and the overall details should be set to "Highest". You can then enjoy the entire journey. Lower settings do not necessarily mean that the simulation runs more smoothly.

When these settings have been made, select "DRIVE" in the main menu, then "STANDARD". You will find Heidi Express with its services. If you go to FREE ROAMING or FAST PLAY in the DRIVE main menu, you will also find the journeys from all important stations but without two-way traffic. The points can be switched in "Free Roaming" but the signals are not always green.



Duty Schedules for Train Driver Services in Prättigau and the Davos Countryside

2. The "Heidi Express" route - short description

2.1 The landscape and places along the route

Famous brand names such as "Glacier Express" and "Bernina Express" have long been part of the history of the Rhaetian Railway. Heidi Express received less attention because of the route from Landquart to Filisur via Klosters-Davos where it connected the Glacier Express to Engadin. In the meantime, the "Heidi Express" name has disappeared from the schedule but the trains still travel along this route and continue to be very popular.

The line begins in Landquart, the railway junction where the SBB (Schweizerische Bundesbahnen - Swiss Federal Railways) and RhB (Rhätische Bahn -Rhaetian Railway) meet and where passengers from the lowlands can change to the trains of the RhB. The larger RhB workshops and space for goods handling is in Landquart. This is very important because the entire Grison canton is only served by the Rhaetian railways. An exception is the short stretch from Maienfeld to Chur, which is also served by the SBB.

Shortly after starting in Landquart, the trains reach the small station at Malans, which is the starting point to the vineyards of the Bündner Herrschaft (Grisons) and where not only the grapes for the "Maienfelder and "Jeninser" wines are grown but also other well-known wines. The journey continues through the "Chlus" gorges where the route coming from Landquart to Klosters goes to the Rhein intersection. The railway line, which goes through a tunnel at this point, continues further to Schiers via Schiers-Valzeina and Grüsch. Here, where the Chur suburban railway ends, all trains stop before they continue their journey through the Prättigau. While still at the bottom of the valley, the journey to Küblis takes us past Furna, Jenaz and Fideris. The RhB line then continues onto the mountain railway. Now it gets steeper and passes the Saas station as well as the Serneus service station on the valley floors of Klosters. There are two railway stations here: Klosters Dorf, where mountain hikers and skiers get their connections to the Madrisa cable cars and Klosters Platz, the "main station" for the summer and winter health resorts.

After a short stop at Klosters Dorf, where the railway line branches off through the Vereina tunnel (car loading ramp) and up to Engadin, our "Heidi Express" continues through the large curves up onto the mountain. There is a stop at Cavadürli high above Klosters a then again at the small Laret station before we reach the "Wolfgang" summit (1631 m asl). From here, we drive into the high valley of the Davos countryside, past lake Davos to Davos-Dorf station and continue to Davos Platz, the central station and starting point of the region's bus services. Cable cars on the right and left provide visitors with an adventurous journey up into the mountain world. Whether spring, summer, autumn or winter, there's always a lot going on here!

Our train continues through the high valley, past the smaller stops in Frauenkirch, Davos Glaris and Davos Monstein, which are all starting points for hiking tours and winter sports. Shortly after a stop at Davos-Monstein, we drive on into the "Landwasser" gorges, the river that flows to the famous Rhaetian Railways Landwasser viaduct (world heritage), where the Glacier Express trains pass on their way from the lowlands up to Engadin. After a short stop in Wiesen, where we also drive over a large well-known viaduct, we continue down to Filisur. Our route ends in Filisur, but not the journey for our passengers. This is where you can get your connection up to Engadin or down into Domleschg, to Chur via Thusis. The fast trains of the Albula Railways stop here in Filisur every hour, which the train simulator engine drives on the "Glacier Express" routes are aware of.



Duty Schedules for Train Driver Services in Prättigau and the Davos Countryside

2.2 The trains in Prättigau and the Davos regions

A large number of different trains drive along our "Heidi Express" route. It was our intention in the scenarios supplied to make these as interesting as possible. They are:

- ⇒ The regional express trains from Landquart to Davos via Klosters
- ⇒ The regional express trains from Disentis to Scuol/Tarasp via Chur-Klosters
- ⇒ The regional express trains from Landquart through the Vereina to St. Moritz
- ⇒ The suburban trains in Chur from Rhäzüns to Schiers via Chur
- ⇒ The local regional express trains between Davos and Klosters
- ⇒ The "Filisur commuter", the Davos countryside regional trains to Filisur
- ⇒ The various goods trains to all stations in the Grisons
- ⇒ The extra trains for group tours to Puschlav via the Bernina pass in the Engadin valley

And because the central workshops of the Rhaetian Railway are here in Landquart, this station is the starting point for all types of engine and services.

Landquart is also the central point for everyone who wants to see something with respect to the rolling stock. You will see only a few of the vehicles on our "Heidi Express" route. We will have to see if we can add more in future add-ons. A large part of the regional express trains to Davos will be taken from the new Allegra railcars and the rest will be hauled by an engine, including the trains to Scuol/Tarasp. The suburban trains will have either a 4-piece "Allegra" without additional carriages or will be hauled by the short railcars of the "Schiers commuter". Much the same as the other RhB rolling stock, this commuter train is already very familiar to our train-simulator engine drivers from the "Glacier Express 2" add-on for MSTS.



Duty Schedules for Train Driver Services in Prättigau and the Davos Countryside

3. The vehicles in the "Heidi Express" package

3.1 The "Allegra" multi-current railcar (3-piece) Type ABe 8/12 - numbers 3501-3515

3.1.1 Description of the vehicle

The "Allegra" is the current "showpiece" of the Rhaetian Railway (RhB). Two versions of this railcar were built. One of them is the 3-piece ABe 8/12 for use on the entire Rhb network, which can be powered by the AC current as well as the DC current of the Bernina Railways. The other is the ABe 4/16, which is only powered by the AC network for use as suburban railway train. The fact that the 15 ABe 8/12 has enormous power, even more than the already familiar and versatile Ge 4/4" engine, means that it makes sense to use of it for non-stop Bernina express trains from Chur to Tirano as well as regional express trains that need a racy driving performance and a lot of power. Longer trains with up to 10 carriages, short distances between the stops and steep routes up into the Davos countryside are the essential characteristics. It's therefore not surprising that an Allegra heads more than half of all RE trains to Davos.

Here's the data for this engine:

- ⇒ 2320 kW power,
- ⇒ 100 seats + 14 jump seats,
- ⇒ V/max. 100 km/h,
- ⇒ Max. towing capacity at 70 % o = 140 t

3.1.2 Destination marking, vehicle numbers and names

It is also possible to display the destination on the front of the Allegra, the ticker on the sides of the vehicles as well as the vehicle numbers and names in your own tasks. Read the instructions in appendix 2 (changing the markings) to find out how to do this

The ABe 8/12 Allegras display the following names of various personalities:

⇒ Vehicle 3501⇒ Vehicle 3502	- -	Willem Jan Holsboer Friedrich Hennings	Co-founder of the RhB Engineer, construction of the Albula railway
⇒ Vehicle 3503	-	Carlo Janka	Ski racer, Olympic champion
⇒ Vehicle 3504	-	Dario Cologna	Cross-country skier, Olympic cham pion
⇒ Vehicle 3505	-	Giovanni Segantini	Grison artist
⇒ Vehicle 3506	-	Anna von Planta	Co-founder of the GR canton hospi tal
⇒ Vehicle 3507	-	Benedetg Fontana	Grison war hero
⇒ Vehicle 3508	-	Richard Coray	Grison bridge builder
⇒ Vehicle 3509	-	Placidus Spescha	Natural scientist / alpinist
⇒ Vehicle 3510	-	Alberto Giacometti	Sculptor and artist
⇒ Vehicle 3511	-	Otto Barblan	Composer and organist
⇒ Vehicle 3512	-	Jörg Jenatsch	War hero, pastor and politician
⇒ Vehicle 3513	-	Simon Bavier	Engineer, constructor of mountain pass roads
⇒ Vehicle 3514	-	Steivan Brunies	Co-founder of the national park
⇒ Vehicle 3515	-	Alois Carigiet	Grison artist





Duty Schedules for Train Driver Services in Prättigau and the Davos Countryside

3.1.3 The driver's cab – operating

The driver's cab of the ABe 8/12 was modeled as closely to the real cabin as possible. All important TS functions are animated and can be controlled using the mouse or keyboard directly from the cabin.

3.1.4 Startup procedure and driving

The engine driver must equip his machine at the beginning of his shift before he can start driving. This startup procedure is described exactly in the "Keyboard assignments and startup procedure" document in the appendix. We recommend printing this document and adding it to your paperwork along with the duty schedules. The startup procedure and the steps required for stopping en-route are described in this document.

3.2 The "Allegra" main line railcars (4-piece) Type Abe 4/16 - numbers 3101-3105

3.2.1 Description of the vehicle

Contrary to the type Abe 8/12 described above, the 4-piece main line railcar was only conceived for lowland operation. Its hauling force is substantially less and it is unsuitable for steep routes. But it is exactly right for the suburban train traffic from Schiers to Bonaduz and Thusis via Landquart-Chur-Reichenau. Good acceleration characteristics, enough space for passengers, driving without or with less towing mass – all characteristics that distinguish this engine.

Here's the data for this engine:

- ⇒ 1160 kW power
- ⇒ 189 seats + 18 jump seats
- ⇒ V/max. 100 km/h

3.2.2 Destination marking, vehicle numbers and names

It is also possible to display the destination on the front of the Allegra, the ticker on the sides of the vehicles as well as the vehicle numbers and names in your own tasks. Read the instructions in appendix 2 (changing the markings) to find out how to do this.

The ABe 4/16 Allegras display the following names of various personalities:

			pass roads
⇒ Vehicle⇒ Vehicle⇒ Vehicle	3104	- - -	Grison writer 1 st director of the RhB Grison artist



Duty Schedules for Train Driver Services in Prättigau and the Davos Countryside

3.3 The Ge 4/4" - a versatile RhB engine

3.3.1 Description of the vehicle

The Ge 4/4 can often be seen on our route hauling regional express trains from Disentis-Chur-Scuol Tarasp, as well as trains on the Landquart-Davos line.

Their good hourly performance of 1700 kW makes it possible for this engine to be deployed on all routes except the DC-powered Bernina railway. It is also used for hauling almost all types of trains. Even goods trains although they are often hauled by the Ge 6/6. The engine is also suitable for hauling commuter trains with an engine at the back and the railcar at the front.

3.3.2 Destination marking and vehicle numbers

This engine is available on our "Heidi Express" route in various liveries. Once with standard livery, once as "Edelweiss" advertising engine and once as "125 Years RhB" jubilee engine. It is possible for the user to change the engine number and name of the red engine in the task editor so that the same engine is not always seen as AI traffic coming from the opposite direction.

There are the following engine numbers and names:

	Name / Emblem		Name / Emblem
No. 611	Landquart	No. 623	Bonaduz
No. 612	Thusis	No. 624	Celerina / Schlarigna
No. 613	Domat / Ems	No. 625	Küblis
No. 614	Schiers	No. 626	Malans
No. 615	Klosters	No. 627	Reichenau - Tamins
No. 616	Filisur	No. 628	S-chanf
No. 617	Ilanz	No. 629	Tiefencastel
No. 618	Bergün/Bravuogn	No. 630	Trun
No. 619	Samedan	No. 631	Untervaz
No. 620	Zernez	No. 632	Zizers
No. 621	Felsberg	No. 633	Zuoz
No. 622	Arosa		

The following is in our package:

- ⇒ The "red" with the no. 613 "Domat/Ems" (number change is possible)
- ⇒ The "Edelweiss" with the no. 618
- ⇒ The "125 Years RhB" with the no. 623

3.3.3 The driver's cabin – functions

In the same way as the Allegra, the keys, levers and instruments in the cabin of the Ge 4/4° are animated and can be operated using the mouse.

It is also possible to drive using the keyboard or the HUD.

3.3.4 Startup procedure and driving

The startup procedure as well as driving the engine is described in the "Keyboard assignments and startup procedure" document in the appendix. This genuine procedure is intended to give the TS engine driver an impression of driving for real.



Duty Schedules for Train Driver Services in Prättigau and the Davos Countryside

3.4 The passenger carriages in the Heidi package

Among the vehicles for passenger trains, you will find the standard coaches IV, 1^{st} class with the number A 1282, the standard coach II, 2^{nd} class with the number B 2378 and the baggage coach D 4211

- ⇒ standard coaches IV, 1st class. A 1282
- ⇒ the standard coach II, 2nd class, B 2378
- ⇒ baggage coach D 4211

It was not possible to implement the "Neva commuter" railcar but it may be possible to implement it in another add-on in the future.

3.5 The goods wagons in the Heidi package

The following goods wagons were added to the "Heidi Express" package

- ⇒ Haik-v "Valser Wasser" type sliding door wagon
- ⇒ Haik-v RhB type sliding door wagon, brown
- ⇒ Gb type covered wagon, a "station wagon" for everything
- ⇒ Uce type goods wagon, nicknamed "chocolate marshmallow"

The "chocolate marshmallow" is a specialty. This wagon is only used by the Rhaetian Railway. It was used as a wagon for transporting cement from the cement works in Untervaz near Landquart to all large building sites in the canton of the Grisons. They were used for bringing cement for building the viaduct near Serneus, the Gotthard tunnel near Sedrun and many other building sites that were served by complete trains.

The Haik-v sliding door wagons also have fixed deployment. The "Valser" supplies the well-known mineral water directly from the warehouses of the Valser springs in Untervaz to the whole canton. And the many others that operate on the network are used for transporting food products during the night from the loading areas in Landquart up to Engadin as well as many other shipments.

The 2-axis Gb is also a versatile vehicle. These wagons can be used as station wagons at stations or as livestock carrier for alpine lifts.



Duty Schedules for Train Driver Services in Prättigau and the Davos Countryside

4. Driving the "Heidi Express" for Railworks

4.1 4.1 What you need to look out for

4.1.1 An engine driver would never drive without a duty timetable!

We often get questions on scenarios because TS engine drives do not read and drive according to the timetables.

In the real cabin, the duty timetable should always be directly in front of the engine driver and in the simulator cabin, it should be next to the keyboard.

The plans allow you to see the intended train junctions, drive-through times at stations, intended shunting procedures and instructions on using the tracks.

4.1.2 Pay attention to the signals!

The RhB uses the L signal system of the Swiss railways. This signal system not only indicates drive or stop, but also the permissible speeds. The approach signal already lets the engine driver know which limits at the next main signal will influence his journey. Therefore, pay attention to the aspects that each signal indicates and drive accordingly. Otherwise it's possible that the tasks cannot be finished.

4.1.3 Stopping points and opening doors Pay attention to the section below topic.



It is not necessary for every train to stop at the same place.

The doors must be opened at every stop and the "close doors" command must be respected.

4.1.4 Local departure instruction with optical signal



Each station has fixed departure signals that are designated as such in the duty timetable. Make sure that you do not move after your train has stopped at the stations or that you do not stop and move again to change your position and then stop once again. In such cases, you will not receive a depart signal because this type of shunting influences the signal behaviour.

4.1.5 Hill starts

Hill starts are often an issue for our Rhaetian Railway products. Similar to driving a car, attention must be paid to preventing the train from rolling backwards after the brakes are released because the train simulator does not like this at all. It does not only frighten the passengers but also influences signals because the simulator assumes that you want to drive backwards. When starting on hills, make sure that you switch to the 1^{st} or 2^{nd} driving gear before releasing the brakes.

4.1.6 Points

The points are usually set properly during tasks in the train simulator. During shunting, it is possible that they need to be changed manually. Therefore, when driving, make sure that you don't change points unintentionally as this would prevent you from reaching your objective. Also pay attention to the track details in the duty timetable.



Duty Schedules for Train Driver Services in Prättigau and the Davos Countryside

4.2 Operating the "Allegra"

The Allegra railcar is a very powerful vehicle but responds very sensitively. Its power as mountain vehicle is almost one half stronger that the most powerful locomotive of the Rhaetian Railway. Control the driving switch carefully, preferably with the A and D keys because this allows much finer control than using the mouse in the HUD.

4.3 The vigilance device and its operation

This is a system that monitors the vigilance of the engine driver. The device must be operated during driving. Depending on the distance already covered, an alarm is triggered when a driving or brake switch is not operated. The alarm is also triggered when the engine drives past an approach signal indicating a warning.

If the signal is triggered, a lighted yellow signal must be pressed within a certain time to confirm that the signal was observed.

If the engine driver does not confirm, emergency braking is initiated. Driving past a main stop signal also results in an emergency stop.

In the train simulator, we leave it up to the engine driver to take advantage of vigilance monitoring or dispense with it. If the vigilance system is to be deactivated, press the corresponding switch during the startup procedure for the engine.

If the vigilance system is active, pay attention to the following:

- ⇒ Acknowledge the alarm signal by pressing the Q key or clicking the switch with the mouse
- ⇒ If you drive past a red signal during shunting, press TAB on the keyboard and hold down the "shunting button" as you drive past the signal
- ⇒ After an emergency stop triggered by the vigilance system, proceed as follows:
 - First acknowledge the emergency stop
 - Set the brake lever or driving switch to full braking (or the ö key), if this has not already been done
 - Set the reverse switch to forwards
 - Release the train brakes and drive off
- ⇒ When starting uphill, make sure that you set the driving switch higher before releasing the train brakes

4.4 Operating the doors and stopping at stations

The vehicles in Heidi Express are equipped with the same types of doors as the real train. The vehicle doors can be opened and closed according to the respective platform. This is also possible along the route but only when the train has stopped.

Stop at the station and operate as follows:

- ⇒ Press the "T" key to confirm stopping before the red bar in the display starts to move.
- ⇒ Open the doors ("u" for left, "o" for right)
- ⇒ Wait for departure and then close the doors ("L")

片

It is only possible to drive off when the doors are closed.

RhB

HEIDI - EXPRESS

Duty Schedules for Train Driver Services in Prättigau and the Davos Countryside

4.4 The duty timetable, engine driver documents

There is a duty timetable for every train journey, also for extra trains. This document used to be in book form in the past but now the railways have changed over to providing files for laptops or tablet PCs. This allows continuous updating. The "Duty timetable.pdf" document provided can be printed if required or displayed on a second screen. It's only important that you pay attention to it during the journey.

There are important instructions for the scenario in the duty timetable. The following is included (from left to right)

- ⇒ Railway kilometres
- ⇒ Information on the local features such as departure instructions etc.
- ⇒ Place name / name of the signal box as well as Information on speed approach curve / departure curve
- ⇒ Permissible station speed
- ⇒ Route speed from this station
- ⇒ Prescribed track at the station for this train
- ⇒ Prescribed departure time, for 2 tasks, arrival and departure time Task in brackets = drive-through time
- ⇒ Comments, instructions etc. for this station
- ⇒ Prescribed train intersections with AI train

All details in this duty timetable apply if the local signals do not indicate otherwise.

The details in this duty timetable apply to the permissible speeds if the local signals do not indicate otherwise. Signal indications always take precedence!



Duty Schedules for Train Driver Services in Prättigau and the Davos Countryside

4.6 The station layout plans, help for shunting

As supplement to "Heidi Express", station layout plans are provided that correspond to the train simulator route and are the same as the originals. Particularly for shunting casts, it is recommended to print the plans or display the file on a second screen. The plans are not according to scale but schematic.

5. The RhB signals

5.1 The signals along the route

Swiss "L" system signals

The Swiss railways use the "L" and "N" systems. The RhB only uses the "L" system and the corresponding terms. It must be considered that the respective signal images for narrow gauge railways prescribe different speeds than the SBB, the Swiss Federal Railways. When driving, pay attention to the signal images that prescribed how fast you may drive after passing the main signal. The required signal explanations are in the signal tables (PDF format) that are supplied with the route.



Duty Schedules for Train Driver Services in Prättigau and the Davos Countryside

5.2 Local departure instructions and ground signals:

For the first time, our routes also have active ground signals in addition to the route signals, which must be observed during driving.

There are also stationary departure indicators at the following stations. In order for them to function properly, the train must stop at the prescribed stopping point before driving into the station. In addition to observing the departure signal, make sure that you also observe the departure indicator which indicates yellow/green when you are permitted to drive. If nothing else is indicated in the duty timetable, the stopping point is end of the platform or the "H" sing on the side of the tracks. Therefore, pay attention to this stopping point when driving.

Stationary departure indicators are in

Landquart, Perron 5-8 Malans

Grüsch Schiers Jenaz

Fideris Gleis 1-2

Küblis

Klosters Dorf Klosters Platz Davos Wolfgang Davos Dorf

Davos Dori

Filisur

Thee stations are indicated by in the duty timetable.

At these stations, the departure instruction can be issued either by these signals or by the conductor (message on the screen).

Important:

In order for the departure instructions to function properly, the train must stop as near as possible to the prescribed stopping point (H sign) before driving into the station. Before departure, it must be ensured that the train doors are closed. Local departure signals only function within sceneries with a stored timetable. They are not active for free roaming / quick driving.

5.3 Driving past red signals (shunting operations)

During shunting operations, it is possible that you have to drive past STOP signals in order for example, to hook up wagons standing behind the signal or carry out other shunting operations.

If a signal indicates stop and you need permission to drive past, press the TAB key on the keyboard after you have stopped in front of the signal. A message follows that either permits or forbids you to drive past. The signal can but must not necessarily react, only the message is important. If you received permission, press the shunting key in the cabin (or press R on the keyboard), keep pressed while you drive past the stop signal. This procedure is mandatory, if your vigilance device is active.



Duty Schedules for Train Driver Services in Prättigau and the Davos Countryside

6. The tasks / Engine driver duties (short description))

6.1 Driving according to the timetable

The scenarios are designed as engine driver duties. You take over your engine at the starting point, follow the instructions that you receive in the form of messages on the screen, as notes in the duty timetable or by signals. The task is complete when you receive corresponding messages at the destination and did not make any big mistakes en-route.

6.2 Stopping points, opening doors and departure instructions

The departure instruction can be issued in two ways. On the one side, by the conductor, which appears as a message on the screen and on the other side by a stationary departure signal. This type of departure instruction can be found under the departure signal on the signal mast or on masts, platform roofs etc. at the station. If for any reason, a stationary signal aspect light up, which sometimes happens, just close your doors and depart when they have closed. If the driver is on his own, he is responsible for departure and the safety.

When a passenger train stops, the doors can only be opened on the entrance side. This is how it is in reality and the same applies to the simulation. If the doors are not opened at a stop, the stop is not detected and the this is considered as an error. It is often the case in TS 20xx that further stops are not detected.

After stopping, you see a red bar in the HUD (F4) that indicates the elapsed time. If this bar does not appear automatically, confirm stopping by pressing the "T" key.

If the time has elapsed and the red bar disappears, it is time to continue the journey. Close the doors now ("L" key). For stations with stationary departure instruction, check whether the departure instruction lights up. You do not receive departure instructions at other stations.

- if this is correct, you can drive off.

Stopping points in the scenarios:

The "H" signal sign on the side of the tracks, on the station roof, on a mast etc. indicates to the engine driver exactly where he should stop his train. Pay attention to the H signs because they influence the departure instructions. Failure to comply could mean you do not receive departure instruction.

⇒ Stop just in front of the H sing in the scenarios so that they are still visible from the driver's cabin!



Duty Schedules for Train Driver Services in Prättigau and the Davos Countryside

6.3 Stop times and drive-through times

In train simulator timetable tasks, a specific departure time is set for each station that you have to stop at. Departing too early is just as wrong as departing too late. Normally, the departure time is coupled to the departure instruction if you are there at the correct time. If you arrive, the minimum stopping time in TS is normally 35 seconds.

The drive-through times at stations where the train does not stop are not detected in the timetable of the train simulator.

These times are stated in the duty timetable. Small deviations do not affect the final assessment.

Nevertheless, there can be consequences in the case of train intersections. Driving ahead of or behind schedule can will lead to problems at intersections in the mostly single-track network of the RhB.

Pay attention to the duty timetable.

6.4 Shunting tasks

A timetable is also stored for shunting tasks. Therefore, make sure that you keep to these timetables and do not drive off not too early or too late. The oncoming traffic also drives according to timetable and deviations will lead to problems at intersections on the single-track routes.



01

HEIDI - EXPRESS

Duty Schedules for Train Driver Services in Prättigau and the Davos Countryside

6.5 List / short description of the driver duties / scenarios for Heidi Express for TS RW 20xx

The following engine driver duties are provided with Heidi Express. A short description follows. You will also find the associated duty timetables, the station plans and the signal signs with explanations on the aspects in the supplement to Heidi Express.

 \underline{RE} 1327 Train = "Engadin Express"

Route: = Landquart - Klosters (-St.Moritz)
Consist = ALLEGRA 3505 with wagons

Season / Weather = Summer / Fair

Departure time = 09.17 Duration = 50 minutes

You take over the train at the railway yard in Landquart. The journey then goes up to Klosters with the scheduled stops where a colleague will take over the train and drive it to Engadin

RE 1025 Train: = "Davos Regional Express"

Route: = Landquart - Klosters - Davos Platz Consist: = Ge 4/4" 618 "Edelweiss" with wagons

Season / Weather = Autumn / Fair

Departure time = 08.42 Duration: = 78 minutes

The "Davoser" runs between Landquart and Davos every hour and makes a connection to the SBB trains from Zurich and St. Gallen.

You take over the train in the yard in Landquart and drive according to schedule and punctually to the health resort.

RE 1229 Train: = "Aqualino"

Route: = Landquart - Klosters Platz

Consist: = Ge 4/4" 613 "Domat / Ems" with wagons

Season / Weather = Spring / Cloudy

Departure time = 09.44 Duration: = 56 minutes

"Aqualino" is the name of the RE1229 train. The train comes from Disentis reaches Landquart Ried where you take it over. After a few stops, the journey continues from Landquart to Klosters Platz.

Your duty finishes here and the train continues through the Vereina tunnel to Unterengadin and reaches the health resort Scuol / Tarasp punctually.



Duty Schedules for Train Driver Services in Prättigau and the Davos Countryside

 \Rightarrow

R 1506 R 1513

Train: = "Schiers Commuter" suburban railway

Route: = Landquart - Schiers - Landquart

Consist: = ALLEGRA 3102 Season / Weather = Autumn / Fair

Start time = 09.10 Duration: = 39 minutes

Schiers commuter is the name we gave to the short suburban commuter trains in Chur that travel between Thusis in Domleschg and Schiers in Prättigau. Since 2014, these trains have been driven more and more by the new Allegra railcars. take over this train in Landquart and drive it to Schiers and back.

RE 1030

Train: = Skier commuter at the Wolfgang pass

Route: = Davos - Klosters Dorf - Davos Platz

Consist: = ALLEGRA 3503 with wagons

Season / Weather = Winter / Cloudy

Departure time = 10.20 Duration: = 75 minutes

While regional express trains run every hour between Landquart and Davos, the short regional express trains supplement the timetable between Davos and Klosters. This is particularly important in Winter as ski commuter which connects the winter sport regions of Klosters and Davos

R 1081

Train: = Night connection to Davos

Route: = Landquart - Klosters - Davos

Consist: = ALLEGRA 3513 with wagons

Season / Weather = Winter / Fair Departure time = 22.40 Duration: = 84 minutes

RhB often replaces the last trains of with busses.

This is not the case with R1081 night connection. This train is an important late-night connection to all destinations particularly Fridays, where the weekend residents from Basel and Zurich want to go home after finishing at the office. Bring your passengers to their destinations with your train.

D 911 07

Train: = Bernina Express shuttle
Route: = Davos Dorf - Filisur

Consist: = Ge 4/4° 623 "125 Jahre RhB" with wagons

Season / Weather = Winter / Snow

Departure time = 09.47 Duration: = 35 minutes

The Bernina Express, the great tourist attraction, drives from Chur via the Albula line and the Bernina pass down to Puschlav and finally to Tirano in Veltlin. In order to allow the guests to get to their holiday destination in Davos, a "shuttle" travels to Filisur.



Duty Schedules for Train Driver Services in Prättigau and the Davos Countryside

R 1817

Train: = Filisur - Commuter

Route: = Davos - Filisur - Davos

Consist: = ALLEGRA 3515 with wagons

Season / Weather = Autumn / Stormy

Departure time = 10.25 Duration: = 69 minutes

The "Filisur Commuter", which has been a short train for a long time, serves the Davos countryside and connects the health resort with Filisur where streamlined connections to the Albula are guaranteed. The deployment of Allegra railcars for the short regional trains is on the increase. Drive one of these from Davos to Filisur and back.

D 960

Train: = Bernina Express return trip
Route: = Filisur - Davos - Landquart

Consist: = Ge 4/4" 618 "Edelweiss" with wagons

Season / Weather = Winter / Fair

Departure time = 18.15

Duration: = 105 minutes

The Bernina Express D960 is the well-known train on the return trip to Chur. In Filisur, a connecting train is available for the Davos guests to drive them back to their holiday location. Because the train needs to be taken to the workshop in Landquart today for servicing, you drive it from down into the valley from Davos.

R 1015

Train: = Early regional train in Prättigau Route: = Landquart - Klosters - Davos

Consist: = Ge 4/4" 623 "125 Jahre RhB" with wagons

Season / Weather = Autumn / Fair

Departure time = 06.10 Duration: = 88 minutes

The first nonstop regional train of the day is to be driven to Davos by you. Take over the Ge 4/4" and wagons and get going. Goods wagons are also part of the train, food supplies from the lowlands that need to get to their destination quickly.

RE 1048

Train: = Regional Express

Route: = Filisur – Davos – Klosters - Landquart

Consist: = ALLEGRA 3510 with wagons

Season / Weather = Summer / Fair

Departure time = 14.25 Duration: = 112 minutes

As service train, you arrive at the entrance to Filisur station where your first stop is planned. From here, you continue to Davos and from there the journey continues a scheduled regional express to Landquart.



Duty Schedules for Train Driver Services in Prättigau and the Davos Countryside

R 1068

Train: = Evening regional train

Route: = Davos - Klosters - Landquart

Consist: = Ge 4/4" 623 "125 Jahre RhB" with wagons

Season / Weather = Autumn / Fair

Departure time = 19.58 Duration: = 81 minutes

While almost only regional express trains frequent this route, there are also regional trains scheduled early in the morning and evenings that can also take on additional tasks.

You drive the evening regional train from Davos to Landquart.

RE 1252

Train: = Return journey of the "Engadiner" Route: = Sagliains - Klosters - Landquart

Consist: = Ge 4/4" 613 "Domat / Ems" with wagons

Season / Weather = Autumn / Rain

Departure time = 16.20 Duration: = 50 minutes

Even the Engadin express trains need to go back home. The train comes through the Vereina tunnel from St.Moritz via Zernez

You drive the train from here to the home depot in Landquart.

G 4045

Train: = Goods train with passenger service

Route: = Landquart - Davos - Glaris Consist: = Ge 4/4" with wagons

Season / Weather = Summer / Fair

Departure time = 13.20

Duration: = 120 minutes

Goods train with passenger service, this type of train disappearing from the timetables more and more. "No liability assumed for adhering to the timetable" was in the footnote of the timetable details. Can you keep to the timetable? Drive from Landquart up the mountain and follow the instructions en route.

E 2838

Train: = Extra train for hiking groups
Route: = Filisur - Davos - Klosters

Consist: = Ge 4/4" 623 "125 Jahre RhB" with wagons

Season / Weather = Autumn / Cloudy

Departure time = 15.00 Duration: = 65 minutes

A tour operator has organized hikes in fantastic region between Wiesen, the gorge up into the Davos countryside and over the Wolfgang mountain pass. Not all of the participants will be hiking over the entire route. Therefore, it's your job to drive an additional train and collect those people in Wiesen, Monstein, Glaris and in Laret and bring them to Klosters.



Duty Schedules for Train Driver Services in Prättigau and the Davos Countryside

G 5054

Train: = "Collector" of goods wagons

Route: = Davos Islen - Klosters - Landquart Consist: = Ge 4/4" 613 "Domat / Ems" with wagons

Season / Weather = Spring / Rain

Departure time = 14.00 Duration: = 86 minutes

Difficulty: = Heavy train on downhill gradients

While the goods wagons are driven to the stations along the route early in the morning, they must be collected again during the afternoon.

It's your job to bring the Davos goods wagons back to Landquart

G 5047

Train: = Fast goods train

Route: = Landquart - Klosters - Davos

Consist: = Double heading Ge 4/4" 618 "Edelweiss"+

Ge 4/4" 623 "125 Jahre RhB" with wagons

Season / Weather = Summer / Fair

Departure time = 14.10 Duration: = 70 minutes

Normally, a fast goods train is similar to the fast passenger trains, the difference is that the goods wagons are hooked up behind the engine. This is very often a so-called "block train", a train whose wagons all have the same departure and destination stations.

G 5027

Train: = Local goods train

Route: = Landquart - Küblis with shunting Consist: = ALLEGRA 3501 with wagons

Season / Weather = Autumn / Fair

Departure time = 10.00 Duration: = 53 minutes

The local goods train serves to supply the villages along the route. All of the wagons are delivered or fetched and the bulk goods loaded and unloaded. They have become less frequent because they are being replaced more and more by trucks.

But, they still exist here in our Heidi Express.



Duty Schedules for Train Driver Services in Prättigau and the Davos Countryside

G 6033

Train: = "Chocolate marshmallows" to Serneus

Route: = Landquart – Serneus Büel

Consist: = Ge 4/4" 618 "Edelweiss" with wagons

Season / Weather = Summer / Fair

Departure time = 12.00 Duration: = 50 minutes

"Chocolate marshmallow" is the name of the legendary cement transport wagons of the Rhaetian Railway

The name can be traced back to the shape of the containers on the flat wagons that looked like the chocolate marshmallows that we used to like as children.

The cement transporters have a long tradition in the entire Grison canton and this building material was widespread as in the mountain region for all types of buildings. And it made sense to transport it into the mountain regions by train. Drive a block train with chocolate marshmallows up to the Serneus Büel sidings.

X 9000 <mark>20</mark> Train: = Shunting operation with a main-line engine

Route: = Shunting operations in Landquart

Consist: = 3 different Ge 4/4" Season / Weather = Summer / Fair

Departure time = 12.00

Duration: =

Of course, there are shunting engines in Landquart for shunting operations such as compiling trains. But today, such as engine is not operable. For this reason, it's your job to follow the instructions of the shunting master with your Ge 4/4°.

D 827 <mark>21</mark> Train: = Ski Express "Winter Dreams" into the sun Route: = Landquart - Klosters - Davos - Filisur

Consist: = ALLEGRA 3512 with wagons Season / Weather = Winter / "Winter Dreams"

Departure time = 09.10

Duration: = 108 minutes

A Winter day just like many others. There's "dirty weather" in the low-lands. The city dwellers from Basel, Zurich and St. Gallen are hungry for some sun and have only one target, the mountain sun in Bündnerland. But in Landquart, it does not look so good. Drive your passengers to the sun in the Ski Express. Whether there will be any sun to see?



Duty Schedules for Train Driver Services in Prättigau and the Davos Countryside

7. The extras / documentation on "Heidi Express"

The following documents /PDF is supplied with the "Heidi Express" Train Simulator Railworks package:

- This manual with instructions
- Quick start information
- Duty schedules for the engine driver duties
- Signal charts with description of the Swiss L and N signal systems
- Station plans of the Landquart-Klosters-Davos-Filisur line

All of these documents are on the DVD/Download and, after installation, also as PDF documents on your PC.

8. Support / help on scenarios

As is usual with simtrain.ch routes, you can get quick help on problems. Write down what you don't achieve or where you have problems and send us an email:

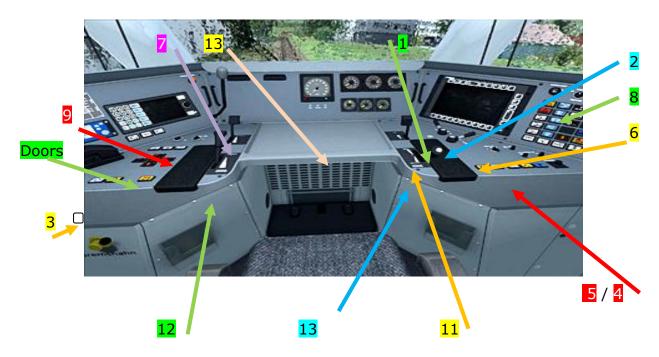
webmaster@bahnsimulation.ch

Describe the problems as exactly as possible and tell us which scenario it is, where exactly and at what time (according to the engine clock) the problem occurs, provide screenshots which also show the HUD (F4) clearly and describe exactly what happens and which AI trains (oncoming traffic) were involved.

Please note that we are only able to help by email.

In the case of problems with downloading and activating download versions, contact info@simtrain.ch directly

10.1 Keyboard assignments and engine startup procedure



Keyboard assignments for the Allegra and Ge 4/4"

All functions in the driver's cabin can be operated both with the mouse or by pressing keys on the keyboard. If required, the functions in the HUD are active on the screen.

Vehicle startup: Individual steps:		ching on or +)	switching off (or back)
1. Turn the key switch to switch on		K	CTRL+K
2. Startup switch (Allegra): Step 1 = control current on Step 2 = raise pantograph Step 3 = main switch on		N P M	CTRL+M CTRL+M CTRL+M
Manual startup (Ge 4/4") Control current on Raise pantograph Main switch on		N P M	CTRL+N P CTRL+M
3. Switch driver's cabin lighting on		F	CTRL+F
4. Switch instrument lighting on		i	CTRL+i
5. Switch outside lighting on		Н	CTRL+H
6. Move reverse switch to forwards	forwards backwards	W S	S W
7. Release engine brakes		?	^
8. Switch the windscreen wipers on if requ	ired	V	
 Vigilance device main switch off (for driving without vigilance device) For driving with preset = set V/max. 		CTRL+Enter	r (Num-Pad) C
Then close doors, release brakes and de	epart	•	-



Duty Schedules for Train Driver Services in Prättigau and the Davos Countryside

Operating	doors	at stops	/	stations:
Stens:				

switching on switching off (or +) (or back)

Operate the doors when the train stops (opening / closing)

a.	Confirm stop	Т
b.	Open all doors on the right	0
c.	Open all doors on the left	U
d.	Close all doors	L

Doors can only be operated when the train has stopped.

The train cannot depart when the doors are open.

If required, the doors can also be opened and closed when the train is not at a station.

Loading and unloading:

This is possible at predetermined locations if required in a scenario

- Loading . T

- Unloading SHIFT + T

Functions during driving:

Steps:	J	 switching on switching off
		(or +) $(or back)$

- Close doors before departing and if necessary, pay attention to the departure signal

2.	Set reverse switch to "forward" Watch the rear-view mirror (fold out)	W R	S CTRL + R
_	Release brakes	0	_
	Move driving switch up	Α	D
5.	(driving switch to + first for hill starts, otherwise the ti	ain will roll back)	
	If required, switch speed preset on Y	С	
7.	Reduce speed with electric brakes	D	Α
8.	Train brake, if necessary or for stopping	Ö	ü

9. Backspace for emergency braking

10. Permission for shunting operations at a red signal

a. Forwards in driving direction TAB

b. Backwards in driving direction CTRL + TAB

ATTENTION:

When driving past a red signal, the "shunting key" must be pressed when the vigilance device is active R

11. Setting switches during shunting

 a. Forwards in driving direction 	G	
b. Backwards in driving direction	SHIFT + G	
12. Sander in the case of wheel slip	X	
13. Adjust sun visor as required	В	CTRL + B
14 Engine whistle as required	Space key	

RhB

HEIDI - EXPRESS

Duty Schedules for Train Driver Services in Prättigau and the Davos Countryside

Vigilance device (driver safety switch / train safety)

For driving, the vigilance device can be activated or switched off in the simulator. When the vigilance device is switched on, the driving switch or the brakes must be operated at least every 600 meters, otherwise a warning is issued.

A warning is also issued when driving past an approach signal that indicates a warning.

If the vigilance device is triggered, the signal must be acknowledged, otherwise the emergency brakes are activated.

 Activate / deactivate the vigilance device 	CTRL+Enter (Num-Pad)
 Vigilance device shunting key (drive past a red signal) 	R
- Acknowledge vigilance device alarm with Q or press the Z	'S key
Confirm signal after an emergency stop	Q
-	
- Set train brakes to 100%	Ö
- Set reverse switch to forwards	W
- Release brakes	ü

Speed preset:

The preset is indicated by a red mark on the speedometer.

The regulator for the preset is set to zero by default and therefore switched off.

If the preset is set to a certain speed, the speed is not exceeded. It is therefore a maximum setting, not an automatic increase in speed up to this limit.

To preset, press the "Y" (higher) or "C" (lower). The indicator that is set is visible in the speedometer

Engine driver's view:

The following views are active:

- Continue driving

Manual for TS Drive Drivers

Α



Duty Schedules for Train Driver Services in Prättigau and the Davos Countryside

Summary:

A B	CTRL+B	= =	Driving controller, switch up Sun visor down/up
С		=	Reduce speed preset
D E	CTDLLE	=	Reduce driving controller, / electric brakes
	CTRL+E	=	Start editor during driving
F	CTRL+F	=	Driver's cab lighting on/off
G	CTRL+G	=	Switch point in front/behind
Н	CTRL+H	=	Front lighting (multistage)
I		=	Instrument lighting in/off
K	CTRL+K	=	Turn key switch (on/off)
L		=	Close doors
М	CTRL+M	=	Main switch on/off
N	CTRL+N	=	Control current on/off
Ο		=	Open right-hand doors
Р		=	Operate pantograph
Q		=	Acknowledge vigilance device alarm
	CTRL+Q	=	End driving
R	CTRL+R	=	Fold rear-view mirror out/in
S		=	Reverse switch backwards/back
T	CTRL+T	=	Confirm stop/confirm/loading/unloading goods
U		=	Open left-hand doors
V		=	Windscreen wipers on/off
W		=	Reverse switch forwards
X		=	Sander
Υ		=	Increase speed preset
Ż	Shift+Y	=	Display framerate
ö	· · · · · ·	=	Train brakes
ü		=	Release train brakes
?		=	Engine brakes (other keyboards 1 st key to the right of number 0)
^		=	Engine brakes (other keyboards 2 nd key to the right of number 0))
Backspace		=	Emergency brakes
Space		=	Engine whistle
TAB	•	=	Clearance for shunting past a red signal (forwards/ backwards direction)
IAD	CIKLTIAD	_	(subsequently press the shunting key while driving past)
CTRL	+ Enter(num)	=	Switch vigilance device off/on (is switched on at the start)
1		=	View from the cabin
⊥ 1⊥rial	ht arrow	=	View from the right-hand window of the driver's cab
		=	View from the left-hand window of the driver's cab
1+left arrow 2			View of the front of the train
		=	
3		=	View of the rear of the train
4		=	Observers on the side of the track
5		=	Inside view of passenger carriages
6		=	Coupling view
7		=	Bird's eye view
8		=	Independent camera, view depends on the train
9		=	2-D map view