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Version	1.0
Date	11.12.2025
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Foreword

Dear customer,

Thank you for your interest in our product "ViererPack Vol. 1". With this AddOn you have purchased a very special realization.
With the "ViererPack", we are launching another product series where the name says it all: the distinguishing feature of this series will be the number four - in addition to four thematically focused scenarios, four new AI vehicles will also be included to enrich the fleet. This reduced scope compared to our complex "ScenarioPacks" not only reduces the development time for the next add-on, but in particular enables the presentation of very special chapters of railroad operations that might not have made it into one of our ScenarioPacks. The latter point was the decisive factor in launching this new series.

This add-on focuses on the class 423 as a third-party vehicle on the Berlin-Leipzig line: all four scenarios take place in 2009. In Berlin, the S-Bahn got into difficult waters that year. For this reason, the S21 line was temporarily revived to enhance the reduced S-Bahn service: Berliners were already familiar with this S-Bahn line, which was exceptionally operated with catenary alternating current vehicles, from 2006, when it provided additional capacity for the Football World Cup. Between Berlin Südkreuz and Gesundbrunnen, several Class 423 trainsets ran at irregular but very tight intervals. We bring this special time back to life in our "ViererPack Vol. 1".

As usual with our scenario packs, the scenarios are equipped with extensive AI traffic based on original timetables, station announcements and scenario-specific train destination displays on the platforms. In addition to a typical Berlin subway train series, the fleet is enriched by two quite rare representatives, the class 156 freight train locomotive in several versions and the ICE-S measuring train. The icing on the cake is a two-way excavator that can be used in scenarios - this is equipped with numerous functions and animations so that it can also be individually staged to suit your own scenarios.

We are planning further packages for the new "ViererPack" series, in which scenarios and AI vehicles will be thematically interlinked even more closely in some cases. It is therefore worth taking a regular look at our forum "www.trainteam.berlin/forum" or our Facebook page https://www.facebook.com/TrainTeamBerlin. With this in mind, we hope you have at least as much fun with this add-on as we had creating it.

TrainTeamBerlin
Berlin, December 2025

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The team and acknowledgements

The team is proud to present and introduce itself at this point:

Software programming: TrainTeamBerlin
Distribution: TrainTeamBerlin

Benjamin Ebrecht	3d models, scripting, scenarios, manual
Nick Zimmermann	3d models, announcements
Denny Göring	Scenarios, announcements
Michael Pabst	Scenarios, announcements
TRAXX-Driver	Scenarios
Ben Duven	Announcements
Verkehrsente	Announcements

Furthermore, we would like to thank all other (partly anonymous) helpers and licensors who have contributed to the success of this addon! A very special thanks goes to all the tireless beta testers and courage speakers who have contributed to the attention to detail of this addon.

System requirements

Processor (CPU):	Quad-core processor with 3 GHz
Random access memory (RAM):	8192 MB
Graphics card:	DirectX 10-capable or better, min. 4096 MB physical graphics memory
Hard disk space:	600 MB
Sound card:	Soundblaster or compatible gamer card
Software:	→ Train Simulator Classic → Route add-on "Ringbahn Berlin" (virtualTracks) → Vehicle add-on "Class 481" (TrainTeamBerlin) → ScenarioPack Vol. 3 (TrainTeamBerlin)

The add-on was developed for Train Simulator Classic.

Please note that the latest updates are required for the respective add-ons.

Installation & configuration

Installation:

To install the ViererPack Vol. 2, run the installation routine in exe format. Follow the instructions and install the package in your Railworks root directory, which is normally recognized automatically. This completes the installation.

Uninstallation:

If you want to remove "ViererPack Vol. 2" from your hard disk, select the menu item "Uninstall" in the Start menu folder Programs→ TrainTeamBerlin→ ViererPack Vol. 02 and follow the instructions. The add-on is now removed from your PC.

Note: Please note that some vehicle folders are shared by several addons. Uninstalling this addon will remove all files associated with this addon. This may mean that if other TrainTeamBerlin addons are installed at the same time, they will need to be reinstalled once the uninstallation of this scenario pack is complete.

Class 481 – Jubilee trainset

Es werden mit diesem Addon mehrere neue Lackierungsversionen für die BR481 (Spielerzug) mitgeliefert:

→ Ingame vehicle name for „Quick Drive“: **TTB_BR481 Jubi**
→ Folder to unlock in scenario editor: **TrainTeamBerlin \ TTB_BR481**

Based on the anniversary livery of the anniversary train presented for the 100th birthday of the Berlin S-Bahn, further semi-fictional full livery versions of the vehicles were derived. The following paintwork versions are available:

- 1926: Design „Oranienburg“ (2 different A-Cars)
- 1928: Design „Stadtbahn“ (2 different A- Cars)
- 1936: Design „Olympia“
- 1984: „Hauptstadtlack“
- 1986: „Class 480-Prototype“
- 1987: „Coladose“
- 1992: „Class 477“
- 2024: Jubilee train to mark the 100th anniversary of the S-Bahn (four differently decaled vehicles with eight different side designs that can be assembled in chronological order).

Prefabricated consists are supplied for all paint versions.

AI vehicles

The vehicles presented below are designed as AI vehicles (AI = artificial intelligence) and are intended for computer-controlled traffic in scenarios. The traction units can NOT be driven by the player. The vehicles do not correspond to the technical and functional level of player vehicles, but some of them can also be used in player trainsets if required.

Please note that the detailed information given below is primarily relevant for scenario builders and requires a basic level of experience in using the simulator's editors.

Class 112.1

→ Unlock in the scenario editor: **TrainTeamBerlin \ TTB_BR112-114-143_KI**
→ Electric engine Class 112.1 in several designs with original sound
→ Delivered Versions:

- TTB BR 112.1 VR1 DB KI — traffic red, DB
- TTB BR 112.1 VR1 DB ZZA-FDG KI — traffic red, DB, TDD FlipDot green-black
- TTB BR 112.1 VR1 DB ZZA-FDW KI — traffic red, DB, TDD FlipDot black-white
- TTB BR 112.1 OR1 DB KI — orient red, DB
- TTB BR 112.1 OR1 DB ZZA-FDG KI — orient red, DB, TDD FlipDot green-black
- TTB BR 112.1 OR1 DB ZZA-FDW KI — orient red, DB, TDD FlipDot black-white
- TTB BR 112.1 OR1 DR KI — orient red, DR
- TTB BR 112.1 OR1 DR ZZA-FDW KI — orient red, DR, TDD FlipDot black-white
- TTB 112 101OR DB KI — orient red, DB Regio Nordost, Retro-Liverie, TDD FlipDot green-black
- TTB 112 108 DB VR Ostsee KI — traffic red, DB Regio Nordost, „Baltic sea"-Advertising, TDD FlipDot green-black
- TTB 112 131OR WFL KI — orient red, WFL, Retro-Liverie, TDD FlipDot green-black
- TTB 112 139 OR DB Miete mich KI — orient red, DB-Gebrauchtzug, Retro-Liverie, „Miete mich"-Advertising, TDD FlipDot black-white

→ The following features are automatically configured for the locomotive:

- Locomotive body design according to production series
- Pantograph: new VSH2-F5 design
- Buffers: square shaped
- Front window frame design: rubber

→ Dynamic Numbering:
→ The pantograph position is set using DynamicNumbering—the third-to-last digit of the vehicle number is a character combination that can be used as follows:

- "p0" – Pantographs lowered
- "p1" – front Pantographs raised
- "p2" – rear Pantographs raised
- "p3" – both Pantographs raised

→ Adjusting the windshield wiper type

- The windshield wiper type can be selected by adding a parameter to the vehicle number.
  - „_S1“: Windscreen wiper with nozzle on blade holder and bend for TDD visibility
  - „_S2“: Windscreen wiper without nozzle on blade holder
  - „_S3“: Windscreen wiper with nozzle on blade holder

→ Train Destination Display (TDD)

- Locomotives with train destination displays are equipped with the “TTB Regional Packages” system.
- Packages with numerous pre-designed target displays that can be controlled in a standardized manner are included.
- Delivered regional packages: VBB1 – VBB3, VMV
- Setting allows train destination display at game start by appending parameters to the vehicle number
  - Selection of Regional Package: *„_RP=<RP- Abbreviation >“* attached to vehicle number
  - Example. Select package VBB2: *„91806_112_108-6____p2_a_RP=VBB2“*
  - Selection of TDD from selected Regional Package: *„_ZZA=<TDD-Abbreviation>“* attached to vehicle number
  - Example. Selection of TDD of slot „y:“: *„91806_112_108-6____p2_a_ZZA=y“*
  - Combined example: *„91806_112_108-6____p2_a_RP=VBB2_ZZA=y“*
- Switching during gameplay is possible by controlling it from the scenario script.
  - Set ControlValue “SetZzaRegionalPackage” to change the regional package
  - Set ControlValue “SetZzaCode” to switch ZZA within regional package
  - Example code snippet from scenario script:
    - *SysCall ("91806_112_108-6____p2_a:SetControlValue", "SetZzaCode", 0, 13);*
- See also the separate manual on the ZZA regional packages.

→ The vehicle has the following additional functions (see documentation below):

- Attention horn on start
- Macrophone greeting on approach
- Immediate triggering of the microphone
- Light horn

Class 147

→ Unlock in the scenario editor: **TrainTeamBerlin \ TTB_TRAXX3_KI**
→ 1 Engine of Class 147 with original sound
→ The specific vehicle number is set via DynamicNumbering for each variant delivered.
→ Delivered Versions:
- TTB BR147 VR DB-Regio-NO KI traffic red, DB Regio Nordost

→ The pantograph position is set using DynamicNumbering—the third-to-last digit of the vehicle number is a character combination that can be used as follows:
- "p0" – Pantographs lowered
- "p1" – front Pantographs raised
- "p2" – rear Pantographs raised
- "p3" – both Pantographs raised

→ Display of the third, green data socket ("Colibri") automatically depending on the serial number

→ Train Destination Display (TDD)
- Locomotives with train destination displays are equipped with the "TTB Regional Packages" system.
- Packages with numerous pre-designed target displays that can be controlled in a standardized manner are included.
- Delivered regional packages: VBB1 and VBB2
- Setting allows train destination display at game start by appending parameters to the vehicle number
  - Selection of Regional Package: *„_RP=<RP- Abbreviation >"* attached to vehicle number
  - Example. Select package VBB2: *„91806_112_108-6____p2_a_RP=VBB2"*
  - Selection of TDD from selected Regional Package: *„_ZZA=<TDD-Abbreviation>"* attached to vehicle number
  - Example. Selection of TDD of slot „y:": *„91806_112_108-6____p2_a_ZZA=y"*
  - Combined example: *„91806_112_108-6____p2_a_RP=VBB2_ZZA=y"*
- Switching during gameplay is possible by controlling it from the scenario script.
  - Set ControlValue "SetZzaRegionalPackage" to change the regional package
  - Set ControlValue "SetZzaCode" to switch ZZA within regional package

    - Example code snippet from scenario script:
        - *SysCall ("91806_112_108-6____p2_a:SetControlValue", "SetZzaCode", 0, 13);*
- See also the separate manual on the ZZA regional packages.

→ The vehicle has the following additional functions (see documentation below):
- Attention horn on start
- Macrophone greeting on approach
- Immediate triggering of the microphone
- Light horn

Class 485

→ Unlock in the scenario editor: **TrainTeamBerlin \ TTB_BR485_KI**
→ Trainset oft he Class 485 (S-Bahn Berlin) with original sound
→ Doors that open and close randomly. Door warning lights on both sides, as in reality.
→ Panitwork variants:

- Traditional colors
- Traditional colors with sign „Farewell Trip“
- Red/Grey („Coke can“)

→ predefined Consists delivered

→ Append the parameter “PASS=0” (separated by an underscore) to the vehicle number: the **entire** train (!) will be loaded without passengers. Example vehicle number: “485_013-5a--_PASS=0”

→ Versions with and without grab bars across the front windows are available

- The last digit of the vehicle number determines the display of the handrail
- Character “-”: no grab rail
- Character “+”: grab rail displayed
- Character “x”: random decision on whether to display the grab rail at the start of the game
- Example: “485_013-5a-x”: random decision at the start of the game.

The vehicle numbers are prepared by default in such a way that when the train is set up in the editor, the grab bars appear on some trains and not on others. This means that variety is automatically ensured, whereby the status (once randomly selected when setting the train in the editor) remains the same for each quarter train even if the game is started several times.

→ Replica of the “Wieder Flott” (“Back on the track”) stickers on the vehicle in traditional colors possible – two labeling modes:

- Indicator of a randomly assigned “Back on the track” number when a “+” is entered in the penultimate position of the vehicle number, regardless of the vehicle number used in reality. Example: „485_013-5a+-“

- Assignment of real "Back on the road" stickers based on the vehicle number is automatic. This can be suppressed by entering an "x" in the penultimate position of the vehicle number. Example: „485_013-5ax-". The "Wieder Flott" numbers are assigned according to the following scheme:

Vehicle number	„Wieder flott"-number
028	13
030	15*
034	02
041	08
043	14*
062	04
072	01
074	03
082	09
085	18*

Vehicle number	„Wieder flott"-number
092	07
094	19*
102	11
104	06
109	16
110	10
160	12
161	17
164	05
168	20

** Stickers with this number were never actually issued in reality.*

→ The vehicle has additional functions, "headlight flash" and "microphone greeting," which are explained separately below in the section "Documentation of cross-functional features of AI vehicles."

→ Compared to the standard settings, the probabilities of the warning whistle when driving off and the randomly triggered microphone greeting when approaching oncoming traffic are set to zero for this vehicle.

→ However, the headlight flash and microphone can be triggered in custom scenarios using a scenario script..

→ Train destination display can be preselected – classic preselection of a train destination via dynamic numbering

- the vehicle number contains a letter in the third-to-last position (!) that preselects a train destination display.
- Example: „485_013-5c--"
- das marked „c" codes the train destination display „S1 Potsdam Hbf"
- Available displays are listed in the following table
- Destinations marked with * deviate from the familiar pattern of AI destinations of other well-known series (BR480, BR483/484, etc.) in order to accommodate historically more relevant destinations, while future lines will no longer be regularly served by the class 485.

a	S1 Oranienburg	A	S45 Südkreuz
b	S1 Frohnau	B	S45 Bundesplatz
c	S1 Potsdam Hbf	C	S45 Flughafen Schönefeld
d	S1 Wannsee	D	S46 Westend
e	S2 Bernau	E	S46 Königs Wusterhausen
f	S2 Buch	F	S47 Herrmanstraße
g	S2 Blankenfelde	G	S47 Spindlersfeld
h	S2 Lichtenrade	H	S47 Schöneweide
i	S2 Priesterweg	I	S5 Spandau
j	S2 Südkreuz	J	S5 Mahlsdorf
k	S2 Potsdamer Platz	K	S5 Hoppegarten
l	S25 Teltow Stadt	L	S5 Strausberg
m	S25 Lichterfelde Süd	M	S5 Strausberg Nord
n	S25 Lichterfelde Ost	N	S7 Potsdam Hbf.
o	S25 Priesterweg	O	S7 Ahrensfelde
p	S25 Südkreuz	P	S75 Westkreuz
q	S25 Potsdamer Platz	Q	S75 Wartenberg
r	S25 Nordbahnhof	R	S8 Birkenwerder
s	S25 Gesundbrunnen	S	S8 Zeuthen
t	S25 Schönholz	T	S8 Grünau
u	S25 Tegel	U	S85 Waidmannslust
v	S25 Hennigsdorf	V	S85 Grünau
w	S3 Erkner	W	S9 Pankow
x	S3 Ostbahnhof	X	S9 Flughafen Schönefeld
y	S41 Ring	Y	S9 BER T1-2
z	S42 Ring	Z	S9 Spandau
:	S1 Zehlendorf	0	S85 Pankow
;	S1 Potsdamer Platz	1	S85 Frohnau
@	S7 Wannsee	2	S8 Hohen Neuendorf
!	S25 Velten	3	S8 Wildau
„	S26 Teltow Stadt	4	S75 Spandau
$	S26 Lichterfelde Süd	5	S75 Warschauer Straße
%	S26 Potsdamer Platz	6	S5 Westkreuz
&	S26 Waidmannslust	7	S5 Charlottenburg
(	S26 Blankenburg	8	S5 Warschauer Straße
)	S3 Spandau	9	S5 Ostbahnhof
?	S3 Westkreuz	+	S86 Grünau
{	S3 Charlottenburg	-	S86 Buch
}	S3 Ostkreuz	*	S4 Bernau*
[	S3X Ostbahnhof	/	S4 Buch*
]	S3X Friedrichshagen	=	S4 Jungfernheide*
<	S45 Hermannstr.	_	S4 Westhafen*
>	S45 Gesundbrunnen	#	Nicht Einsteigen
|	S45 BER T1-2	‘	Pendelverkehr
\	S46 Gesundbrunnen	~	Werkstattzug
^	S47 Südkreuz	.	Sonderzug
`	S47 Gesundbrunnen	,	[leere Anzeige]

Class 648 „Prignitz-Express“

→ Unlock in the scenario editor: **TrainTeamBerlin \ TTB_BR648_KI**
→ Diesel Multiple Unit (DMU) Lint41 with original sound
→ Delivered DMU versions:

- TTB BR 648 DB PrignitzExpress KI traffic red, DB, „Prignitz-Express“

→ Dynamic Numbering:
→ The vehicle nickname is set using DynamicNumbering—the last digit of the vehicle number is a letter—which can be used as follows:

- "A" – no naming
- "B" – „Fontanestadt Neuruppin“
- "C" – „Wittstock (Dosse)“

→ Train Destination Display (TDD)

- Locomotives with train destination displays are equipped with the “TTB Regional Packages” system.
- Packages with numerous pre-designed target displays that can be controlled in a standardized manner are included.
- Delivered regional packages: VBB1
- Setting allows train destination display at game start by appending parameters to the vehicle number
  - Selection of Regional Package: *„_RP=<RP- Abbreviation >“* attached to vehicle number
  - Example. Select package VBB2: *„91806_112_108-6____p2_a_RP=VBB2“*
  - Selection of TDD from selected Regional Package: *„_ZZA=<TDD-Abbreviation>“* attached to vehicle number
  - Example. Selection of TDD of slot „y:“: *„91806_112_108-6____p2_a_ZZA=y“*
  - Combined example: *„91806_112_108-6____p2_a_RP=VBB2_ZZA=y“*
- Switching during gameplay is possible by controlling it from the scenario script.
  - Set ControlValue “SetZzaRegionalPackage” to change the regional package
  - Set ControlValue “SetZzaCode” to switch ZZA within regional package
  - Example code snippet from scenario script:

- *SysCall ("91806_112_108-6____p2_a:SetControlValue", "SetZzaCode", 0, 13);*
- See also the separate manual on the ZZA regional packages.

→ The vehicle has additional functions, “headlight flash” and “microphone greeting,” which are explained separately below in the section “Documentation of cross-functional features of AI vehicles.”

Documentation of cross-functional features of the AI vehicles

In the following, various functions of AI vehicles are presented that are included in several vehicles of this package and may influence each other. Please note that this documentation is only relevant for scenario builders.

Attention whistle on start

Some vehicles can emit a warning whistle when starting from a standstill. This can occur randomly for each specific train in a scenario or can be triggered in every case or suppressed completely. The probability of occurrence can be influenced as follows:

- **Global probability of occurrence:** first, a probability can be defined that is used as the default value (also for different vehicle classes). This is defined in the file *..\RailWorks\Assets\TrainTeamBerlin\TTB_KI_Config\TTB_KI_Options.lua*. The value contained in options.SHORT_HORN_AT_KICKOFF_PROBABILITY is the probability of the engine emitting a warning whistle with the macrophone when starting up (values between 0 and 1).

- **Probability of occurrence per vehicle:** it is possible to overwrite the global default setting for a specific vehicle in a scenario. To do this, a parameter is attached to the vehicle in the assigned vehicle number, which is processed when the game starts. The parameter is **"_HSP=<x>",** where <x> is replaced by a value between 0 and 1. Example: Extending a vehicle number "143_245" to "143_245_HSP=0.75" sets the probability of the attention whistle - only for this vehicle in the scenario - to 75% on departure, regardless of the default setting in the global settings file.

Macrophone greeting on approach

Some vehicles can emit an acoustic greeting with the macrophone when approaching. This can occur randomly for each specific train in a scenario or can be triggered in every case or suppressed completely. The probability of occurrence can be influenced as follows:

- **Global probability of occurrence:** first, a probability can be defined that is used as the default value (also for different vehicle series). This is defined in the file *..\RailWorks\Assets\TrainTeamBerlin\TTB_KI_Config\TTB_KI_Options.lua*. The value options.HORN_ON_APPROACH_PROBABILITY contained therein is the probability with which the engine emits a greeting with the macrophone when approaching (values between 0 and 1).

- **Probability of occurrence per vehicle:** it is possible to overwrite the global default setting for a specific vehicle in a scenario. To do this, a parameter is attached to the vehicle in the assigned vehicle number, which is processed when the game starts. The parameter is **"_HAP=<x>",** where <x> is replaced by a value between 0 and 1. Example: Extending a vehicle number "143_245" to "143_245_HAP=0.75" sets the probability of the whistle to greet - only for this vehicle in the scenario - to 75% when approaching, regardless of the

default setting in the global settings file.

Immediate triggering of the macrophone

The macrophone can be triggered immediately for a specific vehicle in the scenario, too:

- Short attention whistle: the attention whistle can be triggered at any time in the scenario for a specific scenario by setting the ControlValue "TriggerHornShort" to 1. This is only possible via a scenario script and requires basic knowledge of scenario building. Example: the command SysCall ("143_245:SetControlValue", "TriggerHornShort", 0, 1); immediately triggers the attention whistle for the vehicle with the number "143_245" in the scenario.
- Longer greeting or warning signal with the macrophone: same procedure as for the attention whistle, but the ControlValue "TriggerHornGreeting" is set to 1.

Light horn

It is possible for the vehicles to emit a greeting with the headlights (light horn). Unfortunately, it is currently not technically possible to trigger this automatically when approaching AI vehicles. The headlight flasher must therefore always be triggered manually.

To do this, the "TriggerLightHornShort" ControlValue is always set to a value greater than 0. This is only possible via a scenario script and requires basic knowledge of scenario building.

The following headlight flasher modes are implemented:

- 1: Fade in high beam long
- 2: Fade high beam 2x briefly
- 3: Fade high beam long + short
- 4: Switch off dimmed signal long
- 5: Switch off dimmed signal 2x briefly
- 6: Switch off dimmed signal long + short

If the ControlValue TriggerLightHornShort is set to a value between 0 and 1, one of the greeting modes is selected at random. During the day, the high beam is preferably used, while at night the peak signal is primarily switched off to avoid glare.

A specific greeting mode can be forced by setting a value from 1 - 6.

Example: the command SysCall ("143_245:SetControlValue", "TriggerLightHorn", 0, 0.5); immediately triggers the light horn for the vehicle with the number "143_245" in the scenario.

Scenario objects

→ To be unlocked in the scenario editor: **TrainTeamBerlin \ TTB_Scenarios**

→ Set with numerous objects and equipment objects defined as "signal"
→ All objects available in the scenario editor

→ Lf signs:
- Compilation of signal boards for signaling a slow speed zone
- Lf1 panel is set as a signal and the code number is entered in the signal flyout
- Start and end panel (signals Lf2 and Lf3) available as normal objects

→ PZB magnets
- Additional PZB magnets can be installed where operationally required
- For example, the pre-announcement of a La (signal Lf1) can be safeguarded
- Set provides "dynamic" signals (dependent on the next signal state) as well as permanently active magnets with different frequencies
- Magnets are placed as signals in the scenario

→ GPA - Speed test section
- GPAs monitor the speed of the passing train and trigger an alarm if necessary.
PZB emergency braking off
- GPA is to be placed as a signal in the scenario in the same way as the PZB magnets
- the speed to be monitored (in km/h) must be entered in the signal flyout
- Works with all vehicles that evaluate a 2000Hz PZB influence
- also works with the latest version of TTB PlusPack vehicles

→ Construction site objects

- Numerous construction site objects are used to design temporary construction sites along the route

- With the help of the "construction site tracks" as "train sets", which can be placed on the tracks existing tracks can be hidden or made impassable on the construction site. Prefabricated consists are available for these. There are different versions with fences and with/without ballast. Note: there are separate end pieces separate end pieces for the "train sets", which are attached to them manually.

- available "normal" objects for construction site design:

- Excavator
- Bulldozer
- Roller
- Scaffolding
- Construction crane large and small
- Concrete mixer, mobile on two wheels
- 2 different spoil containers
- 2 different spoil containers
- Cable drum individually and 4x on pallets
- Piles of sand and gravel
- Foiled concrete parts
- Accessories

Scenarios

In this section, we would like to introduce you to the tasks provided. We will list the basic data of each scenario and provide further information that may be helpful for the smooth running of the program and thus for solving the task.
Some of the scenarios in this add-on have longer stops and turnaround times at stations. These can be shortened using the fast-forward function. Please also note the "Further information" below.

[TTB VP 02] BR481 01: Deployer from Greifswalder Strasse

Vehicle: TTB BR481
Difficulty: middle
Season / Weather: Summer, clear
Time: 18:41
Duration: 0:40 hours

Description: It's a Saturday in the summer of 2023. Due to a vehicle malfunction, a unit on the S85 line has had to be taken out of service. You take over the service from Greifswalder Straße and are integrated into the normal S85 timetable from here. First, you travel to Pankow and from there to Schöneweide. The turnaround time in Pankow is very short, so you need to hurry.

After setting up the train and programming the IBIS (see also F10 menu), drive to the platform at a shunting speed (Vmax = 25 km/h). The scheduled departure time is 6:47 p.m. In Pankow, after opening the doors, apply the spring brake, return the direction and speed selector levers and the drive and brake levers to their default positions, lock the drive switch, and stow the key in your backpack. When you arrive at the driver's cab for the return journey, unlock the drive switch, program the IBIS for the journey to Schöneweide, and release the spring-loaded brake.

Departure signalling is done in ZAT mode at every station, c.f. F10 monitor.

Greifswalder Straße	*from*	*18:47*
Prenzlauer Allee		*18:49*
Schönhauser Allee		*18:51*
Bornholmer Straße		*18:56*
Pankow	*18:58-*	*19:00*
Bornholmer Straße		*19:02*
Schönhauser Allee		*19:05*
Prenzlauer Allee		*19:06*
Greifswalder Straße		*19:08*
Landsberger Allee		*19:10*
Storkower Straße		*19:12*
Frankfurter Allee		*19:14*
Ostkreuz		*19:16*
Treptower Park		*19:18*

[TTB VP 02] BR481 02: Just yet a still intact world

Difficulty: TTB BR481 Traditional livery
Difficulty: middle
Season / Weather: Autumn, clear
Time: 07:06
Duration: 1:05 hours

Description: In fall 2008, exactly one week before Tempelhof Airport closed, you take an S42 circular train at Gesundbrunnen. At that time, the S41 and 42 were still operating as three-quarter trains – so please hold on to the 24x-H signs. The new ZAT clearance method is gaining ground: it is already in use at some stations along the ring line, but there are still some supervisors on duty, blaring their announcements across the platforms. You can easily distinguish the stations by the ZAT signs or yellow clearance columns. If you are unsure, the F10 monitor will help. The train travels completely counterclockwise back to Gesundbrunnen. By the way, its maximum speed is 100 km/h.

Gesundbrunnen	*ab*	*07:07*
Weding		*07:09*
Westhafen		*07:12*
Beusselstraße		*07:13*
Jungfernheide		*07:16*
Westend		*07:21*
Messe Nord		*07:23*
Westkreuz		*07:25*
Halensee		*07:27*
Hohenzollerndamm		*07:29*
Heidelberger Platz		*07:31*
Bundesplatz		*07:33*
Innsbrucker Platz		*07:35*
Schöneberg		*07:37*
Südkreuz		*07:39*
Tempelhof		*07:41*
Hermannstraße		*07:46*
Neukölln		*07:48*
Sonnenallee		*07:50*
Treptower Park		*07:52*
Ostkreuz		*07:54*
Frankfurter Allee		*07:57*
Storkower Straße		*07:59*
Landsberger Allee		*08:01*
Greifswalder Straße		*08:03*
Prenzlauer Allee		*08:05*
Schönhauser Allee		*08:06*
Gesundbrunnen	*an*	*08:08*

[TTB VP 02] BR481 03a: Interrupted shift

Vehicle: TTB BR481 Traditional livery
Difficulty: middle
Season / Weather: Winter, clear
Time: 07:31
Duration: 0:30 hours

Description: It is Tuesday, January 20, 2015. The thermometer has climbed from -1°C this morning to just 1°C. The nights have been freezing for weeks now. You are on your route from Königs Wusterhausen (KW) and are now standing in front of Neukölln station. After a short wait – an S41 is still blocking the platform – the journey continues to Westend. Once you arrive in Westend, you drive into the turning track. After a short break, you head back to KW.

After a temporary system crash, the IBIS data must first be re-entered and the lights switched back on.

All stations are handled with ZAT. With 32 axles, the train stops at the front H-boards.

Neukölln	*07:34*
Hermannstraße	*07:36*
Tempelhof	*07:39*
Südkreuz	*07:42*
Schönberg	*07:44*
Innsbrucker Platz	*07:45*
Bundesplatz	*07:47*
Heidelberger Platz	*07:49*
Hohenzollerndamm	*07:51*
Halensee	*07:53*
Westkreuz	*07:55*
Messe Nord/ICC	*07:57*
Westend	*07:59*

[TTB VP 02] BR481 03b: Interrupted shift

Vehicle: TTB BR481 Traditional livery
Difficulty: middle
Season / Weather: Winter, clear
Time: 08:09
Duration: 0:35 hours

Description: Now your short break is over, take one last sip of coffee and finish your sandwich. The train is already partially set up — so just insert the key and remove the spring brake. The IBIS still needs to be fed, the passengers need some light, and then you're almost ready to go.

The trainset's maximum speed is 80 km/h. And don't forget: you're traveling with a full train, so always stop at the front H sign.

If you encounter one or more HP0s (red signals) on the way, it's because there's a rather ageing Class 480 in front of you....

Westend	*ab*	*08:17*
Messe Nord		*08:19*
Westkreuz		*08:21*
Halensee		*08:22*
Hohenzollerndamm		*08:24*
Heidelberger Platz		*08:26*
Bundesplatz		*08:28*
Innsbrucker Platz		*08:30*
Schöneberg		*08:32*
Südkreuz		*08:34*
Tempelhof		*08:36*
Hermannstraße		*08:40*
Neukölln		*08:42*

Note: The waiting time can be reduced by using the fast-forward function in the game. You can find out how to use this function under "Further information" below in the manual.

[TTB VP 02] BR481 04: Reserve train (S4) to Westhafen

Vehicle: TTB BR481 Delivery paint scheme/Traditional livery, roller blind display
Difficulty: middle
Season / Weather: Spring, Showers
Time: 13:26
Duration: 1:10 hours

Description: Berlin in spring 2001. Your train, which is standing by as a reserve in Gesundbrunnen, needs to be set up to restore disrupted service on the S4 line from Pankow. You first have to drive to Pankow as an empty train. Then you will take over regular service on the S4 via Ostkreuz – Papestraße – Westkreuz to Westhafen. Along the way, your departure signalling will still frequently be via radio, as ZAT did not exist at that time. By the way: those were the good old days when the Class 481 was allowed to run at 100 km/h – so drive at the appropriate speeds.

Pankow	*13:37*
Bornholmer Straße	*13:39*
Schönhauser Allee	*13:42*
Prenzlauer Allee	*13:44*
Greifswalder Straße	*13:46*
Landsberger Allee	*13:48*
Storkower Straße	*13:50*
Frankfurter Allee	*13:52*
Ostkreuz	*13:55*
Treptower Park	*13:57*
Sonnenallee	*14:00*
Neukölln	*14:02*
Hermannstraße	*14:03*
Tempelhof	*14:07*
Papestraße	*14:09*
Schönberg	*14:11*
Innsbrucker Platz	*14:13*
Bundesplatz	*14:15*
Heidelberger Platz	*14:17*
Hohenzollerndamm	*14:19*
Halensee	*14:21*
Wegkreuz	*14:22*
Witzleben	*14:24*
Westend	*14:26*
Jungfernheide	*14:29*
Beusselstraße	*14:32*
Westhafen	*14:34*

Further information

→ Note: You can start the Train Simulator with the start parameter EnableAsyncKeys start parameter - this allows you to use the time-lapse function in the game. This can be used, for example, to shorten longer station stops.

As soon as TrainSimulator has been started with the **EnableAsyncKeys** start option, the key combinations **Ctrl + Shift + 1** to **Ctrl + Shift + 5 are available to** set the sequence speed from single to five times. Use the combination **Ctrl + Shift + 5** to speed up the game to five times playback speed and then **Ctrl + Shift + 1 to** slow it back down to normal playback speed.

If you are not sure how to enter the start parameter **EnableAsyncKeys** (without a preceding hyphen!) entered in a shortcut, you can also do this directly in Steam by going to "Show game library" under "Games" in the main menu. In list on the left-hand side you will find Train Simulator Classic („Train Simulator"). Right-click on it and select "Properties" from the menu. "Properties" from the menu. The properties window opens with the "General" tab. Here you will find the "start options" section. You can enter the start parameter into the contained text field: Enter **EnableAsyncKeys** (without the hyphen in front!). You can now start Train Simulator from Steam and use the fast-forward function in the game.

→ If you have any further questions, please visit the support forum of the development team at https://www.trainteamberlin.de/forum is at your disposal.