

ICE4 - BR412 - Documentation



The ICE 4 - class 412

As ICE 4, Deutsche Bahn designates a type of high-speed Intercity-Express (ICE) train for long-distance passenger transport that has been in use since 2017. Siemens Mobility was commissioned with the development and construction in 2011. The series designation for the railcars is 412 and for the non-powered intermediate and control cars 812.

The ICE 4 sets new standards in Intercity Express traffic. Together with Bombardier, Siemens has developed a unique concept that can be individually adapted to different needs. The modular drive concept is based on independent powercars with identical traction technology - for increased flexibility. Numerous reliable and redundant systems ensure the greatest possible availability during operation.

The design was jointly developed by Deutsche Bahn, Bombardier and Siemens. The exterior design of the trains received the Red Dot Design Award in 2015. The ICE 4 was also awarded the German Design Award 2016 in the Transportation category for its exterior design.

The Deutsche Bahn AG has 7-, 12- and 13-part units in operation.

The 7-part train set of the ICE 4 has 77 seats in 1st class, 367 seats in 2nd class and 17 seats in the restaurant. The train is approved for a maximum speed of 250 km/ h.

The 12-part ICE 4 is 346 m long and has a seating capacity of 830 and is also suitable for a speed of 250 km/ h

The 13-part "XXL" train set - and the latest addition to the ICE4 fleet - is 374 meters long and offers 918 seats. With 15,640 hp, it reaches a top speed of up to 265 km/ h.

The ICE fleet currently consists of 330 trains. It is expected to grow to 421 vehicles by 2026, and around 600 trains are planned in the long term.

The ICE4 - class 412 - for EEP

The ICE4 multiple units are modeled on the originals true to detail and offer the following

Model features:

- Train driver switching automatically depending on the direction of travel; can be hidden manually for parking position [2]
- passengers; can be hidden manually for parking position [2]
- Controllable doors with extending steps [2]
- Modeled passenger compartments 1st / 2nd class with interior views – the interior views can be called up in the program by using key 8 and 9 (for the front cars)
- Controllable pantographs [2]
- Train destination displays outside and in the passenger area (monitors) that can be edited using a text function [1]; for departure/ destination stations, train route, train number and arrival time on next train station
- animated windshield wipers (switching automatically when it starts to rain)
- Modeled driver's cabs with animated speed indicators; Driver's cab view can be called up via key 8 in the program
- Controllable bow flap for use in double traction (Scharfenberg couplings) [2]
- traction vehicle headlight, traction vehicle taillight; Interior lighting
- realistic vehicle-specific sounds
- realistic driving characteristics

Technical specifications:

Manufacturer: Siemens / supplier Bombardier

Years of construction (ICE4 in general): from 2013, from 2016 testing, since 2017 regular operation

Axis sequences:

- 2'2' '+ Bo'Bo' + Bo'Bo' '+ 2'2' + Bo'Bo' '+ Bo'Bo' + Bo'Bo' '+ 2'2' + Bo'Bo' '+ 2'2' + Bo'Bo' '+ 2'2' + 2'2' '

(13 pieces)

- 2'2' '+ Bo'Bo' + Bo'Bo' '+ 2'2' + Bo'Bo' '+ Bo'Bo' + 2'2' '+ Bo'Bo' + 2'2' '+ Bo'Bo' + 2'2' '+ 2'2' (12 parts)
- 2'2' '+ Bo'Bo' + 2'2' '+ Bo'Bo' + Bo'Bo' '+ 2'2' + 2'2' '(7-part)

Length over coupling: 374 m / 346m / 202 m (13- / 12- / 7-part)

Pivot spacing: 19.50 m

Empty weight: 736.25 t / 675.006t / 392.14 t

Operating weight: 892.74 t / 818.816 t / 469 t

Max. operating weight: 973.28 t / 893.568t / 513.1 t

Seats: 918 (including 205 in 1st class) / 830 (including 205 in 1st class) / 444 (including 77 in 1st class)

Top speed: 265/250 km/ h

Continuous power: 11 550 kW/ 9900 kW/ 4 950 kW

Wheel diameter: 920/840 mm (drive wheel), 825/750 mm (impeller)

Power transmission: overhead line

Coupling: Scharfenberg, type 10

important NOTE:

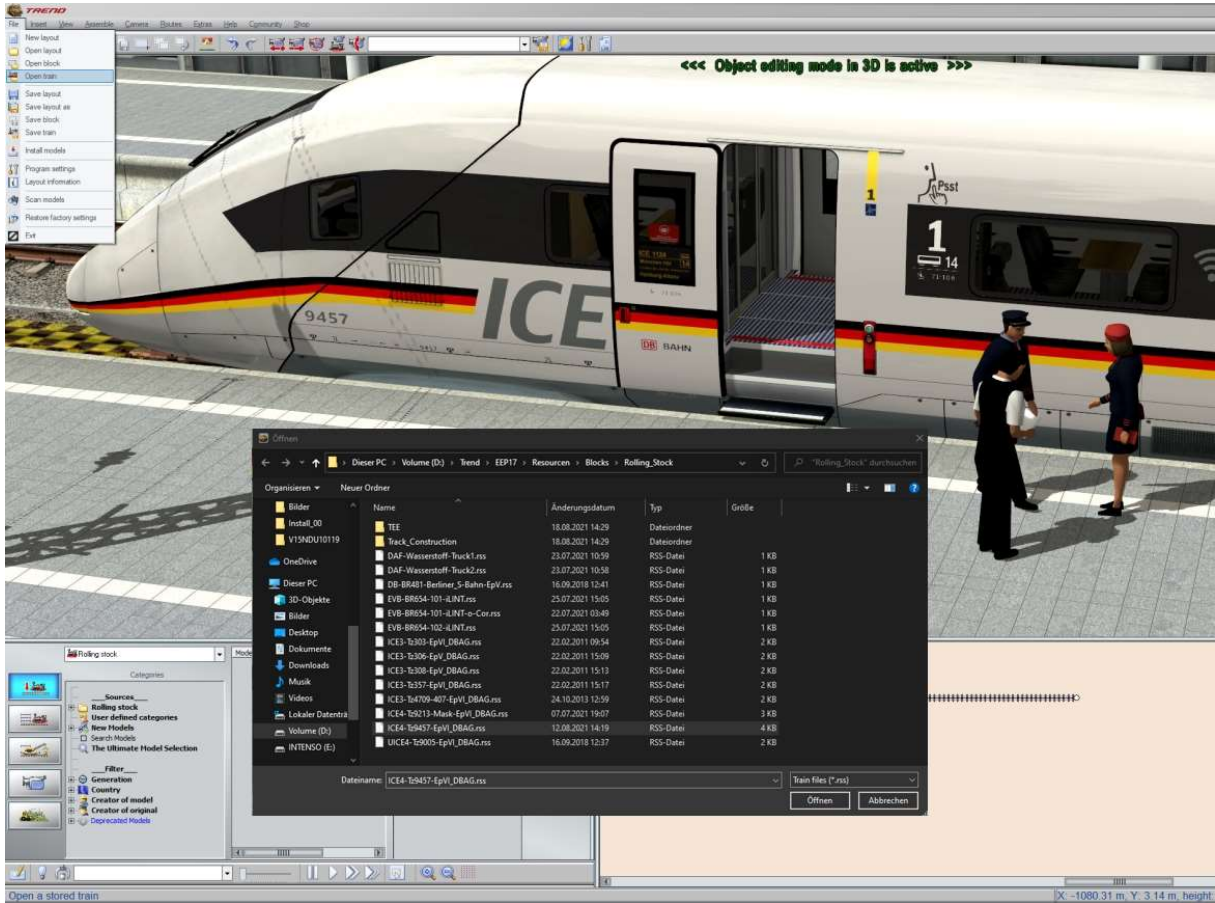
All models are equipped with inscription function. For these models the font "Arial" is used here. For correct rendering on the model it is necessary that this font is installed in Windows\ Fonts.

General instructions for installing fonts can be found here:

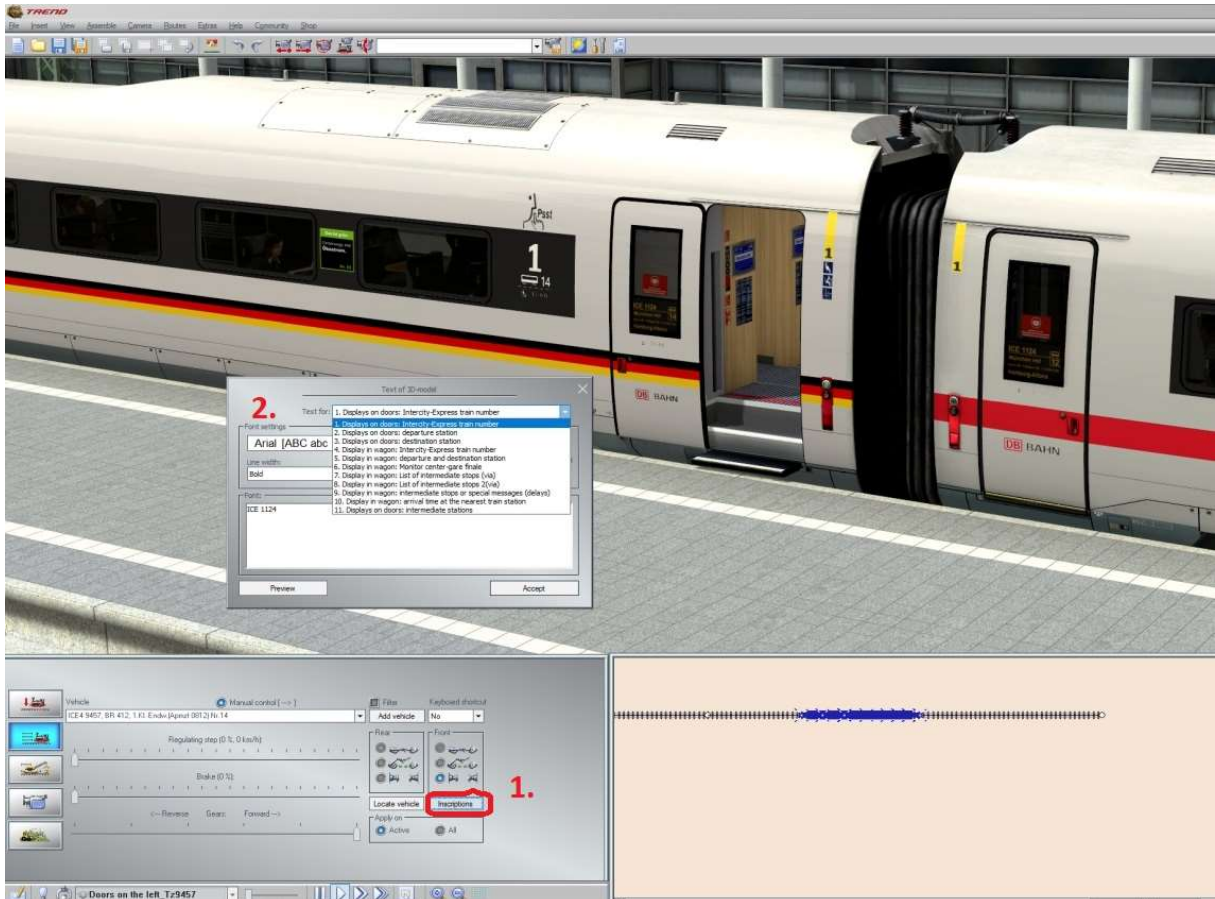
<https://support.microsoft.com/en-us/office/add-a-font-b7c5f17c-4426-4b53-967f-455339c564c1>

Remarks:

1. Loading train sets



2. [1] Text function – inscriptions



3. [2] Controlling the movable axes in the train



Example – front railcar, exterior view



Example - railcar interior view 1st class



Example - railcar interior view 2nd class

We hope you enjoy using the ICE4 class 412 for EEP. If you have any questions regarding the train, please feel free to contact our support team at <https://hilfe.eepshopping.de/kontakt/>

Yours EEP Team Trend