

### Introduction

Congratulations! You have purchased the CreativeworX Re 6/6 – Re 620 pack. Please take the time to read this manual before driving off in your new engine. This add-on is CreativeworX's first locomotive release. Getting to the final result took almost a year of development and a steep learning curve. Although I did my best to test everything, there could be bugs that I did not find. Please take the time to write me an email (paul@creativeworx.nl) to share any issues that you might encounter. I will do my utmost to quickly fix severe issues. Finetuning, nice-to-haves and small issues will be fixed in regular updates. The engine is a bit heavy on polygons which has not showed any issues while testing. On slower computer systems there might be some lagging however. I hope you like the product and have many hours of fun with it. For more information and updates please visit : www.creativeworx.nl and like my Facebookpage : https://www.facebook.com/CreativeworXforTrainsimulator

### **Special thanks**

I want to express special thanks to some people without whom this product never would have seen the light. First off all many thanks to Chris Longhurst (<u>www.christrains.com</u>) who has helped numerous times during the building process. I hope to, one day, reach his level of quality on my builds. Thanx Chris! Secondly I want to thank Bruno Lämmli (<u>http://www.lokifahrer.ch/</u>) for his consults on Re 6/6 details and controls. Bruno made it possible to make the cab and controls as near as possible to the original engine. Merci Bruno! And last but not least I need to thank my main testers Stefan 'Lemaster101' Gisler, Markus 'Safter' Sefrin and Jürg 'Swisstraindriver'. These guys have helped me by testing (and positively criticizing) my work time and time again. Danke Schön! I also want to mention Peter Hanslip who provided the MSTS model. Although only some parts of that model are used in this DTG TS model the general design is his.

# The original

From Wikipedia, the free encyclopedia



. 6	REATIVE
	Design)
The	DRX

	<u>SAAS Geneva</u>
Build date	1972, 1975–1980
Total produced	89
UIC classification	Bo'Bo'Bo'
Gauge	1,435 mm (4 ft 8 <sup>1</sup> / <sub>2</sub> in)
Length	19,310 mm (63 ft 4.2 in)
Width	2,950 mm (9 ft 8.14 in)
Height	3,932 mm (12 ft 10.80 in)
Locomotive weight	120 t (118.1 long tons; 132.3 short tons)
Electric system(s)	<u>15 kV 16 <sup>2</sup>/<sub>3</sub> Hz AC Catenary</u>
Current collection method	Pantograph
Maximum speed	140 km/h (87 mph)
Power output	10,700 <u>hp</u> (8,000 <u>kW</u> )
Tractive effort	270 kN (61,000 lb <sub>f</sub> )
Career	
Number(s)	11601 – 11689

The Re 620, Re 6/6 in the old numbering scheme, are six-axle, electric locomotives of the SBB-CFF-FFS, which were acquired as a replacement for the Ae 6/6 for heavy services on the Gotthardbahn. They are the most modern of the so-called "Gotthard locomotives".



# **Construction and Technology**

To reach the necessary tractive effort, a construction comprising six driven axles was necessary. In order to still get good running characteristics in curves, they were built into three two-axle bogies instead of two three-axle bogies as on the Ae 6/6. The middle bogie can move sideways, and the three bogies are connected by elastic cross couplings. Two of the four prototypes were built with a split locomotive body, whereby the joint may only move on an horizontal transverse axis, not on a vertical axis, to accommodate to gradient changes.

The other two prototypes got a softer secondary suspension instead of the joint, which proved to be so reliable in everyday use that all series locomotives were built this way. Nevertheless, the two prototypes with a split body are still in regular operation.

The exterior design is similar to the Re 4/4II, as are the driver's controls and the conventional transformer technology with fixed running notches, which was applied for the last time for this locomotive. In contrast to the Re 4/4II, the Re 6/6 has two transformers (one power and one control transformer), which are mounted on the frame between the bogies. Due to the higher roof, the Re 6/6 looks more brawny than the Re 4/4II, especially when seen from the front side.

# Operations

The Re 6/6 is equipped with multiple unit train control together with Re 4/4II, Re 4/4II, Re 4/4IV and RBe 540. In passenger traffic they pull heavy passenger trains over the Gotthard route (as an alternative to a double heading of Re 4/4). In freight traffic they are used all over Switzerland for heavy trains, on the Gotthard route very often together with an Re 4/4II or Re 4/4III. Such a couple, often referred to as "Re 10/10" (both locomotives are Re class, so the couple is Re class; 10/10 means that they overall have 10 driven axles out of 10), is capable of pulling the maximum train weight of 1,300 tonnes (1,300 long tons; 1,400 short tons) on 2.6% gradients of the Gotthard line. For heavier trains, up to 1600 tons are operationally feasible; an additional bank engine has to help push the train in order not to overload the couplers.

Locomotive 11638 was retired and scrapped in 1990 due to an accident. For the renumbering to the UIC-conforming new numbering scheme in 1992, only the still existing locomotives were considered, thus the 11638 got no new number any more. But the renumbering was never done consistently. During 2005, the UIC numbering scheme was reworked, and 620 001 (instead of 000) was defined to be the smallest number. To make things easy, the scrapped 11638 also got a new number, 620 038. About half a dozen locomotives bore the new numbers at the beginning of 2006.

After two locomotives were tentatively equipped with radio remote control for pushing trains on the Gotthard line (such that the locomotive pushing at the end of the train may be controlled by the engineer at the front), about 30 locomotives were equipped with it in 2000. To make them administratively distinguishable, they got the new designation Ref 6/6.

When SBB was divided into passenger services and freight, the first thirteen locomotives 11601–13 remained in the passenger division. On 1 January 2003 they were exchanged against Re 460. Now all remaining 88 locomotives are assigned to SBB Cargo. Due to the reassignment of the Re 460 to the passenger division, the Re 6/6 again dominate the freight traffic on the Gotthard line.

The locomotives are assigned to the workshops Erstfeld, Bellinzona and Lausanne (Lausanne: 2000, today unknown), revisions are done at the main workshop at Bellinzona.



#### Installation

The zipfile contains an installer for Trainsimulator 2015, this manual and EULA. Please read the EULA carefully before installing this software. This software is PAYWARE and may not be redistributed in any way or form without written consent from the author (CreativeworX).

- 1. Start the installer : RE66P\_vx\_installer.exe (Platinum Pack), RE66G\_vx\_installer.exe (Gold Pack) or RE66S\_vx\_installer.exe (Silver Pack). The x is the current version.
- 2. Your new assets will now be installed in the 'CreativeworX' assets folder and the manual in the Manuals folder.
- 3. If you want to use these engines in your scenario please make sure you activate 'CreativeworX-Railsimulator' in the assets box (on the right)



#### **Included versions**

This pack includes 13 versions of the Re 620:

- 11604 'Faido' (Prototype)
- 11613 'Rapperswil' (Green R1, Red R2 and Weathered Red R2 version)
- 11622 'Suhr' (Red)
- 11626 'Zollikofen' (Red with AE 6/6 stripes)
- 11646 'Bussigny' (Round lights, faded paint)) and Weathered version



11683 'Amsteg-Silenen'

620-042 'Monthey' (Cargo) and Weathered version

620-087 'Bischofszell' (Cargo)

620-088 'Linthal' (Xrail)

The 11604, 11613 (Red) and 620-042 are also available as IA traffic with front panto raised.

#### Driver

A CreativeworX driver is present in the front cab.

### Controls

The pack comes with a fully functional Re 6/6 Cab. This is the R1 (early models) cab without ECTS which is used for all versions (also R2,R3). I might update it to include newer versions later. Below you can find an explanation of the controls:









Use US international keyboard setting

KeyMapping SBB CFF FFS Re 620 - CreativeworX								
Function	Funktion	Group 🚽		Q١	NERTY 🖵	AZERTY -	Action 🖵	Aktion
AWS	Zugbeeinflussung	Safety			Q	Q	Acknowledge	Betätigung
Cabinelight	Fuehrerstandlampe	Lights		Shift	L	L	Forward-ON	Vorwärts-EIN
Cabinelight	Fuehrerstandlampe	Lights		Ctrl	L	L	Backward-OFF	Rückwärts-AUS
Combined Throttle D-Brake	Fahrschalter (Rekuperationsbremse)	Drive			А	A	Forward	Vorwärts
Combined Throttle D-Brake	Fahrschalter (Rekuperationsbremse)	Drive			D	D	Backward	Rückwärts
Compressor	Kompressor	Electric		Shift	Apostrophe (')	Ä	ON-OFF	EIN-AUS
Emergency Brake	Notbremse	Brakes			Backspace	Backspace	ON	EIN
Enginebrake	Rangier(Zug)bremse	Brakes			Hook right (])	+-	Increase	Mehr
Enginebrake	Rangier(Zug)bremse	Brakes			Hook left ([)	Ü	Decrease	Weniger
Handbrake	Feststellbremse	Brakes			Slash (/)	-	ON-OFF	EIN-AUS
Highbeam	Fernlicht	Lights			F	F	ON-OFF	EIN-AUS
Horn	Pfeife	Safety			В	В	ON	EIN
Instrumentlight	Instrumentenlicht	Lights	Ctrl		1	1	Forward-ON	Vorwärts-EIN
Instrumentlight	Instrumentenlicht	Lights		Shift	1	1	Backward-OFF	Rückwärts-AUS
Main Switch	Hauptschalter	Electric			Z	Z	ON-OFF	EIN-AUS
Panto	Pantograph	Electric			 Р	 Р	Up-Down	Oben-Unten
Panto Choice	Pantograph Wahl	Electric		Shift	P	P	Front-Rear	Vorne-Hinten
Panto Arcing Override	Pantograph Blitz	Electric	Ctrl	Shift	A	A	OFF-ON	AUS-EIN
Rearlight 1	Stirnlicht 1	Lights	Ctrl	0	1	1	Turn CW	Linksherum
Rearlight 1	Stirnlicht 1	Lights	Ctrl	Shift	1	1	Turn CCW	Rechtsherum
Rearlight 2	Stirnlicht 2	Lights	Ctrl	0	2	2	Turn CW	Linksherum
Rearlight 2	Stirnlicht 2	Lights	Ctrl	Shift	2	2	Turn CCW	Rechtsherum
Rearlight 3	Stirnlicht 3	Lights	Ctrl		3	3	Turn CW	Linksherum
Rearlight 3	Stirnlicht 3	Lights	Ctrl	Shift	3	3	Turn CCW	Rechtsherum
Rearview mirrors	Spiegel	Safety	Ctrl		s	s	Deploy/Fold	Aus/Einklappen
Reverser	Wendeschalter	Drive			W	w	Forward	Vorwärts
Reverser	Wendeschalter	Drive			s	S	Backward	Rückwärts
Sander	Zand	Drive			x	x	ON	EIN
Schedulelight	Fahrplanlicht	Lights	Ctrl		F10	F10	ON-OFF	EIN-AUS
Servicelights	Dienstbeleuchtung	Lights	Ctrl		D	D	Forward-ON	Vorwärts-EIN
Servicelights	Dienstbeleuchtung	Lights		Shift	 D	D	Backward-OFF	Rückwärts-AUS
Train Brake	Zugbremse	Brakes		0	1	1	Increase	Mehr
Train Brake	Zugbremse	Brakes			1	1	Decrease	Weniger
Vigilance safetly acknowlegement	Wachsamkeitskontrolle Betätigung	Safety			Space	Space	Activate	Betätigung
Vigilance safety pedal	Wachsamkeitspedal	Safety	Ctrl		Space	Space	ON-OFF	EIN-AUS
Vigilance system	Wachsamkeitskontrolle	Safety		Shift	7	7	ON-OFF	EIN-AUS
Wiper Left	Wischer Links	Safety		5	, C	c		EIN-AUS
Wiper Left	Wischer Links	Safety	Ctrl		c c	c	FAST-SLOW-OFF	
Wiper Right	Wischer Rechts	Safety	Cur		v	v	OFF-SLOW-FAST	
Wiper Right	Wischer Rechts	Safety	Ctrl		V	V	FAST-SLOW-FAST	EIN-AUS EIN-AUS
			Ctrl		M	M	ON-OFF	EIN-AUS
Zug-Manoever	Zug-Manoever	Safety	LCLL		IVÍ	IVI	UN-UFF	EIIN-AUS



Keyboard controls:

Nr.	English	German
1	Left Wiper	Wischerlinks
2	Right Wiper	Wischer rechts
3	Trainbrake	Zugbremse
4	Enginebrake	Locobremse
5	Sander	Sand
6	Warninglight incorrect speeddisplay	Warnungslampe kein ZUB angabe
7	Speedometer	Geschwindigkeitsanzage
8	Max speed (Track)	Maximale Geschwindigkeit (von Spur)
9	ZUB (AWS) warninglight	ZUB lampe
10	Servicelights	Dienstbeleuchtung
11	Lights	Zugbeleuchtung
12	Main switch	Hauptschalter
13	Panto up/down	Pantograf ab/zu
14	Highbeam	Fernlicht
15	Warninglight wheelslip	Schleuderlampe
16	Light 'Stufenschalter'	Stufenschalterlampe
17	ZUB Manouver switch (overrule AWS, max speed 40km/h)	Manoever Schalter
18	Instrumentlights	Instumentenlicht
19	Reverser	Wendeschalter
20	Horn	Zugpfiff
21	Combined Regulator/Dynamic brake	Fahrhebel (Rekuperations Bremse)
22	AWS acknowledgement (ZUB)	ZUB sicherungs freigabe
23	Taillight switch 1 (White-Off-Red-Off)	Stirnlicht 1 (Weiss-Aus-Rot-Aus)
24	Taillight switch 2 (White-Off-Red-Off)	Stirnlicht 2 (Weiss-Aus-Rot-Aus)
25	Taillight switch 3 (White-Off-Red-Off)	Stirnlicht 3 (Weiss-Aus-Rot-Aus)
26	Cablight	Fuehrerstandlampe
27	Schedulelight	Fahrplanlampe
28	Shades	Rollos
29	Handbrake	Handbremse
30	Vigilancepedal	Wachsamkeitskontrollepedal



### Wachsamkeitskontrolle

The SBB has a 'sifa' type vigilance system called 'wachsamkeitskontrolle'. This system is distance based (not time based as German sifa is). Switch the system on by pressing Shift-7.

After 50 Meters : Visual and audible warning

After 100 Meters : Emergencybrake

When pressing the pedal (simulated by Ctrl-Spacebar) the distances change:

After 1600 Meters : Visual and audible warning

After 1800 Meters : Emergencybrake

The system is reset by pressing the spacebar (Acknowledge) or by moving the regulator or trainbrakehandle.

### Manöver

Pressing the 'Manöver' switch will make it possible to pass red signals without SPAD or Emergencybrake. You have to stay under 40 Km/h (warning). This is normally used when shunting.

# **Panto Arcing**

When the season is set to 'Winter' the Panto's will have an arcing effect where it touches the catenary. You can switch this off by pressing Ctrl-Shift-A.

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