Southwest China High Speed Rail Network V1.0

USER MANUAL

Liu Fei

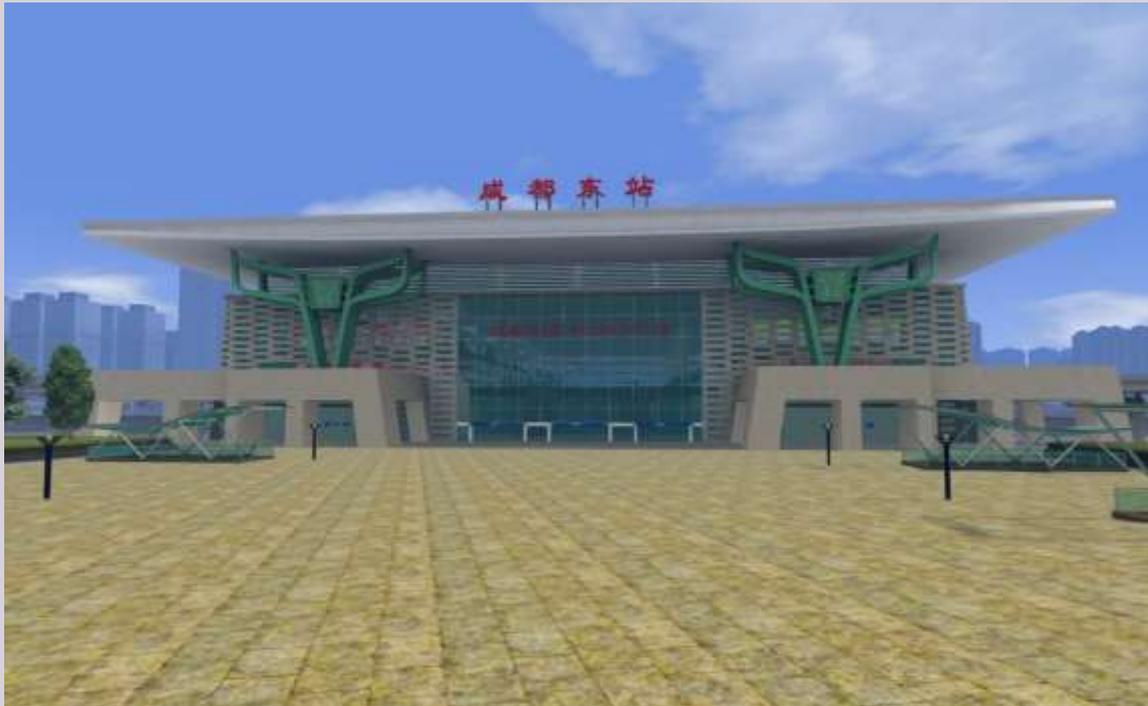SIMTECH VISION FOR TRAIN SIM GAMES

CONTENTS

SOUTHWEST CHINA HIGH SPEED RAIL NETWORK

INTRODUCTION

Southwest China high speed rail network is composed of several passenger dedicated high speed rail lines located in southwest China. It is based on real routes with enhancement.

This route connects the two most important cities in southwest China. One is Chengdu(abbr. Cheng in railways), the capital city of Sichuan province,the other one is Chongqing(abbr. Yu in railways), one of the four municipalities in China.This route makes the railway travel time between Chengdu and Chongqing from 10 hours on an old ChengYu railway down to 1 hour.

Also this route is a high speed rail network for TS2015 which also connects Suining, Nanchong ,Guang'an and other major cities. The total length of this rail

network is more than 570km long, including Chengdu – Suining 146km,Suining – Chongqing 156km, Suining – Nanchong 63km,Nanchong – Chongqing 170km,Wusheng – Guang'an 35km.

Equipped with CTCS2/3 (China Train Control System) signalling system,   both 350km/h and 250km/h trains can run on this route.

While flying on the ground, you can also enjoy the beautiful scenery of Sichuan Basin Area.

ROUTE MAP

ROUTE SPECIFICATIONS

Route class: China Railway class I

Route length:570km

Mainline tracks: 2

Speed limit: 350km/h for 350km/h train;250km/h for 250km/h train.

Parallel distance: 5m

Minimum curve radius:5000m

Maximum gradient: 2.5%

Train type: Electrical, CRH(China railway high speed) EMU

Bridges and tunnels length: >60% of total length of the line.

Platform length: 450m (16 car consist)

ROUTE FEATURES

Currently fastest route for Train Simulator

Built using Chinese high speed rail standards

Hundreds of Chinese-featured objects for the route

CTCT3 signalling system for both 250km/h and 350km/h trains

Beautiful detailed scenery in Sichuan Basin area

Standard, Quick Drive and Freeroam Scenarios included

CRH1A EMU included

STATIONS

Chengdu East (Chengdudong)

Shibantan

Huaikou

Longsheng

Jijin

Zitong

Cangshanzhen

Daying East (Dayingdong)

Suining

Sanxing

Tongnan

Xiataihe

Hechuan

Shizishan

Chongqing North (Chongqingbei)

Pengxi

Nanchong

Yuzhu

Wusheng

Baimugou

Gaofengzhai

Guang'an South(Guang'annan)

CTCS2/3 SIGNALLING SYSTEM INTRODUCTION

Cab signal is very important to guide the driver to drive the train safely.

CTCS level 2 or level 3(CTCS2/3) signalling system is used on Chinese high speed railways. It uses speed limit to control the train. The driver just controls the speed of the train under the track speed limit and does not need to care about the color light signals. Another important feature of CTCS2/3 system is using the continuous braking curve, which makes the braking of the train stable and comfortable.

If next speed limit is higher than current speed limit, the speed limit ring will jump to next speed limit immediately when your train enters next speed limit zone. There is no restriction for you to accelerate.

But if next speed limit is lower than current speed limit,the speed limit ring will guide you to slow down before you enter next speed limit zone. First you will hear a sound alert "Beeeeeeeeee", which means it is time to brake. Then the speed limit ring will jump to your current speed and begin to move continuously until it reaches next speed limit. During this process, you need to control the brake of the train to make the speedometer be covered by the speed limit ring.

For more information, please visit https://youtu.be/iruRigzHdoo

COLOR SIGNAL SPECIFICATION

Green	More than 5 or 5 signal blocks are clear. Train can run at track speed limit.
Double flash yellow	Track speed limit >230km/h, 4 signal blocks are clear. Track speed limit = 230km/h,≥5 signal blocks are clear
Flash yellow	Track speed limit >160km/h, 3 signal blocks are clear Track speed limit =160km/h, ≥4 signal blocks are clear

Double yellow	Track speed limit >90km/h, 2 signal blocks are clear
	Track speed limit =90km/h, ≥3 signal blocks are clear
Yellow	Track speed limit >45km/h, 1 signal blocks are clear
	Track speed limit =45km/h, ≥2 signal blocks are clear
Red	Stop before signal

CRH1A EMU INTRODUCTION

CRH1A is based on Bombardier's Regina family. The train was designed by Sifang and Bombardier, Sweden and originally named C2008.

Each CRH1A set consists of 8 cars, the first batch (CRH1-001A~CRH1-040A)including 2 first class coaches (ZY), 5 second class coaches (ZE) and 1 second class coach/dining car (ZEC). The second batch (CRH1-081A~CRH1-120A) including 2 first class coaches (ZY), 1 first class/second class coaches (ZYE), 4 second class coaches (ZE) and 1 second class coach/dining car (ZEC). The potential maximum speed of CRH1A is 250 km/h (155 mph), but in fact the maximum speed of the initial 40 sets in operation is always restricted by the software of computer control system, so the maximum speed in service is 220 km/h (137 mph).

The first units（CRH1-001A）were delivered on August 30, 2006, the CRH1A sets started service from February 1, 2007 at the Guangzhou to Shenzhen Railway.

In July 2010, the Chinese MOR ordered additional 40 sets of CRH1A. The designed top operating speed increased to 250 km/h. On September 2010, during test run at Qinshen PDL, top speed of CRH1-081A reaches 278 km/h (173 mph).

In September 2012, the MOR issued a revision in the Zefiro contract, which calls for the order of an additional 106 eight car Zefiro 250 (46 sets) and Zefiro 250NG (60 sets) train sets in lieu of the cancellation of the 16 car Zefiro 380 sets. The NG variant is a new model, which will use new materials in order to achieve weight reductions and more efficient operation.

FEATURES

High detailed models, accurate reproduction of the real train.

Custom sounds

CTCS -3 Cab signalling system

Cab light

Cruise mode and Advanced Cruise mode

Passenger view on each coach

Real time speed display in passenger view

Flashing tail light same as the real train

SCENARIOS

There are 12 standard scenarios for CRH1A and 3 career scenarios for CRH1E.

Standard scenarios

1. Introduction to CRH1A

   This scenario is to teach how to drive CRH1A.

2. Fast service to Jijin

   Drive CRH1A from Suining to Jijin with only one stop at Canshanzhen.

3. Bad weather run

   Drive CRH1A on a bad weather day. Usually the train will not delay although the weather is terrible.

4. Short passenger run

   A short passenger run from Chengdu to Longsheng.

5. Night express

A fast service from Chengdu to Jijin returning back to Chengdu without any other stops.

6. Commuter run

    Drive CRH1A from Suining to Chengdu in an early morning. You need to stop at every station during the run.

7. Evening express to Nanchong

    Drive CRH1A from Chengdu to Nanchong which is 208 km long.

8. Wusheng to Suining express

    Drive CRH1A from Wusheng to Suining on a fine day.

9. Guang'an to Nanchong express

    Drive from Guang'an to Nanchong.

10. Chongqing to Wusheng

    Starting from Chongqing CRH train depot, drive CRH1A to Wusheng.

11. Suining to Chongqing

    Drive CRH1A from Suining to Chongqing on a rainy day.

12. Chongqing to Nanchong

    Drive CRH1A from Chongqing to Nanchong in bad weather.

Career scenarios

1. Night express

    This train has travelled about 1700km from Shanghai. Now it's going to arrive at Nanchong station. Drive the sleeper EMU-CRH1E from Nanchong to Chengdu in an early morning.

2. Short commuter run

    Drive CRH1E as a commuter train from Baimugou to Hechuan.

3. Evening express

Drive CRH1E from Tongnan to Guang'an in an evening.

Using CRH1A or CRH1E in self-created scenarios

1. Create a scenario

2. Select the developer CNLiu

3. Tick CRH1APackSW or CRH1EPack

4. In consist view, you will find CRH1A standard consist, CRH1A double consist or CRH1E 16 car standard consist

5. Choose any consist you want and put it on the track.

6. Assign driver on it

7. Add tasks on it

8. Save and play

NOTICE

The driver figure included is copyright of Just Trains/Just Flight London Ltd. And using or copying is not permitted without written permission from Just Trains/Just Flight London.