## Simutrans Reference Manual



A Users Reference Manual to Simutrans

Simutrans Created by HJ Malthaner Simutrans Maintained by Simutrans Team

> Simutrans Version 0.99.09.1 PAK 128 Version 1.4.1

> > Release Date March 2007

Manual Edition 2.06

Manual Created by Cameron Smith

#### The Author's Simutrans History

I'd thought I would share with the rest of the Simutrans Community how I discovered Simutrans and how I came to be writing this particular Reference Manual.

Well I first discovered Simutrans as a free game that was distributed on the June 2004 CD-ROM of PC User. I played it a bit and liked it, though there did seem to be a few problems with it. I went to the Simutrans website and found a more up to date stable version of the game which I got and used immediately.

I liked the game as it was so much I became a member of the forum. I gave my thanks to Hajo for developing Simutrans. I was also happily saying how I had been introduced to Simutrans and my past transport simulator exposure from Railroad Tycoon

Once I had been a member for almost 12 months, the Help system in Simutrans had not developed any further since I had first seen Simutrans. I decided to do a Quick Start Guide for Simutrans that they could have on their computer to either access when they had difficulty or to print out and have as a book.

I started working on the Quick Start Guide and Isaac was testing a new forum and inviting others over to have a look. I went and had a look and signed-up immediately. I finished a copy of The Quick Start Guide and then told Isaac I was ready for a website. He asked me for some suggestions since I was providing the content and so we settled on guide.simutrans.com.

I then released version 1.00 of The Quick Start Guide July 1 2005. I released another three updates to the document by August. I felt The Quick Start Guide was complete and later began work on the Reference Manual.

I released version 1.00 of the **Reference Manual** 26 October 2005 and have tried to keep to monthly updates. I released version 1.04 of the Starter Guide (previously the Quick Start Guide) soon after

That was a year ago and there has been a continual evolution of Simutrans and my reference material as well. Both the Reference Manual and the Starter Guide are both several revisions into 2.0 with additions and corrections continually being made.

Since the beginning of 2006 Simutrans has seen many improvements and enhancements to the game. I like many in the community will probably be amazed at how this game we love develops in the future. At the Beginning of 2007 Simutrans seems only a few releases away from 1.00. Simutrans will develop and improve beyond that. What exciting innovations can we expect?





#### **Acknowledgements**

There are a couple of members of the community that I would like to thank for their help (Even if they think they don't deserve it, or realised they helped me)

Isaac.Eiland-Hall: For the encouragement and support and help he has given

**BauerME:** For saying just the right thing

**RanDrag:** For the faith to enter my Reference Manual Competition **Fagonella:** For Including me in a roll call of Simutrans Contributors

**Joker:** For providing the New Logo

And of Course

Hajo: For creating Simutrans, and deciding to end his involvement with the Simutrans project

Greenfield



Illustration 1 Paragonia by IgorEleizer Using Simutrans 99.03 with 64 pak

This is Greenfield, a medium town with 4227 inhabitants. It was created by an urban planner who desired Greenfield to become an example for other towns of the region. He planned his town around several types of transportation. Buses, trains, ships, tramways and planes were all used to supply the goods and the transport needs of the citizens of his town. And so he did..

IgorEliezer

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#### Simutrans Reference Manual

#### What Is Simutrans

Simutrans is a Simulator/Game where you a placed in control of a Transportation Company. You have complete discretion in developing the transport infrastructure of the company as well as deciding what goods you will transport and where and how those goods will be transported.

#### **Why Is There This Reference Manual For Simutrans**

This Reference Manual is to provide an off-line reference resource to provide a detailed description of all the tools and aspects found within the Simutrans Environment. It is divided into three main segments:

- Starting Simutrans: How to start and operate a game successfully
- **Reference:** A detailed reference of all the tools and features
- Appendices: More useful Simutrans information

#### What About the Starter Guide

The Starter Guide was the original document from which this reference guide as naturally developed. The Starter Guide was written for Simutrans version 86.04 and has been rewritten recently to reflect the recent stable version of the game 88.10.5 and forms the basis for the Getting Started Section of the Reference Manual.

While There has been some previous parallel development of both the Starter Guide and Reference Manual The Starter Guide is intended to reflect the Stable Version of Simutrans [as determined by the Simutrans Community] and enable a user to be able to quickly utilise several of the tools.

# Starting Simutrans



Starting Your Simutran Adventure

## Running the Best Ever Version of Simutrans

When Simutrans loads A populated island will appear behind a splash screen giving the version of Simutrans you are using as well as a credit list of all the people that have contributed in some way to the development and maintenance of the programs source code.

This May be the Best Version at least until it is improved on by the next release



*Illustration 2: Your First Glimpse of Simutrans* 

Hitting a button or clicking the mouse will replace the splash screen with a language dialogue and a world generator dialogue.

#### A New World For A New Game

You use the world generator to choose a map, define the size of the map as well as set certain parameters that affect the features of the world and behaviour and size of population centres and world industries



Illustration 3 Create New World Dialogue

Map Number: Select one of the many maps to play

**Size:** The Number of tiles Wide and High the world will be (These are set separately)

Number Of Cities: The initial number of towns established on your earth

**Median Citizens per Town:** The Average Number of people inhabiting each town. **Intercity Road Length:** The maximum length of public road connecting cities

Traffic Density: How much private traffic is on the streets (Larger Number means More Traffic)

**Factories Outside Cities**: Number of Factories initially in the world **Markets In Cities**: Are there any industries selling within the towns **Tourist Attractions**: Initial Number of sights for people to see

#### Climate Control

Water Level: The Hight of the Water (Larger Number means more water)

Mountain Height: The Height of Mountains (Larger means higher Mountains)

Map Roughness: The amount and frequency of elevation change (Larger means rougher surface)

Snowline Summer & Winter: The Minimum Height Snow appears in either Summer or Winter

#### Desert Climate, Tropical Climate, Mediterran Climate, Temperate, Tundra, Rocky

The Numbers here indicates the maximum height that you can expect to find terrain of the following types

These Options can also be set in the configuration files for Simutrans

**Use Timeline From Year:** Enforces the introduction dates of vehicles, transport systems & buildings **Allow Player Change:** Allow the player to switch between his company, to the public entity or A.I. Players **Beginner Mode:** Income is 150% of actual value and factories always accept demanded goods.

Random Map Can't make up your mind let Simutrans make this decision

Load Height Map: Allow you to load a grey scale image to create a custom map

**Load Game:** Lets you load one of your previously saved games **Start Game:** Starts the Game when you have the settings you want

Once you start a game it will take a few moments to generate the map using your adjusted settings and the game will begin centred around one of the towns on the map.

Your new world will be ready shortly .....

## Saving And Loading Simutrans

#### Save The World

At any time you can (and should occasionally) save the game, either to revoke an expansion that bankrupts the company or simply if you wish to continue the game later.

The Save function if located in the Game Options Menu





Illustration 4 The Game Options

Illustration 5 Saving The Game

Click on the Save Button You can provide a new file name in the space provided Then Click on OK to save the game

Selecting on of the existing files will also save the game but the EXISTING GAME WILL BE OVERWRITTEN

#### The Simutrans Reloaded

If you save the game to continue later you are going to want to open it . Loading allows you to do just that





Illustration 6: Load a game when Simutrans begins

*Illustration 7: Continue down one of your many games* 

Click on the Load Button Select the game from the list provided Once You select the file the game will load

The Save and Load Dialog now also includes information about what pak was used with the save game.

## The Best Place In The World (Using the Map)

When the game begins the screen centres on one of the cities of the world. You can scroll around to have a look at the nearby surroundings however on large maps it will be easier you use the map to move about the world quickly.



Illustration 8: The Map Showing Towns

Illustration 9: The Map Showing Factories

The map also allows you to view a wealth of details in a summarised form as well as 8x Zoom to help get that global perspective or that street level look

Details such as

- Town locations
- · Factory locations
- Traffic density
- Transport infrastructure composition (Rail/Road)

## Finding Business Opportunities, The Power to Enquire

Aside from the map the other useful information tool is the Query Tool. This allow you to find out the value of private buildings as well as the business contacts of , the progress of vehicles, the speed limit of transport infrastructure, history of towns and even the age of trees. The query tool also lets you interact with your own important buildings like depots.



*Illustration 10: Enquire about a consumer or supplier* 



*Illustration 11: The Oil Rig is also a station/stop* 

## Freight, Passengers, Mail

All of these information gathering tools are here for a single reason, to enable you to begin planning your transport company's most profitable/largest/longest goods transportation network. There are three types of basic goods. Freight, Passengers and Mail.

While Freight can be further divided into each specific type of good both Passengers and Mail require special buildings and vehicles to transport them. The Vehicles for Passengers or Mail can be located under the passenger tab of the depot.



Illustration 12: The Freight Buildings have a symbol in the corner indicating the freight type

## **Building Infrastructure**

#### **Building Ports**

The waterways are a natural highway and about the only way to exploit those deep ocean off-shore oil deposits beneath those isolated oil rigs. As already indicated those oil rigs also serve as a station so it is very inexpensive to establish an ocean transit crossing.



Renborough branch dock

Renborough branch dock

Oil rig

Oil rig

Winter, 9. January 1952 18-45h 199,500,00¢ (263,69,-2) (T=1,00) timeline

Illustration 13: Building a Dock

Illustration 14: Location of the Quay to liquid Gold

Open the Docks Tool Bar Choose Quay or a freight capacity dock Build the Dock on a straight portion of shoreline.



*Illustration 15: The Depot For Ocean Vessels* 



*Illustration 16: Infrastructure to support shipping* 

Select the Ship Depot Choose a location to build the Ship Depot

## Congratulations You Have Infrastructure For Shipping Lines

## **Building A Rail Network**

If you had a ship to transport the oil from the Oil rig to your new port that would only be half the journey. A train would be the most efficient method to transport the oil from the port to the power station.

A train needs to stop at a rail platform and a rail platform is capable of supporting two cars



Illustration 17: Building Rail

Illustration 18: Platforms show what goods they collect

Choose a suitable rail type Build a rail line from the Oil burning Power Station to the Port Select a train station capable of freight Build a rail station of several tiles length Build a Depot to provide for vehicles to use the new rail system



Illustration 19: Build a Depot

Illustration 20: All the Basic Elements of a Rail System

## Congratulations You Have Built A Rail Network

## **Building a Road Network**

Roads and streets are the most fundamental elements of any transport system, Neighbours live just across them.



Illustration 21: Building a Road

*Illustration 22: A stop for passengers* 

Choose a suitable road surface Build the road out to some local employers Build some bus stops to transport people Add A Depot and the investment in infrastructure is complete



*Illustration 23: The All important Vehicle Depot* 

## Congratulations You Have Built A Road Network

## **Building Airports**

The Major City of Malliville Would be a wonderful place to visit on the weekend. It would need to be a flying visit though. Air planes are a rapid way to move people vast distances very quickly. To utilise air planes you require airports.



Illustration 24: A Runway is used by airplanes

Illustration 25: A taxiway links the runway and airport

Open The Airport Tool bar

First build a runway to allow planes to enter and leave the airport

Then build a taxiway to connect the runway to the airport

You'll also need a depot

You will need a plane stop which is where the aircraft are loaded and unloaded.

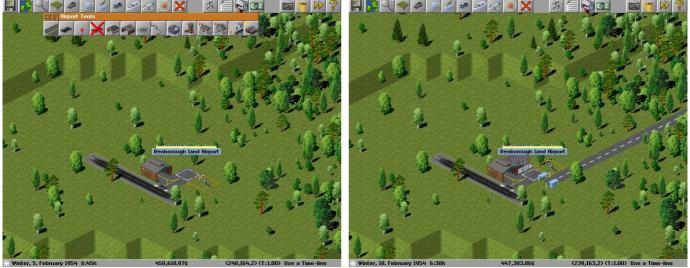


Illustration 26: The Basic Airport

Illustration 27: The Completed and Functional Airport

You need to repeat the Airport building process to have another airport for the aircraft to fly between

If you place your taxiway at an end of the runway you break the runway, causing it to be unusable.

## Congratulations You Have Built Your Airport

## **Building Trams**

People might sometimes get tired of travelling on a bus and my want something different. People like the novelty of riding on trams.



Illustration 28: Yes, Trams also have a Tool bar

*Illustration 29: The Tracks go down first* 

Trams are similar to trains in that they run on tracks Build a stations for the people Build a Depot And A Final Important Step for Trams is to Electrify the Network

Select the Overhead Wires [Low Speed or High Speed] Select the Start and End points as you would for laying normal track



Illustration 30: The Tram Stops are needed

*Illustration 31: Electricity is Important* 

## Congratulations You Have A Ready Tram System

## Civil Engineering 201 (Advanced Infrastructure Forms)

So you can manage to build some simple road or rail lines snaking them around the natural obstacles of the terrain. Sometimes however you may need to get to the other of that natural obstacle, be it valley, hill or mountain. Once you become a master of the Advanced forms of Infrastructure you can decide if you want to go around, over or through whatever Mother Nature has put in your path.

#### **Bridging The Divide**

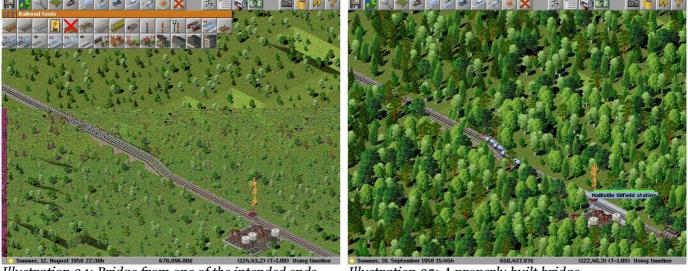
Bridges allow you to build your infrastructure above the natural fall of the land, or raise your infrastructure up to the next rise. Bridges can support traffic travelling up to a particular speed and most can only be built up to a certain length [span].



*Illustration 32: The gap is intended to be bridged* 

*Illustration 33: Choose the type of bridge* 

Lay your infrastructure leaving a gap for your bridge (Note the infrastructure at the slope is important) Choose the bridge type you want (most bridges have a span which is the number of tiles they can cover) Build the Bridge from one of the intended ends.



*Illustration 34: Bridge from one of the intended ends* 

Illustration 35: A properly built bridge

## Congratulations You Have Built An Impressive Bridge

#### **Tunnel The Shortest Distance Between Two Points**

Tunnels Allow you to travel straight through terrain. Damage to the Surrounding Environment is Minimal



*Illustration 36: Infrastructure prior to the tunnel* 

*Illustration 37: Choose the Tunnel Tool from the menu* 

First lay your infrastructure right up to the slope where you want to start your tunnel. Select the Build Tunnel tool under the appropriate Infrastructure [Road/Rail/Tram/...] Menu Start the Tunnel at the infrastructure up the slope. Continue Building the Infrastructure from where the tunnel exits to your destination.



Illustration 38: It's Straight Forward with A Tunnel

Illustration 39: Road with a tunnel in between

## Congratulations You Can Tunnel Through Any Obstacle

## Civil Engineering 202

#### **Having Finer Control [Ctrl] Over Construction**

So now you have mastered the basics of transportation construction as well as some of the not so basic. You can however exert more of your will over your construction teams with an adept use of Control [Ctrl]

Using Control [Ctrl] in conjunction with the construction tools you can:

- 1. Construct the shortest distance between two locations (a Straight Line)
- 2. Build lower quality infrastructure over higher quality infrastructure (saving on maintenance)
- 3. Build Openings to Tunnels (Useful for Access Underground)

#### **Introducing Underground Stations**

After a hard Day at the office you just want to get home but the rush hour just may be to extreme. What you need is to be driven to your door. With the advent of underground transportation you get that, If your basement is adjoining an underground station. (And as CEO of your own transportation company that just may be the case)

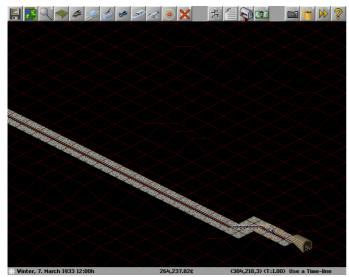


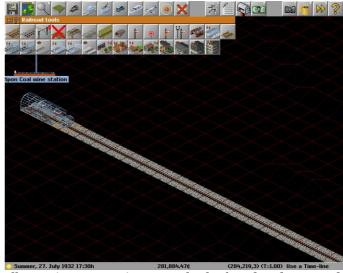


Illustration 40:Underground is similar to tunnels

Illustration 41: Build a single tunnel entrance with Ctrl

Start Building As You would a regular tunnel Hold down Ctrl and build the Tunnel at the infrastructure up the slope. Now switch to the Underground View (Hold Shift + u [U]) Select the Tunnel Tool and Build your underground Transportation System Then Add whatever underground Stations you want.





*Illustration 42: The View Underground* 

Illustration 43: Stations can also be found underground

## Congratulations You Can Travel to Your Underground Bunker

## The Cheque's In The Mail

#### Post Office or Post Box

The Postal Service is slightly different to the other transportation system. It is an extension of the existing system rather than a distinct transport system of it's own. Mail can be collected either at a post office building or a roadside post box.



Illustration 44: The Post Office is a special construction Illustration 45: Post Stop place roadside post boxes

#### **Post Office**

To Build a Post office open the Special Construction Tools Select the Post Office [Envelope in Background] Place the Post office in a undeveloped square either beside the road or near an existing stop

To Build a Post office open the Road Tools Select the Post Stop [Envelope in Background] Place the Stop on a road square.



Illustration 46: Town with A Post Office & Post Box

Illustration 47: Post Offices are needed to transfer mail

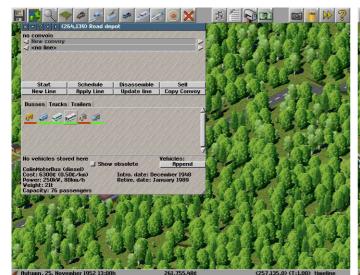
Post Offices or Building are needed to transfer mail from one transport network to another. Now all you need is a van to collect and deliver the mail.

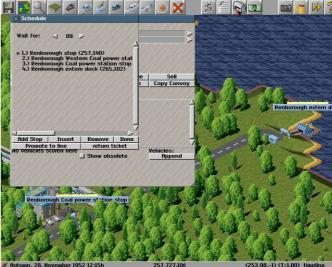
## Congratulations You Almost Have Your Own Postal Service

## Planes, Trains, Buses, Trams, Trucks and Ships

#### **Vehicle Acquisition and Operation**

Each Type of transport infrastructure utilises specific vehicles that can only be purchased at the depot. Trains can only be purchased at a Rail Depot While Buses and Trucks can only be purchased at a Road Depot



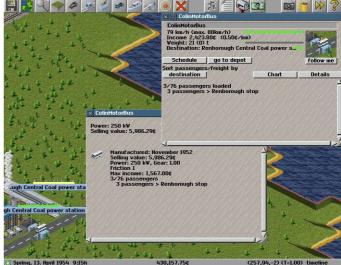


*Illustration 48: What you find inside a Depot* 

Illustration 49: A schedule Lists all places Vehicles stop

Open The Depot and Choose a Vehicle (Vehicles are purchased outright, .... If you Break It remember you bought it) Open the Vehicles Schedule and scroll around and choose the stops for the Vehicle If you want to improve the Vehicles Fiscal Returns Select the Stops where you want it to wait for a minimum load Close the Schedule and Click on Start so the Vehicles can start earning you cash





*Illustration 50: The Vehicle is ready to go* 

Illustration 51: Current information on your vehicle

Out in the world you can find current info about the vehicle just by clicking on it

## Congratulations You Can Acquire and Operate Vehicles with Great Success

#### Service Lines Mean Efficiency

So you can purchase vehicles and get them operating quickly, That does not mean that they are operating efficiently. If you utilise Service Lines you may be able to improve the operation of your vehicles and transportation network. Service lines are easier to maintain than individual schedules and just as easy to implement.



Illustration 52: Regular schedules become service lines Illustration 53: Service Lines have their own window

First find a vehicle with a schedule you wish to have as a service line
Open the Service Line Management Window and locate the service line
You can adjust the service line directly from the Service Line Management Window
Make sure the required vehicles are operating along the new service line rather than their own schedule



Illustration 54: You can alter the service line from here

Illustration 55: The vehicle is on the new service line

A Service Line is better than a regular schedule for a a couple of reasons:

- 1. A service line can have several vehicles using it
- 2. A service line is quick to extend or alter .
- 3. You don't need to find and alter the vehicle schedule if you adjust its service line.
- 4. Service Lines are Colour-Coded to help indicate where improvements might need to be made.

#### The colour scheme

White: Service Line has no vehicles assigned Yellow: Service Line is not Operating

**Black:** Service Line is profitable and has spare capacity **Blue:** Service Line is profitable but has little spare capacity

**Red:** Service Line is operating at a loss

## Congratulations You Have Now Utilised Your First Service Line

## **Giving The Signal For More Profits**

While the road network can automatically handle multiple vehicles your rail networks are are a bit more restrictive in the number of vehicles automatically allow to run. Signals can improve the efficiently of your rail networks by allowing multiple vehicles to use your network.

Signals can only be positioned on straight, level sections of track (No signals on slopes or on intersections)

#### Allowing Multiple Vehicles Along A Single Track



Illustration 56 Add the spur from the main line

Illustration 57 Place the signals near the intersection

Select the signal from the tool bar Position the signals near the intersection

#### Multiple Stations; Multiple Platforms; Letting the Driver Decide

A second or third platform can improve efficiency, however, establishing individual schedules can be a headache. There are signals that can allow multiple vehicles to stop at the same station are scheduled to stop at the same location.



Illustration 58: Use the Special Choose Signal

Illustration 59: We need two vehicles at the station now

Select the choose signal from the tool bar

Position these signals before the station branches to many platforms

Signals will allow single vehicles onto the track that is between itself and another signal.

This will allow if the signals are used properly for multiple vehicles to use portions of your rail network efficiently. The use of too many signals can create problems along your rail network

Congratulations You Have Included Signals to Your Network Allowing You Greater Transport Capacity and Efficiency

## **Work With Other Exciting Industries**

Are you tired to hauling all that coal or oil off just to see it burned up to produce power, maybe you would like to haul something a bit more exotic. Or Maybe the area needs a really big tourist attraction. That can all be arranged if you know who to talk to

#### **Changing Hats**

Fortunately you are the right person, well at least you are if your wearing the government supervisors hat



Illustration 60 Special Construction Tools

Illustration 61 Change Player

Select the Special Construction Tools Click Change Player [P+ button]

You should now get a small set of extra tools and a message indicating your the public services public services should also be present at the info bar at the bottom of the screen

#### **Invite Industry or Tourists**

You can now go about inviting more industry to the area. If an entire industry chain is needed to support the new industry that will also appear within the local area. The Final location and type of industry to appear will be randomly determined.



Illustration 62 Choosing the General Location

Illustration 63 The New Industry

Click to build a new market and then select it's general location The New Industry will appear (in this case a book store)

Now That you have got that now industry it's time to return to the company boardroom Keep Changing Player until your head of your own company again (No player info at the bottom of the screen)

## Congratulations You Have Invited More Industry to the Area

## You Can Call It George (If You Want)

Once you have extended your company you could pretty much leave it to make money for you. The whole system can get rather large and difficult to follow

To make things easier to follow you can change the name of many objects in Simutrans including the Stations/Stops and the vehicles themselves.





Illustration 64 Rename Any Station, Platform or Stop

Illustration 65 Rename a vehicle without it stopping

To change the name just query the station your interested Click in the box with the stations name inside it Change the Name to something better.

Change the name of a vehicle in the same way.

## Cleaning up After Yourself

If you make a mistake while building your network and you do not like its layout you can use z to remove the last section that was added.

If you notice a mistake after you have finished or you just want to tidy things up you can use the removal tool.



Illustration 66 Before removing the redundant platform Illustration 67 Remove platforms helps maintenance

## **Improving Your Environment**

You could also pour company money into land development either to make it easier to access a station or for purely aesthetic reasons. You have the option of either raising land or lowering it depending on what your trying to achieve for the environment

#### **Carving Canyons or Moulding Mountains**

The lay of the land can be altered to suit your needs. You can bridge a valley or bring down a mountain if you so desire. We are going to build a station below the coal mine. We need to clear the land around our desired location



Spring, 11. May 1952 15:30h

176,319.83€

(233,72,0) (T=1.00) timeline

Illustration 68 The Land Tool

Illustration 69 Lower Tool the Land

Choose the Raise/Lower Land Menu Select the Lower Land Tool

Move the cursor (arrow pointing down) to a location you wish to lower and left-click the mouse Keep lowering the ground until there's a wide valley beside the coal mine



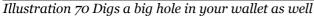




Illustration 71 Now We A station at the coal face

## Congratulations you have Invested in the Environment And Created a Distinctive Feature

## Simutrans A Sign of the Times

Simutrans also lets you label or signpost significant geographic or urban features ,or make notes to your self for future development . So now your customers and staff can look at the massive billboards that are on their route to and from work, vacation or wherever. You can now also remove these messages and notes, perfect if you make a spelling mistake.





Illustration 72: Signs are Special Billboards

Illustration 73: They can be notes, or Places of Interest

To Create A Sign Open the Special Construction Tools Choose Make A Sign (Some earlier versions refer to labels) Enter what you want on the sign Then Click OK To Remove a sign us the Removal Tool



Illustration 74: Any graffiti is simple to remove

## Congratulations You Can Now Sign Off on Signs

## Company Management A List of Things to Do

#### A List of Company Resources

As the director of the company you are going to have to make important decisions like what goods to transport, what vehicles to buy and what infrastructure to upgrade. Many of these decisions are going to require a detailed knowledge of the surrounding area and the current resources of the company. Thankfully you have a terrific administrative staff that provides you with a constantly up to the minute list of the resources of the company and the surrounding area.

#### Filtering Out Distractions

Several of the company specific lists can be further refined to help you make particular decisions. Lets See how many airports the company has.



Sorted by:
Name

Halliville cent
A passengers
Halliville inne
9 passengers
Halliville man
10 goods wai

Halliville stopes
Halliville to spess
Halliville man
10 goods wai

Halliville stopes
Hal

*Illustration 75: A Listing of All the Company Stations* 

Illustration 76: Filtering to see just what you need to

Open the Lists Menu Choose to List the Stations

Now we will apply a filter to have a look at the airports.

Click on Settings Select only airports under filter types Also select Filter Types before closing the filter window Click to enable the filter



Illustration 77: All the Airports are listed

If the filter has been configured correctly and enabled it should list just the airports of the company

## Congratulations You have Successfully Applied A Filter to A List

## **Money Makes This World Go Round Too**



Illustration 78 An Improved Finance Window

The Important section of this interface is the two columns of figures.

They are the monies spent and earned both this year and in the previous one to give a breakdown of the companys' bottom line. Anything in red is a loss, whatever is black is a gain.

There are a lot of expenses some of which are incurred when running the company

#### **Controlled Expenses**

Construction Site: is the cost of establishing the roads, rails, stations and depots of the company

New Vehicles: is the Cost of purchasing new trains, trucks, buses and carriages

Both of these can be directly controlled by you if you buy the train you incur the cost if you build the bus stop it will cost you as well

#### <u>Fixed Expenses</u>

*Operation Costs:* is a fixed expense although it will vary depending on the type of vehicle.

Maintenance: is another fixed expense though it seems to soar unchecked as you keep your infrastructure in top condition.

#### Maintenance

The Maintenance (monthly) value is what is added at the end of each month to pay for the upkeep of the infrastructure (You will pay for the 12 months of the year ) So while you can't stop it you can plan for it and influence it's size.

#### **Summary Figures**

Account Balance: How much ready cash you can get your hands on

Assets: Value of your transportation infrastructure and vehicles

Net Wealth: Total Value of your company, All it's cash and all it's assets

These Figures just provide a historical account for the growth of your company

## Where We Can't Help But Be Helpful

#### How Can I Simutran .....

Simutrans is a complex and fun transport simulator. There are many questions newer users and not so new users have. The Simutrans experience does not stop at the application but extends onto the internet where a helpful community of other Simutrans users. This Community of Simutrans users are prepared to help you extract the best experience from Simutrans.

The Simutrans community have a number of resources to help you become proficient at Simutraning. If you have any kind of question that begins...

How Do I... Does Simutrans Allow Me to ... I can't seem to...

There are a number of helpful resources.

The Simutrans Forum (Where someone can help you) [http://forum.simutrans.com]

The Simutrans Wiki (On-line equivalent to the Guides and Manuals) [http://wiki.simutrans.com]

The Starter Guide or the User Manual (This Document Or it's Near Identical Brother) available at [http://guide.simutrans.com]

There is help available right from within simutrans. The in-game help files are a summary description of various tools in the game. These descriptions are accessible by clicking the ? Button beside the Tools Title.



Illustration 79: Where Do You Need Help

Illustration 80:It's really quite helpful

The help also comprises a list of action short cut keys to use routine tools or windows which is explained as keyboard help.

## Congratulations You Can Find Help If You Need It

#### **Common Questions**

#### There are these blue dots surrounding the stations and stops, what are they for and can I get rid of them?

These blue dots indicate the stations area of influence any cargo demanded or produced will go to the station, You can hide these blue dots by pressing "v" on the keyboard.

#### I have a train with two freight cars but only one freight car is loaded or unloaded at the train station, Is this a bug?

No this is not a bug, every rail station is made up of rail platforms, each platform fits two cars, cars will only be loaded unloaded if there is a appropriate platform (passenger/freight) underneath them. The engine is considered one car, and the tender if used is also considered one car. You will need an additional platform at the station to utilise the other freight car.

#### I have built a tram line and I have a tram depot, but the depot has no trams. How do I buy trams?

One extra thing you need to do to get trams to work is electrify the tram tracks, all of them even the one the depot is on.

#### I just want to learn what to do I don't want to play against the computer A.I. How do I switch them off?

You can disable the computer AI by adjusting the players tab, located among the game options. The AI can also be switched off by pressing "k" on the keyboard.

#### I'm Using Stable Version 88.10.5 but I cannot build the mail building at the airport?

This is a problem with 88.10.5 however you can still utilise mail at the airport. You need to use the post office located under the Special Construction Tools and place it within the airports' zone of influence. (press "v" to see the zone of influence)

#### I cannot query a convoy with the query tool when it is on a bridge?

Actually it is possible to query a convoy on a bridge hold down the control key [Ctrl] and click on the convoy. You may need to click twice once for bridge and a second time for the convoy.

#### I have built a bridge or a tunnel, but vehicles won't use it to travel to their destination on the other side?

Although you have built the bridge, or tunnel correctly it may not be connected to the infrastructure on the other side (dispite appearing to be). B Build yout infrastructure out from where the tunnel (or bridge) begins (and/or ends) and build over the infrastructure that exists on the other side.

#### I am playing Simutrans with Pak 128, I've built a station at the coal mine but the train will not deliver coal.

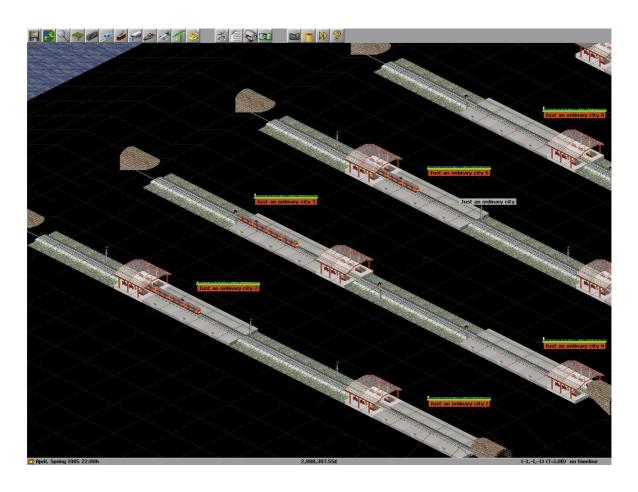
This situation is probably encountered by almost everyone and is specific to Pak 128. This is because the simple platform that is found in Pak128 is not bound to any particular broad cargo category [Passengers/Mail/Freight]. You may have used the simple platform at either the supplier (The Coal Mine) or consumer end (The Coal Burning Power Plant).

One solution is to build a warehouse at the station that uses the simple platform to extend the types of cargo it accepts to include freight [freight is represented by the small box in the top right hand corner of the warehouse]. The warehouse is located at the first level of the special construction tools.

#### I have made a signpost and now want to remove it, but I cannot?

While Simutrans ability to create signposts (also known as labels) has been available for a long time it is only recently that labels have been able to be reliably removed [99.07]. To remove a signpost from 99.07 onwards use the removal tool and bulldoze the small signpost.

# Simutrans Reference



Just Beneath the Surface of Simutrans

## Simutrans Keyboard Bindings

Simutrans comes equipped with certain keyboard short cuts to access common or useful functions. These short cuts are accessed by just pressing the appropriate key on the keyboard. Here are some, There are others.

Кеу	Function	Description			
	Tools and Information Windows				
a	Query Tool	(Magnifying Lens) Query any Object in Simutrans			
r	Removal Tool	(Red Cross) Removes any object in Simutrans			
f	Finance Window	Brings up the Company Finance Window			
W	Lines [Services] Management Window	Brings up the Line [Services] Management Window			
S	Asphalt Road Tool	(Road) Places Asphalt Road [Most Expensive]			
t	Rail with Wooden Sleepers	(Rail) Places Rail with Wooden Sleepers [Cheapest]			
U	Underground View	Allows you to see and build underground			
G	Goods List	Lists the price of transportable goods			
V	Vehicle List	Lists the vehicles of the company			
?	Assigned Keys	Lists some of the Key bindings for Simutrans			
	Game Play				
L	Load a game	Allows you to quickly restore a previously saved game			
S	Save a game	Allows you to quickly save a game to play later			
p	Pause game	Stops the game clock (unable to do anything while paused)			
k	Enable/Disable AI Players	Turns the Computer Players On or Off			
P	Change players	Switch between your company and other companies			
•	Increase Game Speed	Increase the Speed of the game a little bit			
,	Decrease Game Speed	Decrease The Speed of the game a little bit			
W	Super Fast Speed	Run The Game at the Fastest Speed. (W again to Stop)			
	Graphic				
!	Station Names and Statistics	Cycles display of Station Names and Statistics			
"	Hide Buildings Trees	Easily lay infrastructure through forests or developed towns			
#	Show/Hide Grid	Turns the Simutrans World Grid on/off			
v	Station feeder zone	Shows coloured squares around stations, [area of influence]			
c	Capture Screen	Creates an Image of the Simutrans World at That Moment			

## Simutrans Tools

#### **Road Tools**

The Road Tools allow you to build transport infrastructure (Roads/Streets/Highways) of varying material that will allow trucks, buses, vans and auto mobiles to traverse them at greater speeds. The Tool Bar could be divided into four logical sections (Road Base, Bridges & Tunnels, Road Signs, Roadside Buildings/Stops)



Illustration 81 Road Tools in the 64 Pak Edition



Illustration 82 Road Tools in the 128 Pak Edition

Road Tools Pak 64						
Road Base Tools						
Tool	Cost	Maintenance	Speed			
Dirt Road	20¢	4¢	25km/h			
Gravel Road	40¢	8¢	40km/h			
MIP Cobblestone	65¢	20¢	60km/h			
Cobblestone	70¢	27¢	70km/h			
Asphalt Road	100¢	32¢	130km/h			
	Bridges and T	unnels				
Tool						
Wooden Road Bridge	1¢	40¢	20kn/h (12km)			
Concrete Road Bridge	200¢	80¢	80km/h (7km)			
TB_Classic_Road	200¢	100¢	100km/h (7km)			
Modern Road Bridge	1,500¢	140¢	110km/h ()			
Road Tunnel	750¢	100¢	80km/h ()			
Fast Road Tunnel	1,200¢	160¢	130km/h ()			
	Road Sign T	Cools				
Tool	Cost	Maintenance				
Traffic Lights	2,500¢					
No Entry	500¢					
Minimum Speed (80km/h)	500¢					
Choose Point	2,500¢					
Ros	ad Side Buildi	ngs/ Stops				
Tool	Cost	Maintenance				
Garage	1,300¢	80¢				
Post Stop	400¢	80¢				
Bus Stop	400¢	80¢				
Freight Yard	400¢	80¢				

Road Tools Pak 128								
	Road Base To							
Tool Cost Maintenance Speed								
Dirt Road	10¢	O¢	30km/h					
Gravel Road	80¢	0.4¢	45km/h					
Cobblestone	150¢	4¢	65km/h					
Asphalt Road	270¢	8¢	80km/h					
Concrete Road	300¢	8.8¢	95km/h					
US Asphalt Road	500¢	20¢	130km/h					
Motorway	1,000¢	22¢	200km/h					
*	Bridges and Tu	ınnels	1					
Tool	Cost	Maintenance	Speed(Span)					
Concrete Road Bridge	450¢	12¢	50km/h ()					
Steel Road Bridge	750¢	16¢	80kn/h (6km)					
Tubular Road Bridge	1,500¢	40¢	130km/h (10km)					
Highway Bridge	9,000¢	60¢	200km/h (12km)					
Road Tunnel	1,000¢	30¢	80km/h ()					
	Road Sign To	ools	1					
Tool	Cost	Maintenance						
Highway Entrance	150¢							
Highway End	1,500¢							
Highway Entrance	1,800¢							
Highway End	1,800¢							
Choose Destination	1,500¢							
Choose Destination Digital	3,500¢							
Minimum Speed (80km/h)	500¢							
One-way Sign	500¢							
Road Block	1,000¢							
Traffic Lights	500¢							
R	oad Side Buildin	gs/ Stops						
Tool	Cost	Maintenance						
Garage	8,500¢	80¢						
Simple Bus Stop	800¢	80¢						
Street Mail Box	800¢	80¢						
Bus Stop	1,200¢	80¢						
Large Bus Stop	2,000¢	80¢						
Large Modern Bus Stop	2,000¢	80¢						
Modern Bus Stop	1,200¢	80¢						
Parking	400¢	80¢						
Parking	400¢	80¢						
Parking	400¢	80¢						
Modern Bus Terminus	3,200¢	80¢						
Loading Bay	1,200¢	80¢						

#### **Rail Tools**

The Rail Tools allow you to build transport infrastructure (Rail Lines/Sidings) of various material that allow trains using various means of locomotion (steam/diesel/electric) to travel on at increasing speed. The Tool bar is divided into three logical sections (Tracks/Signalling/Platforms and Structures)



Illustration 83 Rail Tools in the Pak 64 Edition



Illustration 84 Rail Tools in Pak 128 Edition

<u>R</u> :	ail Tool	s Pak 64					
Track Tools							
Tool	Cost	Speed					
Sand Track	35¢	4¢	55km/h				
Wooden Sleepers	8o¢	20¢	120km/h				
Concrete Sleepers	120¢	32¢	200km/h				
Steel Sleepers	400¢	64¢	450km/h				
Low Speed Overhead Power	d Overhead Power 15¢ 2¢ 120km/h						
High Speed Overhead Power	15¢	6¢	450km/h				
]	Bridges and	d Tunnels					
Tool	Cost	Maintenance	Speed(Span)				
Brick Stone Viaduct	1,500¢	40¢	100km/h ()				
Concrete Rail Bridge	240¢	80¢	160km/h (7km)				
Steel Girder Rail Bridge	950¢	100¢	250km/h (10km)				
Elevated Track	2,500¢	100¢	450km/h ()				
Rail Tunnel	1,000¢	200¢	300km/h ()				
	Road Sig	n Tools					
Tool	Cost	Maintenance					
Signals	750¢						
Rail Close	500¢						
Pre-Signals (for two blocks)	1,500¢						
Choose Signals	2,500¢						

Rail Tools Pak 64 (Continued)						
Road Side Buildings/ Stops						
Tool	Cost Maintenance					
Train Depot	1,000¢	80¢				
Covered Platform	2,400¢	80¢				
Sand Station	600¢	80¢				
Station Hall	2,400¢	80¢				
Station Hall with News Stands	2,400¢	80¢				
Freight Station	600¢	80¢				
Big Station Hall Right	4,800¢	80¢				
Big Station Hall Left	4,800¢	80¢				
Freight Station	600¢	80¢				
Forecourt	600¢	80¢				
Station in Victorian Style	2,400¢	80¢				
Station Building (by MHz)	300¢	80¢				
Entrance	1,200¢	80¢				
Railway Control Centre	1,200¢	8o¢				
Warehouse	3,000¢	80¢				
Small Station Building	300¢	80¢				
Big Station Building	3,000¢	80¢				

Rail Tools Pak 128						
Track Tools						
Tool	Cost	Maintenance Speed				
Low Quality Track	30¢	1¢	65km/h			
Wooden Sleeper Track	150¢	8¢	110km/h			
Concrete Sleeper Track	300¢	16¢	160km/h			
High Quality Track	600¢	32¢	280km/h			
High Speed Track	1,200¢	42¢	400km/h			
Third Rail Electrification	150¢	8¢	160km/h			
Standard Cantenary	150¢	12¢	280km/h			
Old Cantenary	15¢	2¢	110km/h			
High SpeedCantenary	600¢	20¢	400km/h			
Br	idges and	Tunnels				
Tool	Cost	Maintenance	Speed(Span)			
Wooden Railroad Bridge	250¢	3¢	30km/h (6km)			
Girder Bridge	500¢	9¢	60kn/h (10km)			
Truss Bridge	400¢	12¢	75km/h (8km)			
Concrete Flat Bridge (Haru)	650¢	15¢	95km/h (16km)			
Suspension Steel Bridge (RVg)	900¢	24¢	110km/h (6km)			
Steel Rail Bridge	1,900¢	36¢	160km/h (10km)			
Sturdy Steel Bridge	4,500¢	60¢	300km/h (10km)			
Rail Tunnel	2,000¢	30¢	280km/h ()			
]	Road Sigr	n Tools				
Tool	Cost	Maintenance				
Platform Choose Signals	2,500¢					
Modern ChooseSignals_Right	1,500¢					
Modern Pre-Signals_Right	1,500¢					
Modern Signals_Right	750¢					
Pre-Signals	1,500¢					
Signals	750¢					

Rail Tools Pak 128 (Continued)						
Road Side Buildings/ Stops						
Tool	Cost	Maintenance				
Train Depot	8,500¢	8o¢				
Completely Covered Platform	4,200¢	8o¢				
Coal Station	7,800¢	8o¢				
Container Station	1,800¢	8o¢				
Advanced Container Station	3,000¢	8o¢				
Covered Platform	3,000¢	8o¢				
Freight Train Stop	1,800¢	8o¢				
Modern Train Stop	6,600¢	80¢				
Simple Platform	600¢	8o¢				
Station	5,400¢	8o¢				
Village Station	5,400¢	80¢				
Big Passenger Station Building	9,000¢	80¢				
Small Passenger Station Building	4,500¢	80¢				
Station Control Building	2,000¢	8o¢				
Village Station Building	3,000¢	80¢				
Station in Victorian Style	8,000¢	8o¢				

#### Vehicle List & Filter

The Vehicle List is a up to the moment list of all your vehicles. It summarises the key information about all your vehicles. The Vehicle List also has it's own filter (similar to the Filter for the Station List) so that you can focus on any particular sub-set of your vehicles



Illustration 85: The Vehicle List is Also Colour-Coded

The Vehicle List shows the Vehicles Name and ID the income the vehicle has produced for the year to Date between January 1 and December 31 The Line it serves (if known) or if it is currently in a depot.

#### The colour scheme

Yellow: Vehicle has not operated

**Black:** Vehicle is profitable and has spare capacity **Blue:** Vehicle is profitable but has little spare capacity

**Red:** Vehicle is operating at a loss

#### **Mail Box**

The Mailbox lists the system messages that have occurred. These messages could be to inform that a new vehicle is available or that there is a potential problem on the network with stations filling towards capacity or that another year has passed.

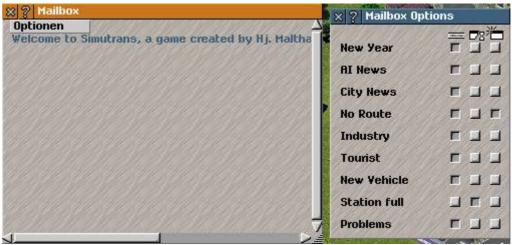


Illustration 86 The Mail Box and it's display options

You can configure how these messages are presented to you.

- As a message running along the bottom of the screen (left)
- As an alert window that will automatically close after a few moments (middle)
- As an alert window that requires you to close it (right)

New Year: A new year has just started, you have twelve months to make as much money as you desire

**AI News:** What your competition is doing, use this to your advantage

City News: Reports city milestones, Pause and celebrate with the denizens

**No Route:** Your vehicles cannot reach their destination, solve this quick or your bankrupt and out of a job **Industry:** Reports appearance of new factories, maybe you could become an integral part of their business **Tourists:** There is now something interesting for people to see, quick bus them over before they get bored **New Vehicle:** A new vehicle is available to use, it might be faster, larger, stronger or all of the above. **Station Full:** A station is approaching it's storage capacity, perhaps you should haul away more goods.

### **Depot Windows**

Whenever your planing to expand your transport capacity or replace old vehicles your going to need to visit the depot.

Each Depot has two or three principal tabs in it's lower half that will list the available vehicles for either passenger/mail transport or vehicles capable of hauling freight. The Third tab will show extra components that can increase the carrying capacity of the vehicles

Because Simutrans has two modes of play all the vehicles and components are coded to assist you.



Illustration 87: The Colour Coded Engines

Vehicles and components with a green bar are available for purchase and use
Vehicles and components with a blue bar are currently not available because they are too old and have been retired
Vehicles and components with a red bar cannot be purchased at the depot in it current mode (Put in Front/Append/Sell
Vehicles and components with a portion of a yellow bar would indicate vehicles that must be assembled in a specific order.



Illustration 88: Building an Engine With Many Segments

# Simutrans Appendices



Everything Else Simutrans Has Squeezed Inside

#### **Goods List**

The goods that can be shipped around Simutrans

All Freight has the potential to earn the company a bonus if the freight is delivered quickly. The Speed required using a particular network (road/rail/sea/air) are given. Higher prices and bonuses require faster delivery



Freight: A categorisation of the type of cargo.

**Price:** How much your paid for transporting a single unit a kilometre.

**Bonus:** The extra you'll be paid if you deliver the cargo quickly.

**Category:** An indication of the type of vehicle the cargo can be transported in.

**Special Freight:** Typically needs a unique type of transportation vehicle to carry cargo of this type.

Bulk Goods: Can be transported with crude storage or carrying vehicles.

Oil/Gasoline: Transports cargo in a liquid state.

**Piece Goods:** Can transport goods in a method similar to Bulk Goods but in smaller quantities.

**Cooled Goods:** Transports similar quantities as Piece Goods but they require refrigeration for transport **Long Goods:** Like Bulk Goods but requires carrying vehicles that can accommodate their extra length

**Weight:** The average weight of a single unit you will be paid to transport.

# Pak 64 Vehicles

	64 Pak Engines							
Steam								
Icon	Name	Cost	Power	Weight	Gear Ratio	Introduce	Retire	
350	Adler	8,000¢ (1.25¢ /km)	30KW 40km/h	18t	2.55:1	August 1835	June 1857	
4	H-Trans 0-4-0T	4,400¢ (8.00¢ /km)	240KW 50km/h	20 t	2.00:1	July 1880	January 1921	
100	Ed2x2	6900¢ (9.60¢ /km)	515KW 55km/h	59t		January 1891	January 1938	
	kkStB91	7,000¢ (9.10¢ /km)	426KW 65km/h	28t		January 1876	January 1936	
	JR_9600	8000¢ (14.00¢ /km)	720KW 65km/h	6ot		January 1913	January 1935	
1	kkStB110	10,500¢ (3.10¢ /km)	310KW 75km/h	34t		January 1863	January 1926	
500	Swiss Federal Railways Eb 3/5	7,500¢ (10.50¢ /km)	730KW 75 km/h	74t		January 1911	January 1950	
	BR85	10,000¢ (21.60¢/km)	1,120KW 80km/h	133t	1.50:1	October 1932	January 1961	
	H-Trans 4-6-0	8,400¢ (9.30¢ /km)	950KW 92km/h	90t	1.19:1	January 1893	February 1851	
-	TPI Std 2-6-4T	8,700¢ (12.90¢ /km)	800KW 100km/h	100t	1.39:1	February 1919	January 1958	
			Die	sel				
	H-Trans BR365	5,700¢ (15.00¢ km)	480KW 60 km/h	54t	1.80:1	November 1957		
	H-Trans BR212	11,000¢ (34.00¢ km)	990KW 100 km/h	64t	1.50:1	March 1958	March 2004	
-	Bennhardt BR204	11,500¢ (3.20¢ km)	1,100KW 100 km/h	64t	1.59:1	August 1967	October 1998	
-	Bennhardt BR220	11,000¢ (73.00¢ km)	1,250KW 100 km/h	116t	2.19:1	April 1966	October 1996	
	F7 A	11,800¢ (23.00¢ km)	1,120KW (105 km/h)	8ot		September 1939	January 2001	

## Pak 128 Vehicles

	128 Pak Engines							
Steam								
Icon	Name	Cost	Power	Weight	Gear Ratio	Introduce	Retire	
	RVg 0-4-0T	5,500¢ (0.84¢ /km)	340KW 45km/h	39 t	0.80:1	January 1901	January 1935	
	RVg o-3-o - Chippy	7,200¢ (0.91¢/km)	390KW 55km/h	48t	0.84:1	November 1932	May 1961	
	RVg 2-5-1 "Muscle Arm"	21,300¢ (2.41¢ /km)	552KW 62km/h	73t	1.58:1	February 1924	May 1939	
	JNR B6	9,400¢ (1.05¢ /km)	294KW 65km/h	47t	1.30:1	April 1890	January 1933	
	Nabe-JNR SL C11	12,600¢ (1.43¢ /km)	596KW 73 km/h	66t	0.94:1	July 1929	July 1940	
	RVg 2-3-0	23,400¢ (2.83¢/km)	1,100KW 82km/h	74t	0.84:1	October 1918	October 1940	
	Rvg 2-4-0 Runner	3,1500¢ (3.05¢/km)	1,348KW (112km/h)	92t	0.94:1	November1929	November1939	