

The Locomotion Book

By Damo566 of TTForums



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1 - INTRODUCTION

I began writing this book when one day I was playing and had an idea.

“Hey, cool,” I thought (after having figured out the ‘puzzle’ of industry, “So that’s how it’s done. Took me long enough to find out – I think I’ll write it down.”

That led to the idea to write this book. I plan it to be a heap of tips and techniques to help pretty much any Loco player. I’ve been building scenarios and large railroads for quite a while, so I’ll also use this to write down everything I’ve learned. Enjoy. :)

Of course, there are a few things you should know about...

1. If you see a few things that look unusual, don’t be worried. I use the mods and resources of TT Forums, AMI Trains, Dekosoft and Zeak. (A full list of the mods and their websites is available at the end of the book.)
2. This guide assumes you are a competent loco player. I won’t teach you how to build roads. ^^ (Experienced players may want to skip the first few bits.)

Okay, now that that’s wrapped up, let’s get on with it!



2 – HOW TO BUILD A RAILROAD

One of the things that is most difficult in Loco is starting up, especially if you are greeted by a million tiny towns. In my experience, the first tracks must be laid with care – often they are the ones that make or break you.

I'll be talking about tiny town landscapes, but much of this applies elsewhere.



In this game, you will always start with a loan. The most important thing to do at this stage is to make money, and you can only make money if you have customers.

You are not going to make much of a profit if you take 10 people to a dump with 3 houses – first of all, you only get about 20 cents a person, or something.

Secondly, the appallingly low passenger count will mean that the maintenance cost of the train or bus will tremendously exceed the profit. The best way to make cash is to find the biggest city you can and survey the surroundings. You must make sure that you will earn enough money to balance out the maintenance. That means building in the big cities – their huge populations will help you.

Speaking of maintenance, you should also decide what transit method to use.

Rail is good – so long as you have somewhere to go. The longer that journeys take, the less you are paid, and the further passengers travel, the more you are paid, but in 1900 the trains are not fast enough for you to make anything useful out of the second bit. If you want to build a railroad, make sure you connect two (or more) big cities – that way you have people to bring back and you will be paid at both ends. An industry railroad will only pay at one end.

You can't move many people without putting your stations deep in the city, but there are a few tricks to increase the catchment area of stations...



Here, I've extended the station by placing passenger stops.

Of course, if the big cities are far apart then you can't use rail that easily. While rail will pay more than any other transport method (I think) if you cannot get an efficient service then it's worth nothing. In any case, the best thing you could do is build a tram service.

In the big city it has a bunch of advantages over rail:

- 1. Every station will attract many passengers, due to it's location**
- 2. You can run far more vehicles on the tracks, therefore improving your pay**
- 3. Tram tracks are not costly to build and needn't knock down *anything***

Whichever method you use, priority number 2 is to get an effective cash flow.

Why is that priority 2? Because priority 1 is – pay back your loan.

This is *important*. Once you establish a cash flow, speed up the game and use the cash to repay your loan completely.

There are a few reasons:

- 1. Loans come with often ridiculous interest rates, and the interest will eventually decrease your income to the point where you lose money**
- 2. Paying back loans decreases your interest amount**
- 3. It's infinitely better to generate cash independently.**

Once you have payed back your loan, you should have a reliable cashflow and with some strategic building you will be able to unleash your transport empire. :P



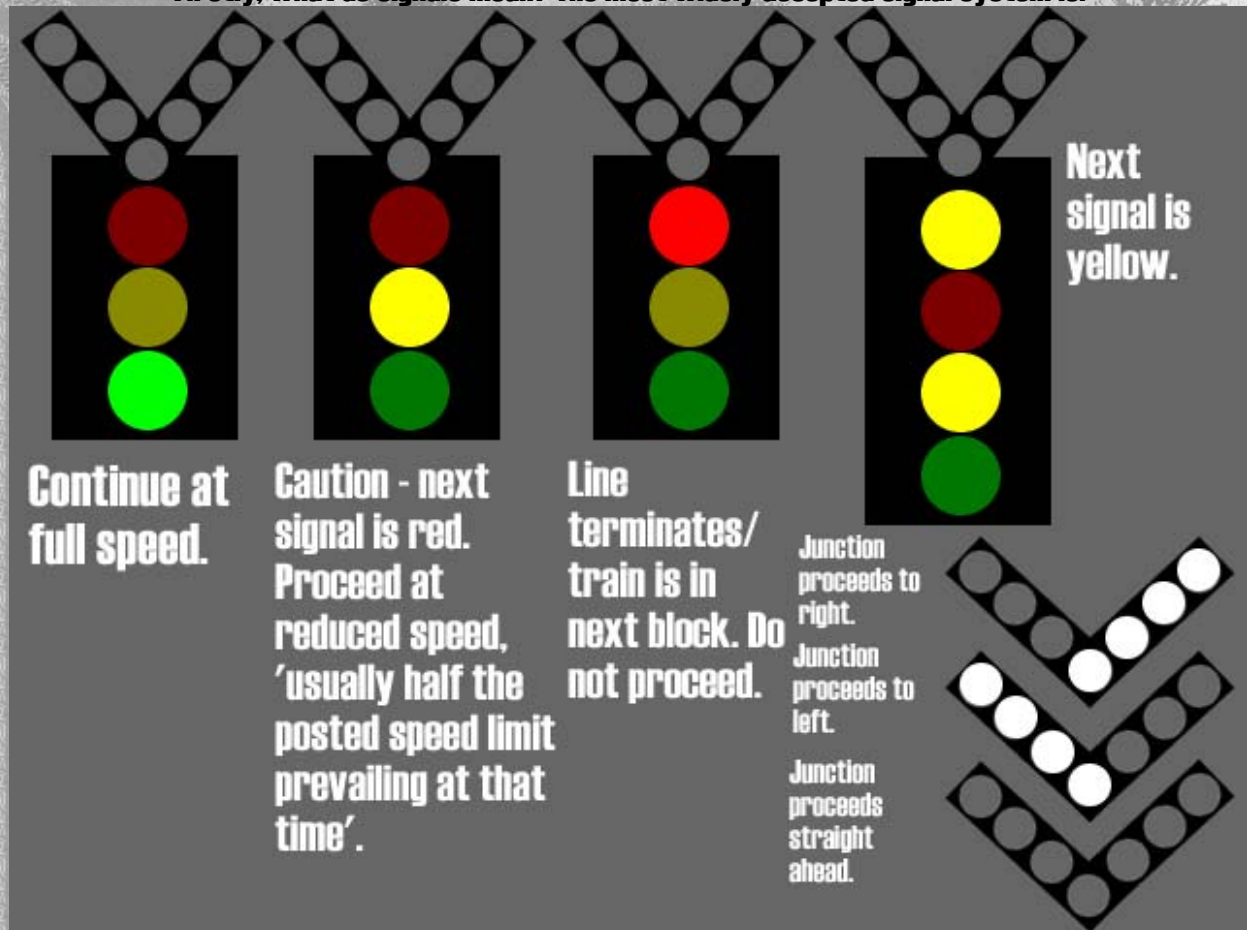
What can be done with good cashflow

3 – Signals

Controlling your trains

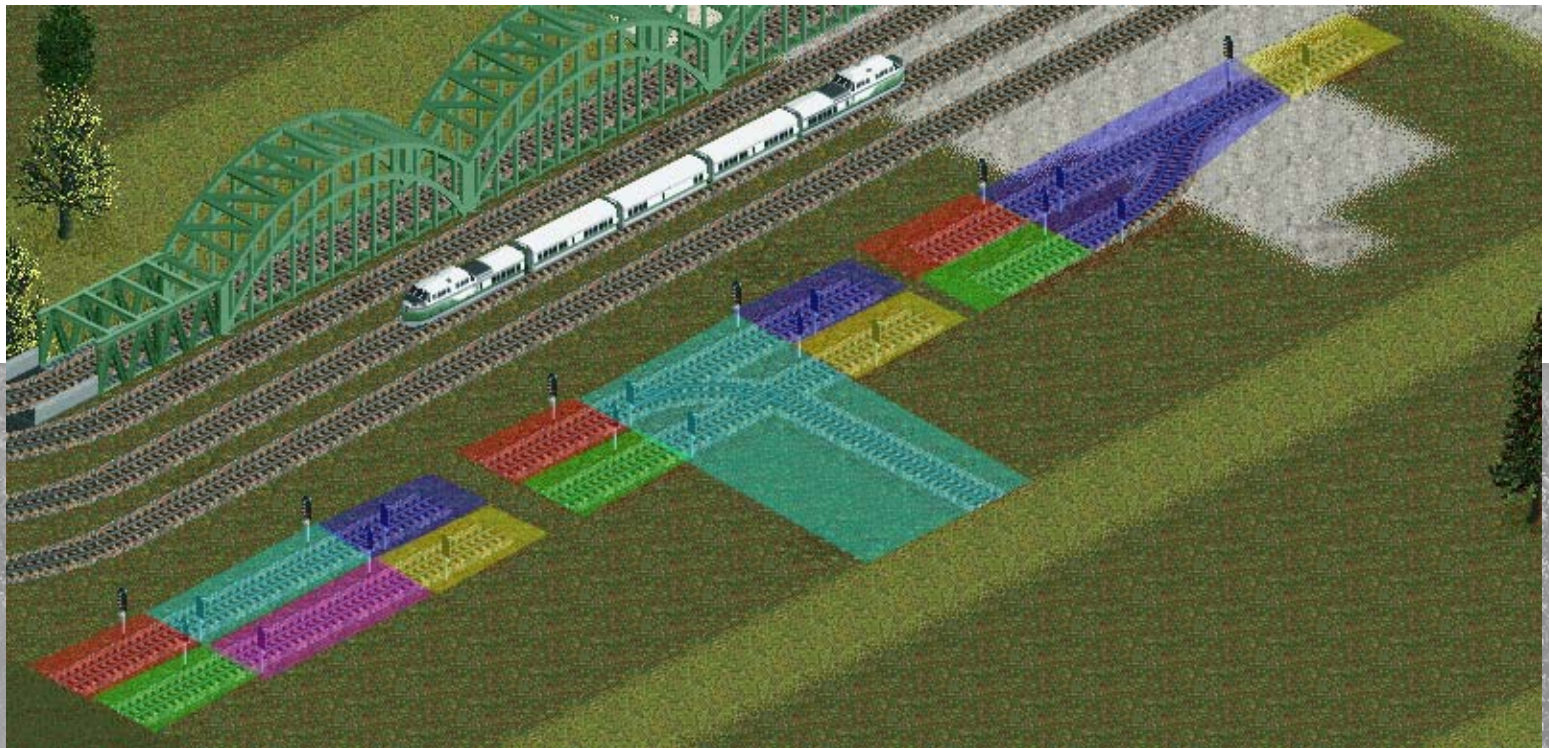
Signals are one of the most annoying things to deal with if not done right; lack of signals could be very dangerous, and bad design could create very annoying lockups or backwards trains. Therefore, this chapter will detail signals and how they work.

Firstly, what do signals mean? The most widely accepted signal system is:

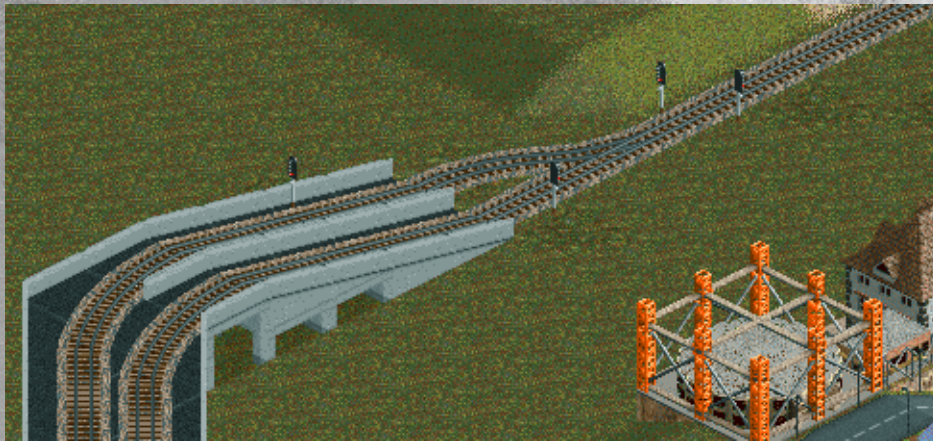


What does this mean in game terms?

Well, signals in the game basically divide the track up into 'blocks' or 'zones'. Only one train is allowed to be in a zone at any time. If tracks cross over each other, the zones join up.

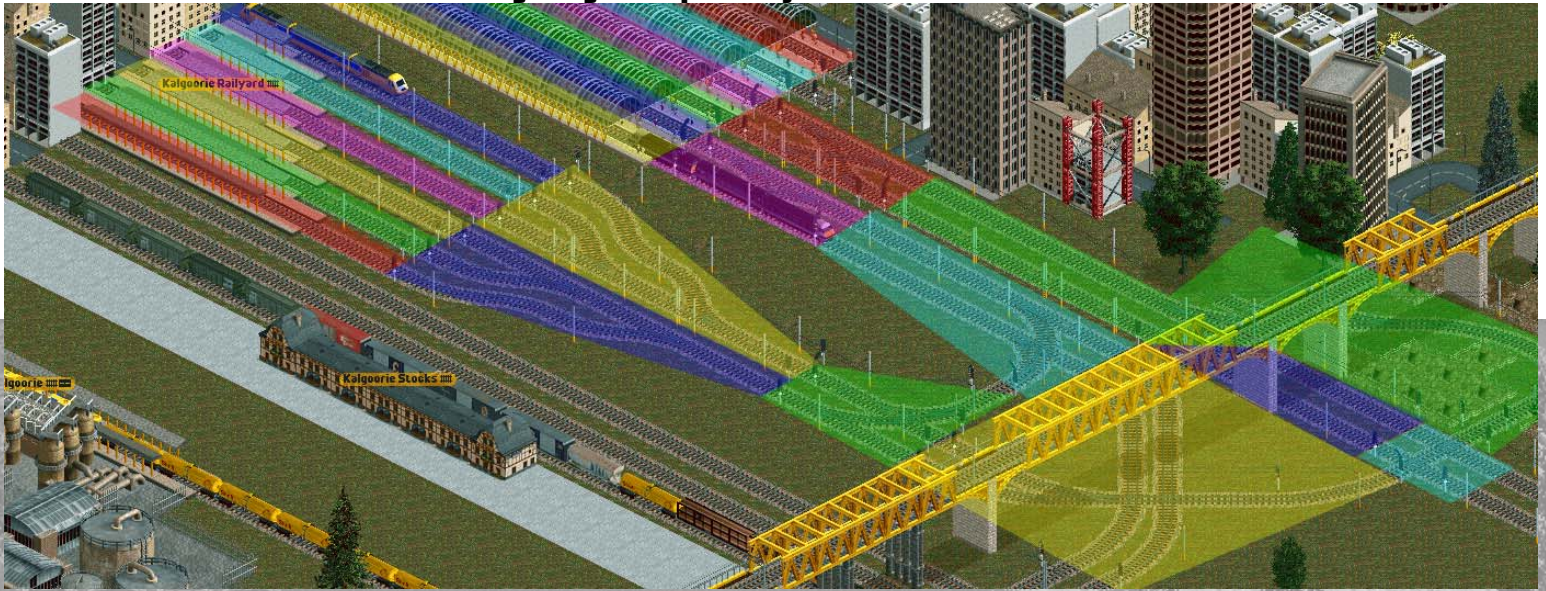


**That's it. That's all there is to it.
Of course, you have to think ahead when placing signals.
Here's a scenario:**

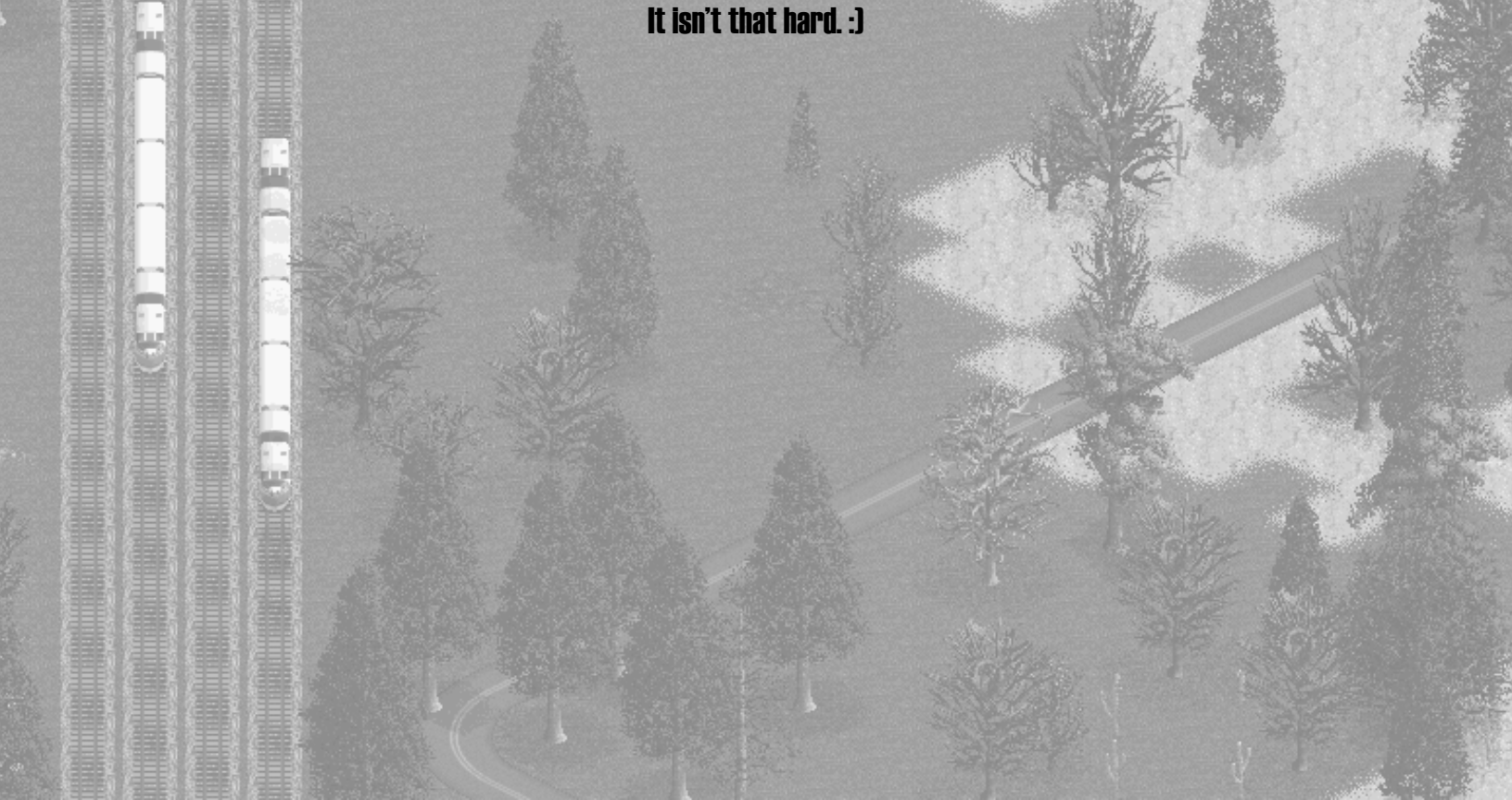


**Not visible off to the right is a ro-ro station. 2 trains stop here at the same time, going different directions.
Will these signals work?
The answer is NO – while one train is in the station, the other will creep forward and block the exit.
Moral: think it through.**

When signals get complicated just think of them as zones.



It isn't that hard. :)



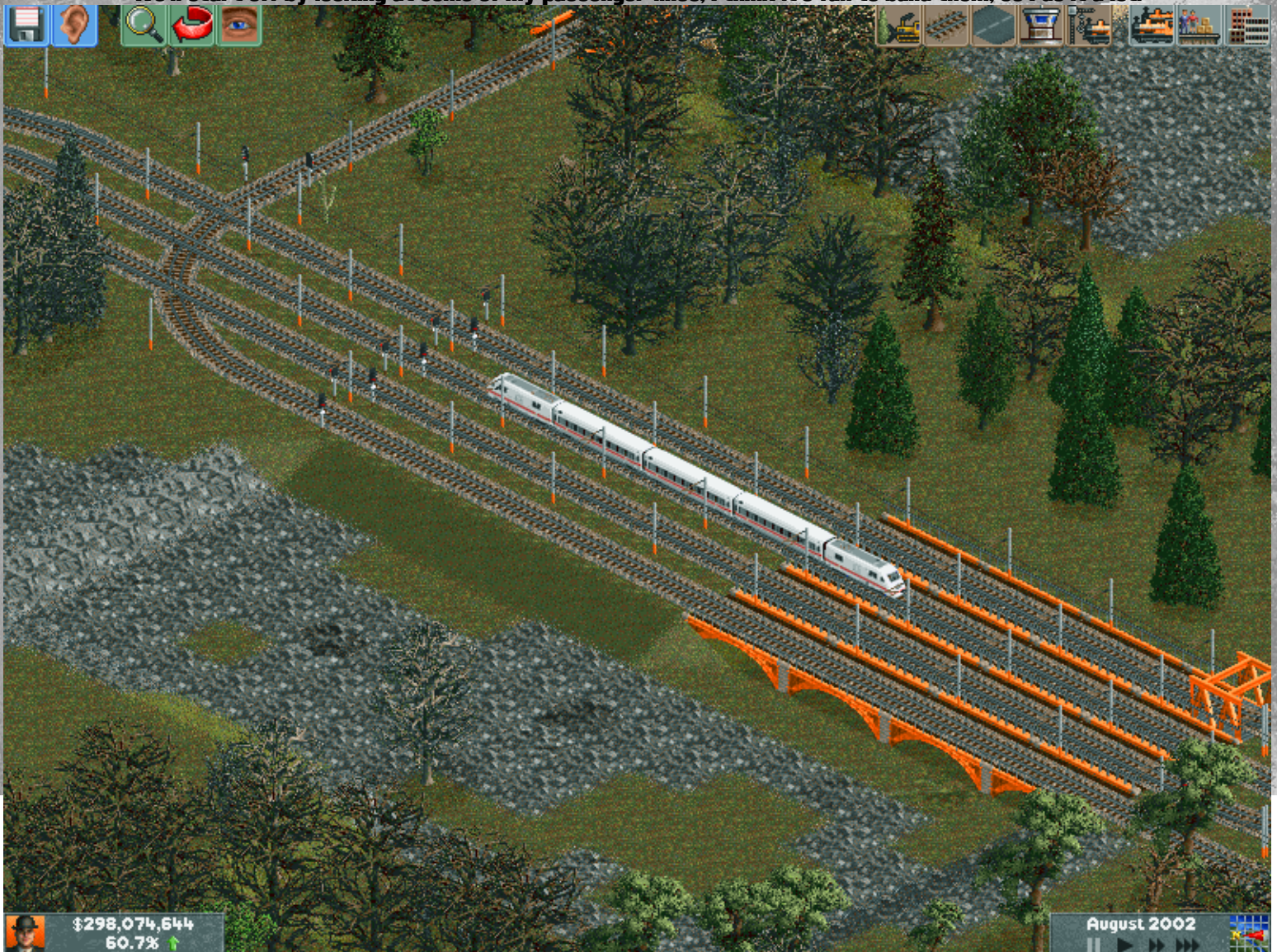
4 – PASSENGER RAIL

Starting a good transport service

To build a good passenger service it is fundamental that the system is, well, big. It needs to really move people – that's why they use it.

Like I said before, you should pick the big cities and build a route to get you some cashflow, and pay back the loan. A fully functioning line can take as much as *20 million* to design and build. That probably seems like an absurdly high number, but you'll understand in a minute.

We'll start off by looking at some of my passenger lines; I think it's fun to build them, so I do it a lot.



This is my HSI-C Ice line,



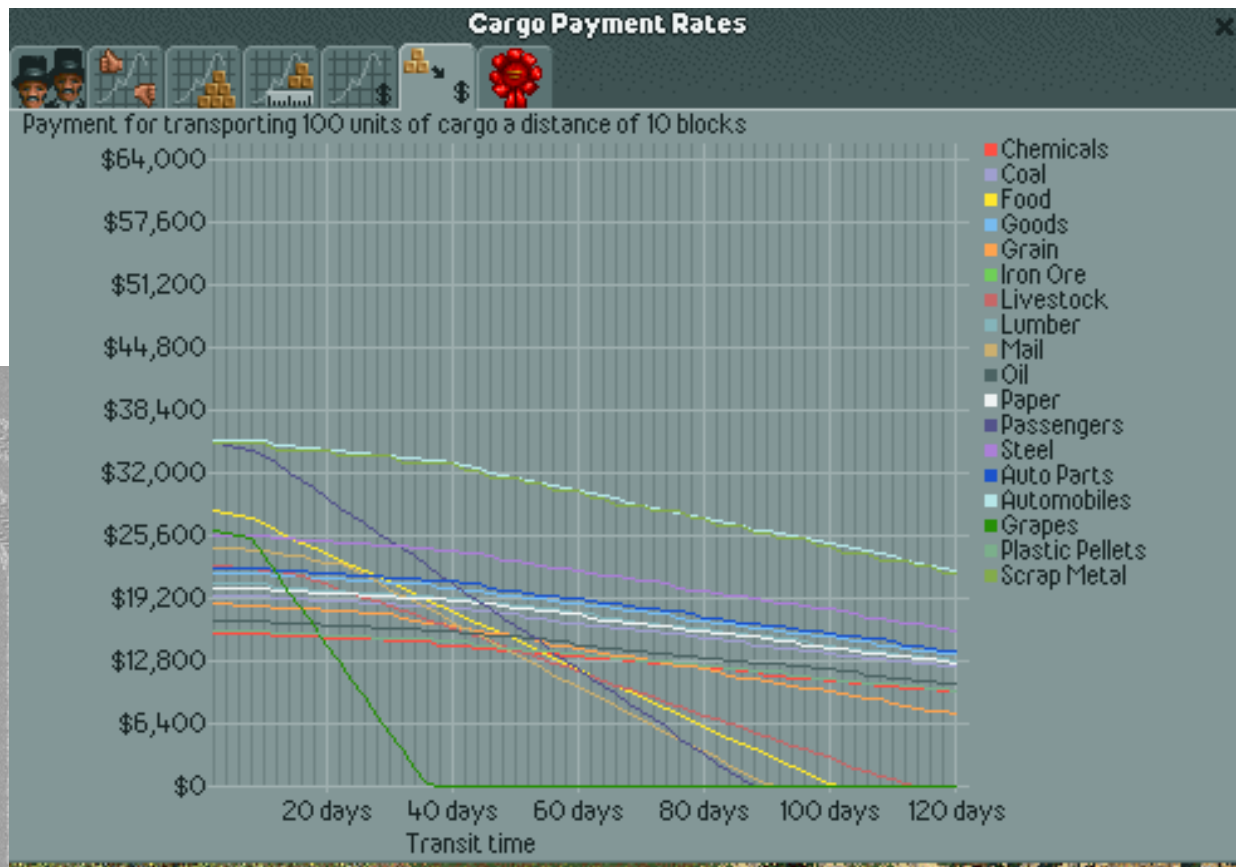
And this is a different HS Turbo I-C line.

I'll say now: *Everything here is my opinion, and how I do things.* It may not be the best/only way, but it's worked for me so I'll share it.

Generally, the most profitable lines are

1. High Speed
2. Inter-City
3. Loooooong.

The reason for the long lines is this:



Passengers are represented by the darker purple line.

As you can see, they are one of the highest paying 'cargo' that you can transport, but they don't like slow routes, so we must provide a satisfyingly quick train.

The turbo trains, for instance, cross 10 blocks in just over a second at 126mph. That's about one day in game. Using a quick train will minimize how much cash you lose to transit time, and the further passengers are taken, the more they will pay at the end.

Here's a list of the highspeed trains that are good to use, in no particular order:

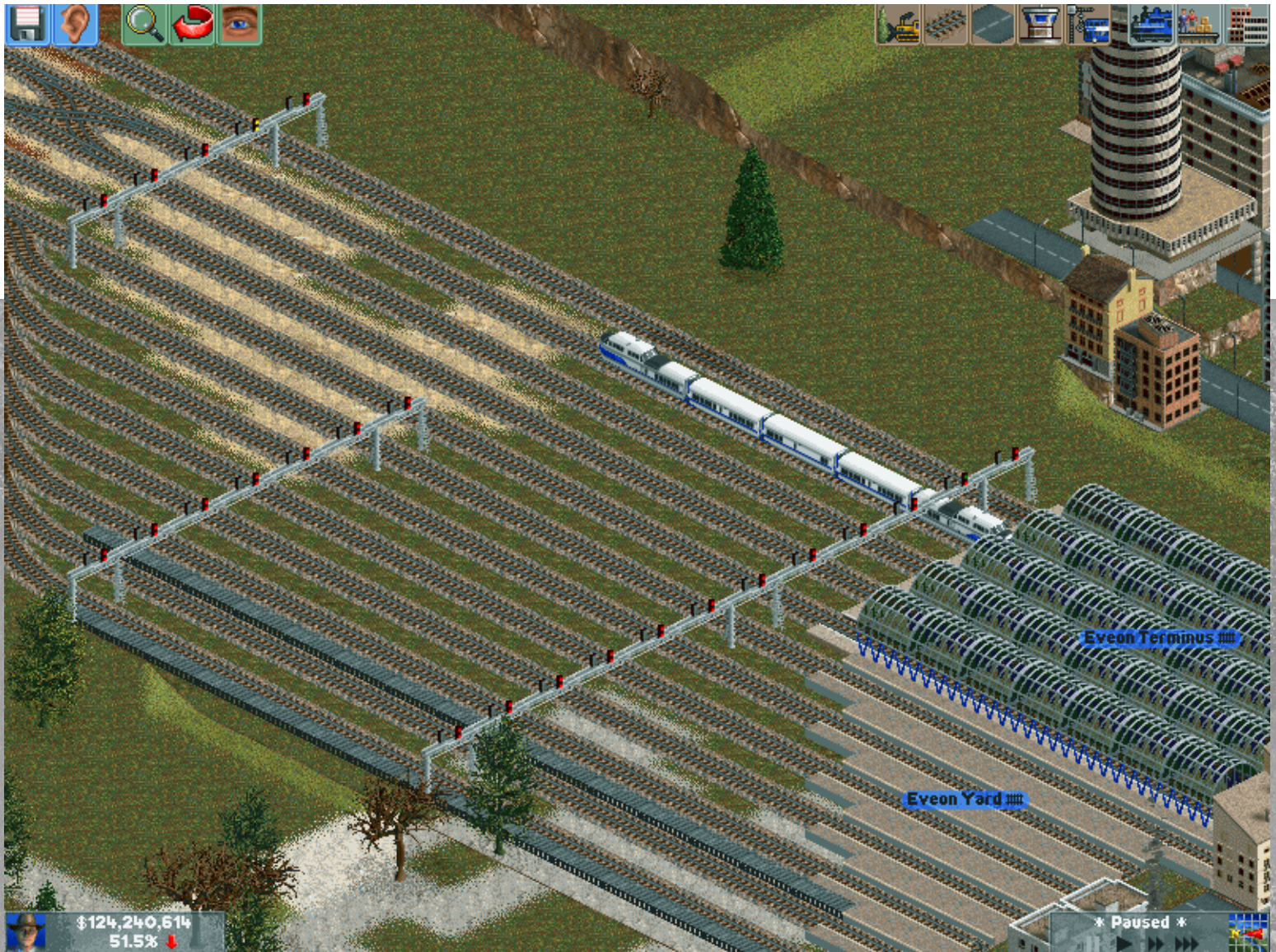
APT
 ICE 1/2
 HST
 Electra-Star
 EW-IV
 MK2
 TGV Réseau-Atlantique/Duplex
 LT Class 91 Intercity
 LT MK IV
 LT Amtrak Superliner (Genesis)
 Shinkansen Series 0
 UAC TurboTrain PDC/IC

My personal favourites are the APT and TurboTrain (Cornering speed 126mph) and the ICE 2.

After establish the train to use, you must design the route. Take note of the big cities and their locations and try to run the line between the two cities furthest apart – that's what gets you cash. My favourite method is to run to high-speed lines between opposite cities, to make a cross.



The blue line is the high-speed. The stations along the way don't matter yet – ignore them.



This is the terminus and yard at Eveon.

One thing to note is that the big cities will grow larger. It is actually kind of difficult to find a good, wide open spot around some cities; here I had to clear the area of trees so I could see, and lower it all. If you do find a good spot, lay down five or six tracks then and there, and place stations. The track stops any buildings being built in the way, and the stations stop the councils from building annoying roads across your railyard. The tracks you lay down then can be used later on, and you won't have to knock down walls of city when you want to expand. Another tip to building a good terminus is to make the

stations large enough to completely hold any train you have; this is important, as you'll see.



This is a terminus in a different game. As you can see, it's pretty complicated. What you don't see is that before this picture it wasn't working very well.

Firstly, let's talk about the signals. The station is signalled in such a way that the curvy bit entering it is one block; no two trains can be in there at the same time. Out of that block, the tracks are all separate.

But here there's a problem – The signals for the station itself used to be 1 square further back. This meant that when a train stopped to load/unload, it would stick out over the signal and completely block any train from entering the other stations. They would all have to wait, one after another, as they all loaded and left, which messed up many schedules and even turned some trains around.

This is poor design, and the reason to make the stations large.

Anyway, back to Eveon.



These are the signals and switches on the edge of the yard. All four of these tracks are intercity ones, but even so, this line only services one other city. Where's the logic in that? Well, the 2 tracks in the centre are Inter-City Expresses, and the tracks on the outside are Inter-City Locals. The Locals follow the same route, but service all the towns along the way. And that's the reason for the stations that you see on the map.

What's the reason for the crossovers?



With this line, I wanted there to be an 'up' side, and a 'down' side. So, express trains will stay on the inside, local trains on the outside. There is an advantage to using this, as well – the crossing over of the tracks means they are all one block, and since 2 trains cannot be in the same block, it helps to keep the trains on time. Since the local trains need to service the towns, the line shouldn't be too far away from them, and use of AMI's Earth Slopes mean that the line can have as many elevation changes as I want without sacrificing any speed. This means that the line can twist around all the towns and still be quick.

5 – Industries

Solving the puzzle

Industry railroad is one of the most difficult things to do in Locomotion.

...kidding! Actually, it's pretty easy, but many people do not attempt it and many others cannot get it right and so label it as 'hard'.

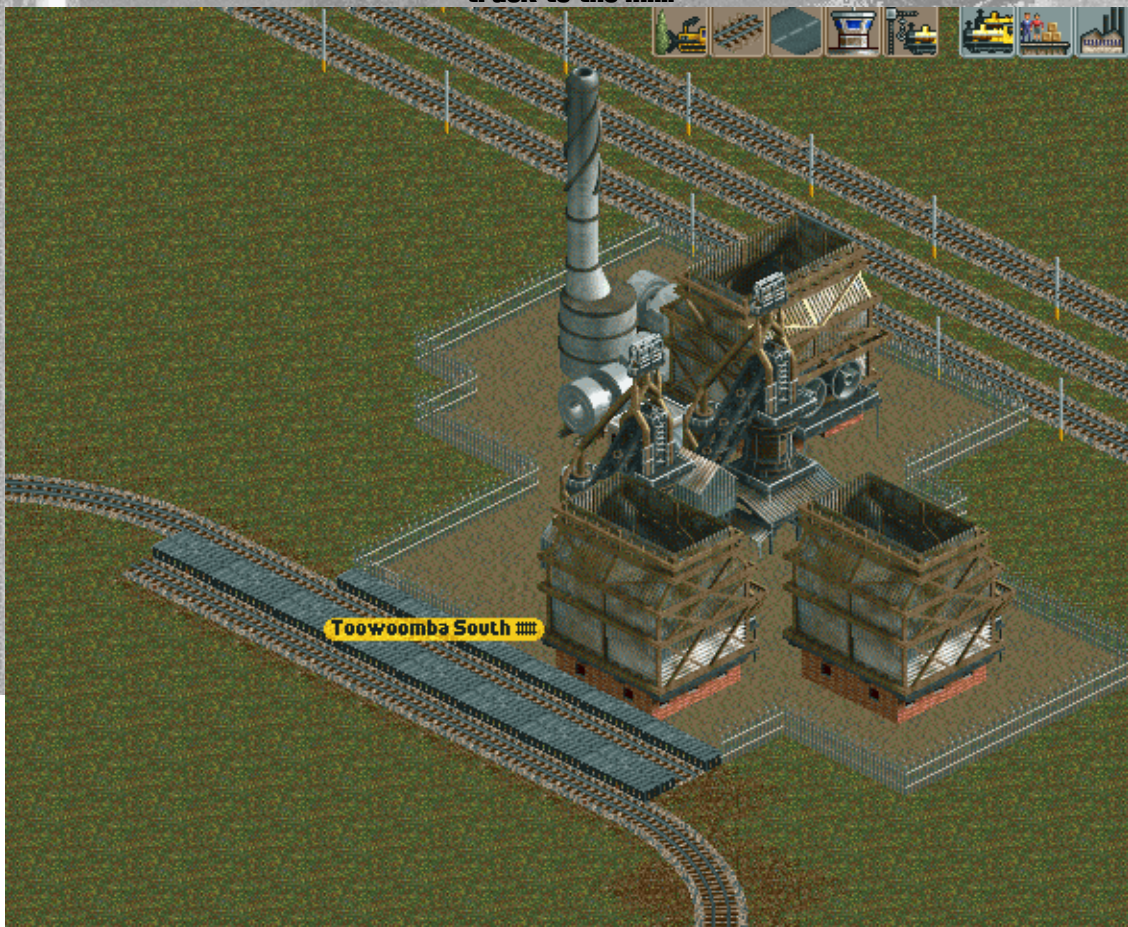
The thing is, it does take a bit more than 'station, station, train, go.' There is (shock!) planning involved. Now, there is no single way to build an industry line. Having said that, I won't say 'build it your own way' or something because that's retarded and is the whole reason we need this section. There are a bunch of rules to keep in mind. I guess the best way to teach is to document the building of an industry railroad.



Okay, so here is a steel mill, coal mine, ore mine and a factory. The coal and ore must be taken to the mill, and the resultant steel taken to the factory to make goods.



The proximity of the mines to each other means I only need one station, not two. Therefore, I only need one train. I build a track to the mill.



Here, I'm using two stations; one in, one out. I could just as well use one, but I would have to signal all of both the tracks.



**Again, one in, one out. Now, all I need to do is build the goods line.
I need the goods to go to the city, because that's where they'll be used.
What I will do right now is tack onto the yard already there.**



The station is important – it must accept goods.



It is important that you make sure that the station accepts/produces the right objects.
Next it's time to build the trains. Firstly, I'll create the train for the mines:



This'll do.

But the cargo presents a problem – the trucks carry both ore and coal. We cannot ask for a full load for either. So, we will tell the train to simply go there. It will grab as much of both as it can the return, which is fine now, but later on production may be higher and it may return with all coal or all ore. To fix this, we'll have to build a second train.

But that's then, and this is now. Here are the orders for the train:



All seems good, so we start it up and off it goes. :)



Next is to do the train that carries steel to the factory. This is simple.



An interesting thing to note is that if a train waits for a full load of something it will not accept anything else. This is helpful here, where the nearby managed forest might otherwise cause problems.



Off it goes.

Finally, we do the goods train. It doesn't have to time itself with anything, so it can just wait for a full load of goods.



Why are we unloading food when we don't have any?

Well, the yard is near the city. Food is offloaded at this yard and could end up in our train, therefore filling space meant for goods. If you'd ever read tooltips you'd know that the unload command will unload all of a cargo regardless of whether the station accepts it or not. So the train will pull up, unload all its goods, unload any food it may have collected, and then leave.

So the unload command can be used to empty the train of all cargo it might collect.

Now we start that train on its way, and our line is complete! It will slowly produce goods.

Of course there is more to this. Cargo ratings, for example – you may not have noticed them, but they are very important. Cargo ratings are basically indicators for what is available at the station. The higher a cargo rating, the more of that cargo is delivered to the station. The ratings will rise when you transport that type of cargo; this way, it's possible to specialise stations. Mind you, it might be smart to make more than one station service an industry if you need different cargo ratings on each.

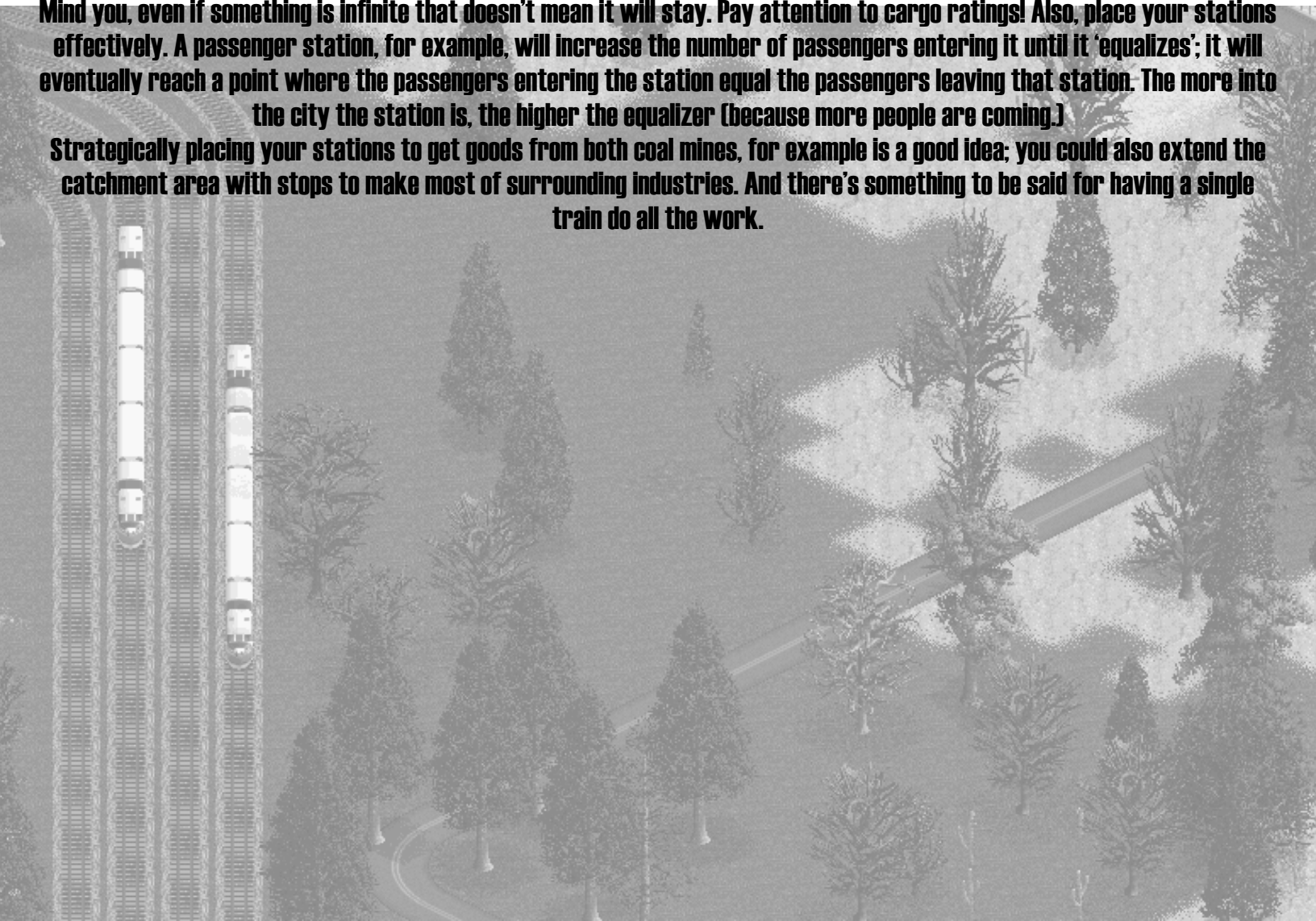
Secondly, you will have to make choices about whether to wait for a full load or take what's there. Different cargos have different life spans, after which they will disappear. They're listed here, to the best of my knowledge:

- Chemicals – infinite
- Coal – around two minutes
- Iron Ore – around two minutes
- Food – around a minute
- Goods – infinite
- Grain – around a minute
- Livestock – around two minutes
- Lumber – infinite
- Mail – infinite
- Oil – infinite

Paper – infinite
Passengers – around a minute
Steel – infinite
Auto Parts – around two minutes
Cars – infinite
Grapes – around a minute
Plastics – around two minutes
Scrap Metal – Around two minutes

Mind you, even if something is infinite that doesn't mean it will stay. Pay attention to cargo ratings! Also, place your stations effectively. A passenger station, for example, will increase the number of passengers entering it until it 'equalizes'; it will eventually reach a point where the passengers entering the station equal the passengers leaving that station. The more into the city the station is, the higher the equalizer (because more people are coming.)

Strategically placing your stations to get goods from both coal mines, for example is a good idea; you could also extend the catchment area with stops to make most of surrounding industries. And there's something to be said for having a single train do all the work.



Mod Directory

Currently, this directory lists very few mod, some of which I have lost the details. But I will be browsing the web, and I'm hoping this will become a list of every mod. Please help!

If you are the author of something, don't hesitate to say so.

If you would like your object in the base, don't hesitate to say so.

If you have a correction or an object, don't hesitate to blah blah.

Nearly everything is available for download at www.tt-forums.net – if you can't find it, look there.

Mod/Object	Set	Description	Author	Author Site
Dekosoft UP Pack	Dekosoft 105	Union Pacific Pack	Dekosoft	http://dekosoft.com/trains
Dekosoft BN Pack	Dekosoft 105	Burlington Northern Pack	Dekosoft	http://dekosoft.com/trains
Dekosoft BNSF Pack	Dekosoft 105	BN + Santa Fe Pack	Dekosoft	http://dekosoft.com/trains
CLW-M-497	Dekosoft 105	Flight of the M-497 Jet Train	Dekosoft/AMI Trains	http://dekosoft.com/trains
BR Rescue Train	MOW	Rescue Vehicles Pack, BR Livery	AMI Trains	www.locomotion-fanpage.net
SBB Loesch und Rettungszug	MOW	Rescue Vehicles Pack, SBB Livery	AMI Trains	www.locomotion-fanpage.net
BLS Loesch und Rettungszug	MOW	Rescue Vehicles Pack, BLS Livery	AMI Trains	www.locomotion-fanpage.net
Swiss Double Railcar		Pikes Peak Cog Railway Conversion	Strongbow	www.locomods.eu
GWR Railcar Special Edition Set v2.0		GWR Railcar Single and Twin, BR Crimson/BR Green Livery	Strongbow	www.locomods.eu
Class 42 'Warship'			Pikkabird	www.pikkarail.com
UAC TurboTrain PDC/IC		Nice looking High Speed Inter-City tilter	Pikkabird	www.pikkarail.com
MK2 Passenger	New MK2s	MK2 Inter-City electric	Pikkabird	www.pikkarail.com
MK2 Driving Carriage	New MK2s	MK2 Inter-City electric	Pikkabird	www.pikkarail.com
MK2 Mail Carriage	New MK2s	MK2 Inter-City electric	Pikkabird	www.pikkarail.com
Sandbox Pack V10		Sandbox Pack, trains listed in TTForum's Sandbox thread	Illegal_Alien	www.tt-forums.net
PlastikMan's Automod		Car industry mod by PlastikMan – adds many new industries and rolling stock	PlastikMan	www.amitrains.co.uk
HighSpeed Pack Reloaded		LT Pack V.1.0.0, TGV Duplex, Réseau-Atlantique, La Poste', Virgin Voyager	Locotrains	locotrains.panzerairlines.nl

Aircraft Pack 1.1

Night Mode

NH

Earth Slopes

FreightStation

Australia Beta

Adds new aircraft and wraps them.
Adds a lot of 'night' content and rolling stock
Adds NIR class 3000 and others.
Adds a bridge that allows unlimited speed elevation changes.
A station with wooden platforms on either side.
Scenario. It's Australia! Only, a tad small.

Unknown... :{ www.amitrains.co.uk
Unknown... }:
Unknown... }:{ www.amitrains.co.uk
Stephen Brandwood LocomotionDepot.net
Unknown... again www.amitrains.co.uk
Zeak I'm not sure it's what I think it is



? – Index

Looking for something? Under construction.

