

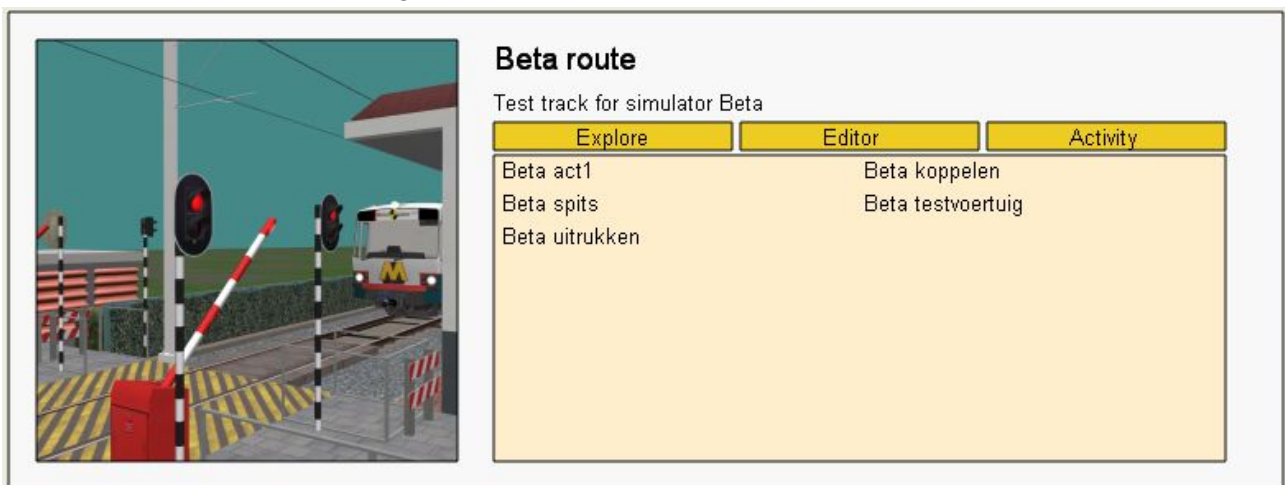
Metro Simulator v0.5 beta

Quick start tutorial

This tutorial is written to get started quickly with the simulator. For all features, please read the full manual. There are 3 tutorials in the beta, you should keep this manual close when playing them as the instructions are not yet shown in game.

Starting up

When you start up the simulator for the first time a configuration dialog will show. Here you can select some settings, like if want windowed mode or fullscreen. Not all features are available in the beta. See the full manual for details about the configuration.



The next time you start the simulator you will get into the main menu directly. The above image shows this menu. The editor is not available in the beta, so that leaves explore and activity. Explore is a free-roam gametype allowing you to explore the route. You can create a train or multiple trains yourself here and drive around. In activity mode you drive using a timetable with AI traffic. You will receive a shedule with tasks like driving a train or shunting at the train yard.

Tutorial 1

In this first tutorial we will use the first tutorial activity. Select "Tutorial 1" in the list and click the "Activity" button. After a few seconds, you will be inside the cab of your train.



You can look around by pressing and holding the right mouse button. Press '3' to get an outside view of the train. In outside view you can use the right mouse button to rotate the view and page up/down to zoom in and out. Press '9' for a free camera you can move with the arrow keys. To return to your cab, press '1' or '2', depending on if you are in the front or back cab of the train.

Departing

When you are ready to go, get back in the cab. You might have noticed the doors of the train were open. To close them, press 'D'. After a few seconds, a green light will show on the left side of the control panel to indicate the doors are locked. Without this signal you cannot depart. You will also need a green signal from the train protection system, they show up around the speedometer. In activity mode signals are controlled by the game so you don't need to worry about them, although sometimes it might take some time for a signal to clear when there is another train in the way.

To drive, you need to use the driving throttle. The vehicles in this beta have a combined throttle for driving and braking, moving the throttle forward means drive and moving it in reverse means braking. The train you are driving in this tutorial has one step for driving, one for neutral and 8 for braking. The throttle is moved with the < and > keys. When you release the key the throttle will stay at its current position.

So press the > key to move the throttle to drive. Watch your speed limit, the green light with "70" on it means you may go 70km/h here. When you are near this speed, put the throttle in neutral by pressing < once. In neutral the train will slowly lose speed due to air resistance, friction and gravity, but the distance between the stations is small.

Stopping

The next station isn't far, so shortly after reaching your top speed it's time to stop already. There are signs next to the track indicating where you should stop. There are blue and white signs, for this type of train you need to look at the blue signs. Your train has 2 cars, so look for the sign with the "2" on it. At this station you will find one, but not at every station there is a sign for each length. In that case you should continue to the next sign with a higher or no number on it.

To slow down, move the throttle back using the < key. Try to limit your braking to 3 or 4 steps on the throttle to keep the trip comfortable for the passengers. At the bottom you can see the current position of the throttle as well as your speed and acceleration. When you are nearly stopped, move the throttle up a bit to -1 or -2 to come to a smooth stop. Open your doors by pressing "Home" or "End", depending on if you want to open or just unlock them. For the doors on the left side use "Insert" or "Home".

Overhead wire

These trains have many doors, so 10-15 seconds is usually enough time for stopping at a station. When you are ready to continue, close the doors again and accelerate to about 50km/u. You will turn left at the junction here and continue as lightrail. That means you have to raise your pantograph to get power from the overhead wire. After some time you will see a blue sign with a vertical line up, as the one on the right. This sign indicates you have to raise your pantographs. You can do this by pressing *Ctrl+P*. Make sure your train is in neutral cause you cannot accelerate when the pantographs are being raised.



At the end of the curve you will notice a level crossing. The barrier is already closed and a yellow light is shown. The yellow light indicates that you may cross the crossing. A blue light means you have to wait. At the end of the next station there is another crossing, which should show a blue light when you arrive. When you are stopped at the station, the barriers will close if they aren't already closed for a train in the other direction and the light will turn yellow. You will come across more of these crossings.

The buzzer

When you are reading this while driving you are probably running behind on shedule rather than ahead, but just in case: when you arrive to early at a station, a blue light will show up next to your speedometer and a buzzer will sound after a few seconds. You need to press the '~' key to stop the buzzer or your train will be forced to a stop. Once you have stopped you can ignore the buzzer, it will stop after 7 seconds, blocking your train. As you aren't allowed to depart with this signal, it doesn't matter that your train is blocked. When you receive a green signal, the train is automatically unblocked.

Reversing

When you arrive at the last station you will be directed over the switches to the left track. Inside the platform you will first receive a "20" signal, later light with a braking valve will show up as displayed on the right here. The buzzer described above will sound here as well and your speed has to be reduced. You probably already noticed that your speed will automatically reduce when it's to high, the same will happen here. Once you know the speed limits on all parts of the line, you can try to beat the automatic braking system by reducing your speed ahead of the speed restriction.



When you arrived, you should set the destination sign correctly for your return trip. Usually this is should be done before arriving, but with all those instructions you are probably already running late. You use the / and * keys on your numpad to change the destination. You should refer to your shedule to see where to go next, you can find this shedule on the top-right of your screen, move your mouse to the corner and it will show up.

Metro Simulator	Beta spits
SMD	08:35:00 - 09:30:00
09:00:00	MLS
09:08:00	
Drive train S512CM	
At MLS set destination to B De Bergen	
MLS	BPK
09:10:00	09:24:15
Drive train S512MX	
Park train at BPK Yard	

When you have stopped, opened the doors and changed the destination, you are done in this cab. Press Shift+F4 to turn off the control panel. Now switch to the other cab. Move your mouse to the bottom of the screen to get the consist bar. Left click on the right cab to go there. Now switch on the control panel with Ctrl+F4 and set the destination sign here as well.

Return trip

Depending on how long you took, you might have to wait a few minutes. The other train will depart first, and 2 minutes afterwards you may depart. If you cannot wait that long, use Ctrl+Page Up/Down to alter the simulation time. At the bottom you can see the current time and simulation speed. You should receive a green signal 15 seconds before your sheduled departure time. Remember, to see your shedule move the mouse to the top right.

On the return trip there is something you should pay attention to. When you were going here you had to raise your pantographs. So when going back you must lower them. A sign is placed where you should lower them, it's a blue sign with white horizontal line. It's similar to the sign for raising the pantograph, just the line is down (as in pantographs down) instead of up.

The return trip is not all the way to the other ending. Instead, you are taken into the train yard. You will be directed to track 15, when you arrive stop your train, unlock the doors and switch it off.

Tutorial 2

Now you have finished the first tutorial about the basics, it's time for more more some advanced stuff. At the moment, to start a new activity, you need to close the game down and open it again. This time select the "Tutorial 2" activity in the menu. This activity introduces a new train type and shunting. In this tutorial, you will start in a RSG2 type vehicle on one of the train yards. The train has been coupled to the buffer. Your first task is to start up the train and decouple it.

You already learned how to switch on the train and how to raise the pantographs. When you have done that, we introduce a new control: the driving mode lever. You might have noticed the "PZ Throttle 0.00" already in the information bar and wondered what PZ was for. PZ is the driving mode, this can be different for each type of vehicle. You can control this mode using the Q and W keys. There are 5 modes available in this vehicle, in PZ the motors are connected in parallel mode while in S/P they are in serial mode. In S/P your train will accelerate slower. The R mode is used for shunting, the speed is limited to 8km/u and the train accelerates very slowly. Finally, Ra and S/Pa are for driving in reverse.

Departing

To disconnect from the buffer, we need to move the train backwards, so select the Ra driving mode. Then hit Shift+O to decouple the automatic couplers of the cab you are in. Use the throttle to drive back a small distance and then stop the train. Put the driving mode back in PZ and turn off the controls and go to the other cab. You will see a yellow signal at the end of this track, which wasn't in the previous tutorial. Also you probably noticed by now the control panel is different. That is because you are operating a vehicle equipped with a different train protection system.

These trains have a point based train protection system, meaning they get their information from a transmitter placed next to the track rather than from a signal sent through the rail. It also means no signal is received until you pass the signal. In your cab it shows a red dot in your speedometer at the 10, and left of the speedometer the display also shows 10. This is your speed limit until the signal. Put your train in 'R' driving mode to avoid going over the limit and head to the signal. Once you passed the signal, move the driving mode to S/P and accelerate to 30km/u. When you arrive at the siding, you notice that the display goes back to 10 and the red line slowly starts to move back from 40 to 10. Make your your current speed stays before the red dot or the train will do a forced stop.

When you arrived at the siding, reverse the train again and head for the main line. When you arrive at the white sign that says '8' you can accelerate to 80k/u.. The signal in your cab should change as well. You are not driving in service so there is no need to stop at stations. However there is a speed limit of 50km/u at stations, a yellow sign with arrow pointing up indicates you are approaching a station and have to slow down to 50km/u.

Coupling

This line is short, and before you know you are at the end of it. You have seen this station before, and maybe you have noticed the switch between the side platform where you are now and the main line you were on before already. Your job is to get your train to the main line. Reverse your train again. The signal will turn yellow, and if you look up you will see the number 4 above the signal lit. This number indicates an a speed limit. Also notice that there is no overhead wire to the right, so lower your pantographs before departing to the siding between the mainline. Move your train all the way to the end of the track, to the stop sign with no number on it.

Now switch to the other train that was parked at the station. You can use the consist bar, on the left there are arrows to scroll between the available trains. The square button in the middle is used to go back to your current train. Switch on the train and drive towards the siding. You will receive a "20" signal because you are approaching a full block. Normally you have to stop at the end of the block with this signal, you can see where the block ends by looking for the transmitter between the rails. However, in this case you have to couple so continue past the transmitter. The signal will change to "0" now, so switch to the shunt mode (the "R" driving mode) and continue slowly ahead until you are near the other train. Reduce your speed to about 2km/u and drive your train against the parked train. The automatic couplers will connect both trains. If your speed was too slow you will bounce back. Reverse your train a bit and try again in that case. When the trains are coupled, switch off your cab.

To the yard

Your next task is to drive both trains to the yard. The reason you needed to couple the trains is that these RSG2 vehicles do not have the train protection equipment needed to drive on this main line, so they are coupled behind two trains that have. Go to the front cab in the direction of the station and switch on the train. The signal should be clear already so depart and head for the train yard. There you will arrive at track 12.

Rather than parking your train there, drive all the way to the back. The signal at the end of track 12 should be clear so you can go the track A01, which is the tail track used to get into the depot. Park your train at the end and turn of the cab. Now using the consist bar at the bottom, select the middle cab of the RSG2 train (which show up with their blue doors in the consist bar as well). You will go to the cab facing the cab from which you previously coupled both trains together. Switch on the cab and press Shift+O to decouple. Put the driving mode in Ra and move the train back a bit.

Now to complete this tutorial, head to the front cab of the RSG2 train. The signal should show a clear signal (two white diagonal lights) already, but as these trains do not have the proper protection system it will show as 10 in your cab. You can either drive in shunt mode to the depot, or you can press Ctrl+TAB to get a signal of 20. This key is also used to pass a red signal, of course it should only be used with permission. Drive both trains into the depot and park them. There is no third rail into the depot, so once you stop you are stuck. At last, go back to the other train and park it at track 16.

Tutorial 3

In this third and last tutorial we introduce the new RSG3 vehicle as well as the locomotive. These trains have a slightly different control, instead of the throttle with fixed steps, they have a smooth control between full brake, neutral and full forward. Press and hold the < and > keys to move the throttle, it will have a small delay at neutral as well as at full brake before the emergency brake. The drive modes are also different, these vehicles just have forward and reverse.

Starting the tutorial, you are inside the locomotive. The signal should show clear within a few seconds, allowing you to go to the side yard where the working vehicles are parked and where also the new RSG3 vehicle is parked. The switches on this part of the yard are manually controlled, you can switch them by double clicking on the levers next to them.

When you enter the yard, go to the middle track (A33). You will see the RSG3 vehicle behind a flat car standing there. Head to the flat car and couple with it. It has automatic couplers so just drive against it slowly. Reverse the train, with the locomotive you can leave it switched on and just use the drive mode to change the direction and the '1' and '2' key to look the other way. Drive until behind the switch at the start of the platform that allows access to the left track. Flip the switch and drive to the other side of the RSG3 vehicle. Reverse the train again and drive to the back of the RSG3 train, but do not couple yet.

Shunting

The couplers of the locomotive and the RSG3 are incompatible. For this reason we need to introduce a new option: the train settings. Go to the consist bar and right click on the coupler of the locomotive. Here you see a "disable electric coupler" option which you should select. This will avoid the electric coupler to open and allows a mechanic only coupling between incompatible trains. If you don't see the correct menu, make sure you click near the coupler and not in the middle of the train. When the coupler is set, couple the trains.

When coupled, go to the consist bar again. You should have 3 cars: the flat car, the locomotive and the RSG3 train. The flat car seems rather useless at the moment, but it will prove to be valuable later. Above the RSG3 there will be a yellow warning sign, this indicates the brakes are stuck. This is as the trains have a mechanic coupling only, the brakes on the RSG3 cannot be released from the locomotive. So right click on the RSG3 now and choose "Brakes disabled". This will reduce the braking power, which is where the flat car comes in useful: it increases the ratio of braking power and weight, allowing you to brake the train better.

When you have the train ready, move it (while controlling from the locomotive!) from track A32 via A44 to A18. Keep in mind that even with the flat car you still have limited braking power, so don't speed to much. When you arrive at track A18, go to the consist bar again and enable the brakes again the same way you disabled them. The warning sign will show up again, but not for long as the next job is to decouple the trains. This can be done from the consist bar as well, just right click on the coupler and select "decouple". When driving the locomotive this is also the only way to decouple.

Test run

When the trains are decoupled, head to the RSG3. If you followed the instructions and coupled on the correct side, it should now be facing the main line and the signal is clear already. Switch on the RSG3 and drive to the main line. Try to get used to the controls and stop at the stations. After the second station, you will see the display indicating the allowed speed goes to 100. This is only on the RSG3 train and only in this part of the route. Here you can test the top speed of these trains. In activities with traffic, you only receive 100 if the track is clear all the way.

After arriving at the siding where you have been previously, reverse the train and head for platform 3, where you reverse again. Raise your pantograph and wait for a green signal. If you look up you will see a flashing '4' above the signal. Previously you had a yellow signal with non-flashing 4 here indicating a speed limit. The flashing 4 is a speed restriction as well, but this one indicates a restriction at the next signal. You can depart with 80km/u here, but before the next signal you need to slow down to 40km/u.

After passing the station you will pass a yellow signal and your speed limit will go back to 10, even though the next signal goes from red to green shortly after. Remember that this is a point based system, so you will only receive a new speed limit when you pass the signal. So you need to slow down to 10km/u here.

Parking

The last thing you need to do is parking your train. You will be directed to the siding you have been before, where you reverse again and head to the track where tutorial 2 started. Drive all the way to the end and slow down to about 5km/u. Carefully drive towards the buffer, until your train stops by itself when you pass the last transmitter. This is what happens if you drive past a red signal. Press Ctrl+TAB to bypass the stop signal and drive even slower against the buffer, coupling with it. Lower your pantograph and turn off the train to finish this tutorial.

So why the complicated stuff before when you did this trip in reverse? Well, the RSG3 vehicle you drive now has two automatic train protection systems built in and can switch between them automatically. The vehicle you drove in previous tutorial however had only one system and cannot run on both lines.