2020
TSW
TRAIN SIM WORLD®
MP36PH-3C
Caltrain
925
305
dovetail
GAMES

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Quick Start Guide: Caltrain MP36PH-3C

1. Enter the Engineer's Cab and sit in the Engineer's seat

Forward Upper Console

2. Set the following three switches:
    a. Engine Run Switch to ON.
    b. Generator Field Switch to ON.
    c. Control & Fuel Pump Switch to ON.
3. Set Cab, Gauge and Marker lights as appropriate.

Control Desk

4. Move the Brake Cut-Off Valve to Passenger.

Rear Bulkhead Console

5. Move the Isolation Switch on the rear upper console to Start/Stop/Isolate.
6. Press and hold the Main Engine Start button until the engine catches.
7. Move the Isolation Switch to Run.

Head End Control Console (Forward Upper Console)

8. Set the Locomotive HEP Isolation switch to Run.
9. Press the HEP Engine Stop/Start button and note the Loco HEP indicator illuminates.
10. Press the Train HEP On button and note the HEP TL COUP indicator illuminates.

Control Desk

11. Wait for the brakes to charge.
12. Set exterior lighting as appropriate.
13. Insert the Reverser Handle.
14. Set the Reverser to the appropriate direction.
15. Move the Automatic Brake to Release.
16. Once the brake gauges have stopped moving, the Throttle can be applied as appropriate.

The Alerter can be enabled by opening the fuse cabinet on the rear bulkhead and setting the Alerter MCB to On (up). See the Reference section for information relating to the Alerter

Quick Start Guide: Caltrain Bi-Level Cab Car

1. Enter the Engineer's Cab and sit in the Engineer's seat.
2. Turn the Cab Set Up key to the On position.
3. Set the following three switches:
    a. Engine Run Switch to ON
    b. Generator Field Switch to ON
    c. Control & Fuel Pump Switch to ON
4. Set Cab, Gauge and Marker lights as appropriate.
5. Move the Brake Cut-Off Valve to Cut-In (on the left under the desk).
6. Press the Engine Run button.
7. Wait for the brakes to charge.
8. Set exterior lighting as appropriate.
9. Insert the Reverser Handle.
10. Set the Reverser to the appropriate direction.
11. Move the Automatic Brake to Release.
12. Once the brake gauges have stopped moving, the Throttle can be applied as appropriate.

The PCS and TMS can be enabled by opening the Circuit Breaker Panel (C.B. Panel) on the rear bulkhead and setting the appropriate switches to On (Up).

Reference Section

Safety Systems: Alerter

The Alerter is a Driver Vigilance Device and its purpose is simply to ensure that the driver is constantly aware of the train and able to react and respond to the train in a timely manner.

How to Activate / Deactivate the Alerter

Whilst sitting in the engineer's seat, press SHIFT-ENTER to toggle the Alerter state. Alternatively, the Alerter can typically be activated by moving the appropriate Circuit Breaker to the On position. By default, the system is disabled.

How to Use the Alerter

Once activated, every 60 seconds the Alerter will trigger a visual indication on the Train Operator Display and an audible alarm. You then have a short time in which to respond to it by pressing the acknowledge button, the Q key on the keyboard.

If you do not respond in time, the train will apply penalty brakes until the train has stopped. You will not be able to undertake any further actions until the train has come to a complete stop. Once stationary, you should reset controls to a safe state (throttle to idle, reverser to neutral, brakes to full service), you can then set the reverser, release the brakes and apply power.

American Railroad Signalling: Peninsula Corridor

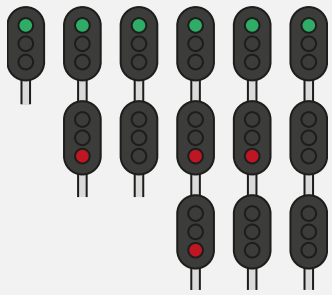
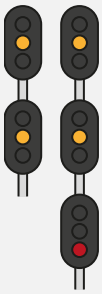
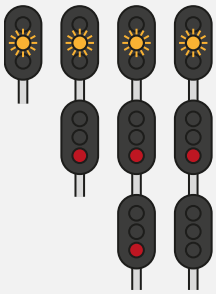
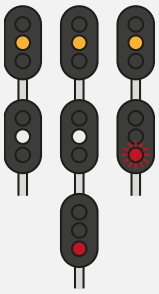
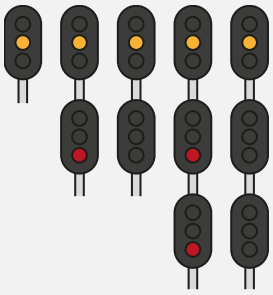
Signals used on the Peninsula Corridor as represented in Train Sim World consist of a number of components that form the basis of advising the Engineer of the state of the route ahead. There are several signal types used on Peninsula Corridor, which are made of one or more “signal heads” arranged vertically on a pole or mounted overhead on a gantry. The following pages explain the variations and the possible aspects that can be displayed.

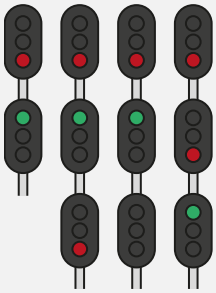
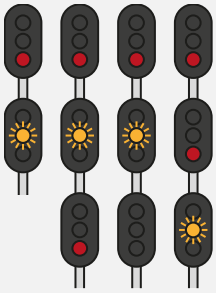
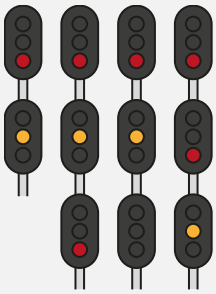
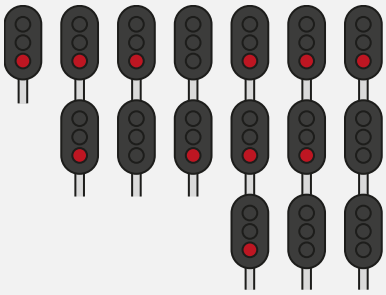
In order to understand the terms used for each of the aspects, it is necessary to provide an outline of the terms as explained below:

Term	Meaning
Normal Speed	Also known as the Maximum Authorized Speed (MAS). This relates to the normal operating line speed or the maximum possible speed for a given route.
Cab Signal	Relates to the indications that can be displayed on in-cab display equipment.
Signal Speed	Relates to the MAS that is implied by a specific signal aspect.
Limited Speed	Defines the MAS as 50 mph for passenger trains and 40 mph for freight trains.
Medium Speed	Defines the MAS as 35 mph for passenger trains and 25 mph for freight trains.
Slow Speed	Defines the MAS as 20 mph for passenger trains and 15 mph for freight trains.
Reduced Slow Speed	Defines the MAS as 15 mph for passenger trains and 5 mph for freight trains.
Restricted Speed	Defines the MAS as 20 mph for all trains.
Interlocking	Is an arrangement of signals that prevents conflicting movements through junctions or crossings. Typically, entrances to interlockings are protected by “Home Signals” which control movements through the interlocking.
Block or Signal Block	Relates to the gap between signals.

Main Aspects: Colour Position Light (Route Signal Rules)

Route Signals are in effect between Southward block signals 433-1 and 433-2 and North Limit CP Lick.

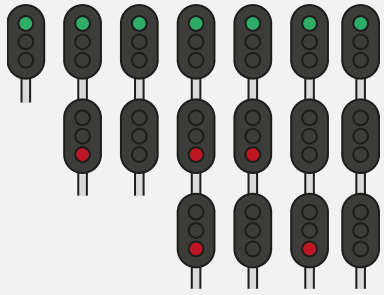
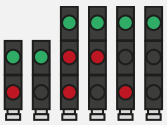
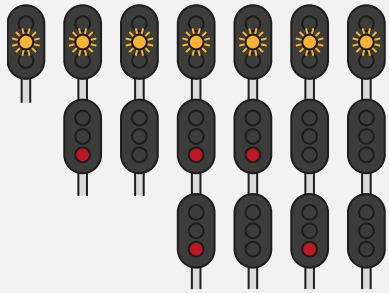
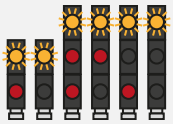
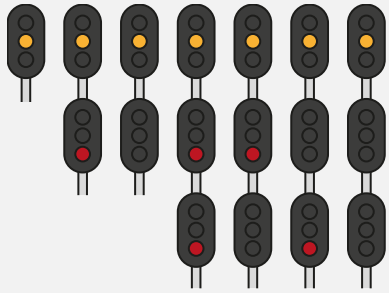
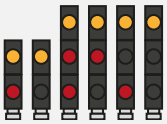
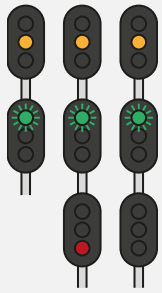
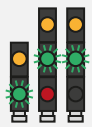
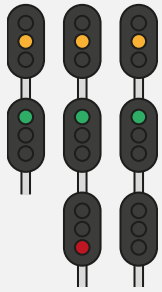
	◄ **Rule 9.1.3 Clear** Proceed.
	◄ **Rule 9.1.6 Approach Diverging** Proceed prepared to advance on diverging route at next signal at prescribed speed through turnout.
	◄ **Rule 9.1.7 Advance Approach** Proceed prepared to stop at second signal. Freight trains exceeding 40 mph (64 km/h) must immediately reduce to 40 mph. Passenger trains may proceed, but must be prepared to pass the next signal not exceeding 40 mph.
	◄ **Rule 9.1.8 Approach Restricting** Proceed prepared to pass the next signal at Restricted Speed, but not exceeding 15 mph (24 km/h).
	◄ **Rule 9.1.9 Approach** Proceed prepared to stop before any part of train or engine passes the next signal. Freight trains exceeding 30 mph (48 km/h) must immediately reduce to 30 mph. Passenger trains exceeding 40 mph (64 km/h) must immediately reduce to 40 mph.

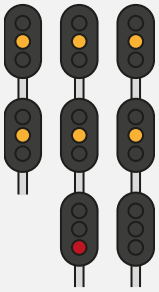
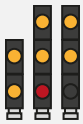
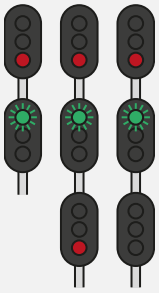
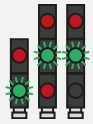
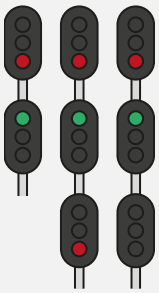
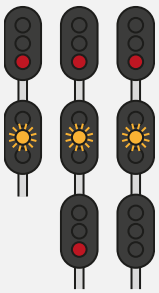
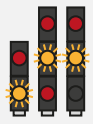
	◄ **Rule 9.1.10 Diverging Clear** Proceed on diverging route not exceeding prescribed speed through turnout.
	◄ **Rule 9.1.11 Diverging Advance Approach** Proceed on diverging route not exceeding prescribed speed through turnout and be prepared to stop at second signal. Freight trains exceeding 40 mph (64 km/h) must immediately reduce to 40 mph. Passenger trains may proceed, but must be prepared to pass the next signal not exceeding 40 mph.
	◄ **Rule 9.1.12 Diverging Approach** Proceed on diverging route at prescribed speed through turnout prepared to stop before any part of train or engine passes the next signal. Freight trains exceeding 30 mph (48 km/h) must immediately reduce to 30 mph. Passenger trains exceeding 40 mph (64 km/h) must immediately reduce to 40 mph.
	◄ **Rule 9.1.15 Stop** Stop before any part of the train or engine passes the signal.

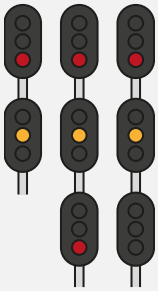
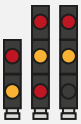
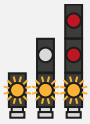
Main Aspects: San Francisco Signal Rules

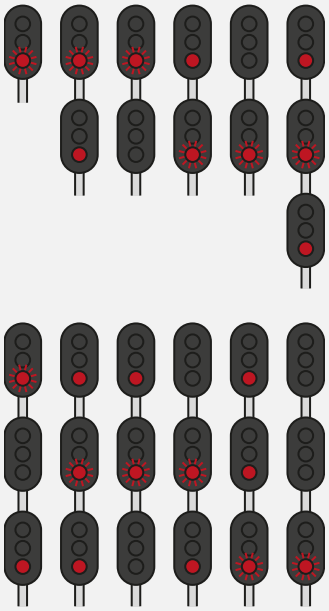
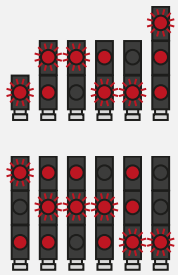
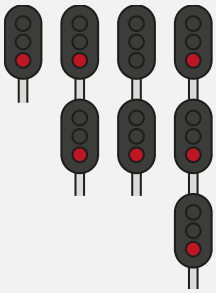
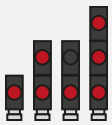
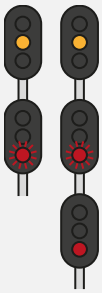
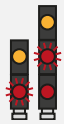
	◄ **Rule 9.1.40 Reduced Slow Clear** Proceed at Reduced Slow Speed until entire train clears all control point switches, then proceed.
	◄ **Rule 9.1.41 Reduced Slow Advance Approach** Proceed prepared to stop at the second signal. Reduced Slow Speed applies until entire train clears all control point switches, then Limited Speed applies.
	◄ **Rule 9.1.42 Reduced Slow Approach** Proceed prepared to stop at the next signal. Reduced Slow Speed applies until entire train clears all control point switches, then Medium Speed applies.

Main Aspects: Colour Position Light (Speed Signal Rules)

	 DWARF SIGNALS	◄ **Rule 9.1.20 Clear** Proceed.
	 DWARF SIGNALS	◄ **Rule 9.1.21 Advance Approach** Proceed prepared to stop at the second signal. Trains exceeding Limited Speed must begin reduction to Limited Speed as soon as the engine passes the Advance Approach signal.
	 DWARF SIGNALS	◄ **Rule 9.1.22 Approach** Proceed prepared to stop at the next signal. Trains exceeding Medium speed must begin reduction to Medium speed as soon as engine passes the Approach Signal.
	 DWARF SIGNALS	◄ **Rule 9.1.23 Approach Limited** Proceed prepared to pass the next signal at Limited Speed.
	DWARF SIGNALS	◄ **Rule 9.1.24 Approach Medium** Proceed prepared to pass the next signal at Medium Speed.

	 DWARF SIGNALS	◄ **Rule 9.1.25 Approach Slow** Proceed prepared to pass the next signal at Slow Speed. Trains exceeding Medium Speed must begin reduction to Medium Speed as soon as the engine passes the Approach Slow signal.
	 DWARF SIGNALS	◄ **Rule 9.1.26 Limited Clear** Proceed at Limited Speed until entire train clears all control point switches, then proceed.
	 DWARF SIGNALS	◄ **Rule 9.1.27 Medium Clear** Proceed at Medium Speed until entire train clears all control point switches, then proceed.
	 DWARF SIGNALS	◄ **Rule 9.1.28 Slow Clear** Proceed at Slow Speed until entire train clears all control point switches, then proceed.
	 DWARF SIGNALS	◄ **Rule 9.1.29 Limited Advance Approach** Proceed at Limited Speed prepared to stop at the second signal.

	 DWARF SIGNAL	◄ **Rule 9.1.30 Medium Approach** Proceed at Medium Speed prepared to stop at the next signal. Trains exceeding Medium Speed must at once reduce to Medium Speed.
	 DWARF SIGNAL	◄ **Rule 9.1.31 Medium Approach Medium** Proceed at Medium Speed until entire train clears all control point switches, then proceed prepared to pass the next signal at Medium Speed. Trains exceeding Medium Speed must immediately reduce to Medium Speed.
	 DWARF SIGNAL	◄ **Rule 9.1.32 Medium Approach Slow** Proceed at Medium Speed prepared to pass the next signal at Slow Speed. Trains exceeding Medium Speed must immediately reduce to Medium Speed.
	 DWARF SIGNALS	◄ **Rule 9.1.33 Slow Advance Approach** Proceed prepared to stop at the second signal. Slow Speed applies until entire train clears all control point switches, then Limited Speed applies.
	 DWARF SIGNALS	◄ **Rule 9.1.34 Slow Approach** Proceed prepared to stop at the next signal. Slow Speed applies until entire train clears all control point switches, then Medium Speed applies.

	 DWARF SIGNALS	◄ **Rule 9.1.35 Restricting** Proceed at Restricted Speed.
	 DWARF SIGNALS	◄ **Rule 9.1.37 Stop** Stop before any part of train or engine passes the signal.
	 DWARF SIGNALS	◄ **Rule 9.1.38 Approach Restricting** Proceed prepared to pass the next signal at Restricted Speed. Trains exceeding Medium Speed must begin reduction to Medium Speed as soon as the engine passes the Approach Restricting signal.
	 DWARF SIGNAL	◄ **Rule 9.1.39 Medium Approach Restricting** Proceed at Medium Speed prepared to pass the next signal at Restricted Speed. Trains exceeding Medium Speed must immediately reduce to Medium Speed.

Signal Progression

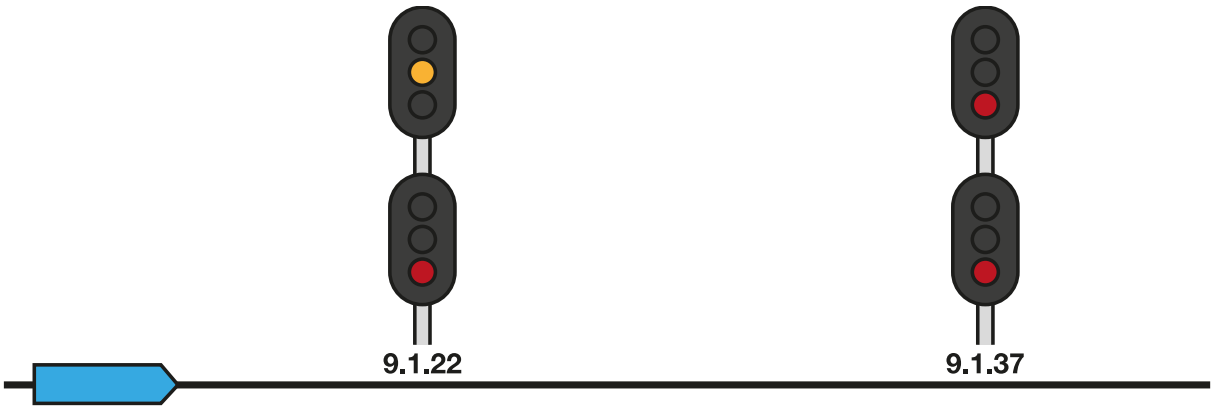
Signals are essentially a form of network, one signal talks to its neighbour further up the line and its other neighbour further down the line. That next signal will also talk to its neighbour further up the line, and that signal will also talk to its neighbour, etc... and so on and so forth. If you are approaching a Stop signal further down the line, because of this network, there are signals you will see on approach that will warn you about it. You will see those types of signals first, before you arrive at the Stop signal. In the same way, if you need to reduce speed to go over a switch, you will see signals that will bring your train down in speed, so by the time you're on final approach to the switch, you will be at the right speed to cross it.

This sequence is called a progression. Either an aspect (what a signal shows) is improved (i.e. going from a Slow to a Clear aspect) or it is degraded (i.e. going from Slow to a Stop).

As there are numerous circumstances that require train control, there can be many signal progressions.

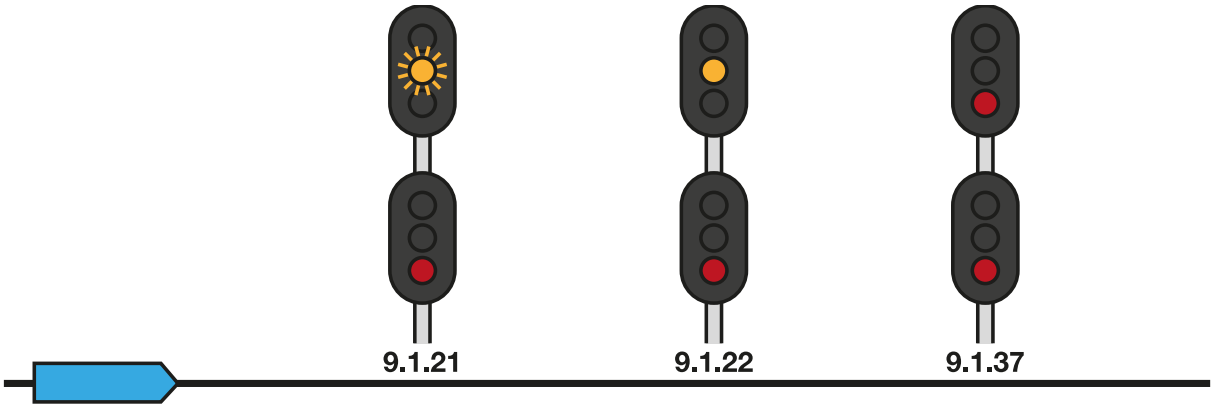
Progressions Leading to a Stop

Rule 9.1.22 Approach ► Rule 9.1.37 Stop



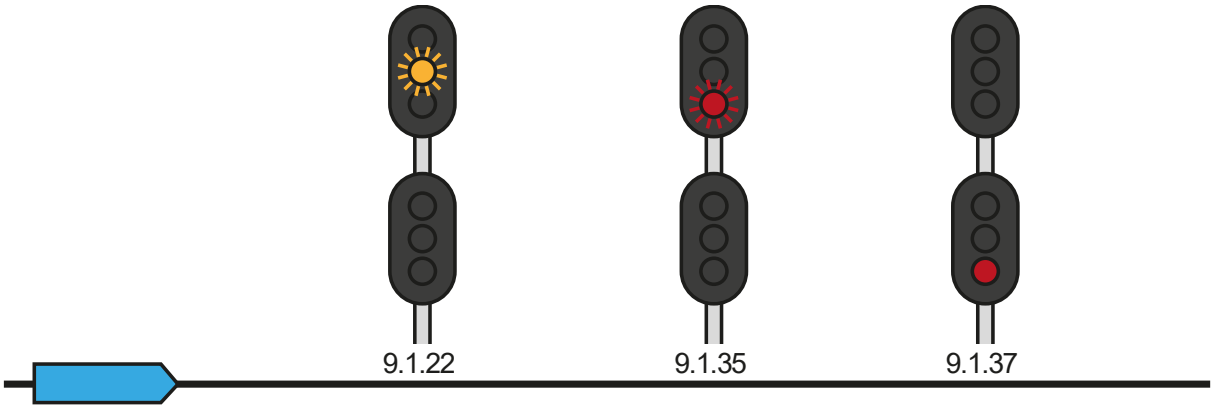
In the above example, the Approach signal precedes the Stop signal which is warning the engineer that a signal they are approaching is displaying a Stop aspect. The engineer would normally begin reducing speed in preparation for bringing the train to a complete stop.

Rule 9.1.21 Advance Approach ► Rule 9.1.22 Approach ► Rule 9.1.37 Stop



In the above example, this progression also incorporates an Advanced Approach aspect which the engineer will see before the Approach signal. This is useful when trains may be heavy or travelling at high speeds as it provides additional distance and warning for the engineer to begin slowing the train.

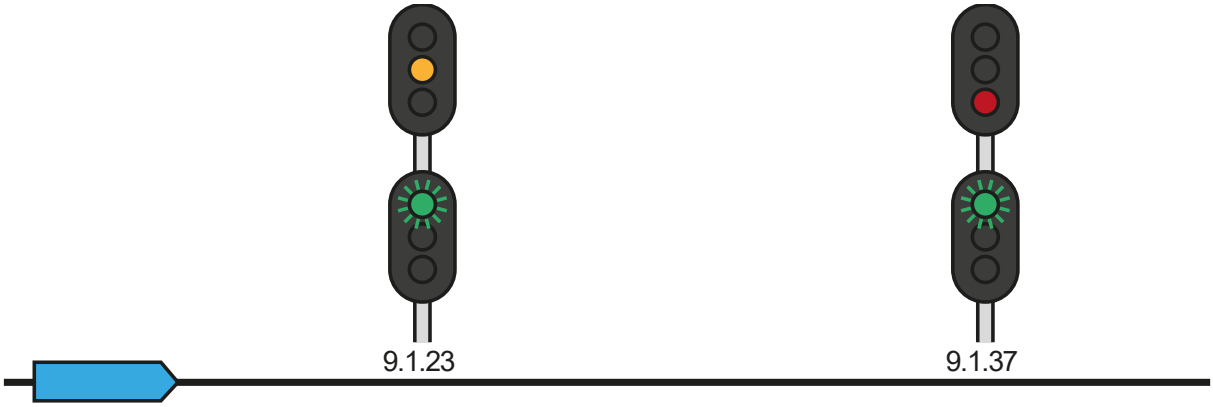
Rule 9.1.22 Approach ► Rule 9.1.35 Restricting ► Rule 9.1.37 Stop



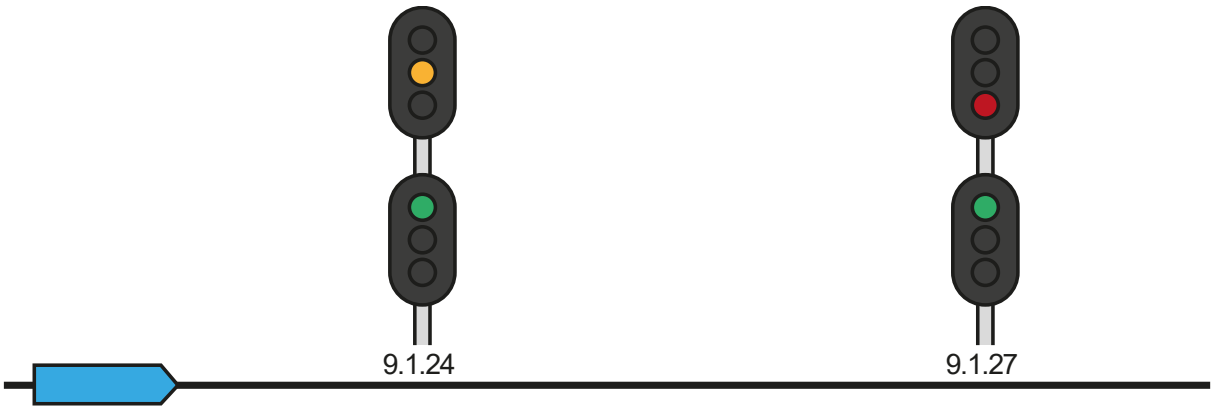
If two signals are too close together, instead of showing an Advanced Approach signal, you may see a Restricting aspect in between the Approach and Stop signals to bring you further down in speed.

Progressions for Slowing Down

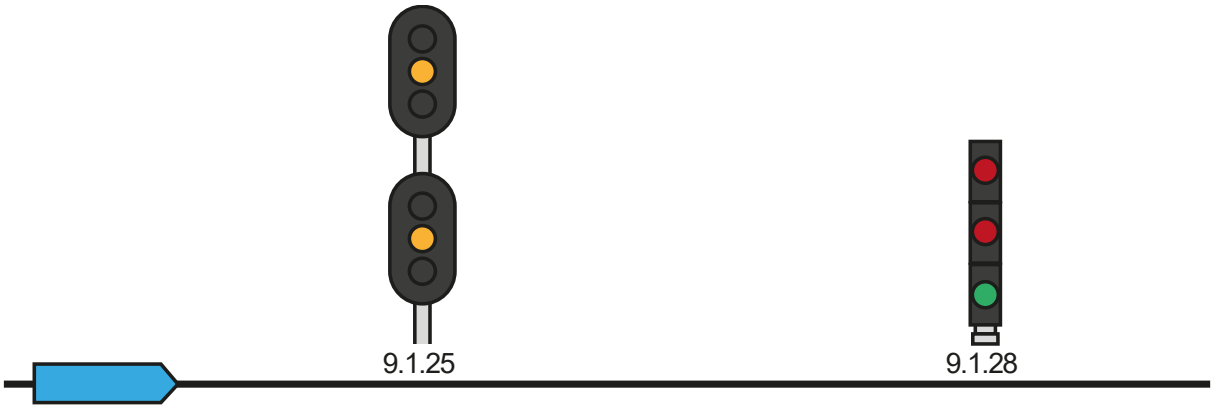
Rule 9.1.23 Approach Limited ► Rule 9.1.37 Limited Clear



Rule 9.1.24 Approach Medium ► Rule 9.1.27 Medium Clear



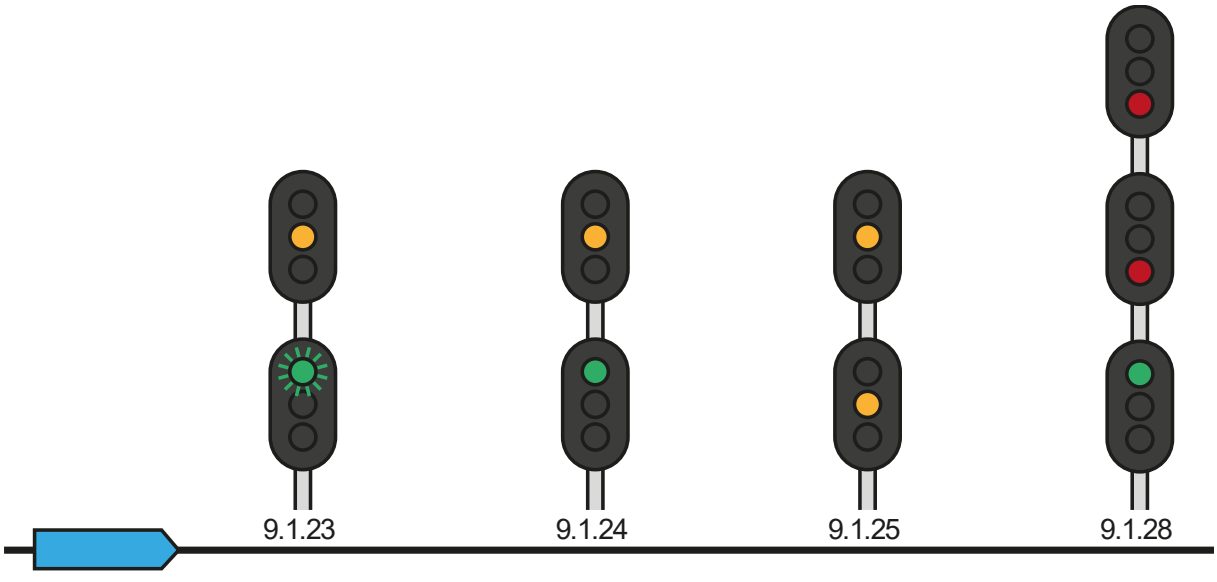
Rule 9.1.25 Approach Slow ► Rule 9.1.28 Slow Clear



The above three examples should be self-explanatory in that, in all three examples, each speed restriction is preceded by an appropriate Approach aspect for that speed.

However, the above examples would not be useful if your train was travelling at 70 mph and you needed to reduce to Slow speed – simply displaying an Approach Slow signal before the Slow Clear would not provide enough distance for your train to slow down. In such cases, you would expect the signal progression to go something like this:

Rule 9.1.23 Approach Limited ► Rule 9.1.24 Approach Medium ► Rule 9.1.25 Approach Slow ► Rule 9.1.28 Slow Clear



Combined Progressions

Combined progressions are those when one progression leads to a specific signal, but another is needed to warn about another signal soon thereafter. For example, if a Medium Clear is required to have the train pass over a Medium Speed junction, but then the train needs to come to a stop at the next signal, the Medium Clear progression and the Stop progression will be combined. There are many more combined progressions that you will see out on your travels. Keep a look out for them.

Default English Keyboard & Other Controls

	Keyboard		Controller	
Name	**Increase / Press**	**Decrease**	**Increase / Press**	**Decrease**
Throttle	A	D	Right Trigger	Right Bumper
Brake	‘	;	Left Trigger	Left Bumper
Reverser	W	S	Left Stick Up	Left Stick Down
Headlights	H	Shift + H	Hold D-Pad Right Also: Tap D-Pad Right to cycle headlight settings	Hold D-Pad Right
Marker Lights	K			
High Horn	Space		Left Stick Click	
Master Switch	CTRL + W			
Alerter Reset	Q		B Button	
Toggle Cab Light	L			
Instrument Lights	I	Shift + I		
Emergency Brake	Backspace			
Wipers	V	Shift + V	D-Pad Left	
Toggle Alerter	Shift + Enter			
Flashlight (When Walking)	L			

Note: the above keys can be redefined in the in-game settings menu.

Using the In-Game Cameras

Train Sim World includes several cameras for you to control, here's an outline of those cameras and some examples of use:

	First Person Camera or Cab Camera Use this camera to operate your locomotive, flip switches and handle all of your cab controls. You can also click the right mouse button to activate the mouse pointer. Click the right mouse button again to return to camera control.
	Boom Camera Your camera extends outward on an invisible pole, you can rotate it around your focussed vehicle. Use Ctrl + left or right cursor keys to switch between vehicles or press the 2-key again to switch between the front and rear of your consist.
	Floating Camera A camera that allows you to freely look in all directions whilst locked to a vehicle. This camera is useful for coupling and changing switches. Press it once to view the front of your consist and again to view the rear. Freely move your view using the cursor keys.
	Free Camera Freely move around without limits using this camera. Use this camera to navigate your way around a busy yard, change switches or position it to get the perfect screenshot.

When in any of the camera modes, you can use the cursor keys to move the camera whilst using the mouse to pan and pitch the view:

	Moves the camera forward.
	Moves the camera backward.
	Moves the camera to the left.
	Moves the camera to the right.

Dovetail Live

The Dovetail Forums are your one-stop destination for everything Train Simulator and Train Sim World related. We have an ever growing and vibrant community of train enthusiasts from all over the world, ranging from experienced railroad veterans to new players getting into the world of train simulation. So, if you haven't already, why not sign up for an account today and join our community – we'd love to have you on board!
See more at: **https://forums.dovetailgames.com**

Dovetail Live is an online destination which enables players to interact with Dovetail's products and each other in an environment tailored specifically to fans of simulation entertainment. Dovetail Live will evolve to become central to Train Sim World®, enriching the player experience in every way from offering rewards, building a community of likeminded players and helping every player find the right content to create their own perfect personal experience.

Signing up for Dovetail Live is completely voluntary. However, users that do sign up for it will receive exclusive benefits in the future.

See more at: **https://live.dovetailgames.com**

Troubleshooting Guide & How to Get Support

I have a problem downloading the Steam client, how do I contact them?
You can contact Steam Support by opening a customer service ticket at support.steampowered.com/newticket.php. You will need to create a unique support account to submit a ticket (your Steam account will not work on this page) and this will enable you to track and respond to any tickets you open with Steam.

How do I install any secondary programs that the game may need?
Train Simulator World requires certain secondary programs to operate properly. These are standard programs that most up-to-date computers already have installed on them, such as DirectX. These programs can be found at the following location: Local Disk (C:) > Program Files (x86) > Steam > SteamApps > common > TSW > _CommonRedist

How do I change the language of Train Sim World?
This is an easy process and will allow you to play Train Sim World in English, French, German, Spanish, Russian and Simplified Chinese. To change the language of Train Sim World, double-click on the Steam icon on your PC desktop, left click on ‘Library’, right click on ‘Train Sim World’, left click on ‘Properties’, and finally left click on the Language tab and select your preferred language.

How do I reset my display screen size settings?
It is possible to change the display screen size settings for Train Sim World from within the game. Changing display screen size settings is done from the Settings menu in the Display tab.

For any questions not covered here, visit our knowledgebase at
https://dovetailgames.kayako.com