





# RailWorks 2: Train Simulator – Quick Reference







Some controls only apply to certain control models. To set the control model, select GAMEPLAY from the Options menu in the main menu.

Controls exclusive to the Simple control model appear in green.  
Controls exclusive to the Expert control model appear in red.





## Simple Driving

	Accelerate	<b>A</b>
	Decelerate	<b>D</b>
	Change direction.	<b>S</b>
	Emergency Brake	<b>Backspace</b>
	Horn	<b>Spacebar</b>




## Expert Driving

	Increase/Decrease throttle (open/close regulator for steam trains)	<b>A/D</b>
	Increase/Decrease Reverser	<b>W/S</b>
	Increase/Decrease Train brake	<b>' /;</b>
	Increase/Decrease locomotive brakes	<b>] / [</b>
	Increase/Decrease dynamic brakes	<b>.,</b>
	Gear up/Gear down	<b>E/shft-E</b>















## Steam Controls

	Small ejector on/off	<b>J</b>
	Cylinder cocks on/off	<b>C</b>
	Switch to fireman view (only if Manual fireman selected)	
	Switch to Driver view (only if Manual fireman selected)	

## Steam Controls – Manual fireman

	<b>Coal.</b> Move the lever to increase/decrease the rate of shovelling. Use the bottom right button to open/close the firebox door	<b>R/shft-R</b> <b>F/ shft-F</b>
	<b>Injector Control.</b> The left button at the bottom turns on/off Injector 1 The right button at the bottom turns on/off Injector 2 The left slider increases/decreases the flow to the injector 1 The right slider increases/decreases the flow to the injector 2	<b>I</b> <b>O</b> <b>K/ shft-K</b> <b>L/shft-L</b>
	<b>Damper/Blower Control.</b> The slider on the left increases/decreases the Blower. The slider on the right increases/decreases the Damper	<b>N/shft-N</b> <b>M/shft-M</b>

## Controlling the view

	Cab view.	<b>1</b>
	External front camera.	<b>2</b>
	Rear of train	<b>3</b>
	Trackside camera	<b>4</b>
	Passenger view	<b>5</b>
	Front coupling camera	<b>6</b>
	Overhead Yard camera	<b>7</b>
	Detach camera from train for general exploration	<b>8</b>
	Zoom in. (scroll mouse wheel)	<b>Up arrow</b>
	Zoom out (scroll mouse wheel)	<b>Down arrow</b>
	Head out of cab left/Head out of cab right.	<b>Shft+2</b>
	Alternate camera	
	Move forward to next cab. (For consists with multiple cabs)	<b>Ctrl+ =</b>
	Move back to previous cab. (For consists with multiple cabs)	<b>Ctrl+ -</b>

Additional keys (**Note:** not all are available in all views):

Zoom: “↑”, “↓”

Zoom fast: **Shft + “↑”**, **Shft + “↓”**

Pan: “←”, “→”

Angle: **ctrl+ “↑”**, “↓”

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## Other Controls

(Note: Not all controls are available on all locomotives)

	Load/unload passengers or freight	<b>T</b>
	Lights. Will cycle through headlight states if appropriate.	<b>H</b>
	Wipers.	<b>V</b>
	Screenshot.	<b>Ctrl+S</b>
	Engine stop/start.	<b>Z</b>
	Raise/Lower Pantograph (Electric trains only)	<b>P</b>
	Alerter ("Q").	<b>Q</b>
	Sander	<b>X</b>
	Bell	<b>B</b>
	Emergency Brake.	<b>Back-space</b>
	Horn. Sound the horn or whistle.	<b>Spacebar</b>
	Handbrake off. This icon is displayed in the Coupling view	<b>/</b>
	Pause. Gives you a choice of: Continue/Save Scenario State/Enter World Editor/Quit	<b>Pause-Break</b>
	Request permission to pass signal in front/behind	<b>Tab/ Shft+Tab</b>
	Change state of junction in front/behind.	<b>G/ Shft+G</b>
	Couple manually.	<b>Ctrl+Shft+C</b>
	Exit. You will receive an option to exit or continue.	<b>Ctrl-Q</b>
	Enter World Editor.	<b>Ctrl-E</b>
	Save position in Scenario.	<b>F2</b>

## Accessing other Information

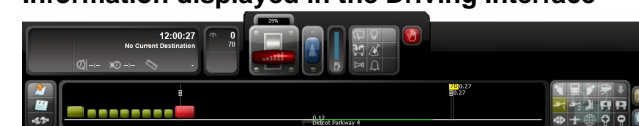
	Display 2D Track map.	<b>9</b>
	Display Task Information.	<b>F1</b>
	Display Coupling view (locomotives, wagons, coaches).	
	Turn on/off Driver's Guide. This is only available when the Driving interface is disabled.	<b>F3</b>
	Turn on/off driving interface	<b>F4</b>
	Engine information. It is only available when the Driving interface is disabled.	<b>F5</b>
	Display labels.	<b>F6</b>
	Display engine and wagon numbers. Note that this option is only available if Display Labels is already selected.	<b>F7</b>

## Other Icons

Activity markers	
	Load bulk freight
	Load Container
	Couple
	Uncouple
	Load fuel
	Load passengers
	Load water
	Set junction

Performance Indicators	
	Comfort.
	Fuel usage (above defined threshold).
	Operational error.
	Speeding.
	Time keeping (late).
	Wheel slip.
	Coach aligned with platform
	Timeliness (early)

## Information displayed in the Driving Interface



	Current speed and speed limit
	Current time and scenario instructions

### Track profile



Shows: Incline; Wagons; Distance to the next signal; Speed limits; Stations

### Coupling view



Shows: locomotives/wagons/coaches in consist, state of handbrake

### Steam engine indicators

	The indicator on the left shows the coal level.
	The indicator on the left shows the water level.
	Boiler level; Boiler Pressure and Fire Mass
	Steam Generation rate; Steam usage; Brake pipe pressure; Steam Chest pressure; Water level; Coal level.

### Diesel/Electric engine indicators

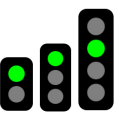
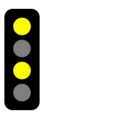
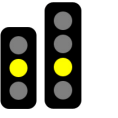
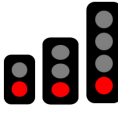
	This shows (left to right): Brake cylinder pressure and Brake pipe pressure.
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# Signaling and Signage

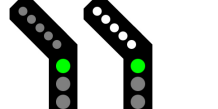
## UK Modern Signalling

These Signals appear on the Oxford to Paddington, Newcastle to York and Hedborough North Routes.


### Multi-Aspect Colour Light Signals

	The line ahead is clear.		Be prepared to stop after the next signal.
	Stop at the next signal.		The line ahead is occupied.

### Junction Signals

	An illuminated row of white lights indicates that the route ahead will be diverging from the current line.
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
### Ground Shunt Signals

	Two illuminated white lights indicates the junction ahead is active and can be used.
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## UK Historic (Semaphore) Signalling



These signals appear on the Bath to Templecombe Route.

### Home Signals

	The line ahead is clear.		The line ahead is occupied.
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

### Distant / Warning Signals

These signals come before the Home signals, and give a warning about what the Home signal is displaying.

	This display indicates that the Home signal is showing the line ahead is clear.		This display indicates that you should be prepared to stop at the next Home signal
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


### Combined Signals

These signals are used when there isn't enough space to have the Distant signal on its own post.

	This signal indicates that the line ahead is clear as well as beyond the next signal.		This signal indicates that the line ahead is clear, but be prepared to stop at the next signal.
	This signal indicates that the line ahead is occupied.		

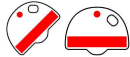
### Junction Signals

The taller signal indicates the main route, with the lower signal indicating a diverging route. There are also 'warning' versions of these signals.

	This signal indicates that you should use the main route and the line ahead is clear		This signal indicates that you should use the diverging route ahead and the line is clear.
	This display indicates that the line ahead is occupied on both routes.		

### Ground Shunt Signals

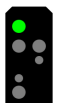
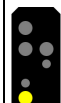

These act like miniature semaphore signals. They indicate if a junction can be used.

	In the diagonal position, the junction is clear and can be used. While in the horizontal position, the junction is not safe to use.
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## German Signalling




These signals appear on the Hagen to Siegen and Seeburgbahn Routes.

### Modern "HP" Main Signal


	The line ahead is clear.		Be prepared to stop at the next signal. If using a junction, slow to a maximum speed of 40km/h.
	The line ahead is occupied.		

### Modern "VR" Distance Signal



These signals appear before HP signals, and provide a warning about what the next HP signal is showing.

	This display indicates that the HP signal is showing the line ahead is clear.		This display indicates that the HP signal is showing a warning.
	This display indicates that you should stop at the next HP signal.		

### Modern "VR" Repeater Signal

	These signals are distinguished by a white marker like on the side but they are identical to the VR signals in every other way.
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### Modern "SH" Shunt Signal

	White lights indicate the junction ahead is active and can be used.
	Red lights indicate the junction ahead cannot be used.

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## US Modern Signalling

These Signals appear on the Barstow to San Bernardino and Castle Rock routes.

### Multi-Aspect Colour Light Signals

	The line ahead is clear.		Stop at the next signal
	The line ahead is occupied		

### Junction Signals

	Prepare to pass next signal not exceeding 60mph for diverging route.		Prepare to pass next signal not exceeding 50mph for diverging route.
	Prepare to pass next signal not exceeding 40mph for diverging route.		Prepare to pass next signal at restricted speed for diverging route.
	Proceed along diverging route at line speed.		Proceed along diverging route at line speed and prepare for additional diverging route.
	Proceed along diverging route at line speed and prepare to pass next signal not exceeding 35mph.		Proceed along diverging route at line speed and prepare to stop at next signal.
	Proceed at restricted speed not exceeding 15mph.		Stop, then proceed at restricted speed not exceeding 15mph.

## Signal Warning Systems (Expert mode only)

	<b>AWS (Automatic Warning System)</b> (used in Oxford-Paddington, Newcastle-York and Hedborough North routes) AWS is a signal warning system mounted in the middle of the track roughly 185m in front of every stopping signal.
	<b>PZB (Punktförmige Zugbeeinflussung)</b> (used in Hagen-Siegen and Seeburgbahn routes) PZB is a signal and speed warning system mounted on the side of the track at main and distant signals.
If the signals ahead display clear aspects, you do not need to react. If the signals ahead display caution or danger aspects you will receive an audible and visual alert and must react to this feedback within a specified time (UK: 2.7 seconds, Germany: 8 seconds). Press 'Acknowledge' (Q) or press the Alerter button. If you do not, the emergency brakes will be applied.	

### Train Protection and Warning System (TPWS)

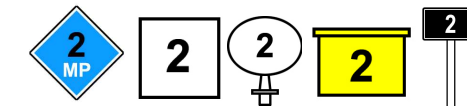
(Only present on Oxford – Paddington route)

	TPWS is a signal and speed monitoring system, mounted in the middle of the track. Similar to AWS, TPWS checks the speed of the train as it passes and decides whether it can stop in time for the signal it is protecting.
If the signal is GREEN or YELLOW, TPWS will only stop the train if it is going faster than the speed limit. If the Signal is RED, TPWS will stop the train if it is unlikely to stop before passing the signal.	

## Trackside Signage

	Speed limit signs.
	Speed limit for direction indicated.
	Speed limit warning signs.
	Speed limit warning for direction indicated.

## Distance Marker Posts



These appear on one side of the line and indicate the distance in miles (for US and UK routes) and kilometres (for Mainland Europe routes) from a main station on the route.