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1. Enter the driving cab.
2. Insert the Master Key and move the Master Switch to On.
3. Put the driver’s seat into the down position and sit down.
4. Turn on the Headlights to let other users of the railway that the train is in operation.
5. Insert the Reverser Key.
6. Move the Reverser to the desired direction. Two forward positions can be set, Forward 1 reduces the overall power output and should be used when railhead conditions are less than ideal, such as when it is raining or snowing. Forward 2 is used when the railhead conditions are dry.
7. The throttle control is a deadman’s handle which requires the driver to press down on the switch at all times. In Train Sim World, this has been simplified as a toggle which then keeps the handle down when any power notch is set. Press the handle by selecting the first notch, then move the handle into the third notch or Series notch. The train will begin to move.
8. As you start to gain speed, move the handle into the Parallel notch to continue climbing in speed.
1. Driver’s side window can be opened by grasping the leather strip to release the catch.

2. Brake cylinder gauge displays the current air pressure being applied to the wheels.

3. The left side of the duplex gauge displays the total air pressure in the main reservoir with the right side displaying the air pressure in the brake pipe that connects each vehicle.

4. The indicator panel displays current status of various train systems such as electrical connection and electro-pneumatic brake control systems.

5. The wiper switch enables/disables the windscreen wipers.

6. Driver’s access door is used to gain access to the driver’s cab.

7. The Speedometer displays the current speed.

8. The Master Key must be inserted before you can operate the Traction Control Switch to enable the cab for operation. The lever key must be removed when changing ends.

9. The whistle is a warning device used to let other users of the railway know that you are approaching. It can also be used for signalling when shunting or awaiting signaller’s clearance.

10. The Driver’s Seat is where you will spend most of your time whilst driving this multiple unit.

11. The Train Brake Valve applies or releases the brakes on every vehicle in the consist. The brake valve is a dual purpose brake in that most of the brake handle operates electropneumatically (EP) with various positions operating via the electronic brake circuit. The second part of the brake handle operates as a Westinghouse brake with Hold and Charge positions directly controlling air into, and out of, the brake cylinders.

12. The Reverser sets the direction of travel. Forward 2 should be used as standard except when railhead conditions are likely to introduce wheelslip and requires the use of Forward 1.

13. The Deadman’s Handle should be depressed before selecting an appropriate Throttle notch to accelerate the train. Series should be selected when moving away before then selecting Parallel once the train accelerates above 40 mph. Shunt is used for low speed movements only.
1. Couples this vehicle to the vehicle in front.
2. Uncouples this vehicle from the vehicle in front.
3. Auxilliary Trip button cuts out the Auxilliary systems (non-functional).
4. Sets the state of the forward marker lights to on (lower) or off (upper).
5. Sets the state of the cab light to on (lower) or off (upper).
6. Sets the state of the instrument lights to on (lower) or off (upper).
7. Overload Trip button activates the overload circuit protection system (non-functional).
8. Overload Reset resets the overload circuit protection system.
9. Door Cut-Out disables the passenger access door system. In Train Sim World, this is configured to activate the appropriate passenger doors for player convenience.
10. Centre access door is used to gain access to another unit if coupled to this end of the train.
11. Driver’s access door is used to gain access to the driver’s cab.
12. Handbrake sets the force and state of the manually operated handbrake.
13. Passenger saloon access door is used to gain entry to the passenger compartment and the rest of the train.
ADDITIONAL CONTROLS
1 Sets the state of the passenger saloon lighting throughout the train to on (upper) or off (lower).

2 Sets the state of the left-side passenger access doors throughout the train to open (left) or closed (right).

3 Sets the state of the right-side passenger access doors throughout the train to open (left) or closed (right).

4 Centre access door is used to gain access to the next vehicle.
British colour light railway signals consist of one or more physical components or modules that form the basis of advising the driver on the state of the route ahead. The components are, from top to bottom:

- **Junction Indicator or Route Indicator** typically mounted above the main aspect head.
- **Main Aspect Head** (the example shown is a four-aspect type) which provides a visual representation of the state of the route ahead.
- **Signal Type Identifying plate** advises what type of signal this is (the example shown is an automatic signal).
- **Signal Identification Plate** advises the area this signal is situated in and its corresponding identification number.

**Stop**
You must not proceed beyond this signal; the next block is occupied.

**Caution**
Proceed into the next block. Expect the next signal to be at Stop.

**Advanced Caution**
Proceed into the next block. Expect the next signal to be at Caution.

**Clear**
Proceed into the next block.

The examples above show the appropriate aspects for four-aspect block signalling. The Advanced Caution aspect is used to enable greater braking distance for trains travelling at high speeds or that have heavy loads, and even in situations such as on steep downhill grades that is likely to require greater distances to stop.
For three-aspect signalling, these signals cannot display the Advanced Caution aspect. The meaning of each aspect is identical to those of four aspect signals.

For two-aspect signalling, these can only display the Clear and Stop aspect. However, care should be taken with two aspect signals as there can also be limited aspect and distant variants as shown above.
Distant signals are explained further along in this guide. However, Limited Aspect signals are those that are incapable of displaying a Clear aspect and are therefore limited to ‘degraded’ aspects. Degraded essentially means - if Clear is the best possible aspect you can receive, then the aspect below that is Caution, which is worse than Clear and Stop is worse than Caution. These are called degraded aspects because each one degrades or slows the movements of trains.
The sequence of displayed aspects runs from left to right as shown in the examples below:

**FOUR ASPECT SIGNALLING**

![Four Aspect Signalling Diagram]

*fig. 1*

**THREE ASPECT SIGNALLING**

![Three Aspect Signalling Diagram]

*fig. 2*

**Direction of Travel ➔**
In these diagrams, if you are the blue train, the five signals spaced between you and the red train would follow the sequence as shown in these examples. They also form a protection barrier between you and the red train. The empty space between each signal is called a block. Essentially, there are four empty blocks between you and the train in front. The distance between you and the train you are following is important as it should provide you with enough distance to bring your train to a complete stop when travelling at the maximum permitted speed of the line.

For a three-aspect signalling system, the number of blocks for braking would be reduced to three blocks. This means there is less braking distance between you and the train in front since three-aspect signals are incapable of displaying the Advanced Caution aspect. So, you can form the conclusion that the greater the number of main aspects a signal can display, the greater the distance between you and the train ahead and the greater the overall braking distance and the safer it is.

For two aspect signalling, you can see that there is very little braking distance. In fact, you would be unaware you were following another train until you were in the block immediately behind it. Two aspect signalling is not commonly used on main lines and is usually used on slower branch lines with less traffic.

Typically, four-aspect signals are used where line speeds would be in excess of 100 mph. However, there may be instances where the line speed is lower but additional protection is required. For example, due to a junction with a preceding steep downhill section and therefore greater distance required for braking of heavier trains. It is also used to increase overall capacity as the more protection that is provided, the more trains can run on the same line.
Additionally, each buffer stop (the end of the track as found at the end of sidings or at a terminus station) is regarded itself as a Stop signal and therefore signals further back up the line would display the appropriate aspects.

Finally, for limited aspect signals, you would normally find these when on approach to terminus stations where the aspect is limited to Caution or stop to add additional protection for trains within the platforms.

**Co-Acting Signals**

Co-acting signals are smaller versions of the main aspect signals and give both short and long-distance sighting of a signal. A co-acting signal repeats the exact same aspect of the main aspect and are always the same type (colour light or semaphore) as the main signal. You will typically find them at stations where visibility of the main signal is obstructed or impossible to read when stopped in a platform.
The examples above show the appropriate aspects for Upper-Quadrant signals (UQ), i.e. the signal arm raises into the upper quadrant of an arc in order to display its Clear aspect. Lower Quadrant signals are those that drop downwards but the meaning between each type is identical. For a Clear aspect (fig. 5), you should regard any indication that is at a 45-degree position and, for a Stop aspect (fig. 4), those indications that are at a horizontal position. Note that these signals are essentially only capable of displaying two aspects and you should regard them as such when considering speed and braking effort.
Clear

Continue at the maximum permitted speed for your train or for the route that has been set. If the train is fitted with AWS, a clear bell or tone will sound as you pass over the magnet that is situated on approach to the signal.

Advanced Caution

For lighter trains that have good braking, you should continue at the maximum permitted speed and look out for the next signal which is likely to be at Caution. If you are in a heavy train, are travelling at or just below 125 mph or are descending a steep grade, you should begin braking as soon as you see the aspect with a 14.5 PSI (1 Bar) reduction with the Driver’s or Train Brake. If the train is fitted with AWS, a warning horn or tone will sound, as you pass over the magnet, that you must acknowledge.

Caution

All trains should be braking once this signal is in sight. If your speed is such that you are unlikely to stop before the next signal, increase your braking effort to 29 PSI (2 Bar) to further reduce your speed. The aim is to reduce your speed to around 25 mph well in advance of the Stop signal ahead. If the train is fitted with AWS, a warning horn or tone will sound, as you pass over the magnet, that you must acknowledge.

Stop

All trains must stop in advance of the signal. If the train is fitted with AWS, a warning horn or tone will sound, as you pass over the magnet, that you must acknowledge.

It is important that you bring your train to a stop as close to the signal as possible but ensure that you can safely read the displayed aspect from your seated position. Do not stop so close to the signal that you need to adjust your driving position in order to read the signal aspect. Also, do not stop so far away from the signal that there is an extended distance to cover before passing the signal, this may result in the rear of the train occupying the rear-most signal block and impacting the safe movement of trains behind you.

Once you have come to a complete stop, it is considered good practice to move the Driver’s or Train Brake into the full-service position to secure the train.
Distant signals, sometimes referred to as Related Signals, essentially provide advanced warning of the aspect being displayed on the next block signal (the signal it is related to). You are not required to take any action at distant signals, but they can be useful for providing extra braking distance when you have a heavy or fast train.

In the examples above, the top row of signals are displaying a Caution aspect. The bottom row are displaying a Clear aspect. These type of signals will show either a triangle or ‘R’ suffix on the identification plate as explained in the Identifying Signal Types section.
When main aspect and distant signals are combined, they are effectively capable of displaying three aspects, as shown in the examples below. Combined semaphore signals are read from the top-most arm first and then the next lower arm, as explained below:

The signal on the left (fig. 8) both arms display a Clear aspect, so it is safe to proceed past this signal into the next block. This signal also advises that the next main signal is also displaying a Clear aspect, so it is also safe to proceed into that block too.

The centre signal's (fig. 9) top-most arm displays a Clear aspect but the lower arm advises that the following main aspect signal is displaying a stop aspect. You therefore need to regard this signal as Caution, you may pass this signal but be prepared to stop at the next signal.

The right signal's (fig. 10) top-most arm displays a Stop aspect. In this situation, the distant arm drops to caution because that is the lowest degraded aspect it can display. You should therefore not pass this signal.
Most colour light signals carry identification plates that aid the driver in understanding how they should regard the indication the signal is displaying. Understanding how to read the identification plate can be useful in determining what type of signal is providing you with instructions or guidance.

The identification plate is typically mounted to the post that carries the main signal aspect head. However, due to placement or clearance issues such as when signals need to be placed on the ground in stations, the identification plate may be mounted on top of the signal head. The identification plate can be broken up into three dedicated sections:

- The upper part of the identification plate employs a form of code that advises the driver on what type of signal is deployed. In this instance, a three aspect banner repeater.

- The alphanumeric characters AB 123 are the signal's area code and signal identification number in that area.

- The suffix characters further advises what type of signal is deployed. In this instance, the letters BR mean Banner Repeater.

Here are some other types of identification plates that are commonly used:

- Signals that carry no type identification are called Controlled Signals (fig. 11). This means the signal is directly controlled by a signaller or controller.

- The horizontal black band on a white background signifies that this is an automatic signal that sets its aspect based on the passage of trains and not by a signaller.

- With the word “SEMI” added, this advises that this signal is semi-automatic and can be controlled by a signaller or set to automatic operation if required.
Slightly different to the three-aspect Banner Repeater shown in the previous example, the solid circle and “BR” suffix signifies this is a two-aspect Banner Repeater.

The white triangle signifies that this is a distant signal and can sometimes be displayed with or without the triangle or the “R” (Repeater) suffix, but never both.

The “CA” suffix indicates that this signal is a co-acting signal.
Banner Repeater signals should be treated in exactly the same way as Distant/Repeater Signals. These signals are often used where visibility of the main signal is reduced or obstructed.

The horizontal band denotes the next main signal is displaying a stop aspect. You should be prepared to stop at the next signal.

The diagonal band denotes the next main signal is displaying a proceed aspect. Note that a proceed aspect can either be Clear, Advanced Caution or Caution. Most banner repeater signals can only display two aspects.

The diagonal band on a green background denotes the next main signal is displaying a Clear aspect. Note the distinction between Proceed and Clear. You will only find this on three aspect banner repeaters.

Position lights are subsidiary signals that grant on-sight movement authority to trains when a main aspect can’t be provided, such as in sidings or a yard.

This signal means stop. There may be an obstruction ahead and you should not proceed beyond this signal without permission to do so.

This signal also means stop. If you are shunting, you should not proceed beyond this signal as this is the outermost shunt limit.

Proceed on sight at caution toward the next train, signal or buffer stop, and be prepared to stop short of any obstruction.

This signal also means proceed on sight at caution.

This signal means stop.
If the position-light is affixed below a main aspect signal, there may not be any indication provided as these indicators are incapable of displaying a red Stop aspect in the same way that Position-Lights do (previous page). If this indicator is unlit, you should always obey the main aspect. Typically, the position light below the main signal would be lit if movement authority is granted where the main aspect cannot provide an indication other than Stop (for example if the line ahead is occupied when coupling to vehicles in a station or siding). For these signals, you need to regard the signal as one indication even though there may be multiple aspects displayed:

**Proceed at Caution** toward the next train, signal or buffer stop, and be prepared to stop short of any obstruction.

**Stop.** You must not proceed beyond this signal; the next block is occupied.
Alongside signals, there are some important signs to be aware of. Here are some of the examples you will find on Isle of Wight:

**Maximum Permitted Speed**

The modern style of maximum permitted speed sign which, in this instance, requires you to not exceed 25 mph.

The “Morpeth Board” advises the driver that the maximum permitted speed will decrease ahead. You should begin to slow to match this new speed before you reach the speed restriction ahead.

**Whistle & Coasting Boards**

The modern variant of the whistle board at which the driver must make a clear single loud tone on the horn if between the hours of 7:30 am and 11:30 pm. At some sites, particularly at crossings it will be necessary to use a loud two-tone horn. Between the hours of 11:30 pm and 7:30 am, drivers must use discretion in use of the horn and should use a low tone except when required to warn other users of the railway of your approach, loud tones can therefore be used for this purpose.

The coasting board advises that the driver may coast (travelling along without power applied) to a stopping point or significant speed reduction beyond the board.
### DEFAULT ENGLISH KEYBOARD & OTHER CONTROLS

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<tr>
<th>Name</th>
<th>Increase / Press</th>
<th>Decrease</th>
<th>Name</th>
<th>Increase / Press</th>
<th>Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Throttle</td>
<td>A</td>
<td>D</td>
<td>Reverser</td>
<td>W</td>
<td>S</td>
</tr>
<tr>
<td>Driver’s Brake</td>
<td>’ (apostrophe)</td>
<td>; (semicolon)</td>
<td>Emergency Brake</td>
<td>Backspace</td>
<td></td>
</tr>
<tr>
<td>Master Switch</td>
<td>Ctrl + W</td>
<td></td>
<td>Headlights</td>
<td>H</td>
<td>Shift + H</td>
</tr>
<tr>
<td>Sander</td>
<td>X</td>
<td></td>
<td>Whistle</td>
<td>Space</td>
<td></td>
</tr>
<tr>
<td>Handbrake</td>
<td>\</td>
<td>Shift + \</td>
<td>Cab Light</td>
<td>L</td>
<td>Shift + L</td>
</tr>
<tr>
<td>Wipers</td>
<td>V</td>
<td>Shift + V</td>
<td>Flashlight (walking)</td>
<td>L</td>
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Train Sim World includes several cameras for you to control, here’s an outline of those cameras and some examples of use:

<table>
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<th>Camera Type</th>
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<tr>
<td><strong>First Person Camera or Cab Camera</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>Boom Camera</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>Floating Camera</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>Free Camera</strong></td>
<td>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.</td>
</tr>
</tbody>
</table>

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.
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
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 [https://support.steampowered.com](https://support.steampowered.com). 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 change the language of Train Sim World 2?

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](https://dovetailgames.kayako.com)
Rivet Games is a team of passionate and talented artists and developers based in Stirling, Scotland. Building on years of prior experience of developing the highest quality routes and models for Train Simulator and Train Sim World, the team have a passion for ensuring everything they do is accurate, built to the highest possible standards, and above all, is fun and enjoyable.

For more information about Rivet Games and to find out more about how they work, please follow them on social media:

www.rivet-games.com
youtube.com/rivetgames
instagram.com/rivetgames
twitter.com/rivetgames
facebook.com/rivetgame
forums.rivet-games.com
We would like to take a moment to express our gratitude to the following organisations and individuals who helped us to deliver this product:

**Dovetail Games Third-Party Partner Team** for their unending help and support.

**Beta Testers** for their tireless commitment to supporting us to make our products the absolute best they can be.

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- Sara Gatland
- Xander MacLeod

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