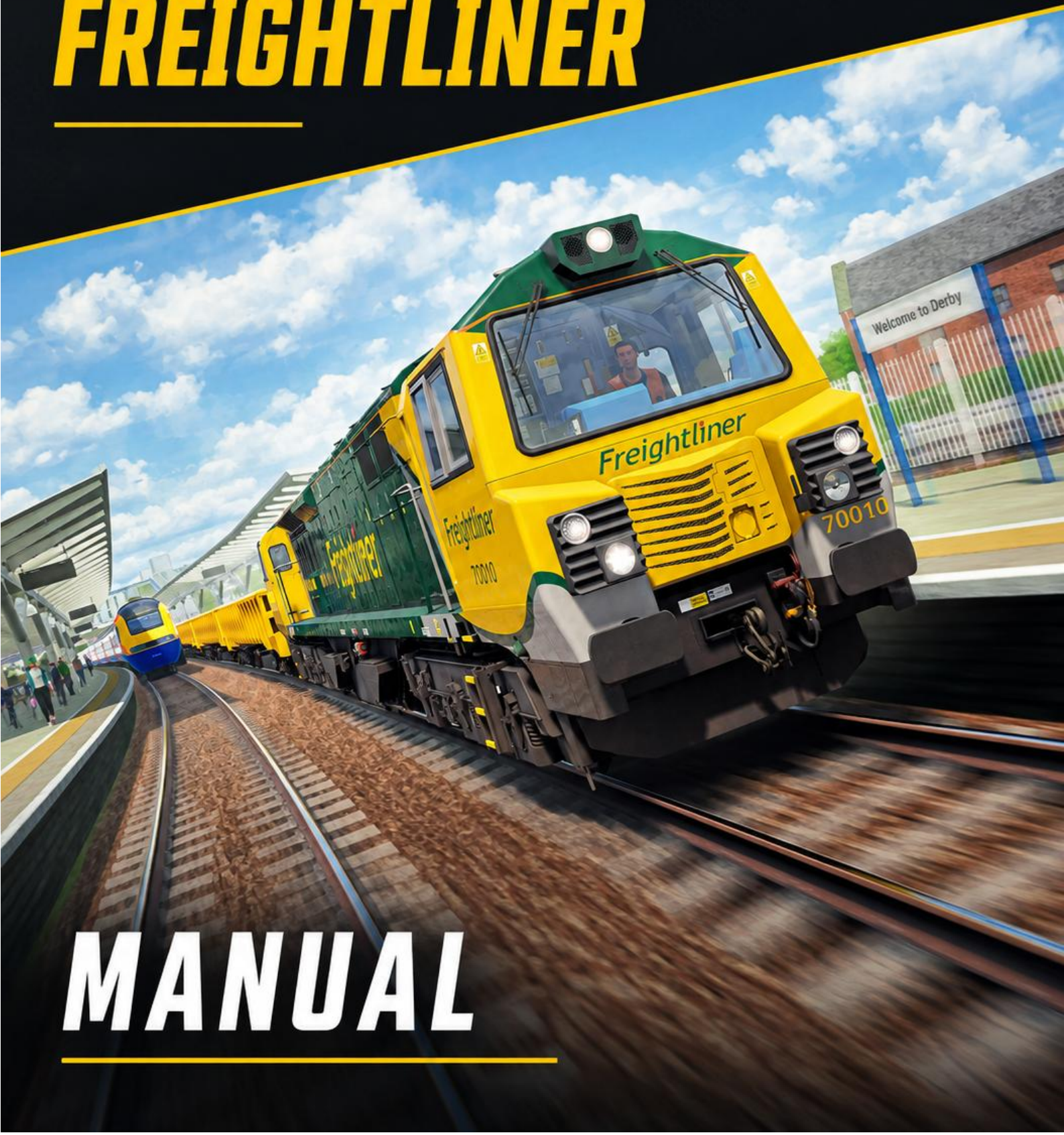


TRAIN
SIM WORLD **7**



ALL ABOARD
STUDIOS

BR CLASS 70 **FREIGHTLINER**



MANUAL

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1. Introduction

Welcome to the BR Class 70 Freightliner & Wascosa MLA Wagon Pack for Train Sim World 7.

Developed by All Aboard Studios, this add-on recreates one of Britain's most powerful modern freight locomotives alongside the versatile Wascosa MLA engineering wagon, bringing authentic heavy freight operations to the Train Sim World network.

The BR Class 70 has been recreated with an emphasis on authenticity, delivering one of the most comprehensive locomotive simulations available in Train Sim World. From the driver's controls and safety systems to the electrical equipment, lighting, auxiliary systems, circuit breakers and interactive cab features, almost every control within the cab performs its intended function. This manual explains each system in detail, guiding you through everything from familiarisation and normal operation to the complete cold start procedure.

Accompanying the locomotive is the Wascosa MLA wagon, a modern bogie box wagon designed to transport a wide range of materials for engineering and infrastructure projects. Commonly used to carry aggregates, ballast, spoil and other waste materials, the MLA forms an integral part of many Network Rail and freight operator engineering trains across the UK.

This manual is intended to be used alongside the in-game tutorials and scenarios. Whilst it covers the operation of the locomotive and wagon in depth, we also encourage players to explore the interactive cab and experiment with the many operational features available throughout the simulation.

Thank you for choosing the BR Class 70 Freightliner & Wascosa MLA Wagon Pack. We hope you enjoy driving one of Britain's most capable modern freight locomotives and experience the depth of simulation that has gone into bringing it to life in Train Sim World 7.

2. Locomotive & Wagon Overview

2.1 BR Class 70 Overview

Introduced in 2009, the BR Class 70 represents one of the most modern diesel-electric freight locomotives operating on the British railway network. Manufactured by GE Transportation at Erie, Pennsylvania, the Class 70 was designed to provide increased hauling capability, improved fuel efficiency and enhanced reliability over previous generations of freight locomotives.

Powered by a 12-cylinder GE PowerHaul P616 diesel engine producing approximately 3,700 hp (2,750 kW), the locomotive is capable of hauling some of the heaviest freight services across the UK rail network. Its AC traction system delivers exceptional low-speed tractive effort, making it particularly well suited to heavy aggregate, intermodal, engineering and bulk freight operations.

Originally introduced into service by Freightliner, the Class 70 fleet has since expanded to operate with several freight operators, including Colas Rail, carrying a variety of liveries and undertaking a wide range of duties throughout Great Britain.



Unlike many earlier British freight locomotives, the Class 70 incorporates a highly computerised control system, allowing many locomotive functions to be monitored and controlled electronically. Combined with modern traction equipment, comprehensive diagnostics and extensive auxiliary systems, this makes the Class 70 one of the most technically advanced diesel locomotives currently operating in the UK.

For Train Sim World 7, the BR Class 70 has been recreated with a strong emphasis on authenticity. The locomotive features a fully interactive driving cab, operational electrical and auxiliary systems, detailed lighting controls, functional circuit breakers and fuse panels, accurate safety systems and an authentic cold start procedure. Together, these systems provide one of the deepest and most immersive freight locomotive experiences available in Train Sim World.

2.2 Wascosa MLA Wagon Overview

The Wascosa MLA is a modern bogie box wagon designed for the transportation of materials used in railway infrastructure and civil engineering projects. Built to provide a versatile, high-capacity solution for engineering trains, the MLA is capable of carrying a wide variety of bulk materials, including aggregates, ballast, spoil and other waste materials generated during maintenance and renewal works.

Designed with durability and operational flexibility in mind, the MLA features a robust welded steel body mounted on twin bogies, providing excellent ride quality and high payload capacity while remaining suitable for operation across the UK's rail network. The wagon's open-top design allows it to be loaded quickly using conveyor systems, loading shovels or excavators, making it ideal for both infrastructure projects and large-scale engineering possessions.

Within Train Sim World 7, the Wascosa MLA has been recreated to complement the BR Class 70 Freightliner locomotive, enabling players to operate realistic engineering and infrastructure services. The wagon features detailed modelling throughout, authentic physics and fully interactive loading gameplay. Players can load engineering materials at designated facilities, adding an additional operational element beyond simply driving the train.

Whether hauling ballast to a worksite, transporting aggregates between quarries or removing spoil from engineering possessions, the Wascosa MLA provides an authentic representation of one of the UK's most versatile modern engineering wagons.



2.3 Technical Specifications

BR Class 70

Specification	Value
Builder	GE Transportation
Build Period	2009–2011
Wheel Arrangement	Co-Co
Power Type	Diesel-Electric
Engine	GE PowerHaul P616
Engine Configuration	12-cylinder
Power Output	3,700 hp (2,750 kW)
Maximum Speed	75 mph (121 km/h)
Length	21.71 m
Width	2.65 m
Height	3.91 m
Locomotive Weight	129.6 tonnes
Starting Tractive Effort	534 kN
Fuel Capacity	6,400 litres
Braking System	Air Brake
Train Protection Systems	AWS, TPWS & DSD

Wascosa MLA Wagon

Specification	Value
Wagon Type	MLA Bogie Box Wagon
Owner	Wascosa
Primary Use	Engineering & Infrastructure Trains
Typical Loads	Aggregates, Ballast, Sleepers & Waste Materials
Bogies	Twin Bogie
Braking System	Air Brake
Maximum Speed (Loaded)	75 mph (121 km/h)
Maximum Speed (Empty)	75 mph (121 km/h)
Coupling Type	Standard Drawhook & Buffers

2.4 Working with Industry Partners

Creating an authentic simulation extends far beyond measuring a locomotive or recording its sounds. Throughout development of the BR Class 70 Freightliner & Wascosa MLA Wagon Pack, All Aboard Studios worked closely with industry partners to ensure both vehicles were recreated as accurately as possible.

We would like to thank Freightliner for reviewing our work throughout development, providing valuable feedback and operational guidance to ensure the Class 70 accurately reflects the appearance and character of the real locomotive.

Our thanks also go to Wascosa and Greenbrier Europe, whose technical information, engineering drawings and specialist knowledge were instrumental in accurately reproducing the MLA wagon.

The support and expertise provided by all three organisations has helped us deliver one of the most authentic and detailed freight experiences available in Train Sim World 7. We sincerely thank everyone involved for their time, knowledge and continued support throughout the project.

3. Cab Layout

3.1 Driver's Cab Overview

The BR Class 70 features a modern, ergonomically designed driving cab that places all primary driving controls within easy reach of the driver. Secondary controls, electrical equipment and auxiliary systems are positioned around the cab to provide quick access whilst maintaining a safe and efficient working environment.

The locomotive and its controls have been split into separate sections to clearly explain what each panel and lever controls and where this is located on the locomotive. Its important to note the Class 70 has two separate cabs with Cab 01 being the primary cab carrying the majority of the main fuses and control panels, Cab 02 carries a smaller selection but both cabs are required to start the Class 70 locomotive from a cold start.

3.2 Main Desk

Both Cab A & Cab B share an identical Main Desk. The desk is split into five key sections:

1. Left screen and controls
2. Central Panel (Power and Brake Levers)
3. Right screen and GSMR
4. Bottom Left Control Panel (Heating & Cooling/ Cab Engage)
5. Bottom Right Control Panel (Lighting)



3.3 Left Screen & Controls

The **display screens** are covered in greater detail in **Section Six**. These screens are principally used to configure the air brake system, identify and review faults and monitor the operation of the locomotive. Information displayed includes brake pressures, reverser position, locomotive speed and other important operating information.

Above the screens are the **windscreen wiper controls**. The central windscreen washer control is non-functional. The two windscreen wipers are controlled independently using their respective switches.

Four additional controls are located on the driver's desk. The black button on the far left is the **Auto Engine Start/Stop** control. This is not required during normal operation of the locomotive. Next is the **Sanding Lever** which can be operated to manually apply sand and improve adhesion when required.



The yellow mushroom-shaped button is the **AWS Acknowledgement Plunger** and is used to acknowledge AWS warnings. Finally the larger lever controls the **Horn** and provides both **high and low tones** depending on the direction in which the lever is operated.

3.4 Central Panel

This is the primary driving control panel of the Class 70 and contains four key controls arranged from left to right.



The **left-hand lever is the Independent Brake** which controls the locomotive brakes independently from the brakes on the rest of the train. The **Bail Off** function allows the locomotive brakes to be released while the train brakes remain applied. This can be useful when controlling a heavy train and helps prevent excessive braking forces or wheel slide on the locomotive.

The **second lever from the left is the Automatic Brake** which controls the train braking system. Push the lever forward to increase the brake application and pull it back towards the driver to release the brakes. The brakes must be fully released before attempting to move the train. Apply the brakes progressively rather than making a sudden heavy application. With a heavy freight train an excessive brake application can rapidly reduce speed and require considerable time and power to rebuild **amps and engine revs** and regain momentum. In this situation using the Independent Brake will help in situations where you are chasing yellow or red signals.

The third lever is the Throttle. Move the lever forward to increase power and pull it back towards the driver to reduce power. The Class 70 has power settings from **Idle through to Notch 8**. Heavy intermodal and freight trains may require **Notch 8** when starting particularly on a gradient. In wet icy or other low adhesion conditions power should be applied more gradually to reduce the risk of wheel slip.

Finally the fourth control is the Master Key and Reverser. Click the Master Key to insert it into the control desk. Once inserted the control acts as the reverser. Its default position is **Neutral**. Move it forward to select **Forward** or pull it back towards the driver to select **Reverse**.

The panel located behind the main driving controls is the **TPWS panel**. Under normal operation no interaction with this panel is required. It is primarily used following a **TPWS** or **AWS intervention** which has resulted in an emergency brake application.

The system operates in a similar manner to TPWS equipment fitted to most UK rolling stock. Following an intervention the train must be brought to a complete stand and the appropriate acknowledgement and reset procedure completed before the brakes can be released and the locomotive can continue.

3.5 Right Screen & Controls

This is one of the **simplest sections of the Class 70 driving desk** with only a small number of controls requiring driver interaction.

The **display screen** replicates the functionality and information available on the corresponding screen on the opposite side of the desk. The screens are interchangeable for many of the locomotive monitoring functions and provide access to the information covered in greater detail in **Section Six**.



Alongside the display is the **GSM-R radio**. This is configured automatically when the cab is set up and operates in the same manner as the standard GSM-R equipment found across Train Sim World. No additional Class 70-specific setup is required during normal operation.

Two additional controls are located in this section. The **Air Brake Overcharge** button temporarily increases the brake pipe pressure above its normal operating level. This can assist

with ensuring the train brakes are fully released, particularly following certain brake applications or when preparing a lengthy freight consist for departure.

The **Emergency Brake** button provides an immediate means of applying the train's emergency braking system. When operated it commands the maximum available braking effort and should only be used when an emergency stop is required.

3.6 Bottom Left Control Panel

This control panel primarily controls the cab heating and cooling systems. Turn the dial to the desired heating or air-conditioning setting to adjust the cab temperature. The appropriate audio will accompany each selected setting.

Three indicator lights are located below the controls. **Generator Field** and **Engine Run** will be illuminated whenever the engine is running. These will be active by default unless you are carrying out a cold start.

Cab Enable will always be switched off when entering the locomotive. Before the cab can be used for operation, it must be enabled. Move the **Cab Enable** switch to the upright position, the corresponding indicator will illuminate, confirming that the cab is now enabled and ready for operation.



3.7 Bottom Right Control Panel

This control panel operates the majority of the locomotive's **interior and exterior lighting** and is divided into four principal sections.

The top-left section contains the **Headlight** selector. Turn the dial to the required position to configure the headlights for the appropriate operating conditions. Note that selecting Day or Night headlights does not automatically configure the opposite cab to display tail lights. The rear cab must be set to **Tail** manually.

The top-right section contains three switches. The **Window Heat** switch activates heating for the cab windows. The **Gage Light** switch controls illumination of the gages on the driver's desk. "*Gage*" is the correct terminology used on the locomotive, reflecting its American-built design.

The **Step Light** illuminates the entrance steps into the cab and is particularly useful when boarding or leaving the locomotive in dark locations, such as trackside or away from an illuminated depot or yard.

The bottom-left section contains the **Gage Dimmer**. Turn the dial to the left to reduce the brightness of the gage illumination or to the right to increase it.

Finally, the bottom-right section controls the **Desk Light**. Move the switch to the left for **Off** and to the right for **On**. The dimmer dial located above the switch can then be used to adjust the brightness of the desk light.



4. Basic Controls

The BR Class 70 locomotive has a small number of critical elements that are not set as default and the player is required to implement before the locomotive will drive. Ensuring you are sitting in the cab you require to drive from before following the next steps.



1. Enable the Driving Cab

Locate the Cab Enable switch and move it to the upright position. This activates the driving controls and allows the locomotive to be operated from the selected cab.

2. Configure the Headlights and Tail Lights

Set the headlights to the appropriate position for the operating conditions. When running as a light locomotive, the tail lights must also be configured manually in the opposite cab. Selecting the headlights in the leading cab does not automatically activate the rear tail lights.

3. Insert the Master Key and Set the Reverser

Insert the Master Key into the reverser slot on the driving desk. Once inserted, move the reverser to Forward for travel in the forward direction or Reverse when travelling backwards. The reverser should remain in Neutral until you are ready to move.

4. Configure and Cut In the Air Brakes

The Class 70 requires the air brake system to be correctly configured before the locomotive can move.

Open the Air Brakes menu on the TMS by selecting F1. Within this menu, select Cut In (F3) and save the changes to activate the braking system.

You must also ensure the locomotive is configured as Lead. If this is not already selected, press F4 after cutting in the brakes to configure the locomotive as the leading unit. Failure to correctly configure the air brakes may prevent the locomotive from moving.

5. Release the Brakes and Apply Power

Once the cab and braking systems are correctly configured, fully release the brakes and allow the brake pressures to stabilise. Gradually advance the throttle to begin moving.

When hauling heavy freight trains, additional power may be required to overcome the weight of the consist. Apply power progressively, particularly in poor adhesion conditions, to minimise the risk of wheel slip.

Operating with Safety Systems Enabled

The Class 70 is equipped with AWS and Driver Vigilance safety systems. The isolation switches for both systems are located on the rear wall of the driving cab and can be used to enable their operation.

When enabling Driver Vigilance, an additional configuration step is required through the TMS to ensure the system operates correctly.

Open the Operator Messages menu on the TMS by selecting F5. From this menu, locate the Alerter Cutout option using F3 and configure it so that Driver Vigilance is active.

Once configured, the Driver Vigilance system will operate alongside the TMS and require the driver to respond to vigilance warnings during operation. Failure to acknowledge these warnings within the permitted time will result in a brake intervention.

The AWS system will also require acknowledgement when approaching applicable signals and warning equipment. Failure to acknowledge an AWS warning will result in an emergency brake application, requiring the appropriate reset procedure before continuing.

5. Advanced Controls

There are a range additional controls to create an immersive driving experience whether its cold starts, cab fans or the fuse boards, there always something to play with whilst say in the seat of the Class 70.



Above the main desk are the cab fans and lighting equipment. The fans can be turned on and off as required and adjusted for speed low and high. The lights are split into three sections, the left and right lights have their on/off switch next to them with a dimmer switch for both, the centre light is controlled lower down to the drivers right main desk panel.



The Parking Brake is located to the left of the driver, directly beneath the cab window. The parking brake is used to secure the locomotive when stationary and must be released before attempting to move.

An indicator light is positioned above the parking brake handle to display its current status. When the parking brake is applied, the indicator will illuminate. Once the parking brake has been fully released, the indicator light will extinguish, confirming that the parking brake is no longer applied.

Cab A contains an extensive electrical control cabinet housing the circuit breakers responsible for operating many of the locomotive's essential systems. These are particularly important when diagnosing and resolving faults, as certain failures may require individual circuit breakers to be checked or reset.

Any faults affecting these systems will be displayed on the Messages page of the Train Management System (TMS), allowing the driver to identify the affected equipment and take the appropriate action.

For a more detailed explanation of the individual circuit breakers, their functions and their importance to the locomotive's operation, we recommend completing the Cold Start Tutorial. This provides a guided walkthrough of the electrical cabinet and explains the role of each circuit breaker when preparing the Class 70 for operation.



The Class 70 electrical control cabinet contains 27 labelled circuit breakers, arranged across four rows. Listed below from left to right as shown in the image.

Row 1 – Lead Unit Operations

1. Control
2. Exit Light
3. Radio NRN
4. Radio GSMR

Row 2 – Locomotive Operations

5. Day Headlight
6. Night Headlight
7. Marker Light
8. Cab Signal

9. ETMS Breaker

Row 3 – Locomotive Operations

- 10. Air Brake 1
- 11. Air Brake 2
- 12. Air Dryer
- 13. Radio Locker Blower
- 14. Window Heater
- 15. Cab Fan

Row 4 – Auxiliary Systems

- 16. Running Lights
- 17. Fuel Pump
- 18. ECU
- 19. Fuel Monitor
- 20. MTB
- 21. BCCB

The cabinet also contains six further controls separately, the Engine Control rotary switch, Engine Start and Engine Stop buttons and four auxiliary lighting controls.

Auxiliary Control Panel

Located beneath the main electrical circuit breaker cabinet in Cab A, this panel contains a number of additional controls responsible for the locomotive's safety systems, heating, electrical supply and auxiliary equipment.

The TPWS Temporary Isolation Switch is located at the top left of the panel. Under normal operating conditions this should remain in the Normal position, allowing the Train Protection and Warning System to operate. Moving the switch to Isolate temporarily disables the TPWS functionality and should only be used when specifically required.

Directly below is the AWS Full Isolation Switch. This allows the driver to isolate the Automatic Warning System and associated train warning equipment. During normal operation this should remain in its active position to ensure the safety systems function correctly.

The red Emergency Fuel Cut-Off button is positioned towards the top of the panel.

The Passenger/Goods Mode Switch is located beneath the Emergency Fuel Cut-Off. This allows the locomotive to be



configured for either passenger or freight operation. For normal Class 70 freight workings the switch should remain in the Goods position.

The centre section contains the Engineer's Heater and Helper's Heater controls. These allow the heating levels to be adjusted independently for the driver and second-person positions, with settings for Off and High. Beneath these are separate switches for the Engineer's Wall Heater and Helper's Wall Heater, alongside the Heater Air Conditioner control. Together these provide additional control over the cab heating and ventilation systems.

On the right-hand side is the APU Ready indicator, which provides information on the status of the locomotive's Auxiliary Power Unit.

Finally, the Battery Contactor Control is located on the far right of the panel. This controls the connection of the locomotive's battery supply to its electrical systems. The switch provides Close, Normal and Off positions and is particularly important during the locomotive's startup and shutdown procedures.

For normal driving, most of these controls will already be configured correctly and will not require regular interaction. However, several are important when completing a cold start or operating the locomotive with safety systems enabled.

The Cab 2 electrical control panel is smaller than the main cabinet in Cab 1 and contains a reduced selection of circuit breakers and auxiliary controls. These primarily operate the cab lighting, heating, ventilation and other essential electrical systems.

The upper-left section contains circuit breakers for the Day and Night Headlights, Marker Lights and Exhaust Motor. Directly below are the Battery Charger Receptacle and Heater/Air Conditioner circuit breakers.

The upper-right section contains circuit breakers for the Windshield Heater, Cab Lights and Cab Fans.

The lower-right section provides additional controls for the Engineer's and Helper's Wall Heaters, Dome Light, Console Receptacles and associated heating switches.



Also located on this panel are the TPWS Temporary Isolation Switch, Main Engine Shut Down button, Auxiliary Power switch and Emergency Lighting/Fire Suppression switch. A separate Emergency Fuel Cut-Off button is positioned in the upper-right corner.

Most of these controls will not require interaction during normal operation, although they may be needed when carrying out a cold start, troubleshooting faults or configuring the locomotive's safety systems.

6. Screens - Train Management System (TMS)

The Class 70 is equipped with two identical Train Management System (TMS) displays, positioned to the left and right of the driver. Both screens provide the same information and functionality and can be operated independently. Throughout this manual, instructions will generally refer to the left-hand display, although the right-hand display can be used in exactly the same way.



The Main Screen is the default display and provides an overview of the locomotive's current operating status. This includes the speedometer, brake pressures, reverser position, throttle setting, engine information and fuel level. It also displays the current air brake configuration, allowing the driver to quickly confirm whether the brakes are correctly configured for operation.

The lower section of the display provides access to the locomotive's various settings and functions, including the ability to change the air brake configuration, review system messages and access additional operating information.

The TMS is operated using the physical buttons located directly beneath each display. The on-screen options correspond to the F1 to F8 function keys, allowing the driver to select the function displayed immediately above each key.

For example, selecting F1 when the Increase option is displayed will increase the selected value, while F2 will decrease it. The numbered keys below the function keys are used for additional inputs and selections where required.

The available functions change depending on which screen or menu is currently selected. Throughout this manual, references to F1, F2, F3 and other function keys relate to the options displayed along the bottom of the TMS screen.

6.1 Air Brake Screen

The first screen we will look at is the Air Brake System, which can be accessed by selecting F3 from the TMS Main Menu. This screen allows the driver to configure the locomotive's braking system and determine whether it is operating as the leading or trailing locomotive.

The F3 Cut In/Cut Out function controls whether the automatic air brake system is active. Before attempting to drive the locomotive, ensure the brakes are set to Cut In. When shutting down the locomotive, the brakes can be returned to Cut Out as part of the shutdown procedure.

The F4 Lead/Trail function determines whether the locomotive is operating as the leading or trailing unit. When driving from the selected cab, this must be set to Lead to allow the braking system to operate correctly.

Once both settings have been configured, press F6 Save Changes to confirm the configuration. You can then select F8 Exit to return to the previous screen.

For normal driving, the Current Setup should display Lead / Cut In, as illustrated in Image 2. This confirms that the air brake system has been correctly configured for operation from the selected cab.



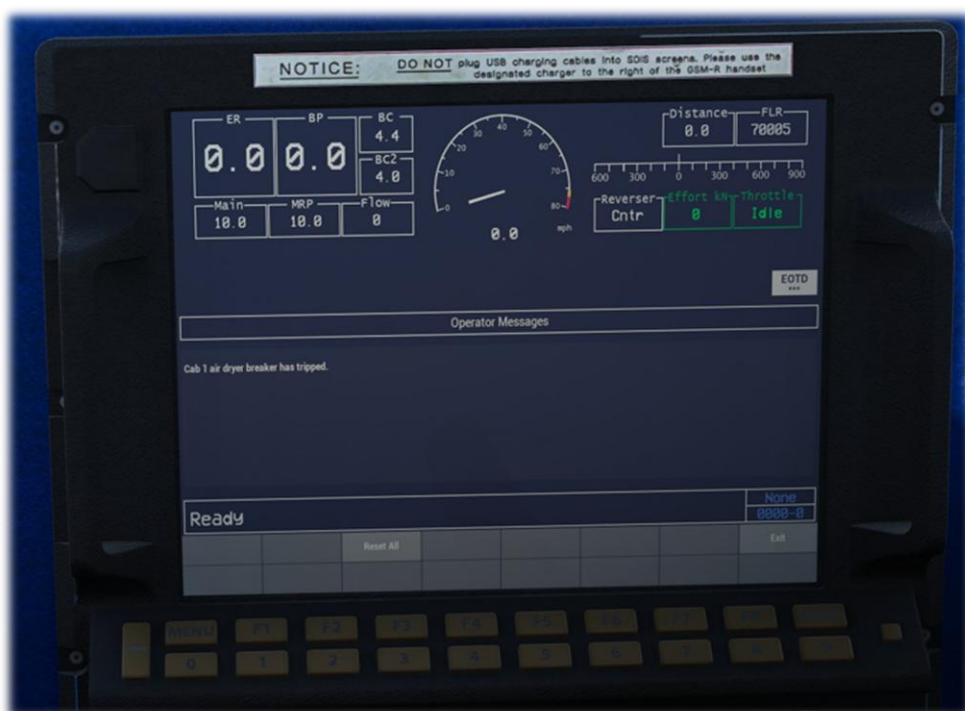
6.2 Operator Messages Screen

The Operator Messages screen is found on the main page via function F5 and provides the driver with important information relating to the locomotive's operating condition and any faults that may occur. This screen can be accessed through the TMS and is particularly useful when diagnosing issues that may prevent the locomotive from operating correctly.

Any tripped circuit breakers, equipment failures or system warnings will be displayed here, allowing the driver to identify the affected system and take the appropriate action. For example, the image above shows a message indicating that the Cab 1 Air Dryer circuit breaker has tripped, directing the driver towards the relevant electrical cabinet to investigate and reset the breaker.

The screen should be checked whenever an unexpected fault occurs or the locomotive is not responding as expected. Once the underlying issue has been resolved, the Reset All function can be used to clear applicable messages.

During normal operation, this screen will generally remain clear unless a fault or warning requires the driver's attention



6.3 Switches Screen

The Switches screen can be accessed by selecting F7 from the TMS Main Menu. This screen allows the driver to monitor and control several additional locomotive systems, including electrical isolation, axle locking, driver vigilance and engine load settings.

The screen displays the current status of each system, indicating whether it is switched In or Out, and provides the following controls.



- F1 – DB Cutout controls the isolation of the locomotive's Dynamic Braking system. Under normal operating conditions this should remain enabled to allow dynamic braking to assist in slowing the locomotive.
- F2 – Locked Axle allows the driver to configure the locked axle cutout function, which is used when an axle-related fault requires the affected equipment to be isolated.
- F3 – Alerter Cutout controls the Driver Vigilance system. When enabling Driver Vigilance using the isolation switch on the rear cab wall, this setting must also be configured correctly for the system to operate.
- F6 – Self Load controls the locomotive's self-load function, which is primarily associated with testing the engine and electrical systems rather than normal driving.
- F8 – Exit returns the driver to the previous TMS screen.

The majority of these settings will not require adjustment during normal operation. However, the Alerter Cutout function is particularly important when operating with Driver Vigilance enabled, while the remaining controls may be useful when diagnosing faults or configuring the locomotive during startup.

6.4 Distance Counter Screen

The Distance Counter screen can be accessed by pressing 2 on the numbered keypad beneath the TMS Main Screen. This function allows the driver to monitor the distance travelled by the locomotive or measure a specific distance along the railway.

The screen provides a Distance Counter Preset, allowing the driver to enter a distance in feet, alongside two different counting modes.

- F4 – Modify Preset allows the driver to enter or adjust the distance used by the counter.
- F5 – Zero Distance resets the distance counter to zero, allowing a new measurement to begin.
- F6 – Count Up selects the counting mode, allowing the driver to switch between counting upwards from zero or downwards from a preset distance.
- F8 – Exit returns the driver to the previous TMS screen.

The Count Up From Zero mode records the distance travelled from a starting point, while Count Down From Preset allows the driver to enter a specific distance and monitor the remaining distance as the locomotive moves.

This feature can be particularly useful when carrying out shunting movements, positioning freight wagons or approaching a specific stopping location, where accurately judging the distance travelled is important.



The distance counter is an additional driving aid and does not affect the locomotive's traction or braking systems.

6.5 Auto Engine Start/Stop Screen

The Auto Engine Start/Stop screen can be accessed by pressing 3 on the numbered keypad beneath the TMS Main Screen. This screen provides information about the locomotive's automatic engine management system, which is designed to reduce unnecessary engine idling and fuel consumption when the locomotive is stationary.

The display shows whether an automatic engine shutdown may occur, alongside the operating conditions that must be satisfied before the system can stop the engine.

These conditions include

- Reverser Centred – The reverser must be in the neutral position.
- Throttle in Idle – The throttle must be returned to idle with no power being applied.
- Independent or Automatic Brake Applied – The locomotive must be secured using the braking system.
- AESS Not Suspended – The automatic engine start/stop system must not be suspended.
- Locomotive Not Moving – The locomotive must be completely stationary.
- Locomotive Conditions Allow Auto Stop – The locomotive's onboard systems must permit an automatic shutdown.

When the required conditions are satisfied, the system may automatically shut down the engine to conserve fuel. The screen allows the driver to monitor these conditions and understand why an automatic shutdown may or may not occur.

The F8 Exit function returns the driver to the previous TMS screen.

To deactivate Auto Engine Start/Stop ensure the Auto Engine Start/Stop button is pressed in located on the main desk left side, this can be found in section 3.3 of this manual.



7. Cold Start Procedure

The following procedure explains how to carry out a complete cold start of the Freightliner Class 70, taking the locomotive from a fully shut down state through to being ready for service.

When the locomotive is in a Cold and Dark state, the engine is shut down, the electrical systems are inactive and there is no air pressure available within the braking system. Before the locomotive can be operated, the electrical circuits, auxiliary systems, air brakes and engine must all be correctly configured.

Step 1 – Secure the Locomotive

Begin by boarding the locomotive and entering Cab 1.

Before carrying out any startup procedures, ensure the Parking Brake is fully applied.

This prevents unintended movement while the locomotive's electrical and braking systems are being prepared.

Step 2 – Activate the Electrical Supply

Locate the Battery Contactor Control switch within the electrical control panel in Cab 1 and move it to the Close position.

This connects the locomotive's battery supply and allows the onboard electrical systems to begin powering up. The SMART displays will begin their startup sequence, which may take a short time to complete.

While the displays are booting up, the circuit breakers can be configured.

Step 3 – Configure the Cab 1 Circuit Breakers

The main electrical cabinet is located in Cab 1 and contains the majority of the locomotive's circuit breakers. These must be enabled to provide power to the various onboard systems.

Set the following circuit breakers to On, working through them in the order shown.

Circuit Breaker	Function
1. Fuel Pump	Enables fuel supply to the engine
2. ECU	Powers the engine control systems
3. Fuel Monitor	Enables fuel level and system monitoring
4. Local Control	Activates the cab driving controls
5. Air Brake 1	Powers part of the air brake system
6. Air Brake 2	Powers the remaining air brake equipment
7. Cab Signal	Enables AWS and TPWS track equipment inputs
8. GSM-R Radio	Powers the locomotive radio
9. Day Headlight	Enables daytime headlights
10. Night Headlight	Enables nighttime headlights
11. Marker Lights	Powers the locomotive marker lights
12. Running Lights	Powers cab and internal running lights
13. Cab Fan	Enables cab ventilation
14. Windshield Heater	Powers the windscreen heating system

Once all fourteen circuit breakers have been enabled, the required electrical systems in Cab 1 are configured.

Step 4 – Configure the Cab 2 Electrical Systems

Leave Cab 1 and walk through the locomotive to Cab 2.

Cab 2 contains a smaller electrical cabinet with several additional systems that must be enabled before the locomotive can be started.

Auxiliary Power Switch – Switch this on to supply power to the locomotive's auxiliary electrical systems.

Exhauster Motor – Enable this circuit breaker to power the roof-mounted ventilation fans responsible for dispersing engine exhaust gases.

Windshield Heater – Enable this circuit breaker to provide windscreen heating in Cab 2.
Battery Charger Receptacle – Enable this circuit breaker to allow the locomotive's electrical charging systems to operate.

Once complete, return to Cab 1 and take your position in the driver's seat.

Step 5 – Configure the Air Brake System

With the electrical systems powered, the air brakes must now be configured using the Train Management System (TMS).

Open the Air Brake Setup screen using F3.

Select F3 Cut In/Cut Out until the automatic brake displays Cut In.

Ensure the locomotive is configured as Lead using F4 Lead/Trail.

Press F6 Save Changes to confirm the configuration.

Press F8 Exit to return to the previous screen.

The current brake configuration should now display Lead / Cut In.

Although the braking system has been configured, air pressure will not be fully available until the engine has started and the system has charged.

Step 6 – Enable Driver Vigilance

The Driver Vigilance Device must now be enabled through the TMS.

From the Main Screen, navigate to the Switches page using F7.

Locate the Alerter Cutout function and configure it using F3 so that Driver Vigilance is enabled.

This ensures the vigilance system is correctly configured for operation once the locomotive has started.

Step 7 – Prepare the Engine for Starting

With the electrical and braking systems configured, the locomotive can now be prepared for engine startup.

Insert the Master Key into the driving desk.

Enable the Cab Active switch to activate the driving controls.

Locate the Engine Control rotary switch within the Cab 1 electrical cabinet and move it to Start.

Confirm that both the Engine Run and Generator Field switches are enabled.

These controls must be correctly configured before attempting to start the engine.

Step 8 – Start the Engine

Locate the Engine Start button within the Cab 1 electrical cabinet.

Press and hold the Engine Start button for approximately five seconds.

The locomotive will begin its engine startup sequence. This may take a short time to complete as the engine starts and the associated systems begin operating. Allow the startup sequence to finish before proceeding.

Step 9 – Carry Out an External Inspection

While the engine is completing its startup sequence, carry out a brief external inspection of the locomotive.

Walk around the locomotive and check that everything appears normal, paying particular attention to the fuel caps and electrical breaker panels.

Once satisfied, return to Cab 1.

Step 10 – Complete the Startup Procedure

With the engine now running, return the Engine Control switch from Start to Run. Check the SMART displays to confirm that the locomotive has started successfully and review the Operator Messages page for any active faults or warnings.

If a fault is displayed, investigate the relevant system and resolve the issue before attempting to move.

Once the engine is running correctly, the air brake system is configured and no active faults are present, the locomotive is ready to be prepared for movement.

Step 11 – Prepare to Depart

Before departing, complete the final driving preparations.

Set the headlights to the appropriate operating position.

Confirm the reverser is in the required direction of travel.

Allow the brake system to build sufficient air pressure.

Release the Parking Brake.

Fully release the train brakes and confirm they have released correctly.

Gradually apply power using the throttle to begin moving.

The Class 70 is now ready for service.

This procedure follows the sequence used in Tutorial C – Cold Start, with additional guidance on TMS navigation and the final driving preparations.

8. Faults

The BR Class 70 features a range of simulated locomotive faults that may occur during normal operation. These have been designed to introduce additional challenges and provide a more realistic driving experience, requiring players to identify faults, assess their impact and take the appropriate corrective action.

Locomotive faults can be enabled or disabled through the Main Settings Menu, allowing players to choose whether they wish to experience random equipment failures during gameplay.

Identifying Faults

When a fault occurs, a message will appear on the locomotive's Train Management System (TMS), identifying the affected equipment.

The Operator Messages screen can be used to review active faults and warnings, including the specific circuit breaker that has tripped.

Depending on the type of fault, recovery may involve resetting a circuit breaker, restarting a system or bringing the locomotive to a stand before carrying out further action.

Circuit Breaker Faults

Circuit breaker trips are among the most common faults that may occur on the Class 70. When a breaker trips, the corresponding electrical system may become unavailable until the breaker has been reset.

The TMS will identify the affected circuit breaker, allowing the driver to locate it within the locomotive's electrical cabinets.

If the affected breaker is located in the cab currently being driven from, it can be reset while the train is moving, provided it is safe to do so.

If the affected breaker is located in the opposite cab, the train must be brought to a stop before the driver can leave the driving position and access the relevant electrical cabinet. The urgency of the stop is left to the driver's judgement. Some faults may require prompt attention, while others may allow the train to continue to a suitable stopping location before repairs are undertaken.

The following circuit breaker faults may occur during gameplay.

Circuit Breaker Fault Recovery Action

GSM-R Radio	Locate and reset the GSM-R circuit breaker
Air Brake 1	Locate and reset the Air Brake 1 circuit breaker
Air Brake 2	Locate and reset the Air Brake 2 circuit breaker
Air Dryer	Locate and reset the Air Dryer circuit breaker
Day Headlight	Locate and reset the Day Headlight circuit breaker
Night Headlight	Locate and reset the Night Headlight circuit breaker
Marker Light	Locate and reset the Marker Light circuit breaker
Engineer's Wall Heater	Locate and reset the Engineer's Wall Heater circuit breaker
Helper's Wall Heater	Locate and reset the Helper's Wall Heater circuit breaker
Dynamic Brake	Locate and reset the Dynamic Brake circuit breaker
TPWS	Locate and reset the TPWS circuit breaker
Engine Cooler Fan	Locate and reset the Engine Cooler Fan circuit breaker

Once the affected breaker has been reset, the corresponding system should return to normal operation.

Where applicable, the fault message can then be cleared using the Reset All function on the Operator Messages screen.

Windscreen Wiper Fault

A windscreen wiper fault may cause the wipers to stop functioning correctly. To resolve the fault, locate the Windscreen Wiper Control and move it to the Off position. Once the wipers have stopped, select the required operating speed again. This will reset the fault and restore normal operation.

The fault can be resolved without stopping the locomotive, although drivers should consider visibility and prevailing weather conditions.

Engine Fault

An engine fault requires the locomotive to be brought to a complete stop before recovery can begin. Once stationary, secure the locomotive using the appropriate brakes and carry out the engine startup procedure.

Restart the engine using the normal starting controls and allow the startup sequence to complete before attempting to move.

Once the engine has restarted successfully, check the TMS for any remaining faults or warnings and confirm that the locomotive is ready to resume service.

Traction Motor Cutout Faults

The Class 70 may experience a Traction Motor Cutout (TMCO) fault affecting one of its six traction motors.

These faults are individually identified as:

TMCO 01

TMCO 02

TMCO 03

TMCO 04

TMCO 05

TMCO 06

When a TMCO fault occurs, the affected traction motor will be identified on the TMS. To resolve the fault, access the Traction Motors screen through the SMART display and locate the corresponding TMCO control.

Select the affected traction motor and return its TMCO setting to Off to clear the cutout condition.

For example, if the fault identifies TMCO 03, navigate to the Traction Motors screen and switch TMCO 03 back to Off.

The same procedure applies to all six traction motors. Ensure the correct motor is selected, as resetting a different TMCO will not resolve the active fault.

Returning to Normal Operation

Following any fault recovery, drivers should confirm that the affected system has returned to normal operation before continuing.

Check the TMS Operator Messages screen for any remaining warnings and verify that the locomotive's braking, traction and other essential systems are functioning correctly.

Some faults can be resolved immediately from the driving cab, while others require the train to be brought to a stand. Drivers should always consider the nature of the fault and the safest available location before undertaking any recovery procedure.

Remember – All simulated locomotive faults can be disabled through the Main Settings Menu if players prefer to operate without random equipment failures.

9. MLA Wagon

Alongside the Freightliner Class 70, this add-on introduces the **Wascosa MLA Engineering Wagon**, providing additional opportunities for engineering and infrastructure maintenance operations across the Train Sim World network.



The MLA is a four-axle, low-sided bogie wagon designed to transport bulk materials used in railway construction, maintenance and track renewal projects. These wagons are commonly used on engineering trains throughout the British railway network, transporting fresh ballast and other materials to worksites while removing used ballast, spoil and redundant track materials. The wagon's low-sided design allows materials to be loaded and unloaded using specialist equipment, including excavators and mechanical grabs, making it particularly suitable for railway engineering operations.

Technical Specifications

Specification	Details
Wagon Type	MLA Falcon
Operator / Owner	Wascosa
Configuration	Four axles across two bogies
Bogie Type	Y25
Maximum Payload	Approximately 66 tonnes
Load Volume	Approximately 43 m ³
Primary Purpose	Railway engineering and infrastructure maintenance

Wagon Loading Configurations

Within Train Sim World, the Wascosa MLA is available with **four different loading configurations**, providing a variety of operational possibilities.

Empty

An unloaded wagon, typically used when travelling to collect materials or returning from an engineering worksite after unloading. Empty wagon movements are a regular part of engineering operations.

Dirty Sleepers

A load of used railway sleepers removed during track renewal projects. These are transported away from engineering worksites for recycling, processing or disposal.

Stone

A load of fresh stone, representing materials delivered to engineering worksites for ballast replacement, track renewals and other infrastructure maintenance activities.

Dirty Stone

A load of used ballast or spoil removed from the railway during engineering operations. This material is transported away from worksites for processing, recycling or disposal.

Operating the MLA in Train Sim World

The Wascosa MLA provides additional freight gameplay alongside the Class 70, allowing players to operate engineering trains carrying a variety of loads.

Loaded wagons will increase the overall weight of the train, requiring greater consideration when accelerating and braking, particularly on gradients or when operating longer formations.

The different loading configurations also provide opportunities to recreate engineering operations, including delivering fresh ballast, transporting used sleepers and removing spoil from track renewal sites.

The inclusion of the MLA wagon extends beyond the Class 70 itself, providing further opportunities for engineering scenarios and freight operations across compatible Train Sim World routes.

10. Timetable Integration

The BR Class 70 has been integrated into a wide range of Train Sim World routes, providing opportunities to operate freight and engineering services across the British railway network.

Timetable integration is divided into **three categories**, each offering a different level of support and availability.

1. Core Timetable Integration

These routes feature dedicated Class 70 timetable layers developed specifically for this add-on. All core timetable integrations are included from release and available across all supported platforms.

West Coast Main Line Trent Valley – Crewe to Milton Keynes

The Class 70 introduces **41 brand-new services** to the full core timetable, alongside **16 additional services** on the reduced core timetable.

These services provide a variety of freight operations across the Trent Valley route, including intermodal, petroleum and other freight workings.

To access the full range of services, the following additional content is required.

- **WCML Milton Keynes to Euston** – Required for the intermodal wagons used on container services.
- **Cargo Line Petroleum** – Required for petroleum train formations.

Midland Main Line – Leicester, Derby and Nottingham

The Midland Main Line receives an entirely new **2018 timetable**, featuring **28 unique Class 70 services**.

In addition to the new freight operations, this timetable significantly expands the variety of passenger and AI traffic across the route.

The timetable includes CrossCountry Class 170 operations at Derby, Nottingham and Leicester, alongside Voyager AI services through Derby and two playable Voyager services to Nottingham.

These additions complement the existing East Midlands Trains passenger operations, together with an expanded selection of freight workings to create a busier and more varied railway environment.

To access the full range of driveable Class 70 services, the following additional content is required.

- Cargo Line Intermodal
- Cargo Line Aggregates
- Cargo Line Petroleum
- Southeastern High Speed JNA Wagons
- Southeastern High Speed MFA Wagons
- Darlington PCA Wagons and Class 31

Some Class 70 services will remain available without all the listed add-ons, although the complete timetable experience requires the relevant rolling stock and wagon packs.

2. Additional Timetable Integration

Alongside the core timetable integrations, the Class 70 has been incorporated into several additional timetables.

These are supplementary integrations beyond the core Class 70 release and may not be available on every platform at launch. Some may also require a subsequent update before the Class 70 becomes driveable.

The additional extra timetable integrations include

- Mildmay Line – Richmond Extension
- Class 805 – Birmingham to Crewe
- Class 805 – West Coast Main Line South
- Thames Valley Branches
- Birmingham to Shrewsbury

These integrations provide further opportunities to operate the Class 70 across different parts of the railway network as the relevant timetables become available.

Please note – These additional timetables are not part of the core Class 70 deliverable. Their availability may vary depending on platform support, ownership of the relevant content and future updates.

3. Class 70 Substitution

The third category is **locomotive substitution**, which allows the Class 70 to appear in place of the Class 66 on selected freight services across existing Train Sim World routes.

Unlike the dedicated timetable integrations, these substitutions do not introduce entirely new services. Instead, they provide an opportunity to operate existing freight workings using the Class 70.

Substitution support has been incorporated into selected services across the following routes.

- Great Western Express Remastered
- Airedale & Wharfedale
- Brighton Main Line
- East Coast Main Line – Doncaster to Peterborough
- East Coastway
- Glossop Line
- Gospel Oak to Barking Riverside
- Southeastern High Speed
- West Coast Main Line South

These substitutions have been applied to selected Class 66 workings where the Class 70 is considered a suitable alternative.

Class 70 substitutions are intentionally uncommon on most routes. This means the locomotive will not frequently appear as AI traffic, but players will have additional opportunities to select and drive it on compatible timetable services.

Understanding Timetable Availability

The Class 70 offers a combination of dedicated freight services, expanded timetables and selected locomotive substitutions.

For the most complete experience, **WCML Trent Valley and Midland Main Line provide the primary Class 70 timetable content**, with the additional timetable integrations and substitutions offering further variety across the wider Train Sim World network.

The availability of individual services may depend on the platform, installed route content, additional wagon packs and the timetable version selected.

11.Scenarios & Tutorials

The BR Class 70 includes **four tutorials and eight scenarios**, providing a comprehensive introduction to the locomotive and a variety of freight and engineering operations across two routes.

Tutorials

Four dedicated tutorials introduce players to the Class 70 and its associated equipment, covering the basic driving controls, safety systems, full cold start procedure and operation of the Wascosa MLA engineering wagons.

These tutorials are designed to familiarise players with the locomotive's systems before progressing to more demanding freight and engineering operations.

Midland Main Line Scenarios

The Midland Main Line features **four scenarios** centred around the extensive **Derby Station remodelling works**, which involved a series of major engineering possessions to reconstruct sections of the station and surrounding track layout.

These scenarios recreate different stages of the engineering operation, requiring players to prepare wagons ahead of a possession, deliver materials to designated worksites, remove redundant materials and equipment, and even assist in the recovery of a failed locomotive.

A particular highlight is the introduction of one of Train Sim World's first UK engineering worksite-based scenario experiences. Players will encounter working possessions featuring **Person in Charge of Possession (PICOP)** and **Engineering Supervisor (ES)** interactions, possession marker boards, designated working areas and animated construction equipment, including excavators and triple whackers.

These additional features bring engineering operations to life, creating an environment that goes beyond conventional freight movements and introduces the challenges of working within an active railway construction site.

West Coast Main Line Trent Valley Scenarios

The West Coast Main Line Trent Valley features a further **four scenarios**, offering a broader selection of freight operations alongside movements connected to the Derby engineering works.

Players will be tasked with transporting engineering wagons from Crewe towards Derby in preparation for the possession, alongside more conventional freight duties across the Trent Valley route.

These include operating a nighttime intermodal service from Daventry and transporting a formation of **three Class 70 locomotives** to Wolverton.

The scenarios provide a mixture of locomotive handling, freight operations and engineering logistics, allowing players to experience the Class 70 in a range of different operating conditions.

A Varied Driving Experience

Together, the eight scenarios provide **several hours of gameplay**, combining conventional freight operations with more specialised engineering activities.

From preparing and positioning wagons to working within railway possessions and navigating active construction sites, the scenarios are designed to challenge players while demonstrating the versatility of the Class 70 and its role in supporting the British railway network.

12. Troubleshooting

The BR Class 70 features a detailed simulation of its electrical, braking and locomotive management systems. As a result, incorrect switch positions, isolated equipment or incomplete startup procedures may prevent the locomotive from operating as expected. The following section covers some of the most common issues players may encounter and the steps required to resolve them.

Locomotive Startup

Q. The locomotive is completely unresponsive and the TMS displays are blank.

Check that the Battery Contactor Control switch has been moved to the Close position. This supplies electrical power to the locomotive and allows the onboard SMART displays to begin their startup sequence. Allow sufficient time for the displays to initialise.

Q. The engine will not start when I press the Engine Start button.

Ensure the required circuit breakers have been enabled in both driving cabs, particularly the Fuel Pump, ECU and auxiliary electrical systems. Check that the Master Key is inserted, Cab Active is enabled and the Engine Control switch is in the Start position. Both the Engine Run and Generator Field switches should also be enabled. Once configured, press and hold the Engine Start button for approximately five seconds.

Q. The engine has started, but the locomotive is still not ready to drive.

After the engine has started, return the Engine Control switch to Run. Allow time for the air brake system to charge and check the TMS for any active faults or warnings.

Braking and Movement

Q. The locomotive is running, but it will not move when I apply power.

Check that the Master Key and Cab Active switch are enabled, the reverser is in the intended direction of travel and the throttle is being applied.

Ensure the Parking Brake has been released and the automatic and independent brakes are fully released. Also confirm that the air brake system has been correctly configured through the TMS.

Q. The automatic brakes are not responding correctly.

Open the Air Brake Setup screen by pressing F3 on the TMS Main Screen.

The active driving cab should be configured as Lead / Cut In. Use F3 to change the Cut In/Cut Out setting and F4 to select Lead/Trail, then press F6 to save the configuration.

Q. The brakes will not release after starting the locomotive.

Allow sufficient time for the locomotive to build air pressure following startup. Check that the air brake circuit breakers are enabled and the brake system is configured as Lead / Cut In.

Also check that the Parking Brake is released and that no active fault is preventing normal brake operation.

Q. The locomotive is not accelerating as quickly as expected.

The Class 70 is designed for heavy freight operations, and acceleration will vary depending on the weight and length of the train, the gradient and the amount of power applied.

Heavy engineering trains, particularly those carrying loaded MLA wagons, will accelerate considerably more slowly than an unloaded locomotive.

Train Management System**Q. How do I change the locomotive from Trail / Cut Out to Lead / Cut In?**

Access the Air Brake Setup screen using F1 from the TMS Main Screen. Select Lead using F4 and Cut In using F3, then confirm the settings with F6 Save Changes.

Q. A warning or fault message has appeared on the TMS. What should I do?

Open the Operator Messages screen and review the displayed information. Messages may identify tripped circuit breakers, equipment faults or other conditions affecting the locomotive.

Investigate the indicated system and correct the issue before attempting to clear the message. The Reset All function can then be used to clear applicable messages.

Q. A circuit breaker has tripped. How do I reset it?

Use the Operator Messages screen to identify the affected circuit breaker. Locate the corresponding breaker within the appropriate electrical cabinet and reset it.

If the breaker trips again, check for any further fault indications before continuing.

Safety Systems

Q. Driver Vigilance is not operating.

Check that the relevant Driver Vigilance isolation switch is correctly configured. The system must also be enabled through the Alerter Cutout setting on the TMS Switches page, accessed using F7 from the Main Screen.

Q. The locomotive has applied an unexpected emergency brake application.

Check whether AWS, TPWS or Driver Vigilance has intervened. Ensure any required warning acknowledgement has been completed and follow the appropriate recovery procedure before attempting to continue.

Additional Controls

Q. The headlights or marker lights are not working.

Check that the relevant Day Headlight, Night Headlight and Marker Lights circuit breakers have been enabled in Cab 1. Confirm that the lighting controls are set to the required operating position.

Q. How do I reset the distance counter?

Press 2 on the TMS numbered keypad to access the Distance Counter screen. Select F5 Zero Distance to reset the measurement or use F4 Modify Preset to enter a new distance.

Q. Why has the engine shut down automatically while stationary?

The Class 70 is equipped with an Automatic Engine Start/Stop system designed to reduce unnecessary idling.

The system may shut down the engine when certain operating conditions are satisfied, including the locomotive being stationary, the throttle being at idle, the reverser being centred and the brakes being applied.

Press 3 on the TMS numbered keypad to access the Auto Engine Start/Stop screen and review the system conditions.

13. Credits & Acknowledgements

The **BR Class 70 Freightliner** and **Wascosa MLA Engineering Wagon** add-on for Train Sim World has been developed by **All Aboard Studios**, bringing together extensive research, technical development and collaboration with organisations across the British railway industry.

We would like to extend our sincere thanks to everyone who has contributed to the development of this project, whether through providing technical information, reference materials, operational knowledge, testing or ongoing support.

Freightliner

Our thanks go to **Freightliner** for their support and cooperation throughout the project. Their assistance in providing access to the Class 70, alongside technical information and operational reference material, has been invaluable in helping us recreate the locomotive and its distinctive characteristics within Train Sim World.

Wascosa

We would like to thank **Wascosa** for their cooperation and permission to recreate the MLA engineering wagon.

Their support has enabled us to introduce an additional aspect of railway freight operations, expanding the opportunities for players to experience engineering and infrastructure maintenance activities.

SimTrack Studios

We would like to extend our thanks to **SimTrack Studios** for their contribution to the development of the Class 70's gameplay content.

Their work on the timetable services and scenarios has helped deliver a varied range of freight and engineering operations, providing players with opportunities to experience the Class 70 across different routes and operating conditions.

Armstrong Powerhouse

Special thanks to **Armstrong Powerhouse** for their contribution to the Class 70's audio, helping bring the locomotive's distinctive sounds and operating characteristics to life.

Dovetail Games

We would also like to thank **Dovetail Games** for their continued support, collaboration and assistance throughout the development and publication of this add-on.

Development & Testing

Our thanks extend to the entire **All Aboard Studios development and internal quality assurance teams**, whose dedication and attention to detail have helped bring the Class 70 and its associated gameplay to Train Sim World.

From locomotive modelling, simulation and audio integration to timetable development, engineering scenarios and testing, this project represents a considerable collaborative effort.

The Train Sim World Community

Finally, we would like to thank the **Train Sim World community** for its continued enthusiasm and support.

We hope you enjoy operating the Freightliner Class 70 and exploring the new freight and engineering opportunities introduced with this add-on.