Class 24
BR Blue

Release Version 1.0

1 Background

1.1 Class 24

The Class 24 was a Sulzer Type 2, Bo-Bo, Diesel-Electric locomotive that was built between 1958 and 1961, the original 20 were built as part of the British Rail Modernisation Plan of 1955. They were fitted with a 1,160hp Sulzer 6LDA28 diesel engine and a 735Kw British Thomson-Houston (BTH) electric transmission, and had a in a top speed of 75mph. The Class 24s were used as the basis for the development of the Class 25.

Built at Derby, Crewe and Darlington (they were the first diesel locomotives to be built at Darlington), the Class 24s could be seen running services initially around Derby and Crewe but eventually throughout the British Rail network hauling both passenger and freight. 15 of the original 20 were sent down for use on the Southern Region as the Kent Coast electrification scheme was behind schedule, they could also be spotted in the Eastern Region, London Midland Region, Wales and Lancashire.

The Class 24s also took over the Condor freight services from London to Glasgow, replacing the Class 28. Class 24s ran this service until they were replaced by the first Freightliner service in 1965.

The 1st class 24 to be withdrawn from service was D5051 when it suffered a fire in November 1967, the damage was beyond repair and it was scrapped in August 1968. From then until 1979, all but 3 Class 24s had been withdrawn from service, 14 of which were scrapped before receiving a TOPS number. The final locomotive, 24081, was withdrawn in October 1980.

Today, there are only 4 class 24s that have made it into preservation, these are D5032 and D5061 at the North Yorkshire Moors Railway, D5054 at the East Lancashire Railway and 24081 at the Gloucestershire Warwickshire Railway.

1.2 Design & Specification

Builder	British Railways' Derby Works, Darlington Works and Crewe Works
Locomotive Weight	79 tonnes
Vehicle Length	50ft 6in (15.39m)
Vehicle Width	8ft 10in (2.69m)
Fuel Capacity	546 imp Gal
Vehicle Power	1,160hp (865kW)
Top Speed	75 MPH (121km/h)
Brake Types	Train Vacuum / Loco Air

2 Rolling Stock

2.1 Class 24

2.2 BR Blue Mk1 FK

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2.3 BR Blue Mk1 SK

2.4 BR Blue Mk1 BG

2.5 Hopper YGH Sealion

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3 Driving the Class 24

3.1 Cab Controls

1	Throttle	8	Instrument Lights
2	Reverser	9	Engine Stop
3	Train Brake	10	Engine Start
4	Engine Brake	11	Sander
5	Horn	12	Tail Lights
6	Wipers	13	Cab light
7	AWS Reset	14	Handbrake

3.2 Locomotive Keyboard Controls

Key Equivalent	Action
D / A	Decrease or Increase the Throttle.
S / W	Decrease or Increase the Reverser.
; / '	Decrease or Increase the Train Brake.
[/]	Decrease or Increase the Locomotive Brake.

3.3 General Keyboard Controls

Key Equivalent	Action
T	**Load/Unload.** Press once to load/unload passengers or freight.
H	**Lights.** Repeatedly pressing will cycle through headlight states.
Q	**(Expert) Alerter.** The Alerter is a system used to ensure that the driver has seen a signal. If the alert sounds (a black/yellow striped symbol is shown in the cab) it must be acknowledged by pressing the Alerter button or the emergency brakes will be applied.
X	**(Expert) Sander**. Causes sand to be laid on the rails next to the wheels to assist with adhesion. Press once to apply sand and again to stop.
Space	**Horn.** Sound the locomotive horn.
/	**Handbrake On/Off.** This icon is displayed in the Coupling view
Shift + Ctrl + C	**Couple Manually.**
Tab / Ctrl + Tab	Request authority to pass a signal at danger.

4 Headcode Discs

4.1 Setting up the headcode discs

To control the headcode discs on the front/rear of the locomotive you can cycle through them while driving the locomotive using the keys CTRL+SHIFT+5 (Front) or CTRL+SHIFT+6 (Rear).

For those creating their own scenarios, it is also possible to set the headcode formation by prefixing the locomotive number with the appropriate letter within the scenario editor.
For example, if the locomotive is to be numbered 24080 and it needs to be a Class A train and it is facing forward, then the value to set in the loco number is AN24080. Another example, if the locomotive is rear facing and it was a Class A train then the loco number would be NA24080.
Note: if you do not set the class, then the loco number will not appear as six characters must be specified in the number field.

These codes can be set up for both AI (computer controlled) trains and for the player train. The player will still be able to change their lamp configuration using the above key combinations during the scenario if they wish, the setting in the loco number only affects the initial lamp configuration.

Class A
Express Passenger, Breakdown Train or Snow Plough en-route to a job.

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Class B
Stopping Passenger, Rail Motor or a Breakdown Train returning from a job.

Class C
Parcels, Fish, Livestock, Milk, Fruit or perishables, all fitted stock.

Class D
Express Freight or Livestock with at least 30% fitted stock connected to the loco.

Class E
Express Freight with at least four fitted vehicles connected to the loco, or a short unfitted Express Freight.

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Class F
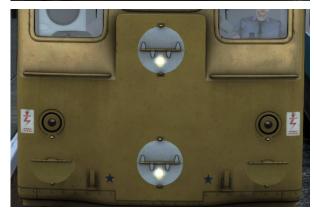Express Freight all unfitted stock.

Class G
Light engine, or engine with one or two brake vans attached.

Class H
Through Freight or Ballast train.

Class I
NOT USED

Class J
Through mineral or empty wagon train.

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Class K
Pick-up or Branch freight, or mineral or ballast train on a short haul run.

Class N
None

Class R
Royal Train

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5 Scenarios

For driving tutorials, please visit the Academy from the main TS2016 menu screen

5.1 [24] 1. Mickleton to Darlington

Transport ballast from Mickleton to Darlington.

- **Duration:**   50 Minutes
- **Difficulty:**   Easy

5.2 [24] 2. Durham to Darlington

Drive a replacement passenger service from Durham to Darlington calling at station en route.

- **Duration:**   55 Minutes
- **Difficulty:**   Easy

5.3 [24] 3. Shildon to Brandon

A challenging freight run from Shildon to Brandon.

- **Duration:**   35 Minutes
- **Difficulty:**   Hard

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6 Acknowledgements

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Beta Testing Team

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