

# UK Classic Diesel and Electric #1

V1.1.5



47500 departs with a rail tour from Carlisle. Re-skin created by Will

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## Welcome!

This pack is part of a community project started by members of the UKTrainSim community. Our aims are simple:

- Build up a bank of resources for the community by combining skills and working together
- Make the packs simple and straight forward to use

## Do I have the latest pack installed?

Every time you install a UKTS Freeware Pack it will automatically check to see if a more up-to-date version is available and warn you if you are trying to install an obsolete pack.

A small utility called “UKTrainSim Freeware Pack Updater” is also installed with every pack. This utility will allow you to quickly and easily check if updates for any of your packs are available. It also lists packs that you do not have with straight forward links to click and download them

## How can I find out what is in this pack?

A gallery of images showing the items available in each pack can be accessed by visiting:

[uktrainsim.com/FreewarePacks/galleries](http://uktrainsim.com/FreewarePacks/galleries)

A Google Documents spread sheet is available which gives further details of all the rolling stock included in each pack.

[View Google Documents Spread sheet](#)

## Scenario Creators – Find the Rolling Stock you Want Quickly

All items in the UKTS Freeware Rolling Stock packs have standardised names. Due to the limited space available to display asset names in game a system of short hand codes is used. A “Quick Reference” of the codes is installed in the same folder as this manual and is also [available online](#). There is also a [YouTube video](#) which shows how to enable and find the content in each pack.

## Object Set Filters Required for This Pack

The following Developer and Product Filters must be enabled to use the content of this pack when creating scenarios:

- DRB\_SimStuff → UK
- DT → Addon
- Kuju → RailSimulator
- MichaelWhiteley → Class 24
- RScott → Addon

## How Can I Get Involved?

There are many ways members can take part in the project:

- Donate a new asset to the pack
- Donate a re-skin to the pack
- Research buildings, objects etc. to assist object creators
- Take pictures that can be used as texture resources
- Assist with the organisation of the packs
- Create tutorials to assist other members

If you have questions or want more information please visit the [Get Involved](#) page on the UKTrainSim Freeware Packs web site.

## Additional Manuals for Pack Content

This section contains the manuals that came with certain items of rolling stock. You are strongly advised to read it if you want to get the most out of the pack. They contain background information and instructions for use.

### Hymek Readme (Class 35)



#### What works and what doesn't!

The loco aliases the Kuju Class 47 cab. I will eventually build a Hymek cab (I have collected some reference for this), but will need to learn a lot more about Rail Sim first! The cab and driver are from the Kuju/RSDL items and many thanks to them for allowing us to use them with freeware models.

Also, because I am not of a technical mind, I have aliased to the Class 47 Engine Simulation and sounds. This means that the loco is running as a diesel electric, where it should be a diesel hydraulic. If anyone, wants to re-do the engine simulation and/or come up with custom sounds, then they are very welcome to do so and I will incorporate them into a future release. Also, because it is using the Class 47 cabs, these relate to the length of the Class 47 loco, which is longer than a Class 35. Unfortunately, this means that when coupled up, your rear cab will actually be partly in the first wagon or coach. the same will happen if you try to couple up at the front. Unfortunately, I have found no way round this, until I build the custom cab. I still felt it was worth releasing the loco as is, so you can at least have another diesel. And all looks fine from the front, driving a train (the Headout view should be correct).

The model has working wipers (press V) and working headlights. Press H to get headlights on, Shift H to turn them off. If the loco is running light, pressing H will give you headlights and rear lights. Press H again and the lights switch for running in the other direction. Shift H goes back to the first direction and Shift H again turns the lights off. Note that if you are coupled to a train, the sim is clever enough to realise this and won't switch on rear loco lights. The fan is animated and should run as long as the engine is on (which is the default setting when you place it with a driver).

### Acknowledgements

Major thanks go to Kevin Martin, who 'talked' me through most of the processes of getting a loco into Rail Simulator. This model would not have happened without his help. And to Ian Morgan, who provided the first detailed tutorial to getting models from Canvas to Rail Sim. His original tutorial on getting a SR Toolbox from Canvas to MSTS got me started in this wonderful world of 3D modelling and it was a huge re-assurance when a version of this appeared for Rail Simulator. Also to others on the Amabilis site, who share their knowledge and ideas. And especially to Richard at 3D Canvas, who provides constant support and updates to this wonderful 3D package. Also thanks to Adam and Derek for providing a direct link to the source of RS and being prepared to share their knowledge and models with us.

### The Prototype

The Beyer Peacock Company formed a consortium in 1958 with Bristol Siddeley Engines and J. Stone of Deptford and called themselves Beyer Peacock (Hymek) Limited. The idea was to produce a Type 3 Diesel Hydraulic loco for British Railways. This was a separate undertaking, not part of the BR Modernisation plan. The loco used a 16 cylinder Maybach engine and was to be built at the companies Gorton works in Manchester. The engine would be made at Bristol Siddeley's Coventry works to a German design. A total of 101 locomotives were ordered by the Western region between 1959 and 1961.

D7000, was the first Hymek delivered to the Western Region on the 16th May 1961 at Paddington station and the last delivered was D7100 in February 1964. When first delivered the locos were Brunswick green and had numbers made from cast aluminium. They retained these to the end of their days and never received TOPS numbers. Despite some early reliability problems the Hymek settled down to be a good performer. The Class 35 did last into BR Blue days, but like all the Western Hydraulics, suffered from a lack of standardisation. Withdrawals started from 1971, the last being withdrawn in March 1975. Four have been preserved, including two at the West Somerset Railway.

The Hymeks weighed 75 tons and were capable of a maximum speed of 90 mph.

Checkout:

<http://www.hymek.co.uk/>

[http://www.greatwestern.org.uk/d7000m\\_in.htm](http://www.greatwestern.org.uk/d7000m_in.htm)

[http://en.wikipedia.org/wiki/British\\_Rail\\_Class\\_35](http://en.wikipedia.org/wiki/British_Rail_Class_35)



The main model was built by me using 3D Canvas ([www.amabilis.com](http://www.amabilis.com)), the cabs, physics, sound and driver figure are all Kuju/RSDL productions. You should therefore not re-distribute this model without permission. Please do not alter and distribute files within this pack without asking first. Some changes could affect how the loco works in differing scenarios.

I hope you enjoy this model.

**Richard Scott**

**April 2008**

**[richardscott@dasp.org.uk](mailto:richardscott@dasp.org.uk)**

### Class 86



#### Driving this locomotive

The train brake has mixed "notched" and continuous positions. There are four notches. Moving anticlockwise they are:

RELEASE - brake pipe is "overcharged" to 78PSI.

RUNNING - brake pipe is maintained at 72.5PSI. This is the normal running/released position.

FULLSERVICE - brake pipe is reduced to 48.6PSI. Brakes are fully applied.

EMERGENCY - brake pipe is reduced to 0PSI.

Between the RUNNING and FULLSERVICE positions the brake has graduated positioning, in application

or release. Note the minimum application brake pipe pressure is 66.5PSI.

The "PAN UP/RESET" and "HEAT ON" buttons can only be operated with the reverser in fwd or rev.

The "change ends" switch is not realistic, but is used for marker/tail lights selection. Leave up for no 1 end leading, down for no 2. Note this is only needed when running light loco.

The ANTISKID and SANDER buttons are functionally identical with regards to improving simulated adhesion.

The handbrake is the big wheel on the back wall. Note it cannot be operated with the mouse by looking through the glass partition behind the driver. Move to the secondman's position.

When driving with a vacuum braked train the "vacuum release" must be operated for the vacuum gauges to operate. This is not shown on the picture and is the white cylinder on the panel to the right of the secondman's seat. Just click on it to turn the gauges on or off.

Power control is very different to that provided on diesel locomotives. The notching handle is not a throttle, but is used to increase/decrease the level of voltage tapping in the transformer. There are 38 voltage taps. The level of applied voltage is shown by the notch indicator, which is calibrated between 0 and 100%. 100% means "full power" is being applied.

There are six discrete notch handle positions, moving anticlockwise they are:

- OFF
- RUN DOWN
- NOTCH DOWN
- HOLD
- NOTCH UP
- RUN UP

In OFF power is immediately disconnected, and the tapchanger is run down to 0 (see above).

In RUN DOWN the tapchanger is run down towards 0, but power remains applied until 0 is reached.

In NOTCH DOWN the tapchanger is reduced by a single tap.

In HOLD the current tap position is maintained.

In NOTCH UP the tapchanger is increased by a single tap.

In RUN UP the tapchanger is run up towards 38, i.e 100%.

If you select OFF you must wait for the notch indicator to reduce to 0 before you can re-apply power. This takes some time (over 30 seconds on the real locomotive to go from 100%-0%).

The OFF, RUN DOWN, HOLD and RUN UP handle positions are simulator "notched" positions. To increase

or decrease power by a single tap briefly move the lever from the HOLD position in the appropriate direction, using the mouse or keyboard, then release it and let it spring back to the HOLD position.

When notching up (increasing power), particularly from rest, it is essential to monitor the ammeters to ensure current is not excessive. Do not allow the needles to enter the red zone for more than a

few seconds, or the power will trip. If this occurs traction power is lost, the ammeters will drop to zero and the blue fault light will illuminate. To clear this you must:

Return the notch handle to OFF, and wait for the notch indicator to run down to zero.

Press the PAN UP/RESET button.

The fault light will go out, and power application can be resumed (gently this time!). As a guide to power application only a single tap can be applied from rest, and 100% tap can only be applied when the locomotive speed is almost 50 MPH.

When the reverser handle is in forward or reverse every 1 minute a vigilance beeper will sound. If you do not acknowledge this by pressing the space bar within 4 seconds the emergency brake will be applied, even if the train is stationary. To use the space bar for this purpose the horn has been moved to the enter and + keys (on the numeric keypad). The 1 minute timer is also reset to zero if the AWS reset is operated.

Blended dynamic brakes operation is simulated. There is no difference to driver brake operation. Provided the notching handle is in the OFF position and the notch indicator has run down to 0 the dynamic brakes will be activated when braking. You will see this by the bogie brake pressures dropping to near 0 and the notch indicator and ammeters rising while the brakes are applied.

For those who dislike the complexity of the above a "simplified" driving controls version is provided. This can be operated in a manner similar to the default locomotives, with the exception that the brakes can be gradually released.

### **Use of Keyboard**

This locomotive uses custom key mapping. This will not affect the default key mapping of the simulator, including any customisations you may have made. The key mapping differs from the default by:

A reduce power >

D increase power > ie MSTs style.

ENTER/+ sound horn

SPACE BAR cancel vigilance warning.

Note the "simplified" control locomotive uses the default key mapping.

### **Credits**

Model developed using Blender and the Blender Railsimulator exporter by SteamPSI.

Integrated with simulation using Railsimulator Dev tools from RS.com.

Original sound blueprints from Kuju/rs.com.

Some texture fragments from Railsimulator Dev tools.

## Known Problems

### *Duplicate Loco Numbers SBHH*

This is a known issue with Railworks2 where it will quite happily allow duplicate loco numbers that are specified in the loco .bin files within the editor, but then throws a SBHH error once you click the play button or exit out of the editor and then try to launch a scenario via the main route window.

### Work Around

Scenario creators should be careful not to place more than one item of any locomotive which is a singled numbered or named type.

## Licensing Conditions for Donated Content

To ensure that assets remain permanently available to route builders once donated contributors must agree to the following conditions:

- Content may NOT be withdrawn from the pack after it has been donated
- All content may be used, distributed, re-skinned and re-packaged with any freeware route.
- The complete pack may be hosted on any website providing no profit is made by offering the download
- The content may be edited by a Freeware Pack administrator so that it fits in with the standardised pack structure
- The content may be edited by a Freeware Pack administrator to improve the realism of the item. This is primarily used for rolling stock donations and their physics (braking, loading etc parameters).

**You may opt out of this condition if you do not want any improvements to be made to your donations by informing a Freeware Pack administrator**

- Freeware Packs may be distributed on UKTS CD's to provide an alternative to those without broadband Internet access and so they may be given away at UKTS Live events

These conditions will allow us to create a reliable, simple and completely free resource for the community. For the latest conditions visit <http://www.uktrainsim.com/FreewarePacks>.

## Licensing Conditions for Hosting Packs

The following conditions apply to anyone wishing to host the packs on a site other than UKTS:

- **Permission must be granted by UKTS before packs may be hosted on alternative sites**
- The download must be available for free
- No profit may be made by offering the download
- A link to the original UKTS download must be provided on the download page
- The date and version number of the pack must be clearly given on the download page
- You must email [FreewarePacks@rwdecal.co.uk](mailto:FreewarePacks@rwdecal.co.uk) supplying a valid email address and link to the download - This ensure we can contact you (the host) when a new version is released making it easy for you to update your download
- You must remove the download at the request of a UKTS Freeware Pack administrator



These conditions ensure users can obtain free and consistent packs. For the latest conditions visit <http://www.uktrainsim.com/FreewarePacks>.

### Credits

These packs would have been impossible without members of the community generously donating their time, energy, skill and expertise to the project.

My thanks go to Mike Simpson for his indispensable RWTools, David Richardson for his design skills and Matt Peddlesden for his support. Kariban and Kromaatikse have done incredible work with rolling stock physics and many others have offered help and assistance along the way. Without you all this would not have been possible.

Donations for this pack were received from (alphabetical order):

- adburgess1992
- bdy26
- danny3
- DavidHossack
- davveb



- nattydredd
- pacerfan
- RichardScott
- sdark2
- Slammer423
- Tankski
- thetrainfan
- Will

## Version History

### *1.0.2 – 17<sup>th</sup> August 2011*

1<sup>st</sup> public release.

### *1.0.5 – 28<sup>th</sup> September 2011*

- Added version history to manuals
- Fixes to registry utility button
- Improved version detection script to prevent installer crashing
- Warning popup added to uninstall routine informing users that removal of rolling stock may prevent scenarios which use them from working
- Added new version of updater program
- Modified installer to allow packs to contain the same asset if needed

### *1.0.6 – 30<sup>th</sup> September 2011*

- Corrected invalid references to simulation files

### *1.1.0 – 23<sup>rd</sup> December 2011*

- Renamed all items using the new naming system
- Reduced uninstall footprint significantly by storing data separate to installer code
- Content updated:
  - FP DL Class 47 DBS updated to TS2012 spec.
  - Updated all Class 47's and 37's to add lights and rain effects
  - Fixed missing fans on some 47's
  - Includes **UKTS 21431** and **UKTS 21474** by DavidBrindley which he updated.
  - Brakes on the Class 86's now are on when you first enter the locomotive
  - Fixed cabs for both the Class 25 and 35
- Additional content added:
  - **UKTS 27507**: Class 47 InterCity Swallow pack by nattydredd
  - **UKTS 27509**: Class 47 Railfreight pack by nattydredd
  - **UKTS 27505**: 47406 & 47609 InterCity Executive livery by nattydredd
  - **UKTS 27508**: Class 47 Large Logo pack by nattydredd
  - **UKTS 25754**: Class 47 Scottish Large Logo Pack by nattydredd
  - **UKTS 25755**: Class 47 Complete ScotRail Pack by nattydredd
  - Added ICS-BR Transitional re-skin by thetrainfan

### *1.1.1 – 24<sup>th</sup> April 2012*

- Additional content added:
  - **UKTS 28278**: Class 47/4 No. 47475 for TS2012 by bdy26
  - **UKTS 28752**: BTP Class 47 by stykx
  - **UKTS 28756**: Virgin Trains Class 47 Repaint 4-Pack by stykx

### *1.1.2 – 24<sup>th</sup> December 2012*

- Fixed cab audio for various DRB\_SimStuff items broken by recent TS2013 release
- Additional content added:
  - **UKTS 29138**: Stratford Railfreight class 47's by nattydredd

- **UKTS 29139:** 47527 "Kettering" in InterCity Mainline livery by nattydredd

#### ***1.1.3 - 11<sup>th</sup> June 2013***

- Fixed cab issue with Class 25 reskin
- Added BR Black reskin by Pacerfan

#### ***1.1.4 - 12<sup>th</sup> June 2013***

- Fixed additional cab issues with Class 25

#### ***1.1.5 - 4<sup>th</sup> February 2014***

- Updated class 47 ICS to fix wiper pairs issue