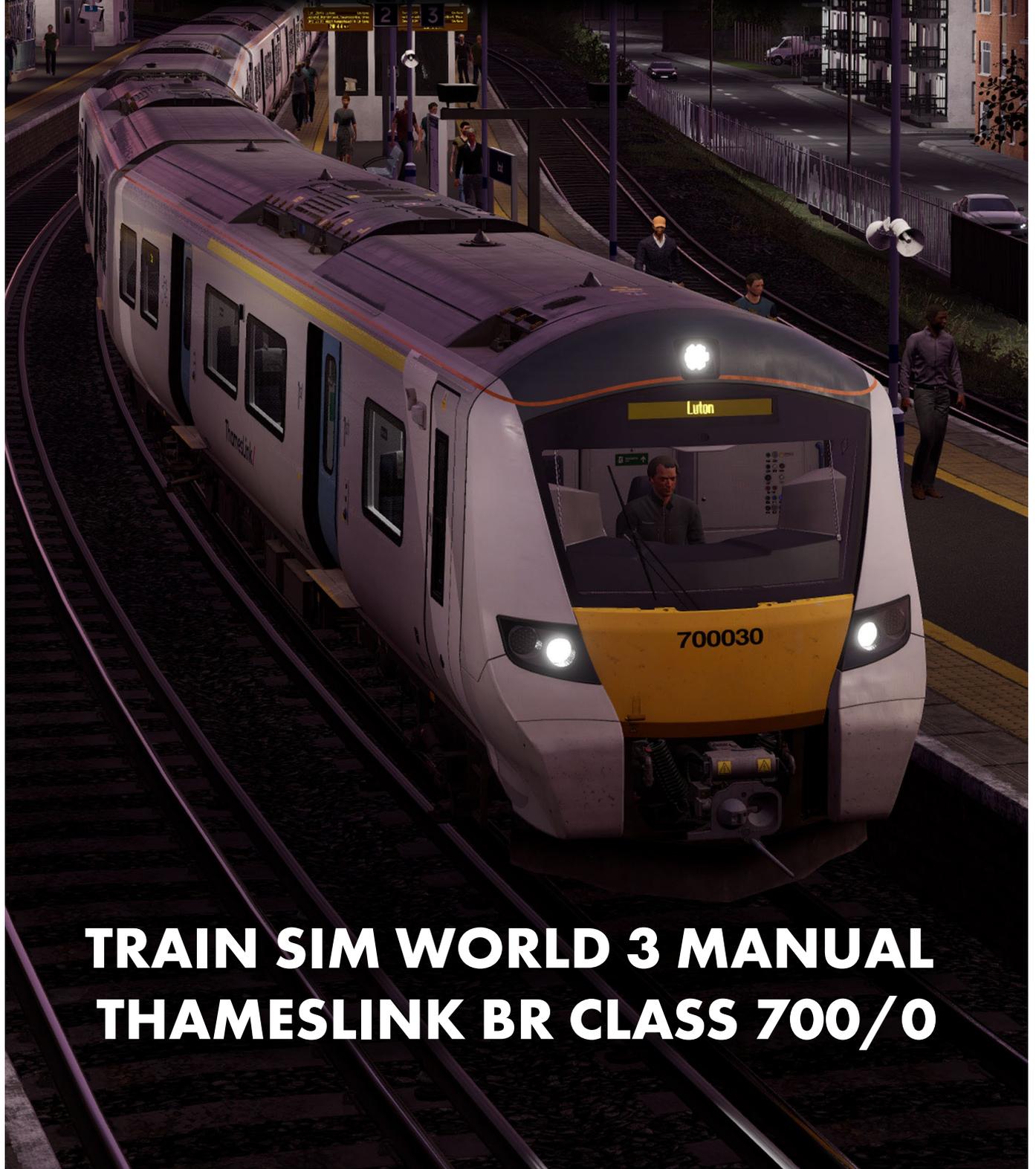
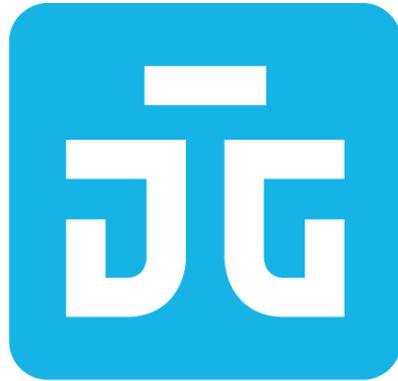


TRAIN SIM WORLD[®] 3



TRAIN SIM WORLD 3 MANUAL THAMESLINK BR CLASS 700/0



dovetail

GAMES

©2023 Dovetail Games, a trading name of RailSimulator.com Limited ("DTG"). "Train Sim World" and "SimuGraph" are trademarks or registered trademarks of DTG. Unreal® is a registered trademark or trademark of Epic Games, Inc. in the United States of America and elsewhere. Unreal® Engine, Copyright 1998 - 2023, Epic Games, Inc. All rights reserved. Portions of this software utilise SpeedTree® technology (©2014 Interactive Data Visualization, Inc.). SpeedTree® is a registered trademark of Interactive Data Visualization, Inc. All rights reserved. Thameslink is a trading name and trademark of Govia Thameslink Railway Ltd. All other trademarks are the property of their respective owners. Unauthorised copying, adaptation, rental, re-sale, arcade use, charging for use, broadcast, cable transmission, public performance, distribution or extraction of the product or any trademark or copyright work that forms part of this product is prohibited. Developed and published by DTG.

The full credit list can be accessed from the TSW "Options" menu.

CONTENTS

Thameslink BR Class 700/0 Introduction.....	4
Thameslink BR Class 700/0 - How to Play.....	5
Thameslink BR Class 700/0 - Technical Info.....	6
Railfan Sheet.....	7
Thameslink BR Class 700/0 Cab Layout.....	8
Cab Layout 1/2.....	8
Cab Layout 2/2.....	9
TMS Screen.....	10
DMI Screen & GSM-R.....	11
Thameslink BR Class 700/0 - Procedures.....	12
Quick Start.....	12
Cold & Dark Start.....	12
Shut Down.....	13
Changing Ends.....	13
Emergency Brake Reset.....	14
Change Power Modes.....	14
Thameslink BR Class 700/0 - Medway Timetable.....	15
Medway Services Map.....	16
Thameslink BR Class 700/0 - Included Scenarios.....	17
Useful Information.....	18

THAMESLINK BR CLASS 700/0 - INTRODUCTION



The Thameslink Programme, a phrase that London commuters have been familiar with for over a decade, was the radical transformation of commuter travel through the centre of London. The plan? Upgrade and expand the Thameslink network with better cross-city connections, as well as longer and more frequent trains made up of a brand new fleet of rolling stock.

The hunt for new trains started back in 2008, bidders needed to offer trains with a high standard of specifications, and provide new maintenance and storage facilities for the vast new fleet. Ultimately Siemens was chosen, with their Desiro City platform, a development of the Desiro UK range which already existed in the form of the Class 350, 360, 380, 450 and 444.

With the first delivered in 2015, and the growing fleet entering service in 2016, the Class 700 is a revolutionary EMU. 115 were ordered in a mix of 8 and 12-car formations, doubling the size of the old Thameslink fleet. Each unit is lighter, more efficient, has better performance, and can soak up commuters by their thousands. A new bogie design reduced energy consumption and wear on the track compared to older trains. Each coach is connected with a wide gangway, allowing for better movement inside, a spacious accessible area features in the middle of every unit, the passenger doors are wider and open faster. Air-con in the summer is second to none, and they are fitted with the latest design of passenger information systems which in real-time offer onward travel information and passenger load per coach.

It's safe to say that the Class 700 was the biggest step-change in London commuter rail travel since the introduction of EMUs themselves, earning the title Train of the Year in 2018, with a bright future on the horizon.

The 700/0 variant is the 8-car configuration, and is mainly used on "metro" routes with more frequent stopping and less overall distance covered per journey, it is these which are used on the Medway route.

THAMESLINK BR CLASS 700/0 - HOW TO PLAY



Training

A single Training module for the Class 700 is included on the Training Center. Be guided through the basics of getting the unit to move and performing passenger stops. This, and more detailed operating procedures are available in this manual.

Scenarios

On Southeastern Highspeed, a total of 7 scenarios are available for the Class 700, offering a range of unique situations and operations away from the standard schedule. Full details can be found on Page 17.

Timetable

A new layer has been added to the Southeastern Highspeed timetable bringing the 700 into its Dartford-Rainham role. More details on the specifics of these new services can be found on Page 15.

Rail Journeys

A new string of chapters in the Southeastern Highspeed Journey ties together a mix of Scenarios and Timetabled Services for continuous Desiro City duty.

Scenario Planner

Make your own experiences on whichever route you desire, bring the Class 700 onto familiar territory such as Brighton Main Line or East Coastway, or make use of the pantograph with Off the Rails and drive wherever you wish!

Livery Designer

Turn the Class 700 into a blank canvas and go to town on creating your own designs, maybe some will be more recognisable than others, but if neon pink is more your fashion then go for it!

THAMESLINK BR CLASS 700/0 - TECHNICAL INFO



Manufacturer.....	Siemens Mobility
Build Location.....	Krefeld, Germany
Build Date.....	2014-2018
Number Built.....	60 sets
Power Type (AC).....	25kV AC OHLE
Power Type (DC).....	750V DC Third Rail
Coaches.....	8-car (RLU)
Capacity.....	1146 Passengers Total
Capacity (First Class) *	52 seats
Capacity (Standard Class).....	373 seats
Capacity (Standing).....	719 standees
Length.....	162 Metres (531 ft)
Weight.....	278 Metric Tons
Top Speed.....	100mph (160 km/h)



* First Class areas on all Thameslink Class 700s are found at the front and rear of the train, however, on "main line" services only the front is deemed First Class, the rear of the train is declassified.

On "metro" routes, such as their use on the Rainham services, First Class on both ends is declassified.

Formation: DMCO-PTSOL-MSO-TSOW-TSOLW-MSO-PTSOL-DMCO

DMCO: Driver Motor Composite Open

PTSOL: Pantograph Trailer Standard Open Lavatory

MSO: Motor Standard Open

TSOW: Trailer Standard Open Wheelchair

TSOLW: Trailer Standard Open Lavatory Wheelchair



THAMESLINK BR CLASS 700/0 - RAILFAN GUIDE

While performing duties on the Southeastern Highspeed route, you will see all the various numbered Class 700/0s operated by Thameslink. Use the table overleaf to tick off which ones you have experienced!

Sight = Seen the unit on the route

Captured = Taken a screenshot of the unit

Haulage = Ridden the unit as a passenger

Signed = Driven the unit as a driver

Unit Number	Sight	Captured	Haulage	Signed
700001				
700002				
700003				
700004				
700005				
700006				
700007				
700008				
700009				
700010				
700011				
700012				
700013				
700014				
700015				
700016				
700017				
700018				
700019				
700020				
700021				
700022				
700023				
700024				
700025				
700026				
700027				
700028				
700029				
700030				

Unit Number	Sight	Captured	Haulage	Signed
700031				
700032				
700033				
700034				
700035				
700036				
700037				
700038				
700039				
700040				
700041				
700042				
700043				
700044				
700045				
700046				
700047				
700048				
700049				
700050				
700051				
700052				
700053				
700054				
700055				
700056				
700057				
700058				
700059				
700060				

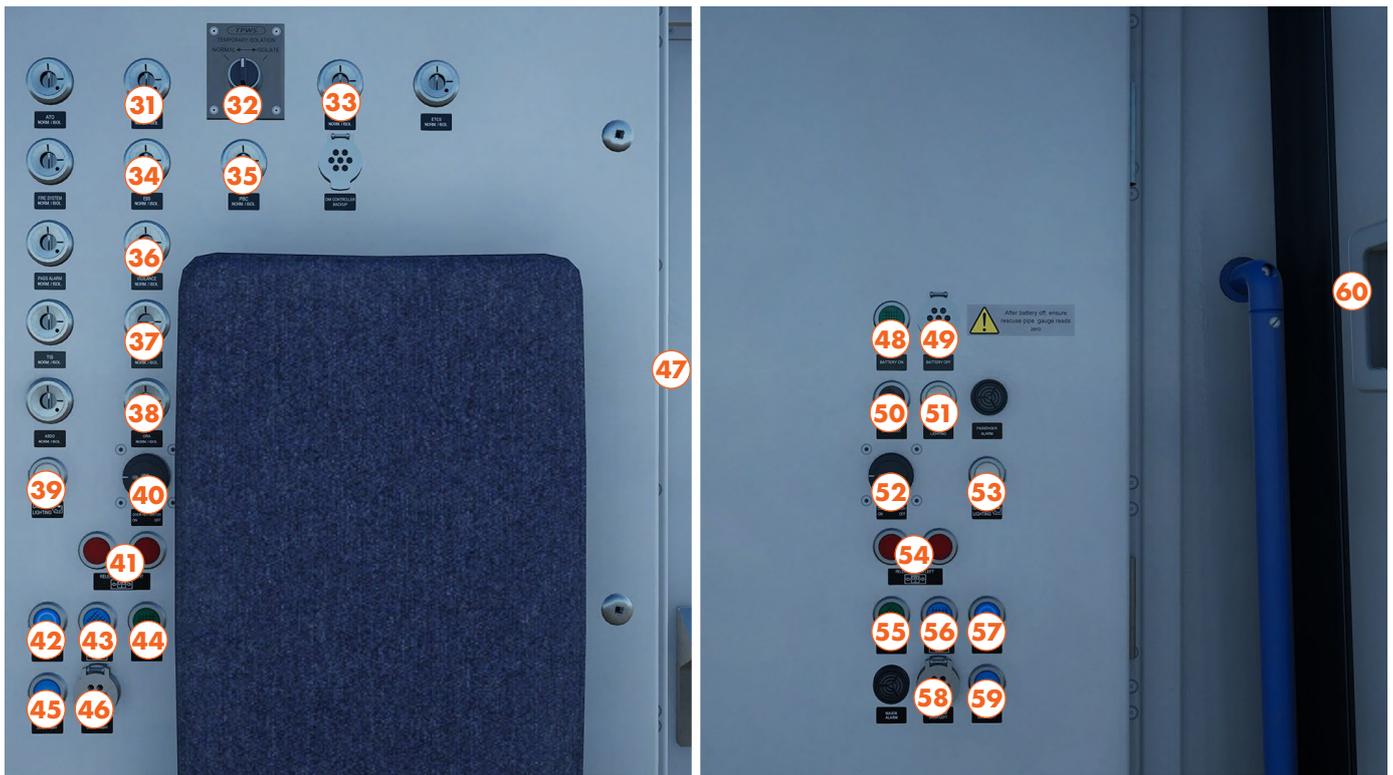
THAMESLINK BR CLASS 700/0 CAB LAYOUT - 1/2



- | | |
|---|---------------------------------------|
| 1 - Depot Warning Horn Button | 16 - Desk Light Button |
| 2 - Door Interlock Indicator | 17 - Exterior Lights Switch |
| 3 - Release Left Doors Button | 18 - Windscreen Wiper Switch |
| 4 - Close Doors Button | 19 - AWS/TPWS Reset Plunger |
| 5 - Signal Bell Button | 20 - Sanding Switch |
| 6 - Master Key | 21 - Two-tone Warning Horn |
| 7 - Reverser Switch | 22 - Release Right Doors Button |
| 8 - Power/Brake Handle | 23 - Close Doors Button |
| 9 - Train Management System (TMS) Screen | 24 - Door Interlock Indicator |
| 10 - Driver Machine Interface (DMI) Screens | 25 - GSM-R |
| 11 - DMI Changeover Switch | 26 - Cab Lighting Switch |
| 12 - Brake Gauge | 27 - Cab Holdover Switch |
| 13 - Emergency Brake Plunger | 28 - Contact Signaller |
| 14 - Driver Reminder's Appliance (DRA) | 29 - Blind (above) |
| 15 - Power Supply/Changeover Switches | 30 - Driver Safety Device (DSD) Pedal |

This Cab Layout shows many of interactive elements and operating gauges that feature on this train. Not all controls are essential to operating this train, you can see the essential controls needed to get this train moving in the "Quick Start" and "Cold & Dark Start" guides.

THAMESLINK BR CLASS 700/0 CAB LAYOUT - 2/2



- 31 - AWS Isolation
- 32 - TPWS Temporary Isolation
- 33 - TPWS/AWS Isolation
- 34 - Emergency Brake Loop Isolation
- 35 - PBC Isolation
- 36 - Driver's Vigilance Device Isolation
- 37 - Driver's Safety Device Isolation
- 38 - Driver's Reminder Appliance Isolation
- 39 - Main Cab Lighting Button
- 40 - Right Door Key Switch
- 41 - Release Right Doors Button
- 42 - Door Interlock Indicator
- 43 - Close Doors Button
- 44 - Signal Bell Button
- 45 - Close Cab Door Right

- 46 - Open Cab Door Right
- 47 - Internal Cab Door
- 48 - Battery On Button
- 49 - Battery Off Button
- 50 - Lamp Test Button
- 51 - Saloon Lighting Button
- 52 - Left Door Key Switch
- 53 - Main Cab Lighting Button
- 54 - Release Left Doors Button
- 55 - Signal Bell Button
- 56 - Close Doors Button
- 57 - Door Interlock Indicator
- 58 - Open Cab Door Left
- 59 - Close Cab Door Left
- 60 - External Cab Door

THAMESLINK BR CLASS 700/0 CAB LAYOUT - TMS SCREEN



- 61 - TMS Page 1
- 62 - Screen Brightness Controls
- 63 - Cab Air-Conditioning Controls
- 64 - Train Configuration Controls
- 65 - TMS Page 2
- 66 - Snow Brake Mode Controls
- 67 - Disable Regen Brake Controls
- 68 - Enable Regen Brake Controls

THAMESLINK BR CLASS 700/0 CAB LAYOUT - DMI SCREEN & GSM-R



- 69 - Speedometer
- 70 - AWS Sunflower
- 71 - Safety System Information
- 72 - Day/Night Mode Controls
- 73 - Brightness Controls
- 74 - GSM-R Brightness Decrease Button
- 75 - GSM-R Brightness Increase Button
- 76 - GSM-R Test Button
- 77 - GSM-R Volume Decrease Button
- 78 - GSM-R Volume Increase Button
- 79 - GSM-R Confirm Button
- 80 - GSM-R Cancel Button
- 81 - GSM-R On/Off Button
- 82 - GSM-R Contact Signaller Button

The DMI screen defaults to showing the Speedometer on the left, and the AWS Sunflower on the right, however, this can be changed with the DMI Changeover Switch (11) - switching it to the left or right will compress all information onto either the left or right half, as per your own preference.

THAMESLINK BR CLASS 700/0 - PROCEDURES

QUICK START

This Quick Start sequence represents the basics you will need to follow to get this train moving - follow along with the Training Module of this train in the Training Center or when you start a Scenario or Service.

- Ensure the Reverser is in the Neutral position
- Open the desk by inserting and turning the Master Key
- Clear the AWS self-test sequence (if enabled) by pressing on the AWS Reset Plunger
- Set the Exterior Lights to the appropriate Headlight position
- Ensure the GSM-R is turned on, if it is not, press the On/Off Button, it will auto register and display your train's headcode (if applicable)
- If in the platform, begin passenger boarding by pressing the Left or Right Side Door Release Buttons
- Once passenger loading has completed, press the Close Doors button and await interlock
- If it is set, reset the Driver's Reminder Appliance
- Move the Reverser into the intended direction of travel
- Pull the Power Brake Handle towards you, increase as you accelerate to gain more speed

COLD & DARK START

This Cold & Dark Start sequence represents when the train is fully powered down. You may use this as a reference to get familiar with how trains are started and practice the full start-up sequence.

- Enter the cab by interacting with the Cab Door and climbing on-board
- If you wish to drive with Safety Systems enabled, set the AWS, TPWS, DSD and Vigilance Isolation Switches on the side wall to Normal as you desire
- Sit down in the driver's seat
- Ensure the Reverser is in the Neutral position
- Open the desk by inserting the Master Key
- Set the Driver's Reminder Appliance (DRA)
- If the train is not powered on at all, press and hold the Battery On button for a few seconds
- Clear the AWS self-test sequence (if enabled) by pressing on the AWS Reset Plunger
- Set the train to the appropriate Power Mode (AC or DC) by moving the Mode Changeover switch left or right, once it stops flashing, turn the Power Supply Switch to On, the train is drawing power once both switches have extinguished.
- Set the Exterior Lights to the appropriate Headlight position
- Ensure the GSM-R is turned on, if it is not, press the On/Off Button, it will auto register and display your train's headcode (if applicable)
- If in the platform, begin passenger boarding by pressing the Left or Right Side Open Doors Buttons
- Once passenger loading has completed, press the Close Doors Button and await interlock
- Reset the Driver's Reminder Appliance
- Move the Reverser into the intended direction of travel
- Pull the Power Brake Handle towards you, increase as you accelerate to gain more speed

SHUT DOWN

This Shut Down sequence represents the steps needed to return the EMU to a Cold & Dark state, which you may wish to do at the end of a service, or to practice the Cold & Dark Start sequence.

- After completing your final move, secure the train in place by ensuring the Power Brake Handle is in full service braking
- If you have just finished a passenger stop, press the Close Doors Button and await interlock
- Set the Driver's Reminder Appliance
- Move the Reverser to Neutral
- Set the Exterior Lights to the Tail Lights position
- Turn the Power Supply Switch to the Off position, when it stops flashing, the train is no longer drawing power
- Remove the Master Key
- Press and hold the Battery Off Button for a few seconds

CHANGING ENDS

This sequence represents the steps needed to change driving cabs, this is a very common practice you may perform when you complete a service, as you may need to be in the other cab to drive the next service.

- After completing your final move, secure the train in place by ensuring the Power Brake Handle is in full service braking
- If terminating at a station, leave the passenger doors open
- Set the Driver's Reminder Appliance
- Move the Reverser to Neutral
- Set the Exterior Lights to the Tail Lights position
- If registered, de-register the GSM-R by pressing the On/Off and Confirm Buttons.
- Remove the Master Key
- Stand up from the driver's seat
- Exit via the appropriate Cab Door and either walk along the train to the other cab, or walk through the train to the other cab
- Once in the other cab, sit in the driver's seat
- From this point you can wait for the next service to begin then follow the Quick Start procedure to setup the unit

EMERGENCY BRAKE RESET

These sequences represent the steps needed to reset the train in case of an emergency brake application, either by Plunger, the Emergency notch of the Power Brake Handle, or missing an alarm.

If you use the Emergency Plunger/Power Brake Handle:

- Let the train come to a complete stop
- Return the Power Brake Handle to a normal braking position, such as full service
- If set, reset the Plunger
- Pull the Power Brake Handle towards you to take power and move away

If you encounter a Vigilance brake demand:

- If you miss the DVD alarm, the brakes will automatically apply after a few seconds
- Cancel the alarm by resetting the Vigilance
- Return the Power Brake Handle to the Off position, and reapply power
- There is no need to wait for the train to come to a complete stop

If you encounter an AWS/TPWS brake demand:*

- As the train decelerates, acknowledge the intervention either by pressing the AWS Plunger, or pressing the flashing indicator on the DMI, either way, ensure the flashing indicator goes solid
- Move the Power Brake Handle into Off or a braking position
- Once the train has stopped, you must wait until the "BR" indicator on the DMI appears, this could take upto 60 seconds depending on when you acknowledged the intervention
- To release the brakes, you must press on the "BR" indicator on the DMI in front of you
- Pull the Power Brake Handle towards you to take power and move away

*It is worth noting that the AWS has a shorter than usual timeframe between the alarm sounding and the brakes being applied, closer to 3 seconds rather than the usual 4 or 5, so be on the ball!

CHANGE POWER MODES

This sequence represents the steps needed to change between AC and DC power, and vice versa, not done in service on our represented service pattern, but useful for off the rails mode and on the Training Center.

- Make sure you are stopped and the Reverser is in Neutral
- Move the Power Supply Switch to Off, when it illuminates, power has been switched off
- If previously in AC or Auto, move the Power Mode Switch to DC
- If previously in DC or Auto, move the Power Mode Switch to AC
- The Power Mode Switch will start flashing, when it stops, the mode has been changed
- Move the Power Supply Switch to On, when the light is extinguished, the changeover is complete

On the contrary of what one might expect, the pantograph light on the roof remains illuminated regardless of which mode the Class 700 is in, so, don't be surprised when you see the light while on DC duty. Equally, unlike other trains such as the Class 395, or Class 387, the third rail shoes remain in a fixed position, they do not raise and lower when changing power modes. Lastly, the 700 is, on a technical level, setup as two permanently fixed EMUs, so equally unlike other trains, the pantograph on each end of the unit will be used.

THAMESLINK BR CLASS 700/0 - MEDWAY TIMETABLE



Thameslink began operations in Kent with the introduction of the May 2018 Timetable, replacing the Southeastern, 2 trains per hour service between Gillingham, Kent and London Charing Cross.

The new Thameslink service was extended one further station in Medway, to take advantage of the recently built bay Platform 0 at Rainham, Kent, and also diverted off SE metals after London Bridge, taking the curve upto London Blackfriars, through the Thameslink core and continuing onto Luton.

Running 2 trains per hour, Thameslink intertwine with existing Southeastern services and can offer an total average of 6 trains per hour through North Kent. The stopping pattern varies throughout the day, but can often look like the following:

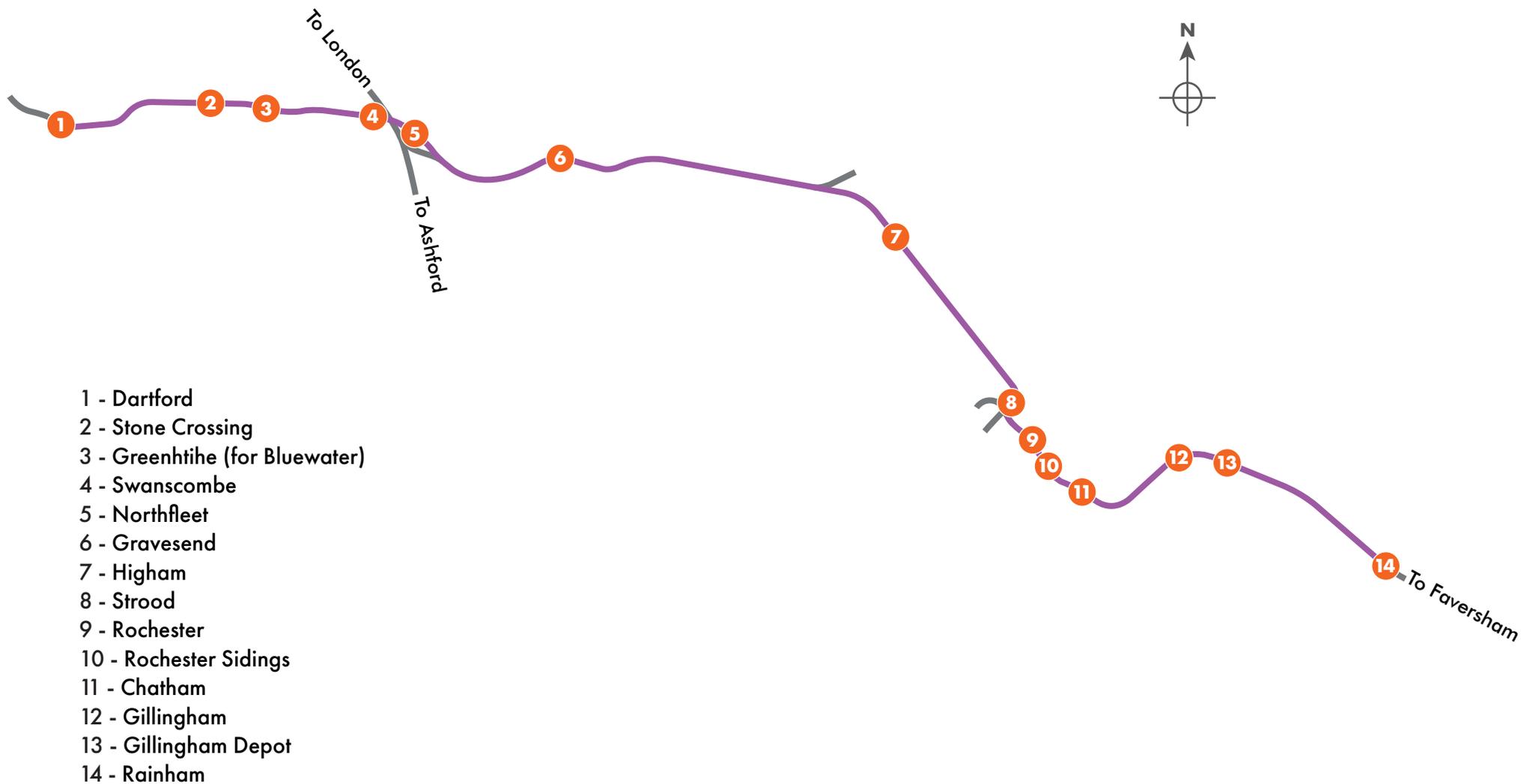
Rainham, Gillingham, Chatham, Rochester, Strood, Higham, Gravesend, Northfleet, Swanscombe, Greenhithe, Stone Crossing, Dartford, Slade Green, Abbey Wood, Plumstead, Woolwich Arsenal, Charlton, Westcombe Park, Maze Hill, Greenwich, Depford, London Bridge, London Blackfriars, City Thameslink, Farringdon, St Pancras Intl, Kentish Town, West Hampstead Thameslink, Cricklewood, Hendon, Mill Hill Broadway, Elstree & Borehamwood, Radlett, St Albans City, Harpenden, Luton Airport Parkway and Luton

In Southeastern Highspeed the services will be, much like the rest of the timetable, representative of the real working schedule from May 2019, and you will be operating the 2 trains per hour service between Rainham and Dartford. This, including empty stock movements, equates to a little over 80 services, you can see the operational area of the Class 700 visually on the following map.

Specific times may vary in peak hours but on average, each service departs at the following times: XX28 and XX58 at both Rainham and Dartford, each service takes approx. 45 mins to complete.

The Class 700 will also populate Bell Isle Junction as AI, running under HS1's tunnel entrance at St Pancras, representing Kings Cross and Canal Tunnel movements at approx. 12 AI services an hour.

THAMESLINK BR CLASS 700/O - MEDWAY SERVICES MAP



THAMESLINK BR CLASS 700/0 - INCLUDED SCENARIOS



Desiro City on-Test

Ahead of the new Thameslink service starting in Medway, run the first test train from Dartford to Gillingham Depot, then return back to Dartford.

Duration: 90 Mins



Desiro City Shattered

A stranded train at Gravesend needs pulling back to Rochester sidings for maintenance.

Duration: 30 Mins



Desiro City Shortened

Engineering work at Rochester means that this will be a reduced service, terminating at Strood.

Duration: 80 Mins



Desiro City Delays

An increased number of freight trains on the route means an increased number of adverse signals for drivers to deal with.

Duration: 60 Mins



Desiro City Changeover

During a day of weather related delays, take your train from Rainham to Gravesend where you will be relieving another driver on a late-running return service to Rainham.

Duration: 60 Mins



Desiro City Showers

Prepare and wash this early morning service before running to Rainham.

Duration: 15 Mins



Desiro City Skip

Issues at Faversham have caused delays, meaning some trains will skip intermediate stops.

Duration: 60 Mins

USEFUL INFORMATION

For any questions or comments, you have, please reach out to us on our forums:

<https://forums.dovetailgames.com/forums/trainsimworld/>

If you are experiencing an issue with Train Sim World 3, please check out our Knowledgebase or submit a support ticket:

<https://dovetailgames.freshdesk.com/support/home>

To catch the latest news, follow us on social media:

Twitter: <https://twitter.com/trainsimworld>

Instagram: <https://www.instagram.com/trainsim/>

Facebook: <https://www.facebook.com/trainsimworld>

Get updates directly by subscribing to our newsletter:

<https://www.trainsimworld.com/>

Or check out Dovetail Live for articles and screenshots:

<https://live.dovetailgames.com/live/train-sim-world/news>

Log In or Create an Account on Dovetail Live to take advantage of Creators Club:

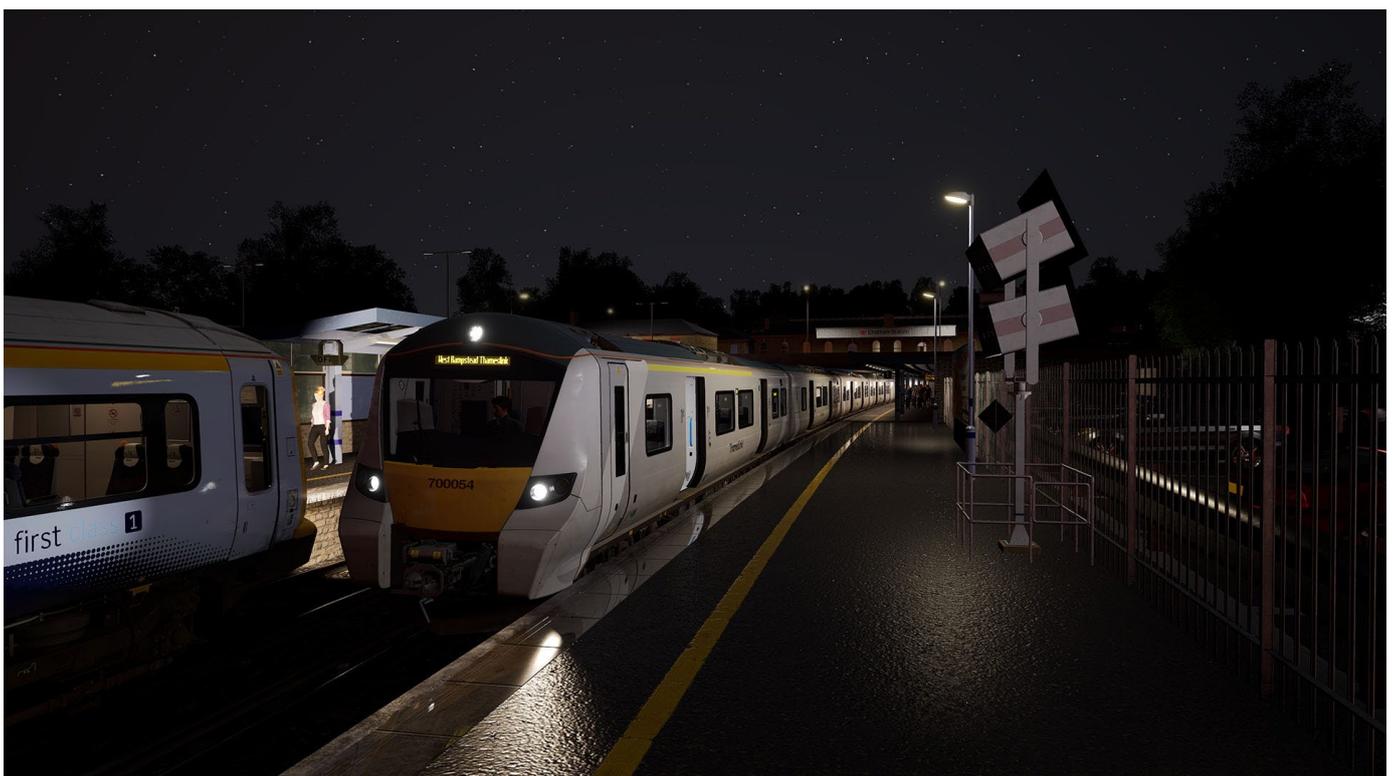
<https://creatorsclub.dovetailgames.com/>

Watch all things Train Sim World on our video platforms:

YouTube: <https://bit.ly/TSW-YouTube>

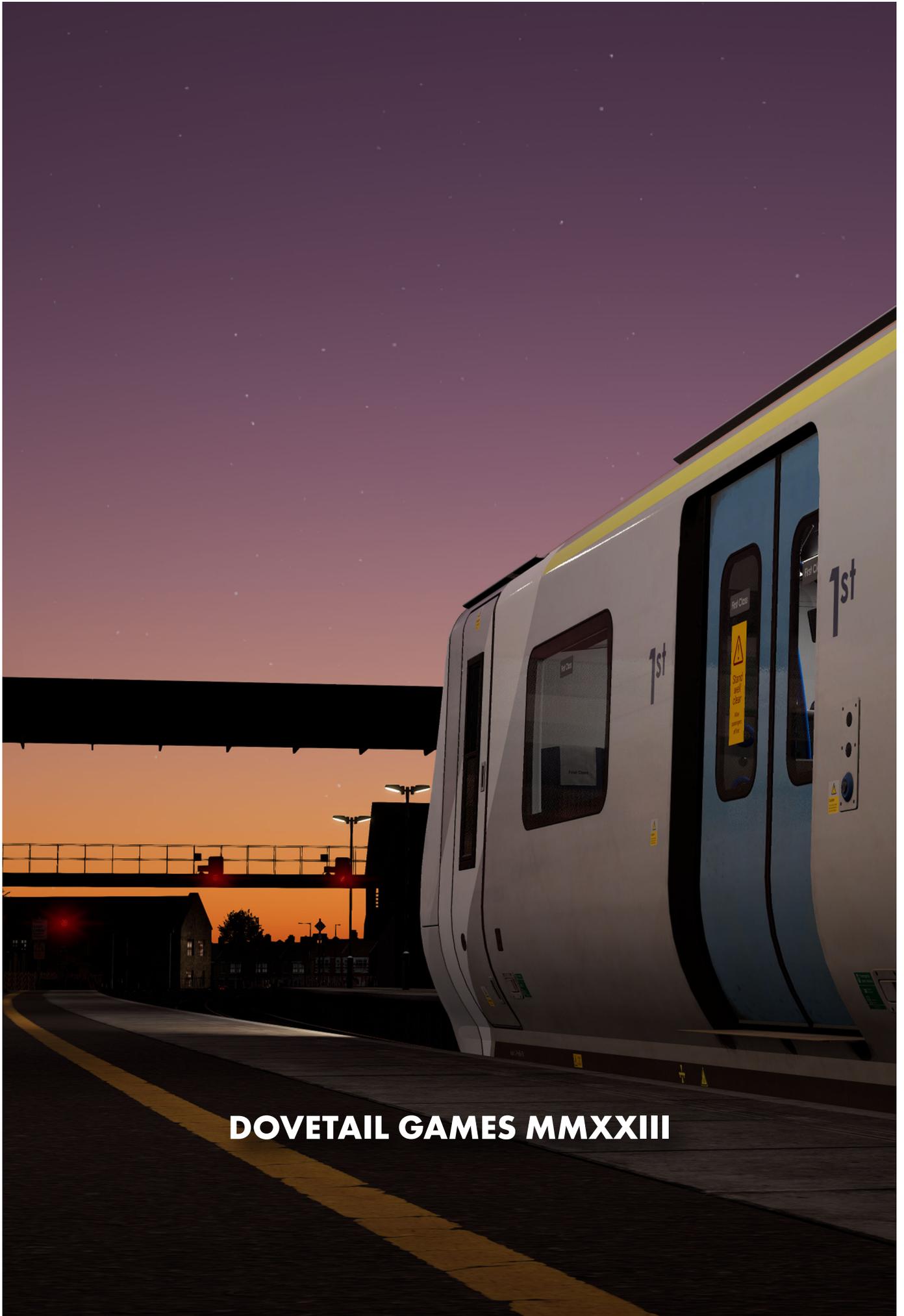
Twitch: <https://bit.ly/TSW-Twitch>

TikTok: <https://www.tiktok.com/@trainsimworldofficial>



EXPAND YOUR COLLECTION





DOVETAIL GAMES MMXXIII