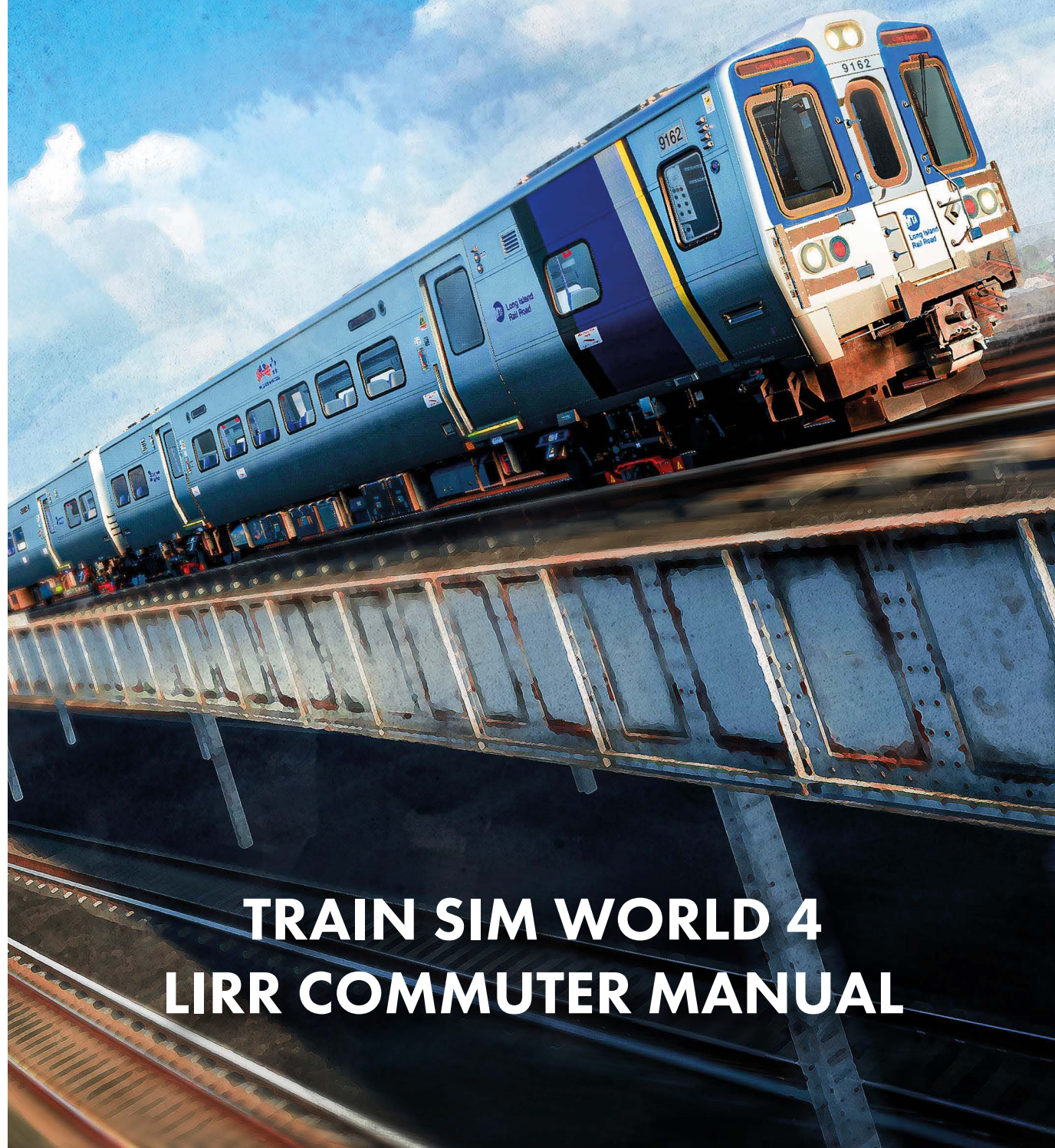


# TRAIN 4 SIM WORLD®



## TRAIN SIM WORLD 4 LIRR COMMUTER MANUAL





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



***Railroads are a dangerous place and you should never attempt to replicate or copy the activities you see in-game on the real railroads. For your own safety, do not trespass on railroad property, always follow advice given by railroad staff and observe signs and instructions provided at all times.***

***Train Sim World 4 has been designed to give you the freedom to enjoy your passion from the safety and comfort of your own home.***

***Please note: this document is not a training tool and exists alongside Train Sim World for entertainment purposes only.***

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## ROUTE SUMMARY



The Long Island Rail Road is America's busiest commuter route, and one of its most historic and famous railroads. The full LIRR network spans hundreds of miles and runs hundreds of trains a day. Operating at a full 24/7 capacity, the network can carry as many as 300,000 commuters daily — that's more than 80 million passengers per year.

Originally envisioned as a rail-ferry-rail route between New York and Boston, what is now known today as the LIRR opened in 1834 and quickly established itself as a major commuter railroad thanks to a dramatic increase of suburban population. The line was once controlled by the Pennsylvania Railroad (PRR), to which it owes its style of signalling equipment and innovative DC third rail electrification. Today, the line is owned and operated by the Metropolitan Transportation Authority (MTA).

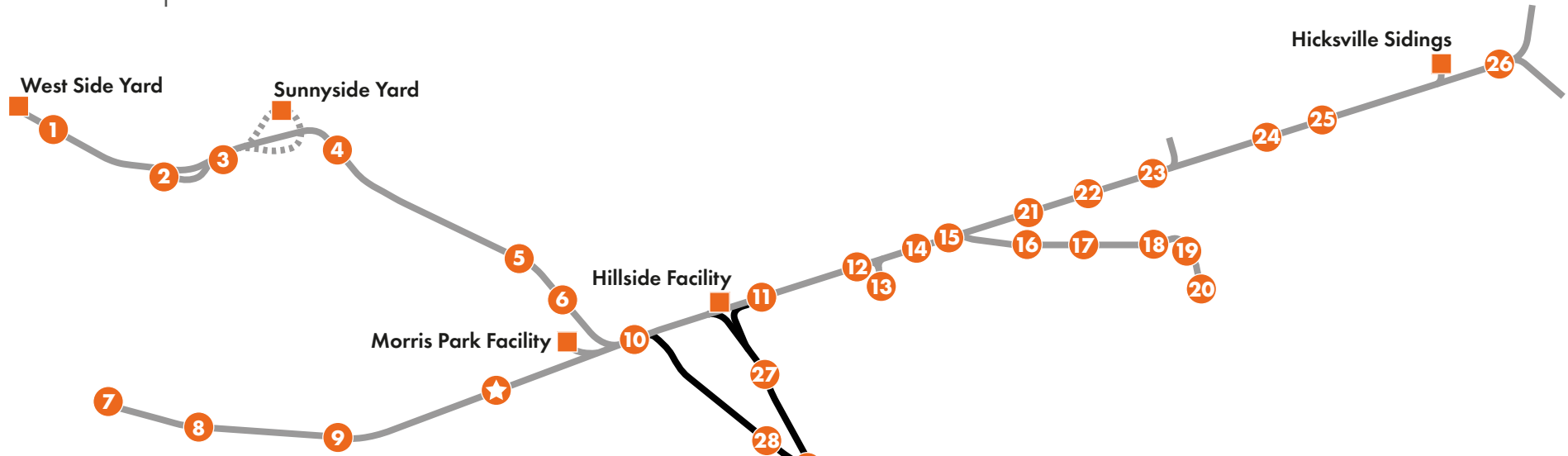
In Train Sim World, the story of Long Island Rail Road began in 2018 with the introduction of the 42-mile network covering Manhattan's Penn Station and Brooklyn's Atlantic Terminal, as well as Queens' Long Island City Station — then stretching eastward through Jamaica Station to Hicksville and Hempstead.

Now in 2024, the LIRR makes a landmark return in Train Sim World 4. The route is now updated, offering a much more comprehensive timetable, greater variety and even more mileage; now including the Long Beach Branch via both St Albans and Locust Manor, adding in 10 additional stations and bringing the LIRR Commuter route to a total 57 miles. The route is still set in the same era as it was in the 2018 release.

### LIRR Commuter Tips & Tricks

- The M7 and M9 included in this add-on have their Alerter, ATC and ACSES systems fully enabled by default, use this guide to help you get started!
- Get additional gameplay with the TSW4 Compatible LIRR M3 add-on, which is available separately.
- There are many route tasks to complete, with route maps to switch on, bagels to eat and more.
- Be sure to unlock the route's Mastery to access a most unique perspective of the Long Beach branch!

# LIRR COMMUTER ROUTE MAP



## EXISTING STATIONS:

- |                        |                        |
|------------------------|------------------------|
| 1. New York Penn       | 14. Bellerose          |
| 2. Long Island City    | 15. Floral Park        |
| 3. Hunterspoint Avenue | 16. Stewart Manor      |
| 4. Woodside            | 17. Nassau Boulevard   |
| 5. Forest Hills        | 18. Garden City        |
| 6. Kew Gardens         | 19. Country Life Press |
| 7. Atlantic Terminal   | 20. Hempstead          |
| 8. Nostrand Avenue     | 21. New Hyde Park      |
| 9. East New York       | 22. Merillon Avenue    |
| 10. Jamaica            | 23. Mineola            |
| 11. Hollis             | 24. Carle Place        |
| 12. Queens Village     | 25. Westbury           |
| 13. Belmont Park       | 26. Hicksville         |

## NEW STATIONS:

- 27. St. Albans
- 28. Locust Manor
- 29. Laurelton
- 30. Rosedale
- 31. Valley Stream
- 32. Lynbrook
- 33. Centre Avenue
- 34. East Rockaway
- 35. Oceanside
- 36. Island Park
- 37. Long Beach
- ★. Woodhaven (Abandoned)

# LIRR M7 EMU SUMMARY



As the staple of LIRR’s fleet over the past 20 years, the LIRR M7 was introduced in 2002 to revolutionize the island’s electrified network for the new century. Replacing aging M1 equipment, the shiny and new M7s brought with them modernized amenities and more efficient operations. Delivered as married pairs, the M7s can operate dynamically, with train length optimized for service on all branches of the LIRR network at all times of day. The M7 is by far the most commonly seen unit on the LIRR network, outnumbering the remaining M3s and new M9s, as well as LIRR’s diesel equipment all combined.

With 20 years under their belt and the M9s only set to replace the M3s, the rocksteady M7 is not going anywhere and will remain a fundamental part of the Long Island Rail Road for decades to come.

Compared to its previous incarnation in Train Sim World, the M7 has been gutted and overhauled to match the same fidelity as the new M9, while also taking improved audio from the Harlem Line’s M7A.

Manufacturer.....	Bombardier Transportation
Build Date.....	1999-2006
Number Built.....	836 cars
Power Type.....	750 V DC Third Rail
Traction Motors.....	8 x Mitsubishi async 3-phase AC
Power Output.....	2120 horsepower
Car Length.....	85 ft (26 Metres)
Service Speed.....	80mph (130 km/h)
Top Speed.....	100mph (160 km/h)
Seating Capacity.....	211 passengers per pair
Possible Formations.....	1 to 7 pairs (2 to 14-cars)



# LIRR M9 EMU SUMMARY



Introduced into service in September 2019, the LIRR M9 EMU is a state-of-the-art fleet of paired railcars that are designed to replace the life-expired M3s. Their overall design is consistent with other modern MTA stock such as the LIRR’s own Bombardier-built M7s or their Metro-North Kawasaki counterparts, the M8s. What immediately sets the M9s apart is the striking new white and blue front, as also seen on new New York Subway equipment, as well as the distinct stripe which adorns every railcar behind the cab. Previous LIRR Stock features yellow fronts and plain bodysides. Other smaller differences between the M7 & M9 include; passenger door window size, subtle cab differences, and of course a different traction package and horn.

While their time on the LIRR is still in its infancy, the M9 is continually entering service as of early 2024. Once the full fleet is in service, it will mark the completion of a new era for the commuters of Long Island, and the remainder of the classic M3s will join their M1 bretheren in the LIRR’s history books.

Manufacturer.....	Kawasaki Heavy Industries
Build Date.....	2018-Present
Number Ordered.....	200+ cars
Power Type.....	750 V DC Third Rail
Traction Motors.....	8 x Mitsubishi async 3-phase AC
Power Output.....	2200 horsepower
Car Length.....	85 ft (26 Metres)
Service Speed.....	80mph (130 km/h)
Top Speed.....	100mph (160 km/h)
Seating Capacity.....	212 passengers per pair
Possible Formations.....	1 to 7 pairs (2 to 14-cars)

## LIRR M7 & M9 EMU - ESSENTIAL CAB CONTROLS



The LIRR M7 and M9 have very similar cabs but with subtle differences — this page details the overall layout commonality between the two cabs. (M9 pictured)

- 1 - Master Key - unlocks the rest of the desk
- 2 - Reverser - determines the direction of travel
- 3 - Master Controller - a combined throttle and brake lever
- 4 - Acknowledge Lever - for cancelling Alerter, ATC and ACSES alarms
- 5 - Horn Lever - activates the horn for as long as it is held, there are no bells or flashing ditchlights
- 6 - Brake Gauge - shows the overall brake pressure in both the pipe and the cylinders
- 7 - Central Diagnostic Panel - contains elements such as train number input and overall train status
- 8 - Aspect Display Unit - shows the Maximum Authorised Speed as governed by ATC and ACSES
- 9 - Train Operator Display - contains elements such as the speedometer and other functional info

### DEFAULT ENGLISH CONTROL BINDINGS

Name	Keyboard	Controller
Master Key	Ctrl + W	Analog Sticks + A Button   Cross Button
Reverser	W/S	D-Pad Up/Down
Master Controller	A/D	Right Trigger/Bumper   R2/R1
Acknowledge Lever	Q	B Button   Circle Button
Horn Lever	Spacebar	Click-in Left Stick
Headlights	H/Shift + H	Analog Sticks + A Button   Cross Button
Marker Lights	Ctrl + H/Ctrl + Shift + H	Analog Sticks + A Button   Cross Button
Passenger Doors	Y/U, or Tab + Mouse	D-Pad Left/Right

Some controls on controller can only be accessed by navigating around the cab with the analog sticks. You can then use A Button (or Cross Button) to click on a control then use the analog sticks to manipulate that control. This also works with the mouse on PC.



## LIRR M7 & M9 EMU - TRAIN OPERATING DISPLAY



The Train Operating Display is where you can take a quick glance down the windscreen and quickly get visual reference as to the current operation of your train. Complete with large fonts and color-coded information, you can double check anything, or see what needs your attention at a glance, without drawing attention away from the track ahead. (M9 pictured)

This display is for information only and does not feature any direct interactivity.

### 9A - Train's Speedometer

9B - An Overspeed Indicator that will illuminate if you go beyond the Maximum Permitted Speed

9C - A simple representation of the train's current Tractive Effort or Dynamic Brake range

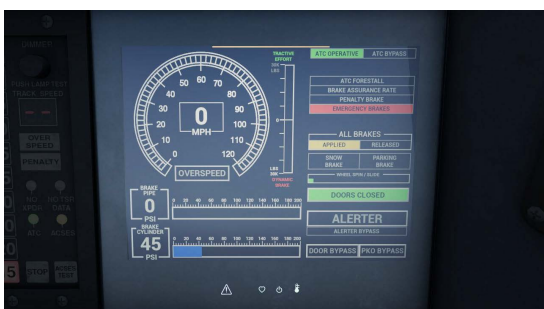
9D - Specific Brake Status information, including if any systems are applied, or a penalty is occurring

9E - Wheel Spin/Slide Indicator, this will show any loss of traction due to poor adhesion

9F - A simple box for the current Door Status, Doors Closed = Ready to Depart

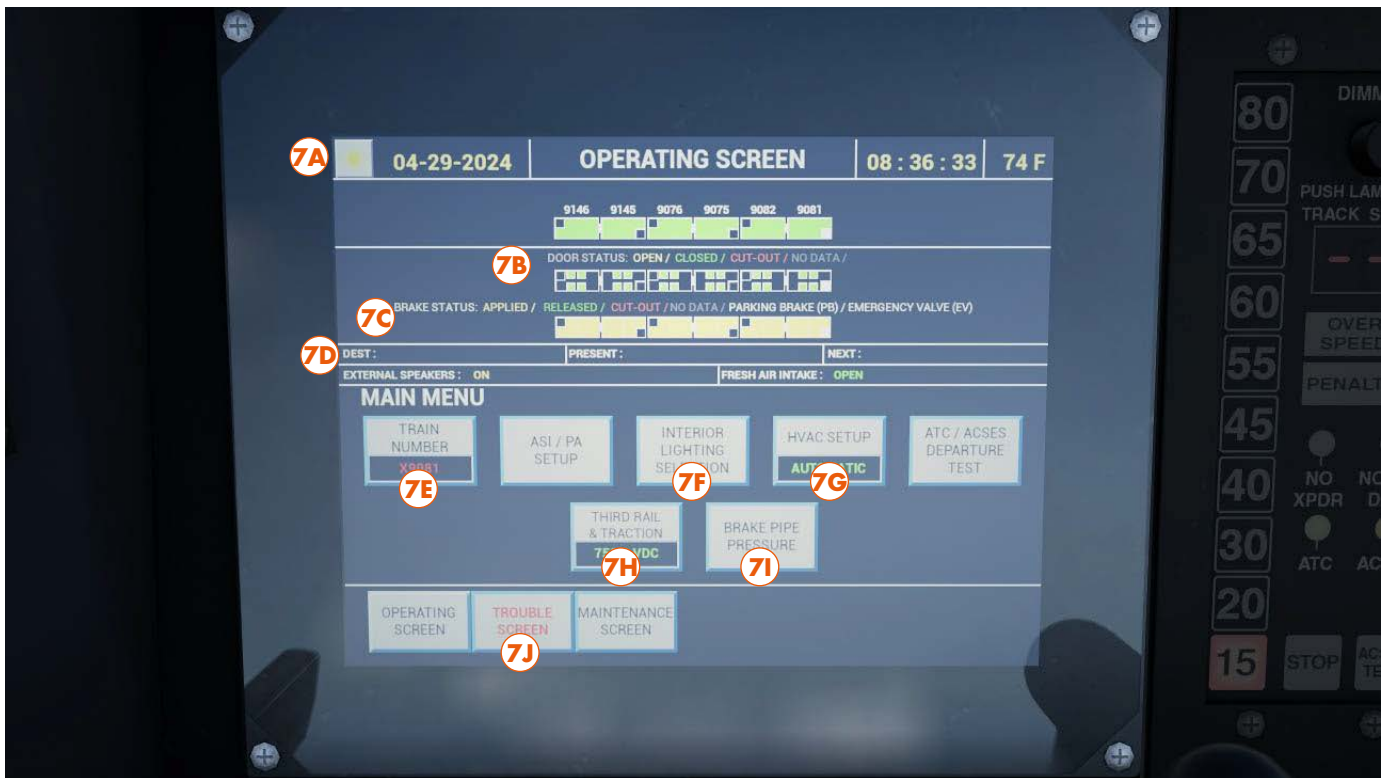
9G - A visual representation of the Alerter which flashes in tandem with the alarm

9H - A simple Brake Gauge which lets you get the same info as the gauge on the other side of the cab



The M7's Train Operator Display differs slightly in style, but fundamentally features the same level of information. The speedometer is displayed with both a central digital readout and a classic circular gauge.

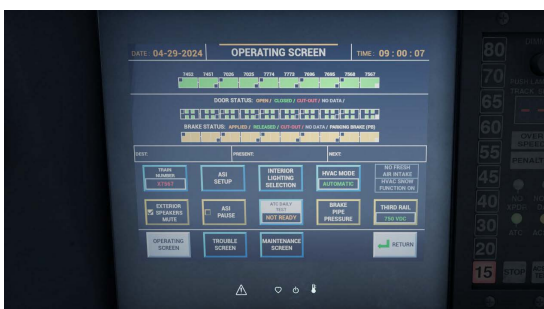
## LIRR M7 & M9 EMU - CENTRAL DIAGNOSTIC PANEL



Unlike the Train Operating Display which is almost exclusively for displaying information, the Central Diagnostic Panel has multiple functions which will be explained here. (M9 pictured)

This panel displays the current status of doors and brakes per car; destination, present and next station stops; and features interactive buttons to access other screens and sub-menus. The details of these individual menus will be summarized on the next page. When on a sub-menu or screen, press on OPERATING SCREEN in the bottom left corner of the screen, or RETURN in the bottom right, to return to the main page.

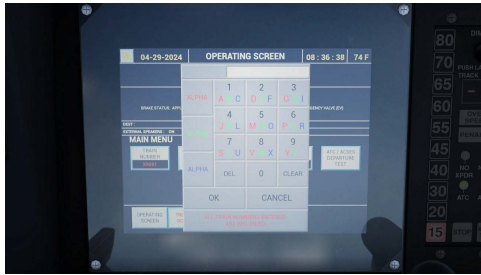
- 7A - Top Row gives you the current time, date and air temperature, this is present on all screens
- 7B - Per-car door status for the entire train, color-coded
- 7C - Per-car brake status for the entire train, color-coded
- 7D - Dest: Present: & Next: are station indicators, for example, Penn Station, Hicksville & Westbury
- 7E - Train Number Input Screen
- 7F - Interior Lighting Selection screen
- 7G - HVAC Setup Screen
- 7H - Third Rail & Traction Screen, this also displays the voltage in realtime which fluctuates when moving
- 7I - Brake Pipe Pressure Screen
- 7J - Trouble Screen



The M7's Central Diagnostic Panel differs slightly in style, but fundamentally features the same level of information and interactivity.

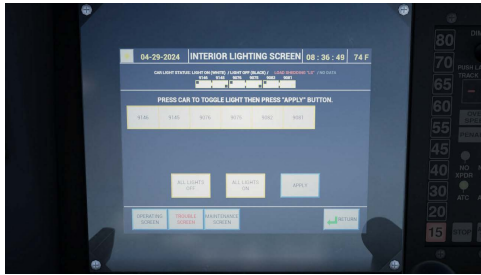
# LIRR M7 & M9 EMU - CENTRAL DIAGNOSTIC PANEL CONTINUED

M9 pictured



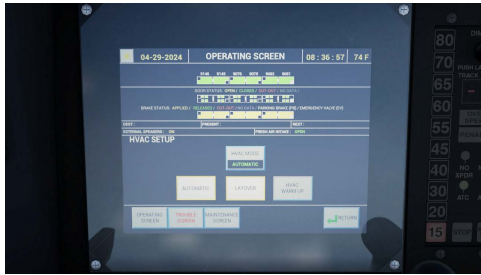
## TRAIN NUMBER SCREEN

This is where you can input the train number, the same number at the start of every service's name, to setup the train's internal and external destination screens - this is covered in the Cab Setup.



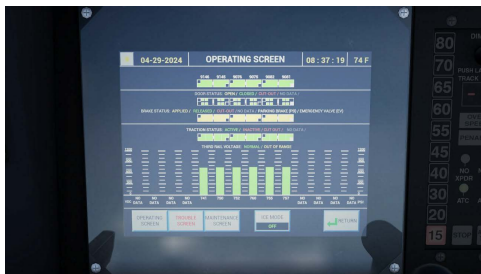
## INTERIOR LIGHTING SCREEN

This screen gives you complete control over the interior lights. You can either turn them on and off for the whole train, or toggle them per-car by pressing on each car and then APPLY to save those changes.



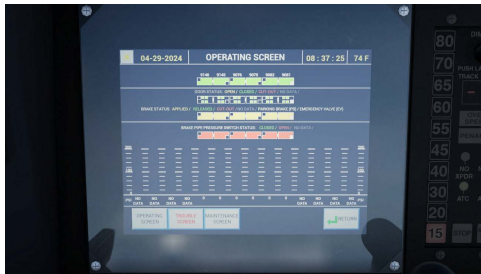
## HVAC SETUP SCREEN

This screen lets you toggle the status of the HVAC (Heating, Ventilation and Air Conditioning), this is done for the whole train. Press LAYOVER to disable it, and AUTOMATIC so it can run as needed automatically.



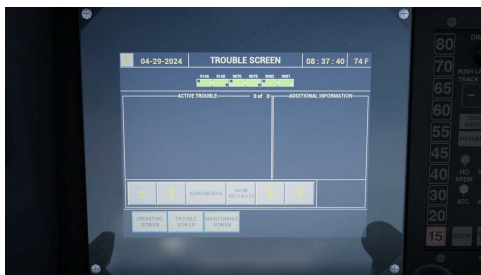
## THIRD RAIL & TRACTION STATUS SCREEN

This page lets you get a per-car breakdown of the current Third Rail voltage; each car has its own shoe pickups, and due to the nature of this electrification type, the collected voltage will vary throughout any given journey.



## BRAKE PIPE PRESSURE STATUS SCREEN

This page lets you get a per-car breakdown of the current Brake Pipe Pressure, this is useful to confirm each car is charged equally and in accordance with the BP measured on the physical and digital gauges.



## TROUBLE SCREEN

This page can display any number of visual-only faults which the train can spawn with or develop mid-journey. You can use the arrow keys to cycle through and acknowledge each fault.



## LIRR M7 & M9 EMU - PASSENGER DOOR CONTROLS



M7 left-side door controls | M7 right-side door controls | M9 left-side door controls | M9 right-side door controls

These are the in-game door controls that feature in the M7 and M9 respectively. At each group of controls, there are three buttons; one for opening the doors on that side of the train, one for closing the doors on that side of the train, and the buzzer, which is used to communicate between conductor/brakeman and engineer that the train is ready to depart.

When you are at a station, be sure to check which side the platform is on then open the doors, you will notice at multiple stations that sometimes there is a platform on each side. The HUD should inform you before arriving which platform number is yours — when in doubt, open both, just don't forget to close both!

If you are stood up, next to the windows on either side of the cab (and the windows are open) - you will notice a prompt to stick your head out the window, this is to quickly check along the length of the train and ensure all passengers are safely aboard before closing the doors.

Be sure to check out the Double Duty scenario to get a taste of life as a conductor & brakeman on the LIRR, where you will be operating the doors and checking tickets instead of driving.

# LIRR M7 & M9 EMU - OPERATING PROCEDURES & FEATURES

## Cab Setup

- Upon loading into a service, your train will be in a warm state with only the essentials needed to prepare it for service
- Turn the Master Key into the On position to activate the rest of the cab
- Move the Reverser into the Neutral position
- Move the Master Controller into the Max Brake position
- Observe the brake gauge to ensure the brakes charge to above 90 psi
- Set the head and marker lights as appropriate
- To set up the train's destination and PIS system, tap on the "TRAIN NUMBER" box on the Central Diagnostic Panel's main menu
- A box will open with a keypad, type in the train's service number (the number present in the title of every service) and confirm this, the train will then load the service's intermediate and destination stations
- If you decide to skip this step, the train number will auto-set itself where applicable upon departure
- Acknowledge any fault codes that pop-up on the TROUBLE SCREEN
- If in a station, open the passenger doors to begin boarding
- Close the passenger doors once boarding is complete
- Move the Reverser into the intended direction of travel
- Pull the Master Controller into the Power range to depart

## Coupling

- Approach the occupied block following signal rules along the way, remember to check manual switches
- Crawl up to the train at Restricted Speed or line speed, whichever is lower
- Stop a few yards away from the other unit(s)
- Reapply power and couple up at no more than 3mph
- Once coupled, shut down the cab you are in, and set up at either end of the new formation as necessary

## Uncoupling

- Move to one of the local cabs where the uncoupling is going to take place and set it up ready to depart, keep the Reverser in Neutral and the Master Controller in Max Brake
- Insert the Uncoupling Key on the left-hand side of the windscreen
- Turn the key to the ON position and hold it there for 5 seconds
- Remove the key and verify on the Central Diagnostic Panel that the formation has changed
- Slowly pull away from the uncoupled unit(s) by going into Reverse and applying power

## Recovering from Emergency Brake

- If you miss the Alerter, any other alarm, or manually put the Master Controller into emergency, your train will automatically bring itself to a complete stop
- Once the train has stopped, cancel any remaining alarms or reset any emergency handles (if pulled) if you have not done so already
- Return the Master Controller to the Max Brake setting, and return the Reverser to neutral
- Wait for the brakes to automatically recharge to at least 90psi
- Reselect your direction of travel and take power to get moving again

## IN-CAB SIGNALLING & ALERTS



This is the **Aspect Display Unit (ADU)**

This device displays the **MAS** (Maximum Authorized Speed) to the engineer and works directly with **ACES** (Advanced Civil Speed Enforcement System) and **ATC** (Automatic Train Control, also known as Automatic Speed Control/**ASC**) to safely govern operations on the Long Island Rail Road.

Running down the left-hand side of the display, you can see the speed limits that are enforceable by ATC. This will change as necessary when passing through code change points or past fixed wayside signals; for example, when passing an "Approach" signal, the valid aspects that can be displayed are 40, 30 & 15mph.

On the right-hand side of the display is the ACSES Track Speed. In the example image above, ACSES is enforcing a current MAS of 60mph, while the ATC signal speed is enforcing a MAS of 40mph. You must always obey the lower of the two speeds.

The ADU will display a speed that conforms with the signal aspect that you are approaching, and will progress down in stages, this is covered later on in the Wayside Signalling section.



## IN-CAB SIGNALLING & ALERTS CONTINUED

### Code Change Points

The signalling system does not only consist of fixed signals, but also code change points. These track circuits behave like a fixed signal, but do not require that a physical wayside signal be installed. They are used to further divide up the signal blocks between physical signals and are commonly used to force ATC speed reductions. Without these track circuits, and without correctly obeying the speed limits they enforce, the LIRR's prototypical operations would not work to the intensity that the service pattern provides.

Unlike fixed signals, code change points will not appear on the HUD, you will be made aware of their presence by ATC alarms enforcing any necessary speed reductions. Take mental notes of where this most commonly occurs.

Only fixed signals can give you absolute stop indications, so do not worry when Code Change Points bring you down to a reduced speed, it is an expected brake application and not an emergency one.

### Route Knowledge

As per all routes across the world, a large portion of successfully navigating a route is route knowledge, and despite all its in-cab assistance, the LIRR is no exception. There are multiple points where enforced speed restrictions may lay outside of ATC/ACSES' control, for example; at Long Beach station there is a 5mph limit within the station area, however neither in-cab system is capable of displaying a speed that low, so it is up to the engineer to know where these limits are. Likewise, while there are not always wayside signals concurrent with speed changes, there isn't always a physical speed limit board for reductions either.

You can spot any area where you need to know the track speed yourself by looking at the ADU. If the Track Speed box is filled with -- two dashes, and the ACSES light is yellow, ACSES is operating in its degraded state, meaning it does not know what the current linespeed is.

You can use the HUD to get familiar with the route, and as your confidence grows, you will find you can start to recall where certain things are, and be able to use landmarks, habit and timing to know your way around.

### Practice Makes Perfect

As a final note before getting into the details of how the signalling operates, take comfort in the fact that the worst that can happen is you need to try something again. There is a lot of daunting information here, but focus on procedure rather than panic, and all will be well. Even if the trains are screaming at you, if you remember the basics, you can successfully and safely operate any service on the LIRR.

If you want to take steps towards mastering the route; start by picking services at quieter times of day, or even setup your own paths in Free Roam to learn the rails without the distraction of other traffic.

## IN-CAB SIGNALLING & ALERTS CONTINUED

### ATC/ASC Alerts & Alarms

If you enter a new signal block and the ADU reduces in speed (for example, going from a 70mph code to a 40mph code), then the following will occur:

- An audible alarm will sound in the cab to notify the engineer of the change
- The MAS on the ADU will change to its new speed
- The standard HUD will also confirm this is an ATC alarm and flash the new speed limit next to it
- The train will automatically begin to brake for the new speed limit
- You must move the Master Controller into the 'Coast' position or any braking position and acknowledge the signal downgrade with the appropriate lever, you must do all this within 7 seconds
- Once the train has braked to below the new signal speed, ATC will release the brakes and relinquish control of the train back to the engineer

As you become familiar with the route, you will be able to anticipate code change points; being able to "dodge" codes and brake in advance of them will result in a smoother passenger experience, although this won't always be possible.

### ACSES Alerts & Alarms

If you are approaching a permanent speed restriction which is lower than the current MAS, ACSES may throw an alarm at you if approaching the new speed restriction too quickly. If this occurs:

- An audible alarm will sound in the cab notifying the engineer they are exceeding the ACSES speed profile, this alarm sounds different to the ATC alarm
- The Track Speed on the ADU will change to its new speed
- The standard HUD will also confirm this is an ACSES alarm and flash the new speed limit next to it
- You must move the Master Controller to at least 40% brake and get below the new speed restriction, once you are below the new speed, acknowledge the alarm with the appropriate lever, you must do all this within 7 seconds

### The Alerter

- The Alerter is a vigilance device which will sound periodically to keep the driver alert
- Every 20-25 seconds that no control input is detected via the Master Controller, Horn or Acknowledge Lever, the Alerter will sound an alarm, there will also be a flash on the Train Operating Display and the standard HUD
- Cancel the alarm and reset the timer by pressing the Acknowledge Lever, failure to do this within a few seconds of the alarm sounding will result in an emergency brake application
- When stationary at a station or interlocking, set the Master Controller to Max Brake to disable the alerter timer, otherwise it will continually count and go off while stationary

### Speed Increase Alert

When the front of the train crosses a point where track speed increases, a short beep will be sounded that does not have to be acknowledged. You must wait until the entire train runs its length before accelerating to this higher speed. Take time to get familiar with different train lengths, as that'll greatly impact how long you must wait before increasing speed.

## WAYSIDE SIGNALLING

These fixed signals are found at block points and interlocking limits. Each aspect corresponds to an indication that in turn determines the speeds that ATC may enforce at any given aspect. These pages represent the signal designs and aspects which you are likely to see on the railroad; you can pause the game and refer to this. Remember to identify which signal is yours when looking at lots of trackage and complex interlockings.

Where "Zone A" is mentioned, this is referring to the area of Amtrak's Northeast Corridor between A interlocking in New York Penn Station and Harold interlocking, where LIRR and NEC territory divide.

Aspect: <b>CLEAR</b> Displayable ADU Codes: 80, 70, 60 (80, 70 in Zone A) Indication: Proceed. Do not exceed Maximum Authorized Speed					

Aspect: <b>APPROACH LIMITED</b> Displayable ADU Codes: 40 Indication: Proceed approaching the next signal at Limited Speed. (Zone A)					
					A signal with protruding lines like this indicates this is a flashing aspect. 

Aspect: <b>LIMITED CLEAR</b> Displayable ADU Codes: 40 Indication: Proceed at Limited Speed until the entire train has cleared all interlocking switches. (Zone A)					

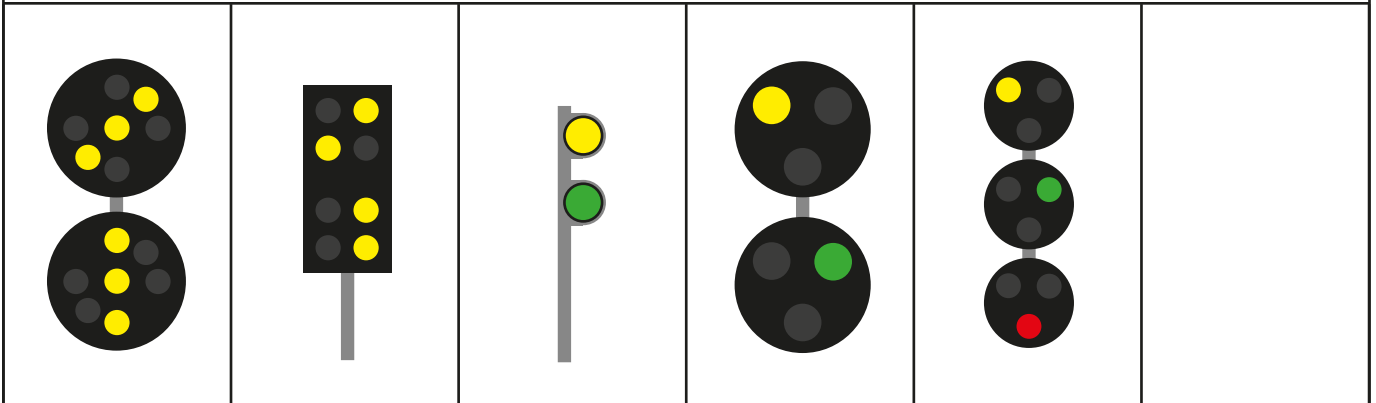


## WAYSIDE SIGNALLING CONTINUED

Aspect: **APPROACH MEDIUM**

Displayable ADU Codes: 80, 70, 60, 40, 30 (40, 30 in Zone A)

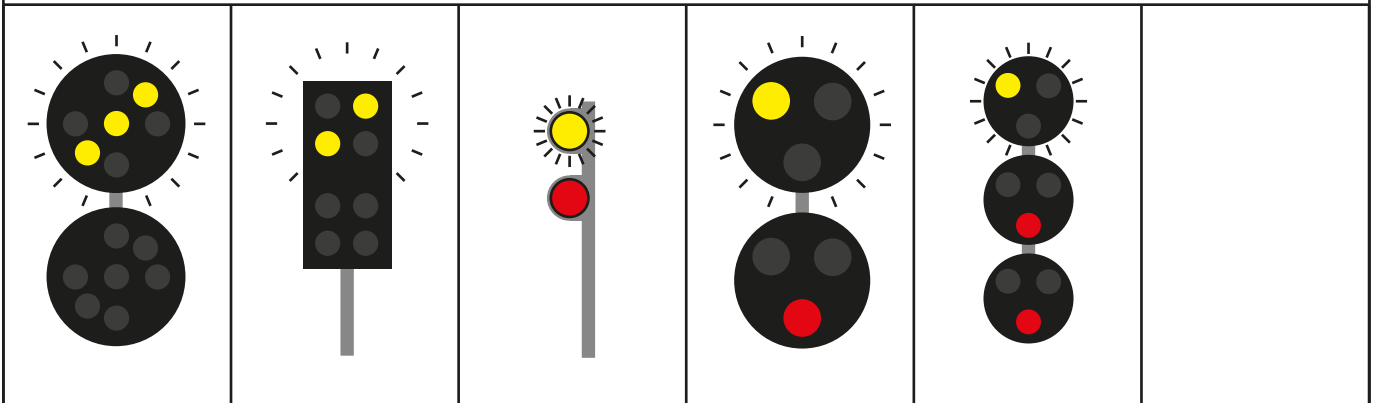
Indication: Proceed approaching the next signal at Medium Speed.



Aspect: **ADVANCE APPROACH**

Displayable ADU Codes: 40

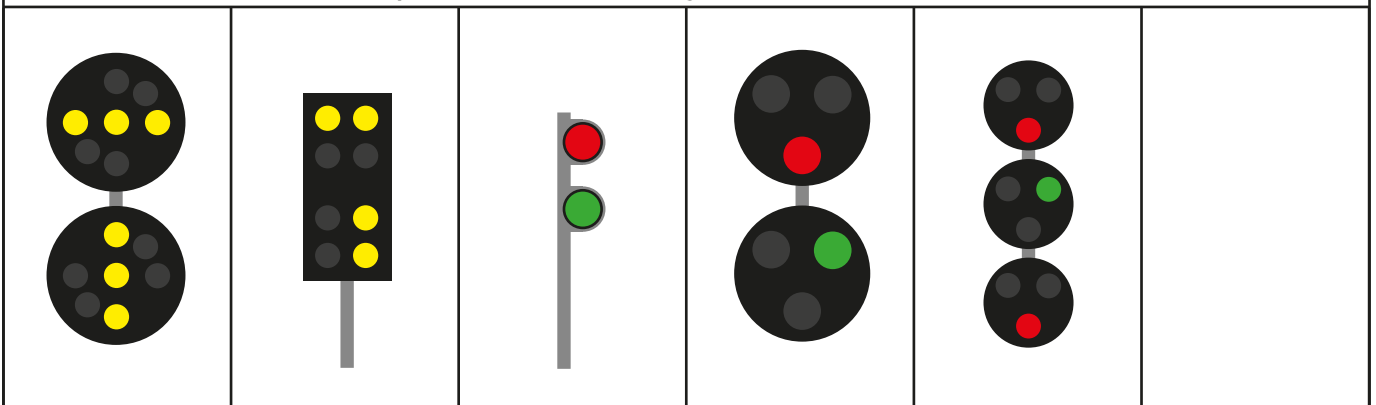
Indication: Proceed prepared to stop at the second signal. Trains exceeding Limited Speed must begin reduction to Limited Speed. (Zone A)



Aspect: **MEDIUM CLEAR**

Displayable ADU Codes: 40, 30

Indication: Proceed. Medium Speed within interlocking limits.

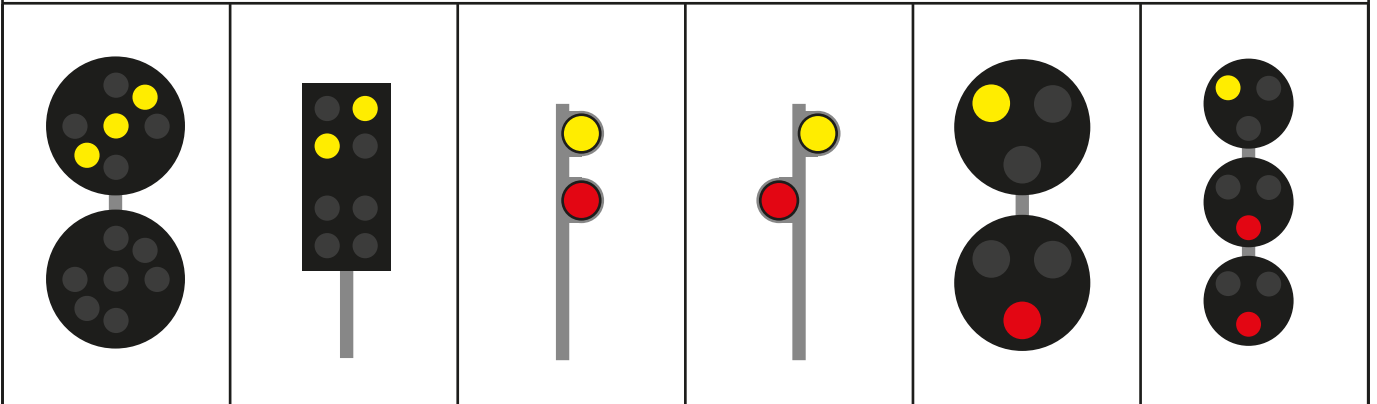


## WAYSIDE SIGNALLING CONTINUED

**Aspect: APPROACH**

Displayable ADU Codes: 40, 30, 15 (30, 15 in Zone A)

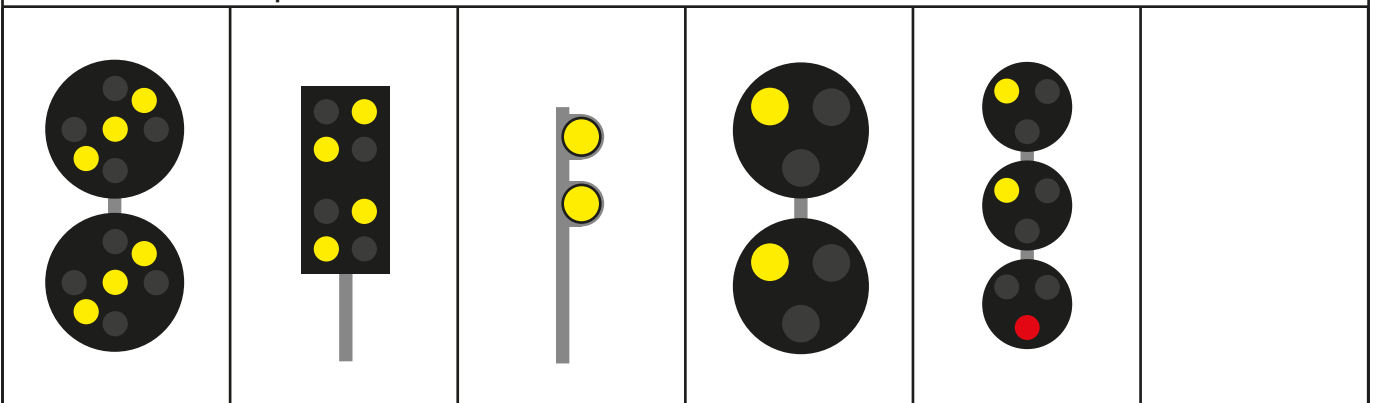
Indication: Proceed approaching the next signal prepared to stop. Trains exceeding Medium Speed must at once reduce to that speed.



**Aspect: APPROACH SLOW**

Displayable ADU Codes: 40, 30, 15 (30 in Zone A)

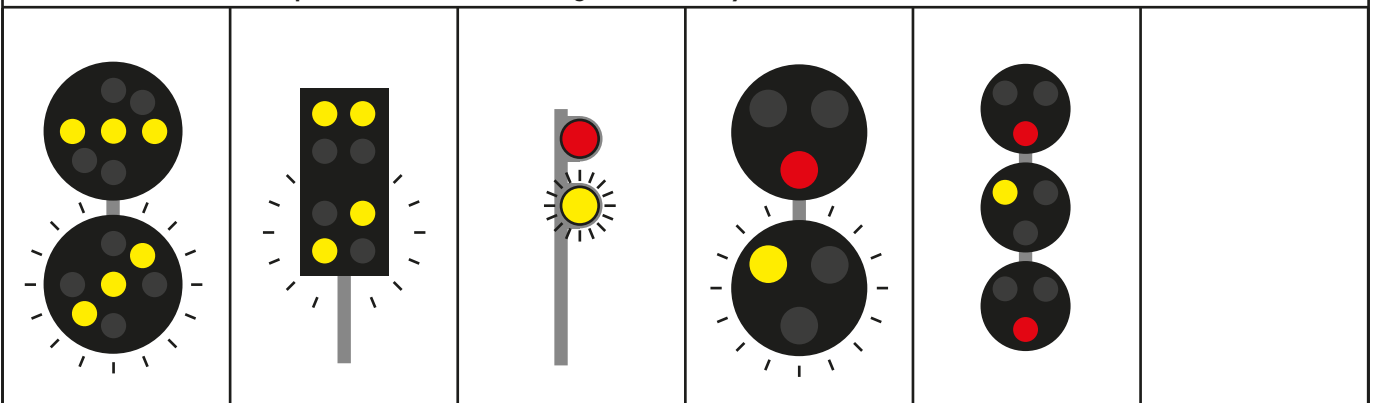
Indication: Proceed approaching the next signal at Slow Speed. Trains exceeding Medium Speed must at once reduce to that speed.



**Aspect: MEDIUM APPROACH**

Displayable ADU Codes: 30

Indication: Proceed prepared to stop at the next signal. Trains exceeding Medium Speed must begin reduction to Medium Speed as soon as the signal is clearly visible. (Zone A)

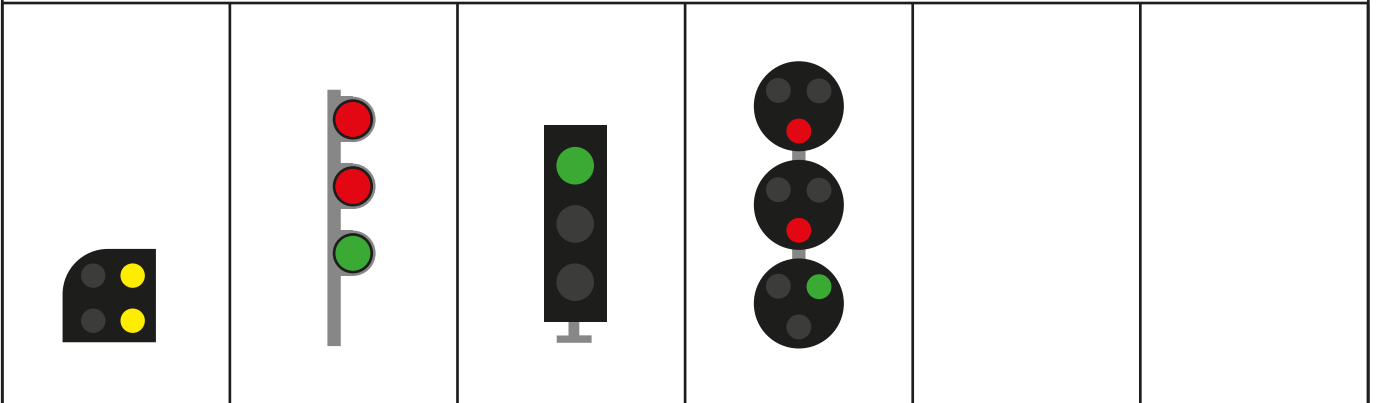


## WAYSIDE SIGNALLING CONTINUED

Aspect: **SLOW CLEAR**

Displayable ADU Codes: 30, 15 (15 in Zone A)

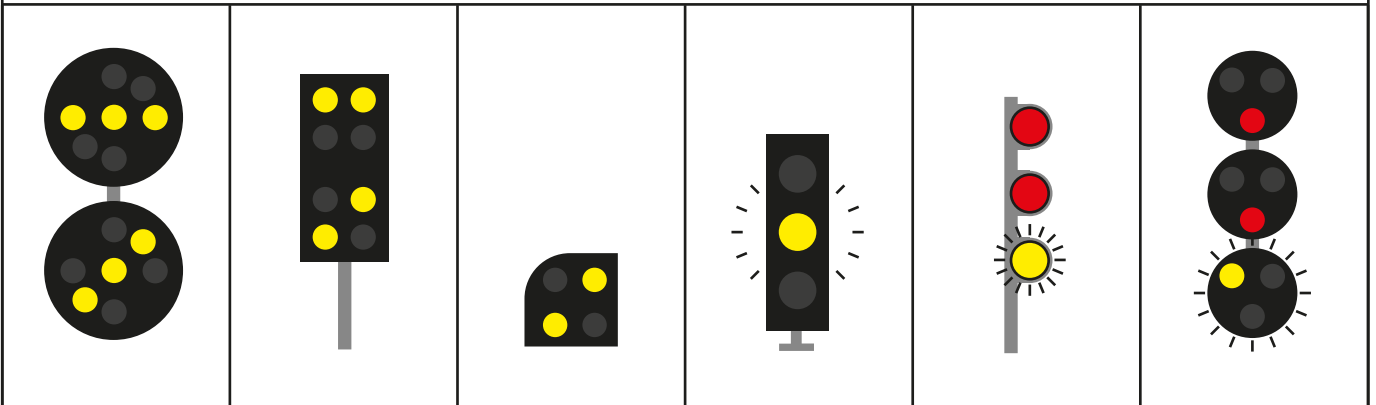
Indication: Proceed. Slow Speed within interlocking limits.



Aspect: **SLOW APPROACH**

Displayable ADU Codes: 30, 15 (15 in Zone A)

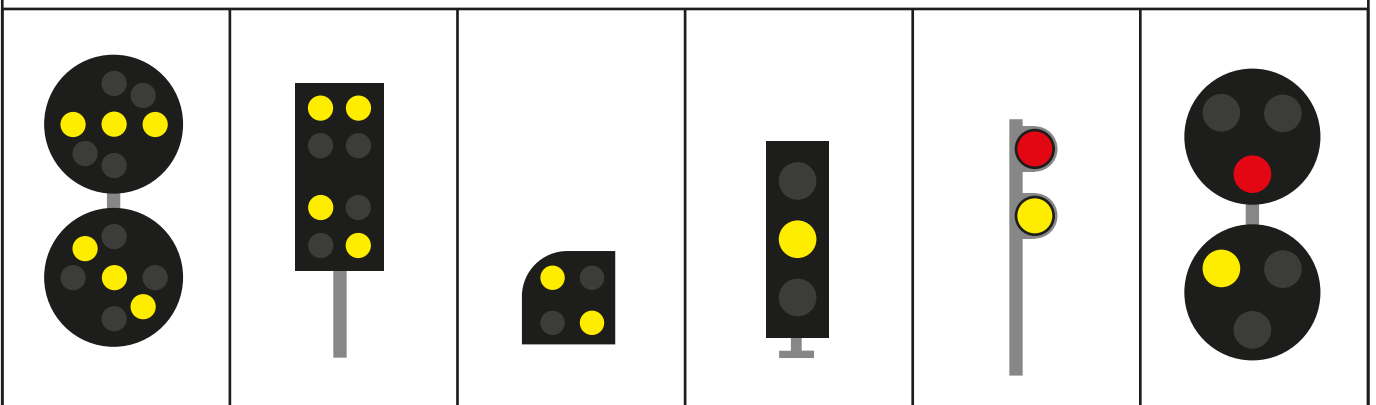
Indication: Proceed approaching next signal prepared to stop. Slow Speed within interlocking limits.



Aspect: **RESTRICTING**

Displayable ADU Codes: 15

Indication: Proceed at Restricted Speed.



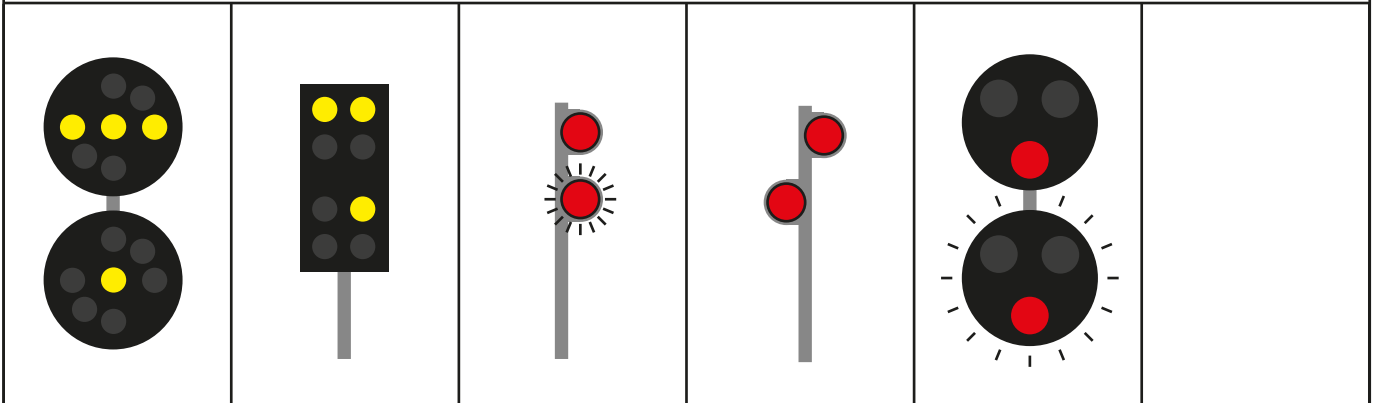


## WAYSIDE SIGNALLING CONTINUED

Aspect: **STOP AND PROCEED**

Displayable ADU Codes: 15

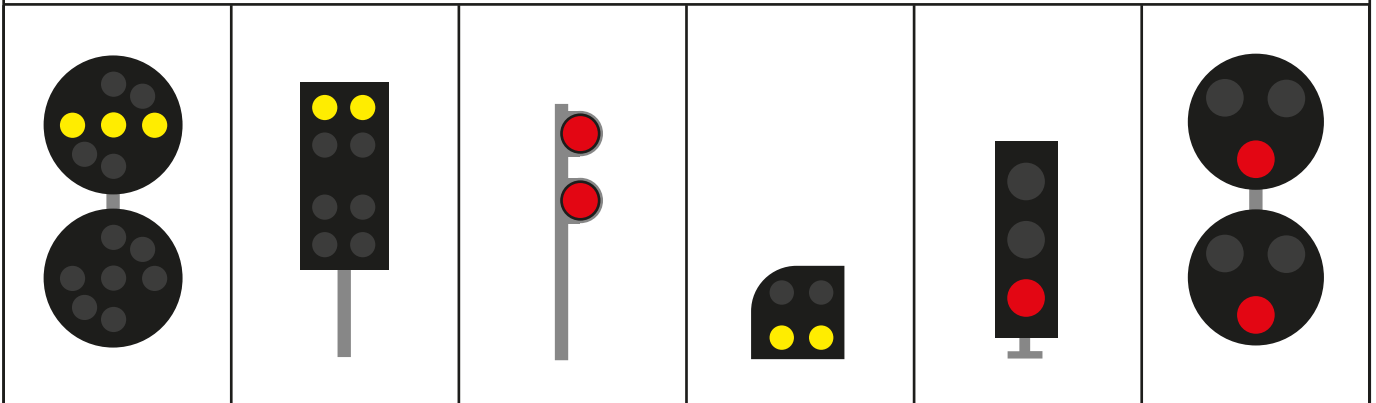
Indication: Stop and then proceed at Restricted Speed.



Aspect: **STOP**

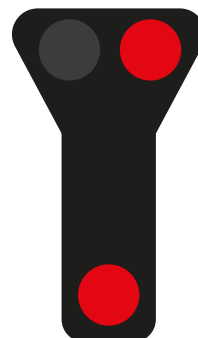
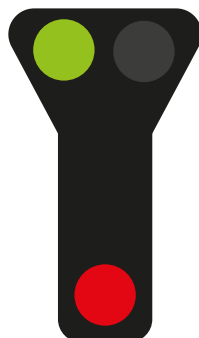
Displayable ADU Codes: 15

Indication: Stop.



## OTHER SIGNAL DESIGNS

You should find that most of the signals on the represented route can be found in one form or another on the previous pages, however there are some unique designs. For example, within the tunnels out of New York Penn Station, the signals may look like the following examples, but overall they are still displaying the information provided, even with subtle differences.



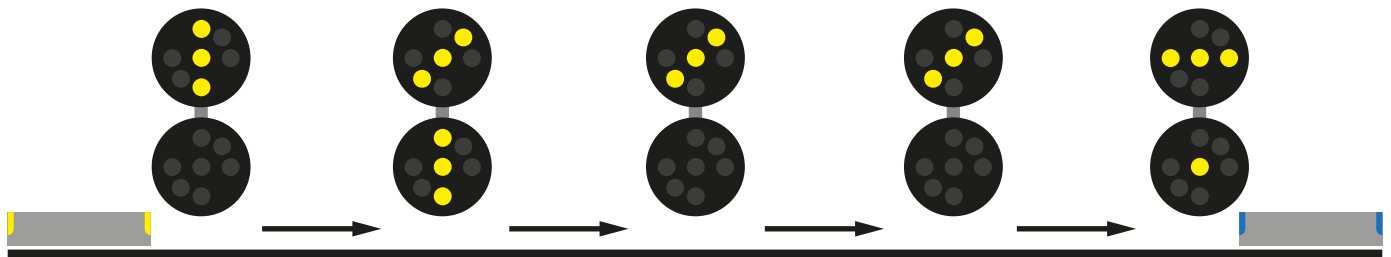
## SIGNAL PROGRESSION

A signal progression is a sequence of signals in a given circumstance. A progression will bring the train down from higher speeds to lower speeds, this is most likely due to an occupied block ahead, or switching tracks at an upcoming crossover.

The complexities of the signalling system mean there is no “one size fits all” approach, but the following examples should help you prepare for most situations. The more you play, the more examples you will face.

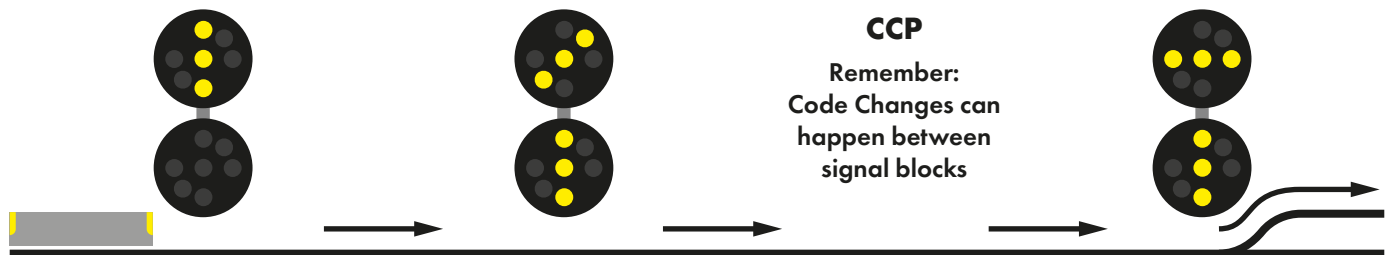
A basic progression utilizing this principle, while catching up to another train could be:

Clear (80) >> Approach Medium (70) >> Approach (40) >> Approach (15) >> Stop and Proceed (15)



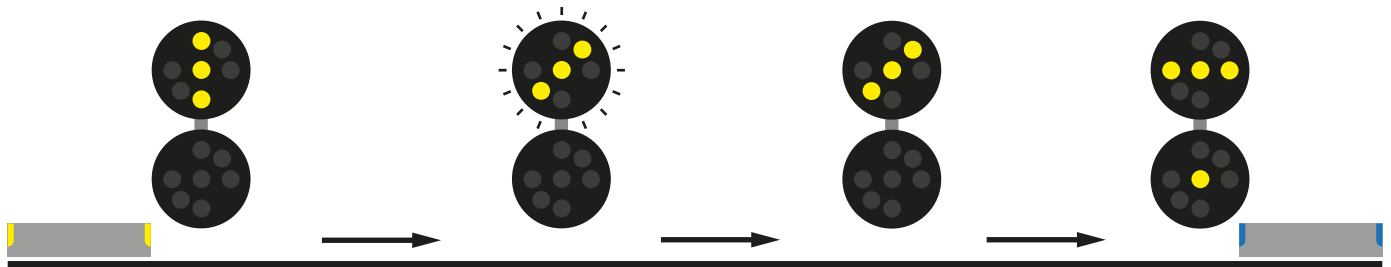
A signal progression for switching tracks ahead at 30mph crossover could look like:

Clear (80) >> Approach Medium (70) >> Code Change Point (30) >> Medium Clear (30)



A signal progression for following a train in the East River Tunnels could look like:

Clear (80) >> Advance Approach - Zone A only (40) >> Approach (30) >> Stop and Proceed (15)



Apart from at interlockings where conflicting movements can enforce an absolute stop, it is worth remembering that more often than not, trains will continue at the end of a Stop and Proceed progression, and can subsequently follow immediately behind another service, so don't be surprised if an AI is tailing behind your player train!

Lastly, always remember when under any Slow/Restricting speed enforcement to always be able to stop your train in half the visible distance ahead, as you may find yourself crawling up behind other services.

## LIRR COMMUTER - INCLUDED SCENARIOS



### Driving Range



Take an extra morning service from Jamaica to Hempstead as part of a 'Festival of Golf', learning about the history of golf on Long Island along the way.

Duration: 35 Mins



### Cutting Down



Have your service interrupted with an order to cut down to a 6-car formation.

Duration: 45 Mins



### Can You Dig It?



Snow has hit overnight but services need to continue. Start your train up for an early morning service and prepare for congestion.

Duration: 60 Mins



### Hydro City



The tail end of a hurricane is heading towards New York City. Assist other engineers in clearing West Side Yard before the hurricane hits

Duration: 20 Mins

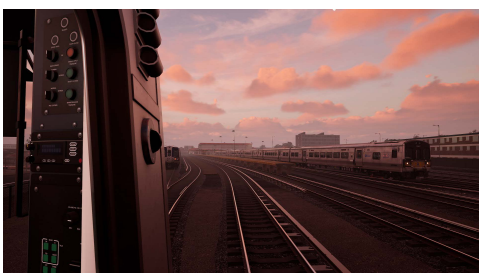


### This Fire



Services are thrown into chaos as an incident occurs near Hillside Facility.

Duration: 40 Mins



### Double Duty



Take on the role of both brakeman and conductor onboard a LIRR service, where you will be operating the doors, checking tickets and assisting the engineer.

Duration: 70 Mins



# LIRR COMMUTER - THE TIMETABLE



Please note that this document refers to the PC and full-power "Gen 9" console timetables. Due to performance limitations on older hardware, "Gen 8" and Series S consoles feature a less intense timetable.

In Train Sim World's original LIRR release, owing to an older dispatcher and limitations of signalling implementation at the time, the route was only capable of supporting lighter traffic, and as such, featured approximately 180 services.

With the overhauled signalling and a smarter dispatcher, the difference in Train Sim World 4's LIRR Commuter timetable is notable, and features a whopping 625 playable services. 287 services are for the LIRR M7, 306 services are for the LIRR M9, and 32 services are for the LIRR M3 (available separately). The LIRR timetable closely represents the real schedules as they were in 2021.

This increase in traffic ensures that all service patterns and routes across the whole network are served with the appropriate frequency, with a good mix of traffic that reflects the complex nature of the LIRR. Services range anywhere from a few minutes of yard work to a full hour of running down the Long Beach branch, complete with rush hour oddities such as both lines to Hicksville being used by trains running in the same direction, occasional Belmont Park services, Long Island City empty moves and more. Owners of NEC New York - Trenton and Amtrak's Acela will find the appropriate equipment stored at Sunnyside Yard.

*There might even be some Halloween extras to look out for...*

The LIRR is made up of various service patterns, this schematic map highlights how different lines operate to form the network as a whole:



## 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 4: LIRR Commuter, 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>

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Watch all things Train Sim World on our video platforms:

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

Twitch: <https://twitch.tv/trainsimworldofficial>

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





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## ACKNOWLEDGEMENTS

Dovetail Games would like to thank the following people for their contribution to the development of LIRR Commuter and the information provided for this manual:

### **Brandon Phelan**

Track & Signalling system implementation & manual guidance

### **William Green**

LIRR M7 & M9 unit & in-cab screen setup

### **Dovetail Games Beta Testing Team**

Knowledge, insight and many hours of testing

### **All the staff of Dovetail Games**

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

### **Metropolitan Transportation Authority (MTA) and Long Island Rail Road (LIRR)**

For their permission and collaboration to represent their iconic brand and trains in Train Sim World, and guidance on crucial operational safety.



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