Train driving

What you need to know to drive a train in the simulator.

- Train driving basics
- Realistic driving
- Safety Systems
- MON/TIMS/INTEROS screen
- Pointing and calling
- Others features

Train driving basics

The train is driven by operating the gearshift (the easiest way is to use the mouse wheel). This allows you to accelerate (speed beginning with P), brake (speed beginning with B) or neutral (speed N). Some trains also have a level between neutral (N) and the first brake level (B1) which is "Speed Limitation" (see "Others features").

Station departure





At a station stop, you can't leave until the door-closing indicator is lit. This is usually located above the driver's pocket watch.

Once lit, you can accelerate to leave the station.

Driving

(All system settings are assumed to be set to "Automatic")

When driving the train between 2 stations, the main objective is to avoid exceeding the maximum speed of the current section.

Trains using D-ATC / ATACS



For trains using the D-ATC (Digital Automatic Train Control) or ATACS (Advanced Train Administration and Communications System) safety system, the maximum speed is represented by a green arrow on the speed dial. This applies to the Keihin-Tohoku and Yamanote lines, among others.

Note that for trains using D-ATC / ATACS, the Max Speed/Next Limit indicator is empty.



When the speed limit is changed, a bell sound is emitted. If the change involves a reduction of the limit, the maximum speed indicator will move slowly. If the indicator above the speed dial (□□□□□ / pattern approach) is lit, then slow down until it goes out.

If the maximum speed is exceeded, then the train will automatically brake more or less hard to go below the limit.

Other safety systems

For other safety systems, it is advisable to use the Max Speed/Next Limit indicator when you are not used to the operation of the various safety systems (ATS-P / ATS-Ps / ATACS). When you're a little more comfortable, you can try driving without using this indicator, using the other information available (see Realistic driving page).

If you exceed the speed limit :

- On an ATS-P section, a bell will sound and the train will brake after exceeding the limit by several km/h, in order to get back under the limit, except when approaching a stop signal. In this case, the train will come to a complete stop.
- On an ATS-Ps section, once you've exceeded the limit indicated by the ATS-Ps dial, the train will automatically brake to a stop and go into emergency braking. You'll need to

move the handle to the emergency brake position before you can start again.

Note that the "Next Limit" indicator flashes faster and faster as you approach the limit change.

More information on the safety systems page.

Station arrival

The aim is to stop the train in the right position at the right time.



When you arrive at the station, the stop indicator appears on the right-hand side of the screen. It helps you stop the train in the right place.

The yellow diamond corresponds to the front of the train and appears at the top of the screen. The aim is to place this diamond in the center of the clear square in the middle of the bar.

The green zones represent the possible error margins (and are configurable in the settings). If the diamond is above the margins, then the stop will not be validated and you'll have to move forward a little more. On the other hand, if the diamond exceeds the margins, the emergency brake will be activated and you will be returned to the correct position if the "Stop Position Correction" setting is enabled. Otherwise, you'll have to manually stop the train and, if necessary, reverse.

You'll need to use your brake and the speed and remaining distance indications (if displayed) to stop your train in the right place.

Note that the Yamanote line has a different bar, as it only allows a margin of +/-35cm, whatever the setting, due to the automatic door system on the platform. In this case, the TASC system stops the train automatically. More details on the Yamanote page.

Once stationary, you should set your brake so that the BC dial (brake cylinder pressure) is at 200 kPa, at least, which generally corresponds to a level of 5 or 6. On some models (e.g. E233), an indicator flashes if the pressure is insufficient. This pressure is also automatically applied at standstill on ATACS sections. This ensures that the train doesn't roll away on its own when

stationary.

Realistic driving

When you're new to the simulator, having as many indications and automated mechanisms as possible allows you to get to grips with its basic principle.

Ideally, however, you should be able to make lines with as few indications and automated mechanisms as possible. Here's how to understand signage "globally", so as to dispense with the need for interface information.

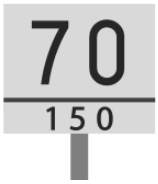
Note that if you're not using the Zuiki controller, I advise you to let the handle position visible.

Speed Limits

This section does not concern trains/sections using D-ATC/ATACS systems, as the limit is indicated directly on the dial.

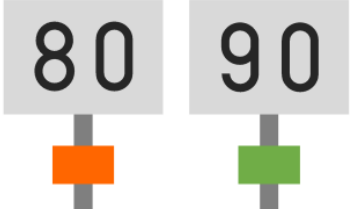
For maximum speed on the track, please consult the line guide.

Track signals



On the track, speed limits are represented by white signs with black writing. They are sometimes accompanied by a smaller number. Speed limits last for the duration of a curve or switch.
The first sign indicates the new limit, and the second (if present) indicates the distance subject to the limit (here, 75km/h limit on 150m). The limit is considered crossed once the entire train has passed (not just the front of the train).

There may be a second limit sign below the first. This is reserved for express trains with seating capacity.

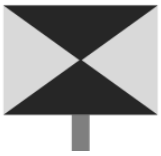


There may also be a small orange (or yellow with red stripes) or green (□□/□□) square below the main panel. The orange square indicates that the limit can be increased by

+5km/h in the case of "new high-performance trains" (i.e. all the trains proposed in the simulator). The green square also increases the limit by +5km/h, except in sections where the maximum speed is 120km/h or more. In this case, the limit is increased by +10km/h.



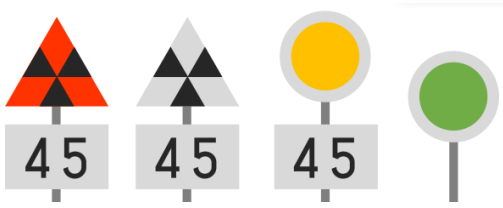
When you're on a switch, you'll see limit signs with black corners, so that it looks as if they're pointing to the right or left.
This means that if you need to take (or arrive at) a switch in the direction indicated, you must drive at the speed indicated.



This sign signifies the end of the limit. Please note that the end is only effective once the train **has completely passed** the sign.



On the Oito line, there are also limits represented by black signs with white writing. These concern tilting trains (E353 series used as Limited Express trains on this line).



These signs are used to indicate a temporary speed restriction (e.g. during railworks). The first/second sign warns of the speed limit (45km/h in this case) and is placed 500/600m before the third sign, which indicates the start of the limit.
The last sign indicates the end of the restriction, and is only effective once the train **has completely passed** the sign.

> If the track uses unwelded rails (i.e., held together by rail joints), it is possible to predict when the train has completely passed a sign and, therefore, when we can accelerate again (after a switch or a curve, for example) - if you play without HUD and pointing-calling.
>
> The average length of a car is 20 meters. The length of a rail is 25 meters. With a simple

> calculation, we can then predict, based on the sound the train makes when passing a joint, the approximate moment the sign is passed.
>
> For example, on a train with 10 cars (i.e., 20 * 10 = 200 meters), you must wait until the 8th joint sound before accelerating (i.e., 25 * 8 = 200 meters).

Light signals

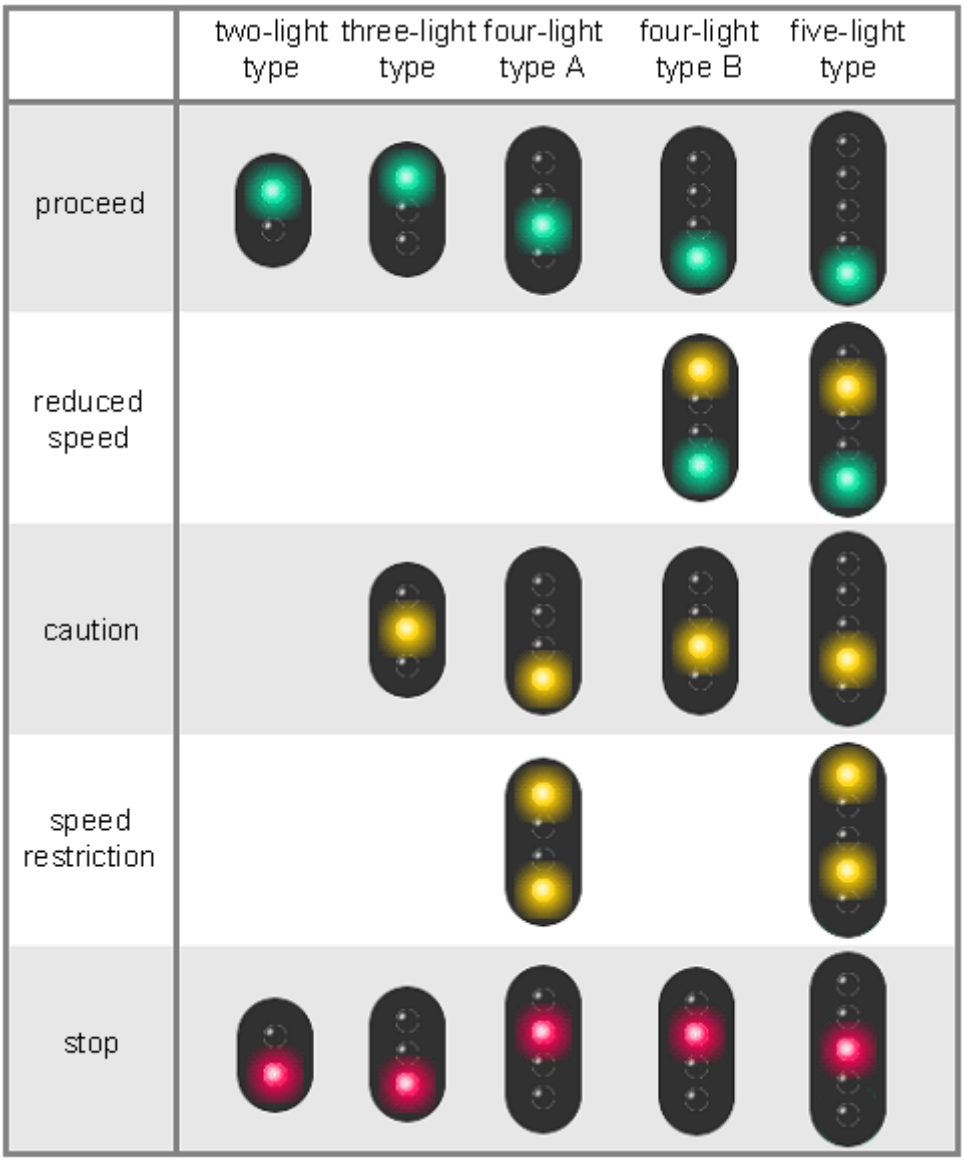
Main signals

A track is divided into several sections called "blocks". There are several types of light signals:

- Starting signals, placed at the end of stations, often on single-track lines, and generally made up of 2 lights: red and green. They indicate whether the train is ready to move onto the track.
- Block signals are placed at the beginning of a block to indicate to the driver what to do inside the block.
- Home signals are placed before the train enters the station, to regulate entry.

Just before a switch, there may be several signals, in which case they are placed to match the profile of the switch, with one signal higher than the others. This represents the track that does not "use" the switch. For example, a red signal at the top left and a green signal lower down on the right means that the train will use the switch to go to the right (and slow down accordingly).

There are several signal formats, with more or fewer lights. Likewise, there are several indications. Here's a summary table.



- Proceed (green): No worries on the lane, you can drive at the maximum authorized speed (except limitation)
- Reduced speed (yellow/green): Displayed when the next signal is "caution" or "speed restriction". Speed is reduced to 75km/h or 65 km/h depending on the line.
- Caution (yellow): Displayed when the next signal is "speed restriction" or "stop". Speed is reduced to 55km/h or 45 km/h depending on the line.
- Speed restriction (yellow/yellow): Displayed when the next signal is a stop sign. Speed is reduced to 25 km/h.
- Stop (red): The train must stop before entering the block.

When several speed limits are present (e.g. via a sign and via a light display), the speed to be applied is the lowest of the limits.

Repeat signal

There are also repeat signals. They are linked to the next block/home signal and repeat their signal. They are used when visibility makes it impossible to see the signal in advance. They display 3 lights in a row and have the following meaning:



- 3 vertical lights: the next signal is "proceed".
- 3 horizontal lights: the next signal is a "stop".
- 3 diagonal lights: other cases.

Distance signal



A distance signal is linked to an home signal. They are used on lines that are not on an automatic lighted block system or where visibility is reduced, and are often used on single-track lines. They are rectangular in shape. The signal displayed lets you know what signal will be displayed on the home signal. Here's the correspondence:

Distance signal	Home signal
"Proceed"	"Proceed"
"Reduced speed"	"Caution / Speed restriction"
"Speed restriction"	"Stop"

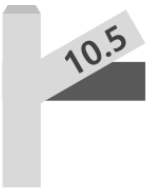
Time and next station

To find out the current time, the easiest solution is... to look at the driver's pocket watch (except on the Oito line, where it's not visible in its entirety).

Otherwise, most trains are equipped with a screen displaying a variety of information. As this screen is often linked to the type of train used, details of this information are given on the associated line page. For the trains where station arrival time information is not available, the remaining time display (STA) is therefore recommended.

Finally, on lines where trains pass through stations without stopping (Rapid, Express, etc.), a "tsuka" sound is emitted before arriving at a station where you don't have to stop.

Terrain inclination



The track inclination is indicated by signs of this type on the side of the rail. The black part indicates the inclination we're on, the white part indicates the new inclination.

The value of the inclination is written on the white part in ‰ (per mille), or L for flat ground. However, this may not be very visible in the simulator. So, if you're interested in the value, I'd advise you to leave the terrain indicator display active.

3 positions are possible:

/ : Rising terrain (as seen in hte example)
- : Flat terrain
\ : Downhill

Stop position in station



When the remaining distance and the stop guide are not visible, you need to use the signs indicating where to stop your train. These signs are square-shaped, turned 45°, with a colored outline (often red/orange) and often a number inside. If there's no number, it's a mandatory stop sign.



This number indicates the stop position for a train with as many cars (or fewer) than the number displayed. You therefore need to know the number of cars in your train (indicated on the simulation settings screen).



The aim is to stop with the front of the train at the sign. Note that the videos were taken with the camera at the front of the train. So, if you're playing with the cockpit view, it's worth bearing in mind that the perspective isn't quite right. You'll need to let the panel pass in relation to the front of the train.

Stopping position correction

When the correction is in manual mode, if you overshoot the stop position in a station, you'll have to manually reverse the train to position yourself correctly on the platform.

To move backwards, place yourself in neutral (N), then press [↓] twice to switch from forward (F) to reverse (R). Then move the handle to a power level (P1-P5) to reverse.

Once you're in the right position, don't forget to shift back into forward gear (neutral position, then press [↑] twice).

Making a good stop

hen you have to stop at a station, a good driver will apply a certain braking force initially, then, in a few steps (3 or 4), reduce the braking force until you come to a halt (for example: N > B7 > B6 > B4 > B2 > B1 or N > B7 > B5 > B3 > B1).

And, of course, a good driver won't apply a higher level while braking.

Dead man's switch

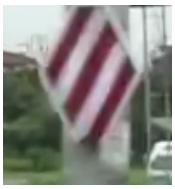
The dead man's switch function checks that the driver is still able to operate the train. The principle is simple: if, after one minute, no commands have been entered (buttons, handle changes), an alarm sounds.

The driver then has 5 seconds to press the dead man's switch to indicate that he is still able to operate the train. If he fails to do so, the train will automatically stop, activating the emergency brakes.

Dead section

On some lines (e.g. Jôban Line), certain sections are not supplied with power (e.g. following a change from DC <-> AC supply). In these areas, no power should be applied. They are represented by the following signs:







- The first (2 black stripes on a yellow background): indicates the arrival of a dead section.
- The second (3 red stripes on a white background): start of dead section (AC and/or DC)
- Third (1 red stripe on white background): start of dead section (AC)
- Fourth (white circle with black border): end of dead section

Note that the simulator does not take these dead sections into account, and that it is still possible to accelerate in them.

Air section



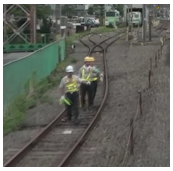

On electrified lines, there are areas where more than one overhead line runs in parallel, mainly due to the fact that you're moving from one power substation to another. When a train passes through these areas, there's no problem. On the other hand, if a train has to stop at these points, it has to lower its pantographs to avoid creating huge short circuits or electric arcs.

So, when you're in an air section, avoid stopping. If you drive too slowly, an audible "Air section (□□□□□□)" alarm will play and a symbol (A-S) will be displayed on the TIMS screen.

Using the horn



This sign indicates that you must use the horn, with a long signal (4 to 6s), mainly because there is an unprotected level crossing.



If you pass workers on the track, you should also use your horn, with a short signal (1s) to show that you've seen them. Usually, one of the workmen has a yellow flag, which he lowers when the horn is sounded.

Other cases where the horn is used include :

- Before entering a tunnel or crossing a bridge, with a medium signal, to warn any workers of your arrival.
- Passengers on the platform crossing the safety line (as on Densha de Go!)
- Children waving at you (as on Densha de Go!)
- When you arrive at a level crossing and pass another train arriving in the opposite direction (in the case of a double track). One train can hide another...

Other signals



This sign indicates that a stop/halt is approaching (small station without signals, usually unstaffed or with very few staff, and with few or no facilities).

You can find more explanations of other panels in this Steam guide by suzu:
https://steamcommunity.com/sharedfiles/filedetails/?id=3098325611

Safety Systems

Note : pressing the "ATS Reset" or alarm stop buttons is not necessary if "ATS Brake Reset" is set to automatic in the settings. The same applies to the "ATS Confirmation" button, if "ATS Confirmation" is set to automatic.

ATS-S

The ATS-S is one of the first safety systems to automatically stop a train as it approaches a stop signal (red light). It operates by means of transponders located between the rails, a few hundred meters before the stop signal.

When the train passes over the transponder and the next signal is a stop signal, a buzzer sounds, along with a "ding dong". You then have 5s to start braking and press the "ATS Confirmation" button (Space key). The ringing will stop, but the "ding dong" will continue to sound. Once stationary, you can press the alarm stop button (X key) to stop the alarm.

However, if you don't brake and confirm within 5 seconds, the train will stop automatically. Once at a standstill, you'll need to put the brakes in the EB emergency brake position, then press the "ATS Reset (Emergency)" button (U button) to disengage the emergency brake, so you can continue driving to position your train.

As this may not be enough to prevent the driver, after confirmation, from passing the stop signal, another transponder has been added just after the end of the platform. If the train passes this and the stop signal is present, an emergency brake is also applied, and you will need to perform the same operation as in the previous paragraph.

ATS-P

ATS-P is a system that no longer relies on driver confirmation (as with ATS-S), but on braking curves (patterns) generated when approaching a dangerous curve or stop signal. The ATS-P is represented by an analog or digital panel (depending on the train) with 6 or 7 indicators (whether there is a service brake/emergency brake distinction or not).

When a pattern is generated and the train approaches the maximum speed generated by this pattern, the "Pattern approach" indicator lights up and a "ding" is emitted to warn the driver to reduce speed.

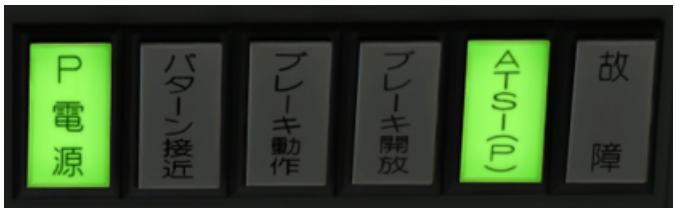
Apart from approaching a stop signal, if the train exceeds the maximum speed authorized by the pattern, the ATS-P will automatically activate the train's brakes to bring it back under the limit.

When braking, the "Service brake" or "Brake operation" indicator lights up and a "ding" sounds, until the train drops below the pattern's speed limit.

However, when approaching a stop signal (red light), if the speed limit is exceeded, the ATS-P will bring the train to a complete stop using the service brake ("Service brake" or "Brake operation" indicator). In this case, once at a standstill, you need to set the brakes to levels B1 to B8, then press the "ATS Reset (Service)" button (key Y) to disengage the brakes and continue driving to position your train.

Finally, if you are about to pass the stop signal by crossing the transponder closest to the stop signal (usually at the end of the platform), the ATP-P will perform an emergency brake (indicator "Emergency brake" or "Brake operation"). Once stationary, you must set the brakes in emergency position, then press the "ATS Reset (Emergency)" button (key U) to disengage the emergency brake, so that you can position your train properly.

Here's the list of indicator lights for each dial version:

Without service/emergency brake distinction	**With service/emergency brake distinction**
	

1. P power supply (P□□)
2. Pattern approach (□□□□□□)
3. Service brake (□□□□□□) or Brake operation (□□□□□□)
4. Emergency brake (□□□□□□) (if distinction)
5. Brake release (□□□□□□)
6. ATS-P
7. Failure (□□)

They are sometimes also followed by the 2 following indicators:

1. ATS power supply (ATS□□)
2. ATS operation (ATS□□)

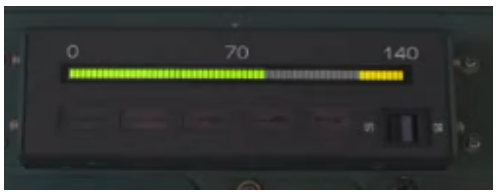
ATS-Ps

The ATS-Ps is an improved ATS-S, incorporating the functionality of the former (see above) and adding a system for generating braking patterns to force the train not to exceed certain limits (generally before dangerous curves or switches). The ATS-Ps is represented in the cab by a dial containing a gauge and several indicators. On the gauge, the green part represents the current speed and the yellow part the limit not to be exceeded.

When a pattern is generated, the "Pattern generation" or "ATS-Ps" green indicator lights up and an audible announcement is made. From then on, the yellow part of the gauge will increase. If you're too close to the limit, the "Pattern approach" light, in orange, will light up and a little buzzer sound will be emitted to warn you to brake.

If, however, the limit is reached, the "Brake operation" indicator, in orange, will light up and the train will stop automatically. Once stopped, you'll need to apply the emergency brakes, then press the "ATS Reset (Emergency)" button (U key) to restart.

Here's the list of indicator lights for each dial version:

ATS-Ps version	ATS-P/Ps version
	
1. Pattern generation (□□□□□□) 2. Pattern approach (□□□□□□) 3. Brake operation (□□□□□□) 4. Brake release (□□□□□□) 5. Ps failure (Ps□□)	1. Normal operation of safety systems (□□□□□□□□) 2. P power supply (P□□) 3. Pattern approach (□□□□□□) 4. Brake operation (□□□□□□) 5. Brake release (□□□□□□) 6. ATS-P 7. ATS-Ps 8. P failure (P□□) 9. Ps failure (Ps□□)

D-ATC

The D-ATS (for Digital Automatic Train Control) is a speed control system and a modernized version of the old analog ATC systems. This was originally developed for Shinkansen (Japanese high-speed trains) because, at high speed, drivers had no time to take note of signals on the track.

This system uses information transmitted by track circuits, as well as information stored in the on-board computer's memory, to keep the train and its driver aware of possible events ahead of the train (tight curve, presence of a train in the next block, etc.).



For trains using the D-ATC safety system, maximum speed is represented by a green arrow on the speed dial. If the maximum speed is exceeded, the train will automatically brake more or less hard to go below the limit.



When changing speed limit, a bell sound is emitted. If the change involves a reduction in speed, the maximum speed indicator will move slowly. If the indicator above the speed dial (□□□□□□ / pattern approach) is lit, then you will need to slow down until it goes out.

ATACS



ATACS works in much the same way as D-ATC, except that information is transmitted via a radio signal and not via track circuits.

MON/TIMS/INTEROS screen

- **MON** : MONitoring system
- **TIMS** : Train Information Management System
- **INTEROS** : INtegrated Train communication networks for Evolvable Railway Operation System

These acronyms stand for systems for monitoring and managing various elements of a train. In JRETS, only the route information display is available.

Although the visual appearance and/or presentation may differ from train to train, the content is generally the same. Here are the details (not applicable to lines not using these systems, such as the Senseki Line or the Hachinohe Line).

Upper part

First section



The first section of the screen contains the following elements:

- The first part displays "Information/announcements" (□□□□ □□□□□)
- The second part displays the current time, the current speed and the distance between the train and certain main stations.
- The third section displays indicators (e.g. A-S - Air section).
- Finally, the "Initial choice" button (□□□□) is displayed but cannot be used.

Second section

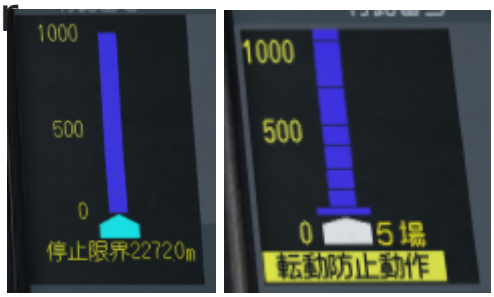


The second section displays the following information (depending on the train):

- The name of the "Driving Information" screen and its internal ID (D01AA/D01AB/D021 □□□□)
- P Line number (P□□) : Defined (□□□□)
- Train number (□□□□)
- Radio channel (□□). A sound is emit when channel change, during operation.
- Route number (□□□□)
- Driving speed (□□□□)
- The type of configuration (Rapid: □□ /□□□□)

Central part

Upcoming kilometer



In trains having this feature, the left-hand section represents the kilometer ahead. Each blue block represents a section of track. Stations are represented by a larger block.

If the safety system is ATS-P/D-ATC: the section number is to the right of the arrow. The text "□□□□□□ ", displayed at standstill, indicates that the brakes are applied to prevent the train from rolling (if the terrain is sloping). The text "□□□□□□ " indicates that a train braking/stopping operation is in progress.

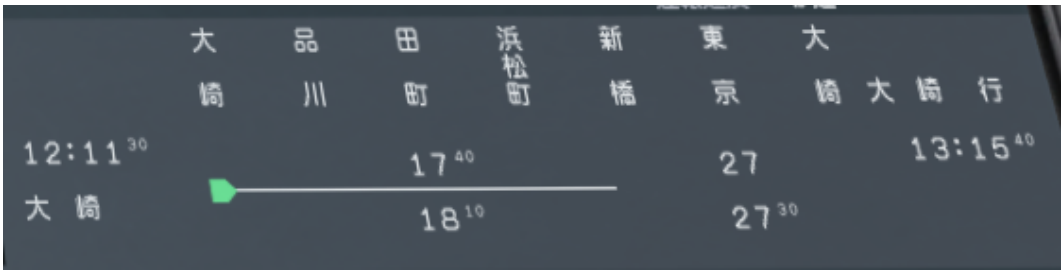
If the safety system is ATACS: the red lines represent level crossings. The number below (Stop limit - □□□□) specifies the distance to the next stop signal (red light).

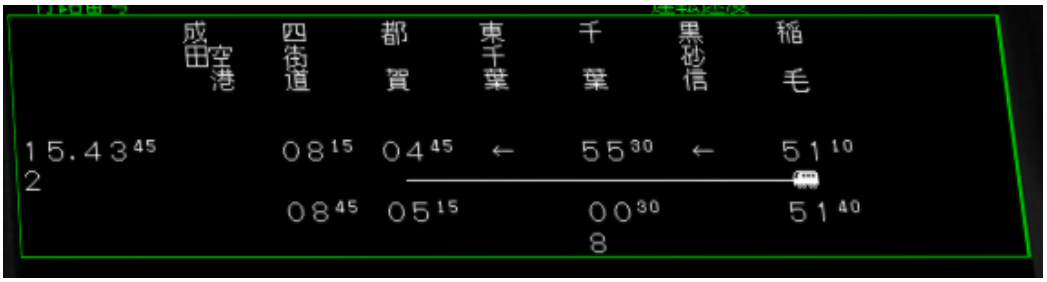
Upcoming stations

This is followed by a display of future stations. 2 presentation formats are available:

- Horizontal reading (according to traffic direction)
- Vertical reading (from top to bottom)

Horizontal reading



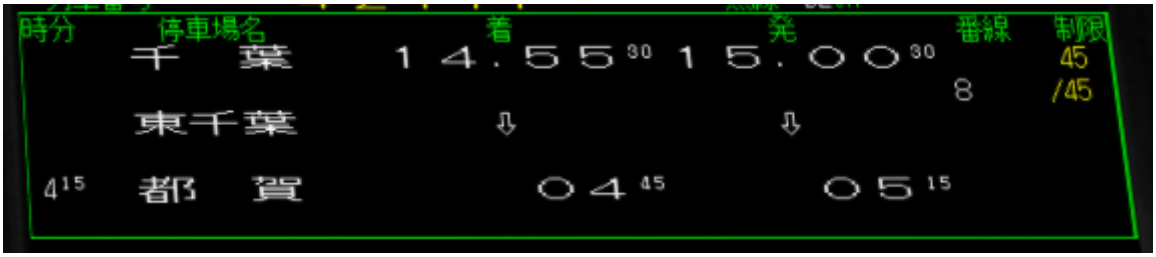


In horizontal reading, the reading order depends on the direction of the arrow. In order:

- The previous station having a departure time, and the departure time
- The current station (or the one just left) and the next 2 (or 4) stations, potentially with an arrival time (in minutes - above) and a departure time (in minutes - below)
- The next station with a specified arrival/departure time
- Station, arrival time and track (if required) at terminus

Vertical reading





Vertical reading shows a list containing the current station (or the one you've just left) and the next 2 stations. Each line displays :

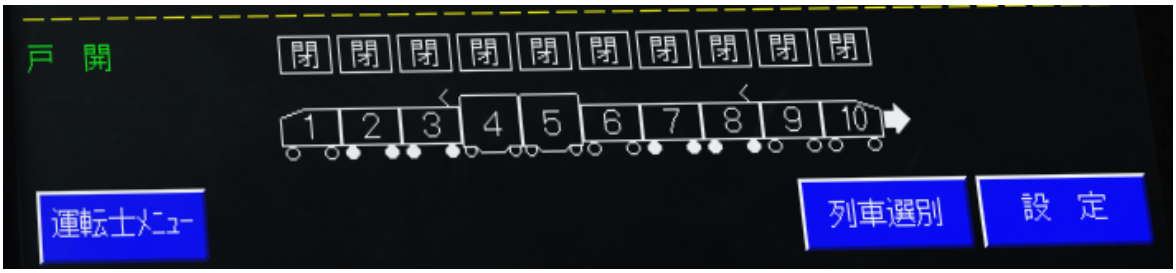
- Time between 2 stops (□□)
- Station name (□□□□)
- Arrival time (□). If the station is a through station, a downward-pointing arrow replaces the time.
- Departure time (□)

- Platform (□□)
- Speed limits (□□).

Next, in yellow, is the name of the next station where the train will stop and the arrival time at that station.

Bottom part





In this area (if present), there is a representation of the different cars. The indicator above each car (□) shows whether the doors are open (lit) or not. The cars can take on 2 colors: blue (engines are in use) or yellow (brakes are in use).

Finally, there are a series of buttons (not usable in the simulator).

Pointing and calling

Principle

Pointing and calling is a method in occupational safety for avoiding mistakes by pointing at important indicators and verbally calling out their status. It is particularly common on Japanese railways, where it is referred to as *shisa kanko* (□□□□), *shisa kakunin kanko* (□□□□□) or *yubisashi koshō* (□□□□). Gesturing at and verbalizing these indicators helps with focus.

Pointing and calling requires co-action and co-reaction among the operator's brain, eyes, hands, mouth, and ears.

Signals validation

One of the elements where "pointing and calling" is used is for signal validation (in the case where we are not in ATC/ATACS). This is done when the train leaves or when we encounter the following sign:



When you encounter this sign, you must validate, via "pointing and calling", the next visible signal. This sign may contain an indicator specifying the nature of the next signal:

- Number : block signal (heisoku / □□)
- □ : starting signal (shuppatsu / □□)
- □ : home signal (jōnai / □□)
- □ : repeating signal (chūkei / □□)
- □ : distance signal (enpō / □□)

When validating, you typically have to say the type of signal followed by the status of the signal (in addition to pointing it). And in the case of a block signal, you must also specify the block number.

Here is the Japanese pronunciation of the different signal statuses:

- Clear signal (green) : shinkō / □□
- Reduced speed signal (yellow/green) : gensoku / □□
- Caution signal (yellow) : chūi / □□

- Speed restriction signal (yellow/yellow) : keikai / □□
- Stop signal (red) : teishi / □□

Which gives, for example:

- Start with green signal : Shuppatsu shinkō / □□□□ / Proceeding departure
- Block N° 2 with yellow signal : Dai ni heisoku chūi / □ □ □□□□ / Caution block N° 2
- Home with yellow/yellow signal : jōnai keikai / □□□□ / Speed restriction on home

Other validations

In addition to signal validation, there are other elements to validate at various times. I'll just detail the main moments.

Just before departure

1. Confirm door closing light: Lit (Tentō / □□)
2. Confirm departure signal: Proceeding departure (if green) (Shuppatsu shinkō / □□□□)
   - If ATC/ATACS, confirm ATC signal on console (Shingō shinkō / □□□□)
3. Confirm watch time: Depart <station name> at <hour>, on time. (<station name> eki hassha <hour>bu chōdo, jikoku yoshi / <station name>□□□ <hour>□□□□□□□□□□)

Once validated, the train can start.

Arriving at a station with a stop

Do this when the home signal is visible (or, failing that, before the stop signal).

1. Confirm arrival station (point to timetable or monitoring screen): Stop at <station name> (<station name> eki teisha / <station name>□□□)
   - If there are several tracks, also specify the track no. (<n°> ban / <n°>□)

Stop

1. Validate BC pressure : 200 OK (200□□)
2. Validate opening door closing indicator : Off (Metsu / □)
3. Validate watch time: On time / 15s late / 7s early (Teiji / □□ - 15 byō en / 15□□ - 7 byō sōchaku / 7□□□)
4. Validate track, if multiple arrival/departure tracks (point to timetable or monitoring screen) : Track control. <station name>, track <n°> (Unten senro kakunin. <station name> eki <n°> ban. / □□□□□□ <station name>□ <n°>□□)

Passing a station without stopping

1. Confirm passing station (point to timetable or monitoring screen): Passing <station name> (<name> eki tsūka / <name>□□□　)

Passing a speed limit sign (end of)

1. For a speed limit: Limitation, <speed> (Seigen, <speed> / □□　, <speed>)
2. For the end of a speed limit (once the tail of the train has passed the sign): Limitation ended (Seigen, kaijo / □□□□　)

Other examples and additional information are available on suzu's guide :

https://steamcommunity.com/sharedfiles/filedetails/?id=3098325611

Others features

Slow advance / Inching

Used to correct the stop position in stations equipped with landing doors and the TASC system. (e.g. Yamanote line)

In stations where the TASC system is installed, if the train is not correctly positioned in front of the platform doors (±35 cm), the platform doors will not open. This is detected by transponders on the track.

In this case, you need to put the handle in P1 (forward or reverse, depending on where you are) while pressing the inching button, so that the vehicle moves at a very low speed (<2 km/h).

When the train is finally in the correct position, TASC intervenes to stop the train, the landing doors open and the stop position correction is completed.

Cruise control

This allows the train to run at a constant speed (like for a car), by controlling power and brakes.

To use it, you need to be in position P5 at 60km/h or more. Pressing the button locks the speed. To deactivate the regulator, simply manipulate the handle.

Speed limitation

This prevents the train from exceeding a certain speed when descending at high level, by using regenerative braking.

To use it, depending on the train:

- The gearshift handle must be set to "Speed limitation" / "□□ " (e.g. series 211 or E129).
- If the position does not physically exist (e.g. E531 series), then you must be in position N and be at 55km/h or more and press the speed limit button. This activates the speed limit (noted □□). To deactivate, simply manipulate the handle.

Hill start

For 1-lever trains, when you are at a standstill and switch from braking to acceleration using the handle, there is a short delay between the moment the brakes are released and the moment the train moves forward. If the train is stationary on a slope, this can cause the train to move backwards before it moves forwards.

To avoid this, simply hold down the hill start button while accelerating. This will cause a B4 brake level to be applied until the train moves forward, preventing it from moving backwards.

TASC deactivation

TASC (Train automatic stopping controller) is a fixed-position stopping device. In stations with platform doors, the stopping position must be more precise than usual, so that the platform doors are aligned with those of the train. If they are not aligned, the doors will not open.

TASC is a device that automatically applies the brakes and stops the train exactly at the specified point. It applies if the train is 60km/h or less when ~150m from the stop point. This button deactivates TASC, leaving the driver in control.

It is installed on E233 and E235 series trains. However, only the simulator's Yamanote line contains TASC data.