Driver's Manual (EN)

TADAMI LINE: AIZU WAKAMATSU - TADAMI

CONTENTS

1 TADAMI LINE

AIZU WAKAMATSU - TADAMI OVERVIEW

INTRODUCING TADAMI LINE

The Tadami Line is a 135-kilometre (84 mi) scenic railway line in northeast Japan which connects Aizu-Wakamatsu Station at Aizuwakamatsu in Fukushima Prefecture with Koide Station at Uonuma in Niigata Prefecture.

The Tadami Line runs along the Tadami River, and its charm lies in the magnificent scenery of the changing seasons. The train passes through many bridges and tunnels heads to Oku-Aizu. The scenery outside the window is refreshing. Many domestic and foreign photographers come here to capture this breathtaking scenery. It was even selected as the top of the "Top Ten Most Beautiful Autumn Leaves Railways" by national media.

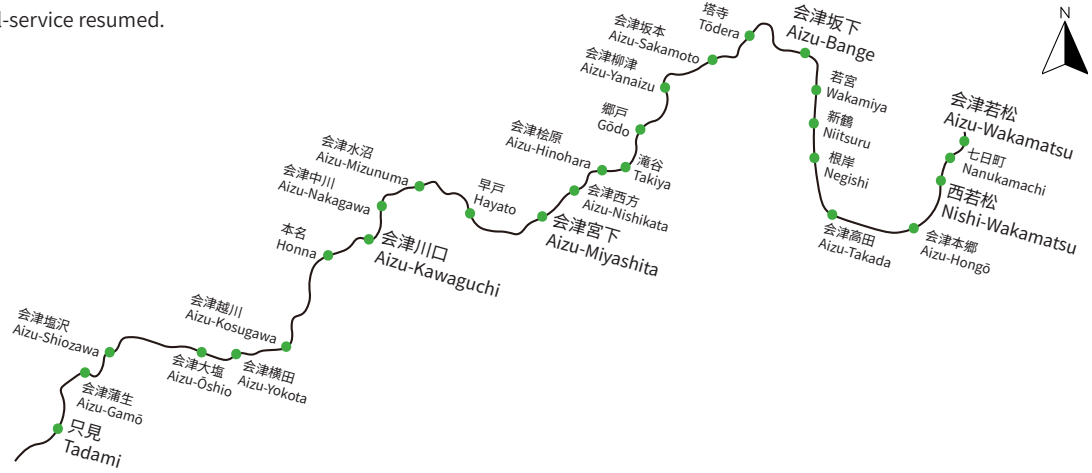
The section between Aizu-Kawaguchi and Tadami was severely damaged by the rainstorm in 2011. Thanks to the support from local residents and the efforts of all parties, full service finally resumed on October 1st, 2022.

The areas along the route not only have beautiful natural scenery but also unique local culture. One of the pleasures of the journey is to immerse yourself in the nostalgic scenery and experience the daily life intertwined with legends and stories. The Tadami Line inherits the history of the mountain village, the traditional culture, and the exquisite craftsmanship, and continues to protect people's reunion and separation.

In Train Sim World 6, learn to operate the classic Kiha 40 DMU, serve the suburban towns of Aizu-Wakamatsu and rural areas along Tadami River, and enjoy the slow pace. Don't forget to get a craft called Akabeko as souvenir!

HISTORY AND ROUTE MAP

Oct 1926	Aizu Line opened between Aizu-Wakamatsu and Aizu-Bange
Nov 1928	Aizu Line extended to Aizu-Yanaizu
Oct 1941	Aizu Line extended to Aizu-Miyashita
Nov 1941	Tadami Line opened between Koide and Oshirakawa
Sep 1956	Aizu Line extended to Aizu-Kawaguchi
Aug 1963	Aizu Line extended to Tadami
Aug 1971	Route between Oshirakawa and Tadami opened, Aizu Line integrated into Tadami Line
Nov 1974	Steam locomotive service discontinued
July 2011	Tadami Line damaged by heavy rain, and the train service suspended in some section.
June 2018	Route recovers construction work began
Oct 2022	Full-service resumed.



2 KIHA 40
DIESEL MULTIPLE UNIT

INTRODUCING KIHA 40

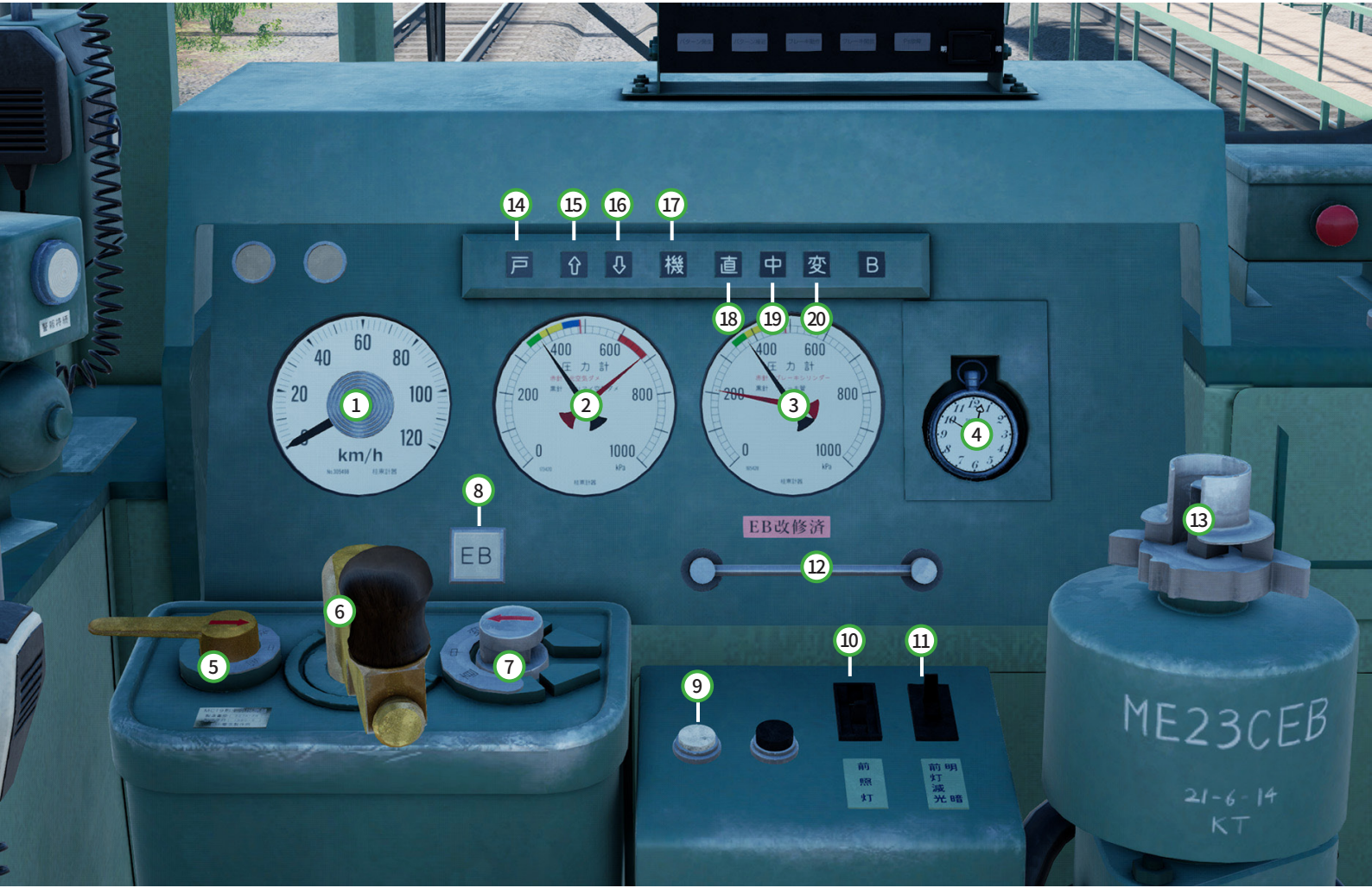
Kiha 40 series diesel multiple units were designed in 1977 to replace the aging vehicles in suburban and rural services. A total of 888 vehicles were built from 1977 to 1982.From the northernmost Hokkaido to the southernmost Kyushu, they haved been widely operated all around Japan. Kiha 40 entered operation at Tadami Line in 1979, and retired in 2020.

Since 1990s, Kiha 40s have been gradually replaced by newer and more powerful vehicles. However, there are still hundreds of them in operation nowadays, becoming a nostalgic symbol of rural railway lines.

Kiha 40 in the game is based on several vehicles once operated by Aizu-Wakamatsu depot. These vehicles still keep the original condition without modernization updates. Powered by an inline 6-cylinder DMF15HSA diesel engine outputting 220 horsepower, the power performance of Kiha 40 is far from powerful, making it challenging to drive on the slopes. Please keep an eye on the gradients to maintain your speed.

THE DRIVERS CAB: MAIN VIEW

1. Main control desk (see next pages for detail)
2. Switch and fuse panel (see next pages for detail)
3. Side window
4. Sun visor
5. Timetable holder. Timetables are available in timetable and scenario mode.
6. ***Driver's buzzer***
7. Use the ***ATS alert release*** button to cancel the bing-bong alert. Learn more in the "Safety system" section of this manual.
8. Press the ***Contact Signaller*** phone to request access to a blocked section of track in front of you.
9. To use the ***Engine Start-run Switch*** to start the engine, the master handle needs to be inserted.
10. The ATS indicator indicates the status of ATS-S safety system. Learn more in the "Safety system" section of this manual.
11. ***Left Wiper*** switch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THE DRIVERS CAB: CONTROL DESK

1. Speedometer
2. Reservoir pressure gauge: red needle for main reservoir, black needle for equalizing reservoir
3. Brake pressure gauge: red needle for brake cylinder, black needle for brake pipe
4. The driver's pocket watch shows current in-game time
5. ***Reverser*** handle
6. ***Throttle handle.*** The throttle handle also controls engine shutdown. Move the handle below **P0** (**Engine stop** notch) to shut down the engine. Move ther handle to **P0** and use **Engine Start-run Switch** to restart the engine.
7. ***Transmission selector.*** To control the transmission, master handle needs to be inserted during driving. Learn more in the "Operating the Kiha 40" chapter in this manual.
8. The EB vigilance indicator lights up with warning sound. Learn more in the "Safety system" section of this manual.
9. The ***ATS Acknowledge*** button needs to be pressed to acknowledge an ATS warning.
10. ***Headlight*** switch
11. ***Headlight Dimmer*** switch
12. Press the ***EB reset*** lever to cancel the vigilance warning. Learn more in the "Safety system" section of this manual.
13. Train Brake valve. Insert the ***brake handle*** to use. To remove the brake handle you need to move the handle to **Handle-off** notch. See the notch settings on the righr side image.
14. The door indicator light up when all passengers doors are closed
15. Travel direction indicator: front
16. Travel direction indicator: reverse
17. Engine running indicator
18. Transmission indicator: Direct drive
19. Transmission indicator: Neutral
20. Transmission indicator: Hydraulic drive.

THE DRIVERS CAB: SWITCH PANEL

1 ***Left Door Control***. Turn on to activate the control of left side door of this car.

2 ***Right Door Control***. Turn on to activate the control of right side door of this car.

3 ***Cab Fan*** switch

4 ***Cabin Fan*** switch

5 ***Cabin Light*** switch

6 ***Cab Light*** switch

7 ***ATS and EB Power*** switch

8 ***ATS Power-off Warning*** swtich. If turn on this fuction, warning will sound when you move the train with out **ATS and EB Power** on.

9 ***Gauge Light*** switch

10 ***Destination Borad Light*** switch

11 ***Left Marker Light*** switch

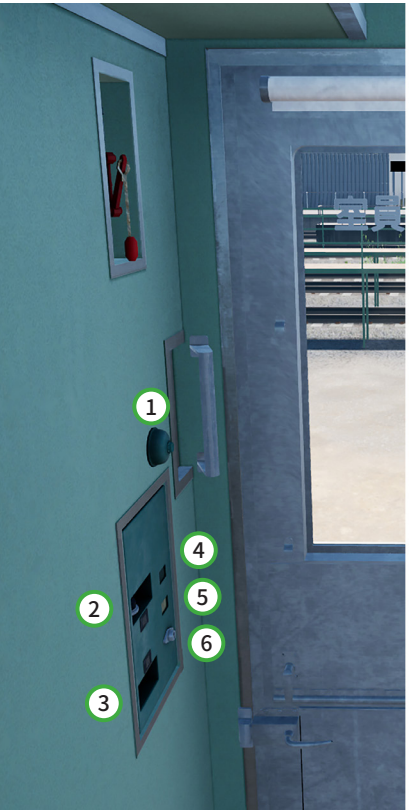
12 ***Right Marker Light*** switch

13 ***Cab Heater*** switch

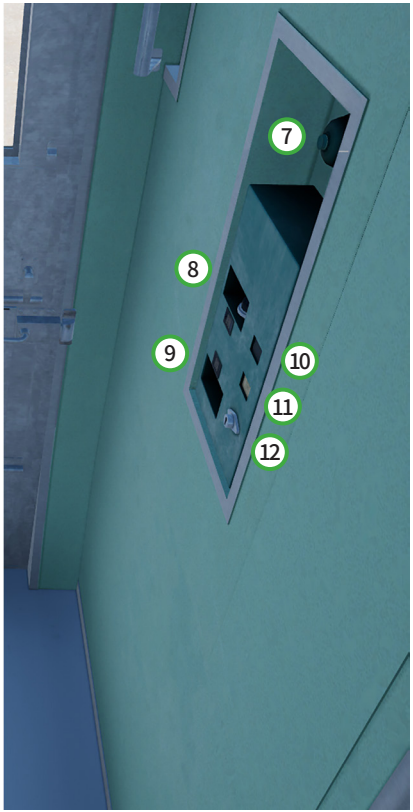
14 Insert the **master handle** in ***cab selector*** to activate/deactivate the current cab.

Note: Some of the switches only appear in the 1-end cab of each car.

THE DRIVERS CAB: GUARD'S CONTROL



Left guard panel



Right guard panel

1 ***Gurad's Buzzer***

2 ***Left Door Close*** button

3 ***Left Door Open*** button

4 Passenger door auto-lock indicator. The passenger doors will lock automatically and the auto-lock indicators light up when the speed is higher than 3km/h.

5 Left door open indicator

6 ***Guard's Panel Lock (Left Door)***

7 ***Guard's Buzzer***

8 ***Right Door Close*** button

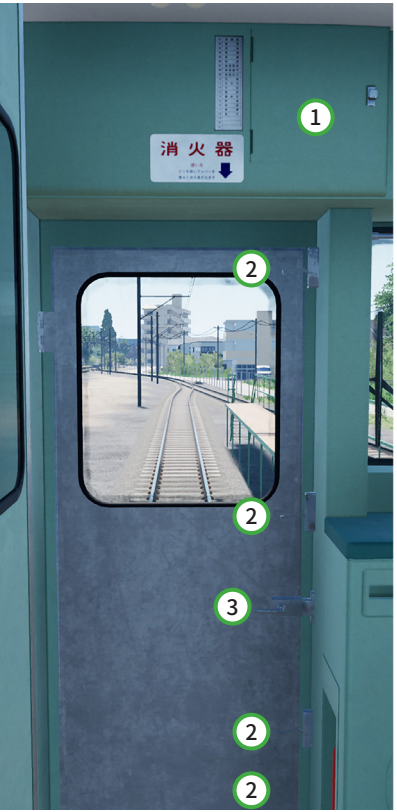
9 ***Right Door Open*** button

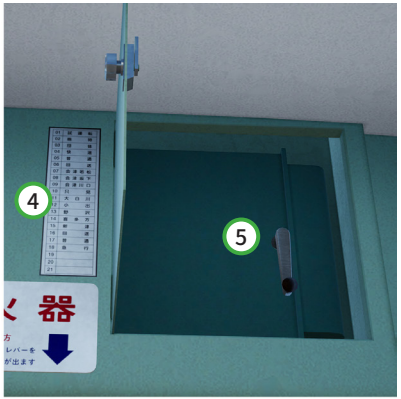
10 Passenger door auto-lock indicator

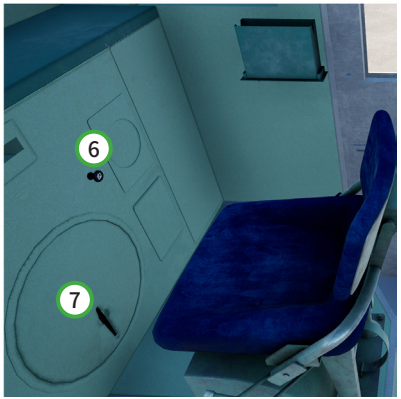
11 Right door open indicator

12 ***Guard's Panel Lock (Right Door)***

THE DRIVERS CAB: VESTIBULE DOOR AND OTHERS







1 Destination board control roller door

2 Vestibule door locking mechanism

3 ***Vestibule Door Main Lock.*** To open the vestibule door, unlock all looking mechanisms and then open the main lock. The vestibule door will open when coupled with another train, and close when uncoupled.

4 Destination board reference card

5 ***Destination Board Roller.*** Use this handle to change the destination display. You need to change each destination board on each car manually.

6 ***Right Wiper*** switch

7 ***Handbrake*** handle. Handbrake only appears in the 2-end cab of the car.

Destination list

1	試 運 転	Test run	10	只 見	Tadami
2	臨 時	Extra	11	大 白 川	Oshirakawa
3	団 体	Reserved	12	小 出	Koide
4	快 速	Rapid	13	野 沢	Nozawa
5	普 通	Local	14	喜 多 方	Kitakata
6	回 送	Out of service	15	新 津	Niitsu
7	会 津 若 松	Aizu-Wakamatsu	16	回 送	Out of service
8	会 津 坂 下	Aizu-Bange	17	普 通	Local
9	会 津 川 口	Aizu-Kawaguchi	18	急 行	Express

3 OPERATING KIHA 40

GETTING STARTED

In real life, the drivers will bring the brake handle and master handle with them and board the train. In Train Sim World, you only need to board the train and follow the steps below to start your Kiha 40 train:

1. Go to the rear cab of the consist. Make sure the rear cab is inactive, all removeable handles are removed.
2. Go to the front cab, sit down on the driver's seat.
3. Insert **Brake handle**.
4. Insert master handle into **Cab Selector**, move the handle to **Active** position, then remove the master handle.
5. Insert master handle into **Engine Start-run** switch, set the switch to **Preheat** position and hold for 5 seconds, then turn to **Engine start** position.
6. Move master handle on the **Engine Start-run** switch to **Handle-off** postion and remove it once the engine starts.
7. Insert master handle into **Transmission Selector**.

Now the train is ready to go, set the reverser, release the brake, set **Transmission Selector** to **Hydraulic** position and apply some power to move the train.

Optional:

8. Go to the rear cab of the consist. Set up **Destination Board** and turn on both left and right **Marker Lights**.
9. Go to the front cab, set up **Destination Board.**
10. Turn on **Headlight**, adjust **headlight dimmer** if needed. (Set to **Dimmed** when approaching the platform and loading passengers, set back to **Normal** when you're ready to depart)

If you wish to run with safety systems (ATS and EB):

1. Turn on **ATS and EB Power** switch on the switch panel. Or use the keyboard combo "***Ctrl+Enter***"
2. Turn on ATS Power-off Warning switch on the switch panel, so that you can get warning when you turn off ATS power by accident during driving.

Transmission

Kiha 40 features a semi-automatic hydraulic transmission system, which is similar to the Dynaflow gearbox on some early AT cars. The hydraulic gear is usually engaed under 60km/h, and the direct-drive gear is used for cruising at higher speeds.
The gear change needs to be set manually. You can follow the steps below when driving Kiha 40:

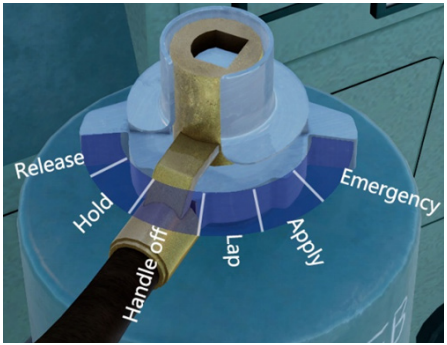
1. Set **Transmission Selector** to **Hydraulic** postion (or use keyboard combo "***Ctrl+A/D***"), then add some power to move the train.
2. When you reach a speed of 50-60 km/h, set **Throttle** handle back to **P0**, change **Transmission Selector** to **Direct-drive** postion. The gearbox will automatically match the rev speed between the engine and output shaft. Then you can add some power for further acceleration.
3. If you wish to coast, set **Throttle** handle back to **P0**, and don't forget to change **Transmission Selector** to **Neutral** postion.
4. To stop the engine, set **Throttle** handle back to **P0**, then click "Engine stop" near the the base of the handle.

Brake

Kiha 40 comes with a manual-lapped automatic air brake system. The system applies brake by reducing the brake pipe pressure, and releases brake by increasding the brake pipe pressure.

Brake handle notch:

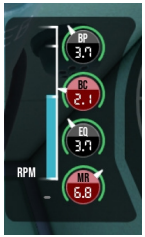
- **Release**: Release the brake of the whole train.
- **Hold**: When you drive a train with more than 1 cars, set the brake handle to **Hold** position will keep the brake force of the first car and release the brake on other cars.
- **Handle-off**: Keep the current brake status, you can remove the brake handle.
- **Lap**: Stop reducing BP pressure and keep the current status.
- **Apply**: Reduce brake pipe pressure to increase brake force.
- **Emergency**: Reduce the brake pipe pressure to 0 quickly. It takes time to recover brake pipe pressure and release.



Tips:

- The maximum brake force is 4.5 kgf/cm² @ 1.8 kgf/cm² BP reduction. Over-redcution of BP won't increase brake force.
- Kiha 40 features a 3-pressure distribution valve and EP brake system, enabling a partial release. You can reduce the brake force gradually by setting the brake handle to **Release** postion, then back to **Lap** position using shortcut key "/" on PC.

HUD Instruction:



BP	Brake pipe, 4.9 Bar (5.0 kgf/cm²) max
BC	Brake cylinder, 1.8 Bar (1.8 kgf/cm²) max
EQ	Equalizing reservoir, normal pressure is the same as BP when brake is properly applied
MR	Main reservoir of the air system, normal working pressure is between 5.9 and 6.9 bar (6-7kgf/cm²)

Door operation

You can use the shortcut keys "*Y/U*" to unlock and open the left/right passenger door, or use the guard's panel as follows:

- Insert **Guard's Key** into the **Panel Lock** and switch it to **Unlock** position, then press the **Door Open** button.
- Press the **Door Close** button, switch the **Panel Lock** back to **Lock** position once the doors are closed. Then remove **Guard's Key**.

4 SAFETY SYSTEMS

AUTOMATIC TRAIN STOP (ATS) SYSTEM

The ATS system is designed to provide the driver a warning indication when approaching a signal at danger, and apply an emergency brake when the driver fails to respond to the warning.

The sub type of ATS system used on Tadami Line and Kiha 40 is ATS-SN. This system has 2 main functions in the game:

1. Provide warning indication to next signal at danger.
2. Apply emergency brake when:
   - The driver fails to respond to the warning.
   - Signal passed at danger, regardless of whether the driver responds (immediate stop).
   - Starting a train with the departure signal at stop (immediate stop).

ATS-SN devices

Ground coil

A ground coil is installed on the track. It contains an LC circuit, and the resonant frequency is set based on the next signal aspect.

Coil type	Color	Clear/caution signal	Stop signal
Distant (ロング地上子)	White	103 kHz	129.3 kHz
SPAD (直下地上子)	Green	103 kHz	123 kHz
Departure at stop (誤出発防止地上子)	Red	103 kHz	123 kHz

On-board receiver

The on-board receiver detects the frequency, thereby transmitting "approaching stop signal" information to the vehicle.

Cab indicator

The ATS warning indicator and warning sound remind the driver to respond.

How to use

- Turn on the **ATS and EB Power** switch in the activated cab.
- Once ATS is enabled, a self test runs automatically. The **warning bell** rings for 2 seconds, and **alert sound** (bing-bong) sounds. You need to press **Alert Release** button to stop the alert sound.
- When passing a distant coil of a stop signal (129.3 kHz), the **ATS warning indicator** lights up, **warning bell** rings, and **alert sound** sounds. You should:
  1. Set **brake handle** to **Lap** or **Apply** notch, then press the **ATS Acknowledge** button to respond to the warning in 5 seconds, or the emergency brake will be applied.
  2. The alert sound will continue after acknowledge. When the train comes to a complete stop, press **Alert Release** button to stop the alert sound.
- When passing the SPAD coil of a stop signal (123 kHz), emergency brake will be applied immediately.
- When passing the departure at stop coil of a departure signal at stop (123 kHz), emergency brake will be applied immediately.

Emergency brake recovery

When ATS emergency brake is applied, you should

1. Set **brake handle** to **Emergency** position.
2. Wait for the train to come to a complete stop. (ATS-SN system will not check the speed, but you should)
3. Press the **ATS Acknowledge** button to cancel the warning.
4. Release the brake until the brake pipe pressure recovers.

VIGILANCE (EB) SYSTEM

The Japanese version of the vigilance system is called the EB device. It is designed to ensure that the driver remains alert and capable of operating the train, and it automatically applies the emergency brake if the driver fails to take any action for an extended period of time.

In the game, the EB device on Kiha 40 is enabled together with ATS when you turn on the **ATS & EB Power** Switch in the active cab. Its operation is as follows:

- Unlike ATS, EB does not have a self test when enabled.
- When the current speed is **higher than 15 km/h**, and you haven't been operating the train (move the **throttle handle**, **brake handle** or sound the **horn**) for 60 seconds, the **EB vigilance indicator** on the control desk will light up, and **audio warning** will sound.
- You must reset the vigilance warning in 5 seconds by either pressing the **EB Reset** lever, moving **throttle handle**, moving **brake handle** or sounding the **horn**.
- If you fail to respond within 5 seconds, emergency brake will be applied automatically. Set **brake handle** to **Emergency** notch, the warning will stop, then you can release the brake.

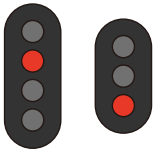
Safety system key chortcut

Function	Key shortcut
Turn on ATS and EB power	Ctrl+Enter
EB reset	Q
ATS acknowledge	Q
ATS alert release	PageDown

5 BASIC JAPAN RAILWAY SIGNAL AND SIGN

COLOUR LIGHT OVERVIEW

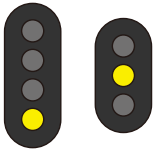
Main signal



Stop

You must not proceed beyond this signal, the next block is occupied.

If the train is fitted with ATS-S, there will be a warning as you pass over the distant ground coil of this signal, and you must acknowledge. If you fail to stop, emergency brake will be applied as you pass over the SPAD coil.

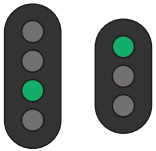


Caution

Procced into next block, expect the next signal is to be at **Stop** or a stop marker.

Reduce your speed under **45 km/h**.

If the train is fitted with ATS-S, there won't be any warning as you pass over the ground coils of this signal.



Clear

Procced into next block, expect the next signal is to be at **Clear** or **Caution**.

If the train is fitted with ATS-S, nothing will happen as you pass over the ground coils of this signal.

Home signal, departure signal and block signal are main signals that have block sections and related ATS ground coils. Home signal and departure signal are also called **absolute signals.**

Repeating signal

Repeating: Stop

Procced and expect the main signal is to be at **Stop**.

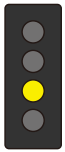
Repeating: Restricted

Procced and expect the main signal is to be at **Caution**.

Repeating: Clear

Procced and expect the main signal is to be at **Clear**.

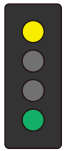
Distant signal



Caution

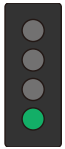
Procced and expect the main aspect signal is to be at **Stop**.

Reduce your speed under **45 km/h**.



Advanced Caution

Procced and expect the main signal is to be at **Caution**.



Clear

Procced and expect the main signal is to be at **Clear**.

SUBSIDIARY SIGNALS

Subsidiary signal (repeating signal and distant signal) is set to provide advanced indication of the aspect on the next main signal which it is related to. Subsidiary signal has neither block section nor related ATS ground coils.

Repeating signal

The repeating signal is generally used in locations where the main signal has poor visibility. It is installed in front of the corresponding main signal at a point with good visibility.

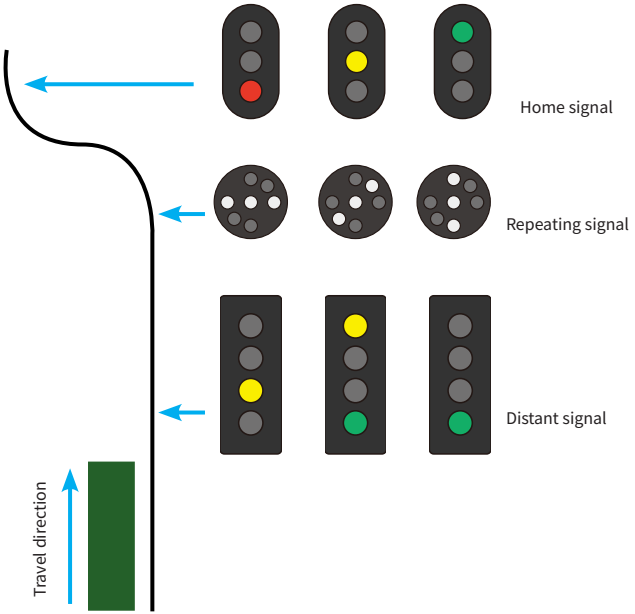
Distant signal

The distant signal is generally used in semi-automatic blocking, where there is only one block section beween two adjacent stations. In this case, apart from the departure signal of the previous station, there are no other main signals ahead of the home signal.

To give the train an advanced indication for deceleration, a distant signal is installed approximately one automatic block section length ahead of the home signal.

You need to reduce the speed as the distant signal is at Caution, but the signal itself is still a subsidiary signal, and it doesn't have a Stop aspect. To distinguish it from a four-aspect main signal, the distant signal uses a square backboard.

The figure on the right side shows the relationship of home signal, repeating signal and distant signal.



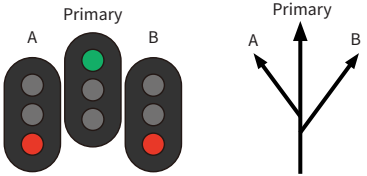
ROUTE INDICATION

At a point where the track branches, there are mainly two methods of indicating the direction in which a route is set: one is to install a number of signal heads corresponding to the number of routes, and the other is to use a route indicator.

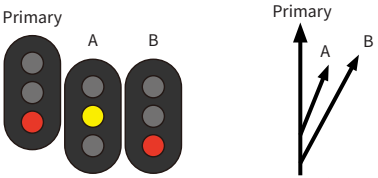
Multi signal heads

The main signal located before the branch will have multiple signal heads, each corresponding to the display aspect of a particular route. Routes that are closed will display a red light, while the route that is set will display according to the signal aspect of that route.

The highest head indicates the primary direction. A black signboard with white lettering may be placed below the corresponding signal head to indicate the route direction.



a) The primary route in the middle is set, and the next main signal on this route is at **Clear** or **Caution**



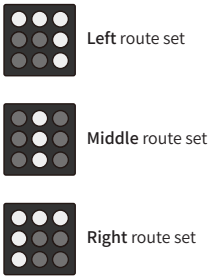
b) The first secondary route on the right (towards A) is set, and the next main signal in direction A is at **Stop** or a stop marker.

Route indicator

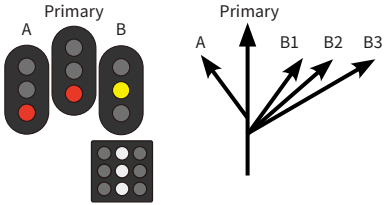
For multiple routes on the same level, the combination of a signal head and a route indicator can be used to simplify the display.

In this case, the signal head shows the aspect of the next main signal of the route that is set, while the route indicator shows the currently set direction. If none of the corresponding routes are set, or the currently set route is at stop, the route indicator remains unlit.

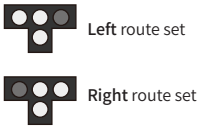
A 2-way route indicator is generally used with a departure signal, while a 3-way route indicator is generally used with a home signal.



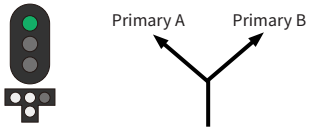
3-way route indicator



a) B2 route is set, and the next main signal in direction B2 is at **Stop** or a stop marker.



2-way route indicator



b) The primary direction A is set, and the next main signal is at **Clear** or **Caution**

SHUNTING SIGNAL & CALLING-ON SIGNAL

Shunting signal and shunting indicator

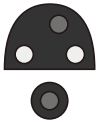
A shunting signal is used to guide the movement of a train engaged in shunting operations. The separate light affixed below is called the **shunting signal indicator**. Only when this indicator is lit, the upper part is regarded as a shunting signal. When calculating the protection section, the shunting signal is treated independently from other main signals.

When the shunting signal indicator is unlit, or if no indicator is installed below the head, the upper part of the signal functions only as a shunting indicator, used solely to show whether a shunting route is set. If there are multiple routes, a route indicator is usually attached below to show which specific route has been set. A shunting indicator has no protection section, and trains are allowed to freely pass beyond a shunting indicator even if it's in the "route closed" aspect.

Shunting stop

Shunting procced

a) Shunting signal



Route closed

Route set

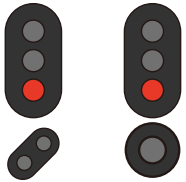
b) Shunting indicator

Calling-on signal

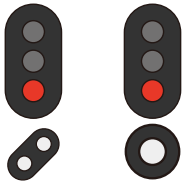
The calling-on signal is usually affixed below a home signal. When the calling on signal will be lit when movement authority is granted where the main aspect cannot provide an indication other than Stop.

Usually it is used when coupling to vehicles in a station or siding. In that case, the preceding train stop in the station or siding, and the home signal is at stop, indicating the line is occupied. In the game, you should stop in front of the signal at stop (and be careful not to pass over the SPAD ground coil), **contact signaller** for movement authority. Once the calling-on signal is lit, you can procced into the occupied line regardless of main signal at stop. The permitted speed is restricted **under 25 km/h** when you pass the signal.

There are 2 types of calling on signal: colour-light-type and light-row-type, with no difference in function.



Stop
You must not proceed beyond this signal



Proceed at caution
Enter the occupied line with restricted speed and be prepared to stop

RAILWAY SIGNS

Train stopping position marker

The number in the center indicates the train set length.

Speed limit.

Black markers on the left indicates the speed limit of the left branch of the turn out, while markers on the right indicates the speed limit of the right branch.

End of speed limit section.

Proceed with maximum permitted speed of the line or the permitted speed indicated on the timetable.

Stop marker

You must not proceed beyond the end of line.

Departure at stop coil indicator

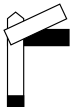
Departure at stop ground coil of the next departure signal is installed here. You must not pass beyond this coil if the departure signal is at **Stop.**

Departure at stop coil for the opposite direction

Your driving direction is not subject to its control.

Risky area limit

Proceed with caution and be ready to slow down. Black circle indicates the end of risky area.



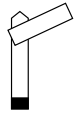
level track → uphill

Gradient indicator

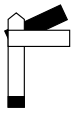
The white arm indicates the coming gradient, the direction is from center to outside.

The black arm indicates the current gradient, the direction is from outside to center.

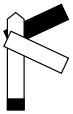
level → downhill



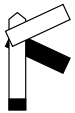
downhill → uphill



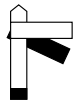
downhill → level



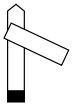
downhill → downhill



uphill → uphill



uphill → level



uphill → downhill

Whistle sign

Sound the horn once.

Approaching the station

Check whether the train is scheduled to stop or to pass.

Snow-plow vehicle warning signs

There are no snow-plow vehicles in the game and these signs are not relevant for you.

6 GENERAL INFORMATION

APPENDIX: REFERENCE TIMETABLE

会津若松運輸区

施行日　指定日

① 列車	最高速度（Km／h）	速度種別	けん引定数
４３３Ｄ	② 65	③ 停気Ｆ８	④ ４０系 ４両

運転時分	停車場名	着	発（通）	着発線	制限速度	記事
⑤	4両	⑥	⑦		⑧	
	会津若松		19.40		２５	
2 45	七日町	42 45	43 15			
3 15	西若松	19.46 30	19.47 30			
4 45	会津本郷	52 15	52 45		３５ ３５	
5 45	会津高田	58 30	59			
5 00	根岸	20.04	04 30			
3 00	新鶴	07 30	08			
3 15	若宮	11 15	11 45			
3 45	会津坂下	20.15 30	20.21 30		３５ ３５	
8 30	塔寺	30	30 30			
6 00	会津坂本	36 30	37			
5 00	会津柳津	20.42	20.42 30			
6 30	郷戸	49	49 30			
5 30	滝谷	55	55 30			
3 15	会津檜原	58 45	59 15			
3 45	会津西方	21.03	03 30			
3 00	会津宮下	21.06 30	21.07		４０ ４０	
9 00	早戸	16	16 30			
6 45	会津水沼	23 15	23 45			
5 30	会津中川	29 15	29 45			
4 15	会津川口	21.34			３５	

注意事項

1 **Train number.** "D" is for DMU train

2 **Permitted speed limit:** km/h.

3 **Classification of train speed** is the expected balancing speed on a 10/1000 slope, which is used in train diagram planning. F8 indicates a balancing speed of 58 km/h.

4 **Train formation**

5 **Expected running time between stations:** mm/ss

6 **Arrival time:** hh/mm/ss

7 **Departure time:** hh/mm/ss

8 **Speed limit at station:** km/h. The upper-left shows the speed limit for the entrance turnout, and the lower-right shows the speed limit for the exit turnout.

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* Listed above in no particular order


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