

A UWS's Mainline Product

Tadami Line User Manual



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1. Route Information

1.1 Background information

The Route and a brief history

The Tadami Line is a local railway line in northeast Japan, connects Aizu-Wakamatsu with Koide.

This route was first open in 1928 as under title of Aizu railway, with service between Aizu-Wakamatsu and Aizu-Yangaizu. Then the route extended to Aizu-Miyashita in 1941. In 1942 at the western end, the Koide-Oshirakawa section was open and named as Tadami Line.

Aizu-Miyashita to Aizu-Kawaguchi section opened in 1956. At that time, the Tagokura dame was under construction, a light freight railway was built to link the construction site and Aizu-Kawaguchi station to transport construction material. After the Tagokura dame completed, the light freight railway was upgraded to heavy rail and extended to Tadami in 1963.

In 1971, two sections were connected with the opening of Tadami – Oshirakawa. The route of original Aizu line now renamed as Tadami line.

Tadami line is famous for its beautiful scenery along the route, won the title of “Railway lines featuring beautiful autumn leaves”, “Local line featuring beautiful scenery of snow”. Those who visited were unexceptionally charmed by the scenery.



1.2 The route map

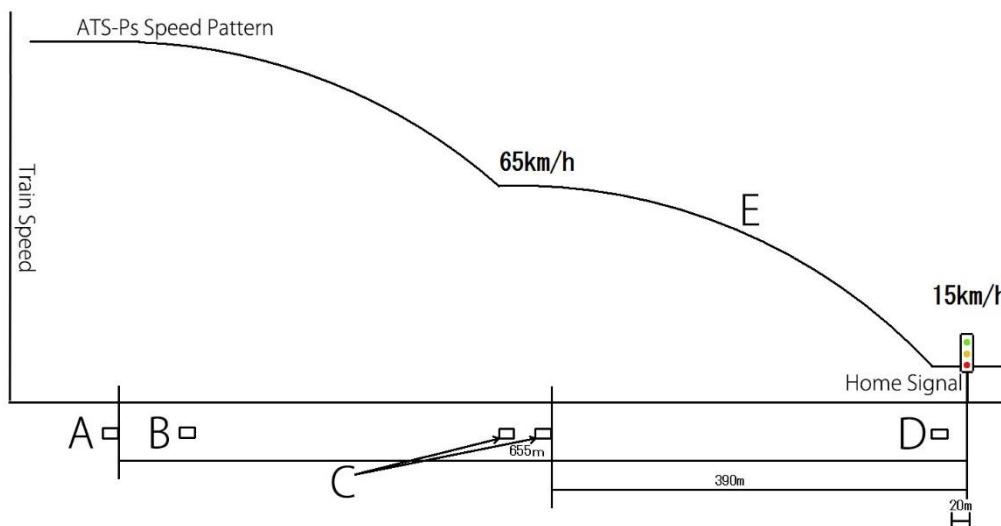
	●	会津若松	Aizu-Wakamatsu
	●	七日町	Nanukamachi
	●	西若松	Nishi-Wakamatsu
大川橋梁	{	●	会津本郷
宮川橋梁	{	●	会津高田
	●	根岸	Negishi
	●	新鶴	Niitsuru
	●	若宮	Wakamiya
	●	会津坂下	Aizu-Bange
	●	塔寺	Tōdera
	●	会津坂本	Aizu-Sakamoto
	●	会津柳津	Aizu-Yanaizu
	●	郷戸	Gōdo
	●	滝谷	Takiya
滝谷川橋梁	{	●	会津松原
第一只見川橋梁	{	●	会津西方
第二只見川橋梁	{	●	会津宮下
第三只見川橋梁	{	●	早戸
	●	会津水沼	Aizu-Mizunuma
第四只見川橋梁	{	●	会津中川
	●	会津川口	Aizu-Kawaguchi
第五只見川橋梁	{	●	本名
第六只見川橋梁	{	●	会津越川
	●	会津横田	Aizu-Yokota
第七只見川橋梁	{	●	会津大塩
	●	会津塩沢	Aizu-Shiozawa
第八只見川橋梁	{	●	会津蒲生
	●	只見	Tadami

1.3 ATS-Ps safety system

ATS or automatic train stop is a system on a train that automatically stops a train if certain situations occur to prevent accidents. The ATS installed on most Japanese trains and routes (apart from Shinkansen), are mostly transponder-based. In this DLC, we provide you ATS-Ps and ATS-S system

ATS is a system using a pattern renewal transponder. ATS-Ps will generate a speed curve you will need to follow once you pass the first transponder. If your speed is 5 km/h over the speed limit, then the system will kick-in to slow down the train. An example graph can be seen below. The ATS-S functions much like the UK AWS system but with more transponders before home signals.

There are usually 4 transponders installed in front of signals. When the train passes transponder A, it will get the first ATS-PS message while B, C and D will renew the message. E means the system monitor curve; system will kick-in curve once you fail to follow the speed pattern. Unlike the ATS-P, ATS-Ps speed pattern will not directly down to zero when home signal is red.



If the home signal is red once you pass transponder A, a warning chain sound will remind you there is a red signal just 655m ahead. You need to push the ATS confirm button quickly, or the train will apply an emergency brake after 5 seconds. Then there will be another caution sound; it will turn off automatically if signal changes to green or yellow once you are passing another transponder. You need to apply the brake to slow down the train before the red signal, or system will kick-in to stop the train.



A Transponder on the track

There is also an ATS-Ps panel installed on the top of driver's desk. The yellow part is the speed you should not pass, green part is your current speed. Lower left green light illuminated indicate the ATS-Ps speed pattern is generated (home signal ahead is red).



ATS-Ps speed pattern generated (train is moving)



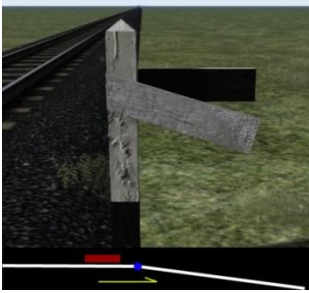
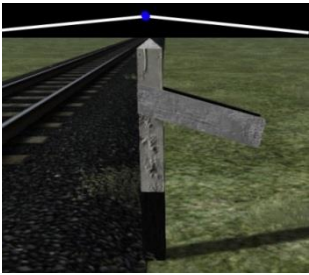
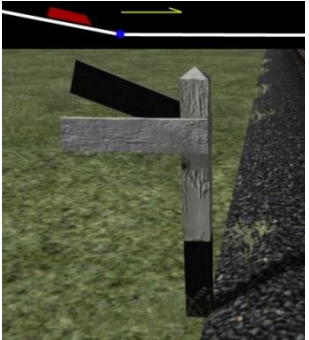
ATS-Ps speed pattern generated (train stopped)

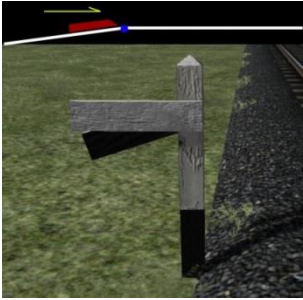
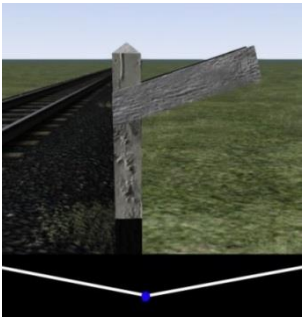
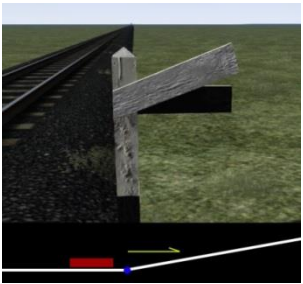


ATS-Ps speed pattern is not generated.

1.4 Route signs and train stop position

Route Signs

Speed limit signs	
	Normal speed limit sign. Used by default on the main line, indicates the speed limit ahead.
	The Speed limit of left track. Placed near junctions, indicates the speed limit of the track going left.
	Placed near junctions, indicates the speed limit of the track going right.
Track gradient indicator	
Red boxes correspond to the train and yellow arrows correspond to the direction the train is going.	
	The track changes from being level to being a downwards slope.
	Track ahead going down slope. Both sides are slopes.
	Track ahead is going to level out. The track changes from being a downhill slope to being level.

	Track ahead levelling out. The track changes from being an uphill slope to being level.
	Track ahead going up. Both directions go uphill.
	Track ahead going up. The track changes from being level to being an uphill slope.
Train stop position signs	
	Stop position for steam locomotive
	Stop position for trains with 4 cars (EMU/DMU).
	Stop position for trains with 2 cars (EMU/DMU).
	With crossing: Absolute stop position. Trains should stop before this sign if they are required to stop at this station. Without crossing: Stop at this sign if required to stop at this station.
Other signs	
	Border sign. Usually placed before a junction. Train should stop before this sign or will crash with train on nearby track.

2. Kiha 40 DMU

2.1 Basic information

The Kiha 40 series is a diesel multiple unit design and introduced by Japanese National Railways (JNR) in 1977. After privatization in 1987, all Kiha 40 train operated by Japan railways group companies on suburban and rural services. It also served in other private railway companies and Myanmar transferred from JR companies.

Between 1977 and 1982, a total of 888 Kiha 40 were built. They are mainly divided into 4 subtypes: -100 are designed for extreme cold area like Hokkaido, -500 are in cold regions like Tohoku and Chubu regions. -1000 and -2000 are designed for warm area. During the long period of service, many modifications were made for those subtypes, even same subtypes may have different design on vehicle as different depots may have different requirements.

Constructed:	1977-1982
Number built:	888 vehicles
Number in service:	714 vehicles (as of 2018)
Car length:	21,300 mm
Width:	2,900 mm
Maximum speed	95 km/h
Engine:	L6 Diesel engine type DMF15HSA
Power output:	220 PS (Engine output)
Safety systems:	ATS-Ps (in this DLC)
Track gauge:	1,067mm
Transmission Type	liquid transfer
Gearbox	DW10

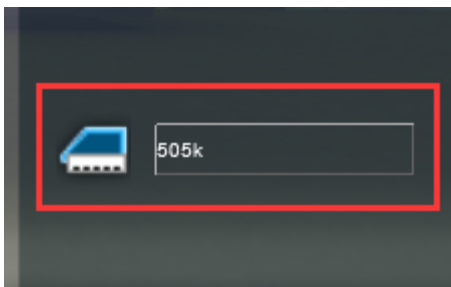


2.2 External models

In this DLC we provide you detailed Kiha 40-500 train set model. On Tadami line, Kiha 40 consist up to 2 cars per train, 4 cars per train at most.



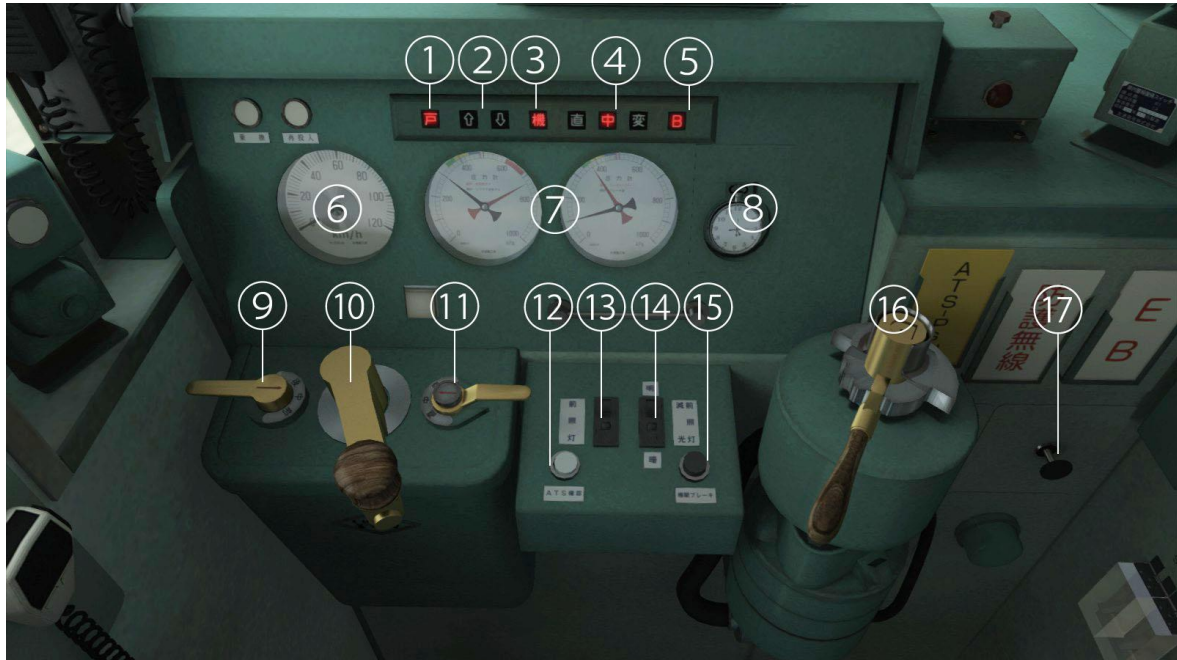
You can change numbers on the train in the Scenario Editor. The Kiha40 series uses 3 digital numbers and one English character, so you need to enter 3 numbers plus one English character to get them to work. Double click an engine in scenario editor, and enter the number in the right window:



The first number should be 5 means this is -500 series subtype of Kiha40. English characters meaning can be seen in Appendix 2.

2.3 The cab

Main Driver Desk



- | | |
|----------------------------|-------------------------|
| 1. Door state light* | 2. Reverser state light |
| 3. Engine state light | 4. Gearbox state light |
| 5. Brake state light | 6. Speedometer |
| 7. Brake pressure gauge | 8. Pocket watch |
| 9. Reverser | 10. Regulator |
| 11. Gear lever | 12. ATS Confirm |
| 13. Headlamp master switch | 14. Headlamp switch |
| 15. Emergency brake | 16. Train brake handle |
| 17. Wiper | |

* When doors open, door state light will off.

* To turn on Headlamp switch, you much first turn on Headlamp master key first.

.

Right lower side



18. Rollsign lamp

19. Desk light

20. Cabin light

21. Cab light

22. Sun visor

Front upper side



2.4 The Cabin

This DLC offers a detailed cabin view, you can use your mouse and keyboard arrow key (←and→) to explore the cabin.



2.5 Hotkeys

Headlight shift up	H	Headlight shift down	Shift+H
Desk light	Ctrl+H	Reverser	W/S
Regulator handle increase	A	Regulator handle decrease	D
Train brake control increase	Apostrophe	Train brake control decrease	Semi Colon
Emergency brake	Backspace	Horn	Space
Wiper	V	Cab light	L
Cabin light	Ctrl+L	Instrument light	I
ATS Confirm	Q	Cabin heater	M
Handbrake	Slash	Gear shift down	Shift+E
Gear shift up	E	Train Start/Stop*	Z

*_Kiha40 does not have master key in cab, in real world, to start the engine, driver should go to the engine and start it by press button on starter, then go back to cab. So here in game, you need press button “Z” to start or shut down the train.

3. Scenarios

8 career scenarios are enclosed with this DLC to enhance your experience on Tadami line. You can find them by click Drive on top game menu and then click on Career tag.

We arrange these scenarios in all four seasons because Tadami line is famous for its scenery in different season. With these scenarios, you will be running through four seasons on Tadami line.

Please pay attention, manual junctions are installed between section of Aizu-Bange and Tadami, you need to check and change your track manually.

1. The Sound of Spring
Start location: Aizu-Wakamatsu
Terminal station: Aizu-Bange
Duration: 40
Season: Spring
2. Summer breeze in the valley
Start location: Aizu-Bange
Terminal station: Aizu-Kawaguchi
Duration: 95
Season: Summer
3. Colorful forest in autumn time
Start location: Aizu-Kawaguchi
Terminal station: Tadami
Duration: 50
Season: Autumn
4. Winter wonderland
Start location: Tadami
Terminal station: Aizu-Kawaguchi
Duration: 50
Season: Winter
5. A Midsummer Night's Dream
Start location: Aizu-Kawaguchi
Terminal station: Aizu-Bange
Duration: 65
Season: Summer

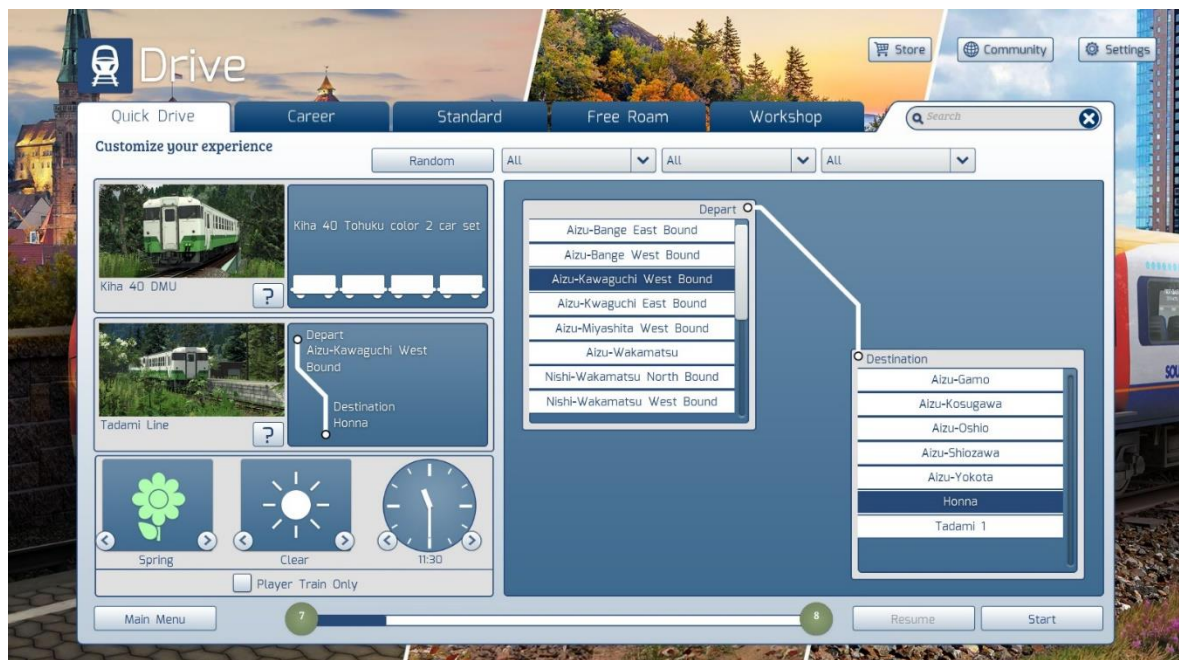
6. Spring thunder waking of insects
 Start location: Aizu-Bange
 Terminal station: Aizu-Miyashita
 Duration: 40
 Season: Summer

7. Tourist special service A
 Start location: Nishi-Wakamatsu
 Terminal station: Aizu-Miyashita
 Duration: 60
 Season: Summer

8. Tourist special service B
 Start location: Aizu-Miyashita
 Terminal station: Tadami
 Duration: 60
 Season: Winter

Quick Drive

This DLC also features Quick Drive scenarios; you can create your own journey by clicking on the Quick Drive menu.



Appendix 1: Reference Timetable

Aizu-Wakamatsu to Tadami reference timetable for scenario creators

Station	Arr.	Dep.
AizuWakamatsu	--	12:00:00
Nanukamachi	12:02:48	12:03:00
Nishi-Wakamatsu	12:06:00	12:07:00
Aizu-Hongo	12:12:00	12:13:00
Aizu-Takada	12:19:00	12:20:00
Negishi	12:25:00	12:26:00
Niitsuru	12:29:00	12:30:00
Wakamiya	12:33:00	12:34:00
Aizu-Bange	12:38:30//	12:39:00
Todera	12:45:00	12:46:00
Aizu-Sakamoto	12:51:30	12:52:00
Aizu-Yanaizu	12:57:00	12:58:00
Godo	13:03:00	13:04:00
Takiya	13:08:00	13:09:00
Aizu-Hinohara	13:12:00	13:13:00
Aizu-Nishikata	13:17:00	13:18:00
Aizu-Miyashita	13:21:00	13:22:00
Hayato	13:29:30	13:30:00
Aizu-Mizunuma	13:35:30	13:36:00
Aizu-Nakagawa	13:41:30	13:42:00
Aizu-Kawaguchi	13:46:30	13:48:00
Honna	13:51:30	13:52:00
Aizu-Kosugawa	14:00:00	14:01:00
Aizu-Yokota	14:06:00	14:07:00
Aizu-Oshio	14:10:30	14:11:00
Aizu-Shiozawa	14:18:30	14:19:00
Aizu-Gamo	14:24:00	14:25:00
Tadami	14:32:30	--

Appendix 2. Kiha 40 number reference table

Characters	Meanings	Characters	Meanings
White base black character rollsign			
a	Local service	b	Rapid service
c	Temporary service	d	Group service
e	Not in service	f	Test run
g	Aizu-Wakamatsu	h	Aizu-Bange
i	Aizu-Kawaguchi	j	Aizu-Oshirakawa
k	Tadami	l	Koide
m	Kitakata	z	White blank base
Black base white character rollsign			
A	Local service	B	Rapid service
C	Temporary service	D	Group service
E	Not in service	F	Test run
Z	Black blank base		

Attention! Please set the Scenery Density to higher level, or you will miss a lot of sceneries!



Credits

Tadami Line route & Kiha 40 DMU

Staff

Model & Textures	<i>CNAurora</i>	<i>T9Express</i>
Scripts	<i>CNAurora</i>	<i>T9Express</i>
Sound Effects	<i>T9Express</i>	

Developer	<i>Union Workshop</i>
Publisher	<i>Dovetail Games</i> <i>train-simulator.com</i>
Special thanks	<i>Beta testing team</i> <i>3rd party team of Dovetail Games</i>

* listed above in no particular order

