

Shanahaialle

HOCHBAHN

HH8 YF 1479

13



Deservelektrischer Hybridbus.

HOCHELH



Manual

1479

Developed by: Manual[.]

Darius Bode Darius Bode Aerosoft

Copyright: © 2017 / Aerosoft GmbH Airport Paderborn/Lippstadt D-33142 Büren, Germany

> Tel: +49 (0) 29 55 / 76 03-10 Fax: +49 (0) 29 55 / 76 03-33



F-Mail[.] Internet:

info@aerosoft de www.aerosoft.de www.aerosoft.com

All trademarks and brand names are trademarks or registered of their respective owners. All rights reserved.



OMSI 2 add-on HafenCity — Hamburg modern Manual

add-on for

OMSI – The Omnibus Simulator 2

Content

ntroduction	6
About this manual	6
System requirements	7
Installation	7
Removal	8
Important information about game performance	8
Acknowledgement	9
Route introduction	10
Line 6	10
Line 111	11
Mesterkamp bus depot	13
Гhe new hybrid buses	15
Volvo 7900 H und 7900 LH	15
Technical data	17
Volvo 7900 H	17
Volvo 7900 LH	17
Operation instructions	18
Control lights Specifics Central information display Air conditioning Using the ticket printer	18 21 22 23 24 26
Door controls	29
Light controls	29
Duty roster and codes	30
Sightseeing	34
Rathaus (town hall)	34
Speersort	35
Börse (stock exchange)	36
Rödingsmarkt	36



	Sankt Michaelis church	
	Baumwall	
	Landungsbrucken (landing bridges)	
	Cap San Diego	
	Rickmer Rickmers	
	Kehrwieder	40
	Speicherstadt	41
	Elbphilharmonie	
	Hauptbahnhof (central station)	43
	HafenCity University	
	Marco Polo Tower	
	Millerntor Stadium	45
	Flakturm IV (flak tower IV)	
	Rindermarkthalle (cattle-market hall)	
	Hamburger Dom	
	Fischauktionshalle (fish auction hall)	
	Cruise Center Altona	
	Davidwache (David guard house)	
	Planetarium	51
	Rathaus Altona (city hall)	
	Schellfischtunnel (haddock tunnel)	
		-
Арр	endix	54
	Route outlines	
	Linie 6 – U Borawea	55
	Linie 6 – Speicherstadt Auf dem Sande	56
	Linie 6 – Altstadt Brandstwiete	57
	Linie 6 – II Feldstraße	
	Linio 6 – Rathausmarkt	50
	Linie 0 - Natilausillarkt	
	Linie III – DI. Allund	
	Linie TTT – HarenCity Shanghalallee	

Introduction

Back in the harbor city – take a ride in the modern hybrid buses on two new lines through Hamburg's HafenCity and Speicherstadt in the OMSI 2 add-on "HafenCity – Hamburg modern".

The scenario is set at the end of 2015 and also contains a lifelike bus depot.

The included hybrid buses are a lifelike copy of original vehicles from Hamburg and feature matching paint schemes, many new sounds and the first complete implementation of a parallel hybrid drive in OMSI 2.

Remember the detour on line 111 on Sundays due to the fish market. Line 6 will be particularly challenging with different routes and destinations. Additional roads for service trips across the city and a total of 11.6 mi of bus routes with 50 stops have been added.

With OMSI 2 add-on "Hamburg Day and Night" installed you will also be able to drive on bus lines 109 and 688.

In addition, this add-on offers new AI cars, cyclists, ships, trains, passenger voices, tickets, hundreds of new objects and close-to-life roster and tour plans.

About this manual

This manual is limited to the installation of and introduction to this add-on. It is a supplement to the manual for the base game "OMSI 2 - The Omnibus Simulator".

Please read the manual for the main OMSI game for descriptions and instructions about basic functions and configurations. If clarification for the add-on is required, explicit references to the OMSI manual are provided in this manual.

System requirements

In order for the add-on "HafenCity – Hamburg modern" to run as smoothly as possible, your system should meet the following minimum requirements:

- OMSI 2 The Omnibus Simulator min. 2.2.032
- Operating system: Microsoft Windows 7 / 8 / 10
- Processor: Dual Core CPU with 3 GHz
- Memory: 4 GB RAM
- Graphics card: 2 GB (DirectX 9.0 or higher)
- Free disk space: 5,5 GB
- Internet connection and Steam user account required

Installation

You have to be logged in with administrator rights before you start the installation of OMSI 2 add-on "HafenCity – Hamburg modern". To start the installation simply insert the CD into your CD drive. Select your preferred language in the lower left corner and click on "Installation". After the installation has finished, you'll be presented with information about activating your license. Please read it carefully and follow the steps as described to install the add-on. Please note that you need an internet connection for this. Steam and the base game OMSI 2 have to be installed already.

If you have purchased the download version, please open Steam in your library view. Click the button "Add a game..." in the lower left-hand corner and then click on "Activate a Product on Steam...". A new window opens. Follow the steps and enter the product key you purchased when prompted.

Removal

In order to fully remove OMSI 2 add-on "HafenCity – Hamburg modern" right click the "OMSI 2" entry in your Steam library, select "Properties" and open the "DLC" tab. Here, remove the checkmark next to the "OMSI 2 add-on HafenCity – Hamburg modern" entry.

Important information about game performance

A detailed city scenery can be a challenge for OMSI 2's graphics engine. You will find multiple ways to improve the game's performance here. Wrong settings can lead to a low frame rate (FPS), white or missing 3D graphics, missing sounds and an error message "System error code 8".

The new add-on comes with recommended settings that can be called by using the options menu - "Load options". This will globally effect OMSI 2. I want to suggest to save your current options before changing or loading the settings.

You can also modify certain settings by yourself. The largest increase of performance will be achieved by reducing the options "Neighbor Tiles Count" in "Graphics" to 1. Also, use the tab "Al-traffic" to set "Schedule Priority" to 1 or 2 and "Road Traffic Scheduled" to 20–30.

If you still experience issues with performance, use the following recommended settings:

Graphics - Real time reflections: Economy

Graphics – Particle systems: off

Graphics - Stencil Buffer Effects: off

Graphics (advanced) – Max. Tex. Mem.: 1024–4096 MB depending on your GPU

Graphics (advanced) - Real Time Refl. Size: 256-512

Sounds - Max. Sound Count: 400

- Al-traffic Road Traffic Max. Count: 250
- Al-traffic Road traffic factor: 90%
- Al-traffic Parked cars: 80%
- Al-traffic Humans Max Count: 500
- Al-traffic Factor Passengers: 100%
- Al-traffic Use reduced Al list: active

Acknowledgement

Special thanks for supporting the development of this add-on to:

Barbara Bode (texture design, editorial)

Markus Doemens (bus stop objects, subway trains, passenger voices, beta test)

Rolf Westphalen (bus depot Mesterkamp, surrounding buildings, beta test)

Many thanks also to all other beta testers, passenger voices and supporting companies:

Marcel Blank	Anika Krüger
Lutz Bode	Andreas Lignow
Carsten Christier	Tobias Rumrich
Tobias Christier	Jürgen Röper
Christoph Eckart	Susanne Seifert
Michael Engelhardt	Aerosoft GmbH
Leonard Goetsch	Hamburger Hochbahn AG
Saskia Hölscher	Verkehrsbetriebe Hamburg-Hol- stein GmbH

Route introduction

No matter if you are already familiar with Hamburg or it's your first time coming to the Hansestadt:

I want to present the new bus routes and introduce you to some useful tips to make you drive like a real-life bus driver.

Line 6

The "metro-bus" line 6 operates in a tight schedule Monday through Friday from 4 am to midnight. There is continuous operation on the weekend nights. This line is solely served by articulated buses.

Starting north-east of the city center in Winterhude, the trip departs at the subway station Borgweg close to Hamburg's municipal park. It is a short journey to U Alsterdorf (add-on "Hamburg Day and Night", Line 109) and the bus depot Mesterkamp. We'll keep moving forward on line 6 through residential areas (Winterhude/Uhlenhorst) towards the Außenalster. Important transfer stations are Goldbekplatz (bus 25) and Mundsburger Brücke (bus 172, 173, 37).

Leaving the banks of the Außenalster at Graumannsweg, we'll get closer to the central station through the Lange Reihe in the district of St. Georg. You might recognize the main station from the line 109 in the add-on "Hamburg Day and Night".

After entering the Mönckebergstraße, the two different routes of bus 6 split after the stop Gerhart-Hauptmann-Platz. Buses will alternately continue to U Feldstraße in St. Pauli or Auf dem Sande in the Speicherstadt. There are also short supporting trips between Gerhart-Hauptmann-Platz and Goldbekplatz during the peak rush hours.

Make sure to watch for no-stop service trips especially between short runs and during the night. You will see the "***" on your roster paper indicating a service trip with no passengers. The OMSI 2 route helpers also show recommended routes for service trips.

Passengers are allowed to board at all doors Monday through Saturday until 9 pm.



Please take care of the bus stop names that OMSI 2 will display in your schedule. If you begin a trip at "U Borgweg – Pause 1" or "Brandstwiete – Pause 2" you will actually have to position your bus at that very stop to make OMSI 2 recognize the start of the trip. Also check route outlines in the next chapter. To avoid this problem, make sure to click the correct starting bus stop before you activate a schedule in the OMSI 2 schedule menu!

Line 111

Since Hamburg's new concert hall Elbphilharmonie has opened in late 2016, the passenger density on bus 111 has increased dramatically. This is also caused by rising popularity of residential and business areas in the HafenCity. In this add-on, we are still in late 2015 when passenger rates were moderate. Line 111 was mainly operated by standard 40-ft buses back then.

Despite a marketing campaign and the addition of "Elbphilharmonie" to the connecting bus stop signs, only a few concert attendees use the bus 111 for travel to the new venue. Most people take the short walk from Baumwall subway or use cars and taxis.

Bus 111 starts at Bf. Altona which you might already know from night-bus 688 in the add-on "Hamburg Day and Night". After leaving the bus station, you will continue going straight towards Altona city hall and not take a left where line 688 heads to the Reeperbahn.

Make sure to remember the detour on Sunday mornings during the fish market. You will then need to turn left after the stop Rathaus Altona. In weekday standard routes, take a right followed by an immediate left there and go down the Elbberg. You will recognize a run with detour by checking your upcoming stops. Behnstraße after Rathaus Altona or Rathaus Altona after Pepermölenbek indicates an alternative route.

In normal service, line 111 will lead through business streets in the harbor area to pass the cruise ship terminal, fish market and continue up to the Reeperbahn. We join the night-bus 688's route there for a while and turn right at Davidstraße.

A short ride on cobblestone passing the Herbertstraße and you will see the dome of the old Elbe tunnel entrance as well as the Landungsbrücken (landing bridges).

Following the Hafenstraße eastbound, you can discover the Überseebrücke, an old bunker and the museum ships Rickmer Rickmers and Cap San Diego. We will make a right turn after Baumwall subway into the Speicherstadt. Next stop is Am Kaiserkai right next to the Elbphilharmonie.

The next part of the route is a short shared path with line 6 between Am Sandtorkai eastbound until the next crossing. We will then turn right into Großer Grasbrook which takes us to the HafenCity and Marco-Polo-Terrassen, Magellan-Terrassen, Marco Polo tower and Überseequartier. The trip ends right in front of the HafenCity university in the Shanghaiallee.

There are two waiting positions and a restroom container. Do not pull up to the departure stop before your break time is over.

Passengers need to board at the front door and present their valid ticket to the driver.

Please take care of the bus stop names that OMSI 2 will display in your schedule. If you begin a trip at "Shanghaiallee – Pause 1" you will actually have to position your bus at that very stop to make OMSI 2 recognize the start of the trip. Also check route outlines in the next chapter. To avoid this problem, make sure to click the correct starting bus stop before you activate a schedule in the OMSI 2 schedule menu!

Mesterkamp bus depot



The bus depot Mesterkamp is located at the Weidestraße in Barmbek and has been a horse-train and streetcar depot since 1890. It houses around 140 buses today and is set to be replaced by a larger new depot in a different location in 2018.

Though you will not find Volvo hybrid buses on this depot in real life, it operates line 6 and perfectly fits in this map to quickly reach Borgweg, Alsterdorf and the city center.

There are multiple rules to observe on the premises. The entry and exit gates will automatically open and close on approach (caution to the light). When you return to the depot after your duty, make sure to obey the BMS display. It will show you a designated park position for your bus. If there is no display, park a 40-ft bus on legs 2–3 or a 60-ft bus at the right side fence or on legs 6–7.

Observe the one-way traffic in the depot. You may only turn right after entering through the gate. When you leave the yard, go around the garage buildings until you reach the exit gate. The area right in front of the garage doors up to leg 1 is excluded from one-way traffic. You are needed to stop before re-entering the circle street and may still only turn left there when leaving.



The new hybrid buses

Volvo 7900 H und 7900 LH



The two new bus models were built close-to-life based on real vehicles from Hamburg regarding functionalities like drive-train, door controls, dashboard and more. You can also choose between realistic paint schemes.

While these buses are mostly used on line 109 in real life, you will find them on all driveable lines in this add-on.

If you want to replace an AI bus driver and take over his vehicle, make sure you choose a Volvo and not a C2 bus. The C2 models are reduced AI versions that cannot be driven in this add-on. If you own the add-on "Three Generations" you can simply replace them in the AI list with the full-feature C2.

The first Volvo hybrid buses of HOCHBAHN were put into service at the end of 2014. The predecessor had been used since 2011 by a subsidiary company. After 5 40-ft and 15 60-ft vehicles of the current type were delivered, all 6 other 40-ft buses were transferred from another subsidiary to HOCHBAHN in addition. All vehicles were equipped with the VisionAir design schemes.

Volvo's model 7900 has been introduced in 2011 and is manufactured in Poland. The parallel hybrid drive (on the 40-ft model) is made of a 4-cylinder Diesel with 177 kW and an electric motor with 110 kW. The gearbox is no classic torque converter but an automatically operated 12-gear shift transmission.

The vehicles conform with the Euro 6 standard (exhaust cleaning by AdBlue) and store electric drive energy in a lithium ion battery with 600V. The battery is charged by the Diesel engine and recuperation when braking. In contrast to classic Diesel-driven buses, many auxiliaries like the compressor, A/C, doors and hydraulics are powered by electrics. There are two separate 24V circuits due to the high power demand.

The buses can kneel down to lower entry height. There is a fold-out ramp for wheelchair access and power-driven roof hatches.

As in all modern HOCHBAHN buses with three and four doors, you have the possibility to force-operate the rear doors or use the release switch for passenger operation.

The 7900 buses have LED daytime running lights and LED rear lights. The usual orange LED target displays are used and there is a passenger information system with 2 LCD displays.

Some side and roof panels are made of aluminum to save weight. Owing to the hybrid drive technology, the buses still have a high empty weight.

The included paint schemes also contain versions of VHH and Jasper/ SBG vehicles that are technically not identical with the HOCHBAHN buses. Also, rechargeable plug-in hybrid buses were not included in this add-on.

HOCHBAHN buses 1474 and 7477 were used for the recordings.

Technical data

Volvo 7900 H

Length:	12,134 mm
Width:	2,550 mm
Height:	3,265 mm
Max. gross weight	: 17,980 kg
Max. speed:	85 kph
Seatings:	28+1
Standings:	48
Drive:	Volvo D5K 240, 4-cylinder in-line Diesel engine, 177 kW/918 Nm and electric motor Volvo I-SAM, 110 kW/800 Nm

Volvo 7900 LH

Length:	18,134 mm
Width:	2,550 mm
Height:	3,280 mm
Max. gross weight	:: 29,000 kg
Max. speed:	85 kph
Seatings:	40+1
Standings:	114
Drive:	Volvo D5K 240, 4-cylinder in-line Diesel engine, 177 kW/918 Nm and electric motor Volvo I-SAM, 130 kW/1200 Nm

Operation instructions

Dashboard



1	Switch cashdesk lights	2	Switch interior lights
3	Switch interior lights rear / ow level	4	Switch raise air-ride level
5	Light selector (Off/Stand/ Full-beam) Pull out: Fog tail lights	6	Selector wheel dashboard lighting
7	Switch hazard lights	8	Switch external speaker (no functionality)
9	Switch radio communica- tion (no functionality)	10	Column switch: Indicators, horn, headlight flashers, wipers, washer
11	Rev meter	12	Control lights (check other chart)
13	Speedometer	14	Central information display (check other chart)
15	Light stop request (push: change brightness)	16	Light wheelchair/stroller request (push: change brightness)

17	Switch change display page	18	Switch vehicle menu (no functionality)
19	Switch lock doors	20	Switch cut-out external door emergency buttons
21	Gear selector	22	Switch kneeling
23	Switch stroller	24	Switch school bus mode (automatic hazard lights)
25	Switch stop brake	26	Switch door release
27	Door switches 1–3 (40-ft), 1–4 (60-ft)		



28	24V outlet	29	Emergency cut-off start-blocking
30	Switch ventilation control	31	Switch radio communica- tion volume (no functional- ity)
32	Switch release articulation angle blocking	33	Switch mirror heat
34	Switch reset door emer- gency release buttons	35	Roof-hatch operation panel
36	Switch emergency raise	37	Switch video record (no functionality)

38	Emergency cut-off 24V circuits	39	Power mirrors (no func- tionality)
40	A/C panel: driver's place temperature selector	41	A/C panel: driver's place ventilation flaps
42	A/C panel: driver's place ventilation power	43	A/C panel: recirculation air
44	A/C panel: auxiliary heat	45	A/C panel: switch passen- ger climate control
46	Emergency cut-off 600V circuits	47	Parking brake valve
48	Parking safety valve (when parking brake released on too low pressure)	49	Tire fill outlet (no function- ality)



50	Foot-switch announce- ments (no functionality)	51	Foot-switch dashboard adjustment
52	Brake treadle	53	Accelerator treadle
54	Ignition key		



55	Emergency release doors	56	(no functionality)
57	ZEM (for use by garage only, exclusive electric drive mode!)	58	Switch Driver's place head ventilation

Control lights

All lights come up after start for a few seconds as a self-check.

	Coolant temperature	Ē	Charge control
<u>30</u>	No functionality	\bar{Q}	Check engine

B	Mirror heat	H04	No functionality
00	No functionality	Т	Trip recorder
ABS	ABS		Brake system
- <u></u>]3	Particle filter		No functionality
2	No functionality	(H)	Stop brake
P	Kneeling	•	Left indicator
٠	Right indicator		High beams
Q≢	Fog tail lights	Å	No functionality
	Parking brake	S	Stop requested
CHECK	Low-priority failure	STOP	Highest priority failure (Not safe to operate vehicle)

Specifics

A few specifics about Volvo hybrid buses explained for you to consider while driving.

Parking safety valve: When the parking brake is released while air pressure is low, the safety valve will engage and avoid the vehicle from moving. You then need to re-engage the parking brake, wait for the reservoir to rise to a sufficient pressure level and disengage the



safety valve. Now, the parking brake can be released.

Door release: The passenger controls on the rear doors will only be released when turned on while standing. Also, the start blocking will not turn off if you operate the accelerator treadle before all doors close.

Doors emergency release: If an emergency release button was pushed, you need to use the reset switch on the window console at the driver's place.

Articulation angle blocking: You can use the blocking release switch on the window console in the articulated bus to temporarily release the angle blocking.

Hybrid drive: To fully use the potential of your hybrid drive, accelerate gently up to the 2nd gear. Brake smoothly, slow and steady to recuperate as many volts as possible.

Central information display

The information display in the center of the dashboard will show you important information about door status and vehicle failures. After booting up, you will see pressure and fuel reserve. When pressured air is too low, the screen will stay on until sufficient pressure is available.



The display page switch (dashboard elements #17) can be used to browse between the display pages.

The screen will automatically switch between stop and drive menu in operation mode and show the "HYB" tag as soon as the hybrid system has started. You will then see the battery charge status. Avoid full acceleration and brake slow and steady to recuperate as much energy as possible.



The permanent information line at the bottom will always show exterior and interior temperature, time and odometer. The letters R, N and D indicate the currently selected transmission speed.

A stroller symbol will light up when the combined request switch for

wheelchair and stroller has been engaged.

The stop menu will come up when doors or stop brakes are engaged. A flashing door symbol indicates a door failure or an engaged emergency release.



The central information display will also show failure messages. A high-priority message will stay on until it is solved.

Air conditioning

The hybrid buses feature electric A/C, auxiliary heat, roof hatches and pull-down windows. Windows will remain locked and A/C will be used during normal operation.

The passenger A/C is switched on by default when starting the engine. You can toggle it with the push button on the climate control panel on the window console (see dashboard elements #45). The ventilation can be switched to manual operation with the switch #30.

Use the oil-driven auxiliary heat to quickly heat up the coolant (switch #44). It can also operate when the engine is turned off.

Switch to recirculation air in bad ambient air or to max out the heating power (switch #43).

The three control knobs on the left of the climate control panel are used to adjust the driver's place ventilation. It does not affect the passenger room. There is an extra head ventilation that can be toggled with a separate switch above your head.

59 60 Splaros Hatch Control Auto	
61 62 63	
64 ^{SEL} 65 ^{MEM} 66	

59	Indicator front hatch	60	Indicator rear hatch
61	Button to set selected hatch de-airing	62	Button to set selected hatch fully open
63	Button to set selected hatch venting	64	Button to select hatch
65	Button to set selected hatch to closed	66	No functionality

The roof hatch control panel is located on the window console. You need to choose a hatch with SEL before setting the actual position. The hatches will automatically close when the bus is turned off or rain comes up.



Using the ticket printer

The ALMEX ticket printer ("EFAD 2") is a highly advanced touchscreen device that was developed in cooperation with HOCHBAHN. It sells tickets, controls target display, interior stop display and plays station announcements.

The printer will start together with the main electrics. It will remain in standby for a few minutes after electrics have been turned off to keep settings, powered by battery. The outside target display is initialized each time the electrics key is toggled.

On the outside of the printer, you find a passenger display, ticket output and change coin output. There is also a nearfield sensor for ticket cards and driver cards, however this is not functional in OMSI 2.

The ALMEX has two basic operation modes: FIMS (= passenger information and management system) and EFAD (= electronic ticketprinter).

The driver needs to be logged in with PIN to print tickets. You will find this data on a paper attached to the clipboard each time you get a new bus.

The basic functionality of FIMS (line and target display, device settings) can also be used without driver login, but you cannot sell tickets or enter a tour number then.



There is a pause mode and a lock mode to lock the cashdesk and the drawer in it to lock the money when you are having a break. Push up the metal lever to lock the register mechanically. You need to enter the PIN again to unlock it. The lever will then move down by itself.

When you start your shift, equip the cashdesk with the changer device by clicking into the empty space. You will notice it is not yet possible to give change coins at that point. The driver needs to be logged into the printer to unlock the cashdesk.

This is the startup screen. Press "Dienst anmelden" to log in. You will recognize any operable key by the mouse turning into a hand symbol when moved across the icons.

Enter the driver's PIN into the login screen. You find this information on the paper attached to the clipboard. On the next screen, the Dienstnummer will be automatically completed.

You need to activate a schedule and enter a valid tour number to use automatic target display and station announcements. This tour number can be seen when you select your timetable in the OMSI 2 menu and on the paper sheet right next to the printer.

When driving on other maps than HafenCity and Hamburg it is sufficient to enter a random number to activate the tour.



You can go back at all times to change the number with "FIMS" > "Umlauf ändern".

Correct wrong entries with "C".

If the correct tour number was recognzied, the next route will be displayed. This also comes up after each complete route of a line. After confirming this screen with the green checkmark, the next route begins. If you cancel this query with the red cross, automatic tour mode will be disabled.

In the EFAD main screen, all available tickets are being displayed. The Almex printer will recognize all tickets on every OMSI map.

The bus-stop tree shows the current stop and the next upcoming 6 stops.

You can manually browse through stops with the bus arrows at the bottom, but this will disable automatic station forwarding.

The top line shows all relevant timetable information: line and target code, target display, current delay and time. The current delay will turn red when bus is too early.

The green keys "FIMS" and "EFAD" allow switching between ticket sale and main menu at almost all times when the driver is logged in.

The "FIMS" main menu shows all options that do not relate to ticket sale. You see relevant tour information and have buttons to change tour number, line and target code. The option keys (bottom right) allow turning on and off automatic station forwarding and announcements.

The options menu is called "Hauptmenü" and can be entered by pressing the blue key in "EFAD" screen. You can unlock the cashdesk, do a testprint and deactivate the key sound here.

The second page is "Dienst" (= shift), here you can use the UV banknote check and more. To quit your shift, use "Dienstende" in the options menu.

Most menus have an arrow key to return to the previous menu.

When the second-to-last station is passed, the target display will change to "End of line, please do not enter" (in HafenCity and Hamburg map only).



Door controls

Our Volvo hybrid buses feature 3 (40-ft) or 4 (60-ft) electrically powered pan-in double doors.

Each door can be controlled by a push-button on the dashboard and by passengers when the door release is active (rear doors only). The passenger controls on the rear doors will only be released when turned on while standing. Also, the start blocking will not release if you operate the accelerator treadle before all doors are closed.

You can use the red indicator lights or the display graphics to monitor the door status. Flashing specifies a door failure or engaged emergency release.

The emergency releases are operated by air pressure. According to current safety guidelines, there are interior and exterior emergency buttons at each door. You can also use the red handle above the driver's seat to release all doors at once. To reset a released door, use the reset switch on the window console.

Stroller and wheel chair request are toggled by combined blue push buttons. Red flashing lights above the rear doors indicate the very door is about to close.

The lock door switch can be used to block the front or rear wing of the first door.

The kneel switch will lower the bus' right side while standing. After all doors close, it will come back up automatically.

Light controls

The common light selector switch is used to control the exterior lights. Turn to position 2 and 3 for standing and full-beam lights. Headlight flashers and high beams are controlled by the steering column lever.

Pull out the light selector for fog tail lights. The 4th position of the rotating knob is not being use d in this model.

LED daytime running lights will automatically turn on and off with the engine.

The passenger lighting can be controlled by two switches on the dashboard. The left switch turns on all interior lights. The second switch will either turn on only rear lights (without the left switch being pushed) or reduce the brightness (with both switches pushed).

For some reason, these hybrid buses do not have a power-save function that will automatically turn down lighting levels when the engine is stopped.

Duty roster and codes

You will see your duty roster attached right next to the ticket printer in the Volvo buses when you activated a schedule and correctly entered the tour number or replaced an AI driver. The duty roster shows shift start and end times and all information about routes and departure times for the current shift.

All roster plans can be found as a PDF in the directory of OMSI 2\ add-ons\HafenCity\Fahrauftraege.

-lan-l	۲. ۲.	5612 8	5		Dienst- I	una rar							
1.Diens	stteil	2.Die	Instte		Dienst	¤	ezahlte	P/M	Über-	Weg	je je	Vers	spätung
von	bis	Non	bid	(0	dauer	Ц ,	auer	Leistung	stundei	n zei	Ŧ	1.Teil	2.Tei
12:30 2	23:41	Ð	6		11:11		11:11	00:00	00:00):00	00		
Lin	<u>.</u>	Z		vbfahrts	szeit	ш	ahrt	Pause	Ankunft F	ause	Auße	rplanm.	Wagen
(3	•	olanm.	tats.	Non	nach	Soll	Abwei.	lst	Non	nach	Nummer
	unm	mer: 6	36128		Einst	etzer		Ì	(
9	*	*	_	2:30	2	9	FEB		8				
	4	9	-	3:01		'n	BOW	15					
	e		-	3:58		BOW	FEB	18					
	4	9	-	4:55		EB-	BOW	9					
	e	с С	-	5:41		BOW	BRT	ω					
	4	-	0	6:20		3RT	GOP						
	*	*		6:45		GOP	BRT	5					
	4	9	0	7:20		3RT	GOP						
	*	*		7:46		30P	BOW	2					

- 1 = Trip duration code
- 2 = Route code
- 3 = Line number
- 4 = Tour number as entered into the ticket printer
- 5 = Departure time of that trip
- 6 = Departure bus stop (see below)
- 7 = Target bus stop (see below)
- 8 = Break time after this trip
- 9 = No-stop service trip
- All terminus bus stops are identified using the following codes:

General

M = Betriebshof Mesterkamp

ATH = Bf. Altona

RAM = Rathausmarkt

Line 6

BOW = U Borgweg

ASA = Speicherstadt Auf dem Sande

FEB = U Feldstraße

GHP = Gerhart-Hauptmann-Platz

GOP = Goldbekplatz

- BRT = Altstadt Brandstwiete
- RPK = Rathausmarkt Petrikirche

MBG = U Messberg = Brandstwiete

Line 109

- ZAL = Hauptbahnhof ZOB Adenauerallee
- ZOB = Hauptbahnhof ZOB



- UAA = Überliegeplatz Adenauerallee
- UAL = U Alsterdorf

MAC = Alsterchaussee

Line 111

SHA = HafenCity Shanghaiallee

Sightseeing

The following information will make you familiar with most of the interesting places along bus routes 6 and 111.

Rathaus (town hall)



The town hall of Hamburg is located next to the Binnenalster and houses the council and citizenship. It was built between 1886-1897 and survived the World Wars with almost no damage.

If you own the add-on "Hamburg Day and Night", you might already know the building. Bus lines 109, 688 and now also 6 to U Feldstraße stop here.

The forecourt was used by streetcar and private car traffic till the seventies. It is now mostly used by buses and houses several events especially during the summertime. Staircases allow access to the subway stations of Rathaus and Jungfernstieg.

Speersort



Not a spectacular sight at first glance, but a remarkable place of Hamburg's history. The Speersort or Old Fish Market is located next to the bus stop Rathausmarkt (Petrikirche) of line 6.

The name derives from the former land owner Ditmar Speer in the 15th century. The Mariendom cathedral was located here until 1806. The Hammaburg, the original castle Hamburg was named after, was the first settlement in this area. Remains of this wooden enclosure were found and dated back to the 9th century. Today, the Domplatz on Speersort was refurbished and contains a small urban park as well as illuminated seats. A few houses down the Steinstraße, you will find the headquarters of HOCHBAHN.

Börse (stock exchange)



The Hamburg stock exchange founded 1558 is Germany's oldest exchange still in service and located behind the Rathaus at Adolphsplatz. Many bus operators are familiar with this building as they took their commercial vehicle license exams in here.

The current building dates back to 1841 and was the area's only surviving structure of Hamburg's Great Fire in 1842. It was refurbished in 1946 after serious damaged in the Second World War.

Rödingsmarkt





The Rödingsmarkt is well-known for its speed trap and the elevated railway. The track of today's subway U3 are located on a former canal that was filled with debris of the Great Fire in 1842.

There was never a market here, but a ground owner called Rodiger.

During the construction of highway B4, many old buildings were torn down after Second World War.

The revenue and customs office was located in the massive building created in 1910 on the corner of Rödingsmarkt and Graskeller.

Sankt Michaelis church



The protestant church Sankt Michaelis is often called Michel. The building has burnt two times since 1600 and the current structure was finished in 1912. The church was refurbished until 1952 after Second World War.

The church clock's faces with 8 meters in diameter are the largest in Germany. The tower itself with 132 m height was often used by sailors to identify the harbor's location.

Bus 6 stops directly in front of the church. The stop towards down-town is equipped with a FIMS display and accessible raised curbs.

Baumwall



The Baumwall (meaning log wall) is known for the U3 subway station. It is the closest train station to the Elbphilharmonie. Bus 111 stops here as well. If you terminate at Auf dem Sande with bus 6, you can see the Baumwall in the distance.

Baumwall is named for the ancient town fortification. The inner harbor was protected with log barriers at nights until 1852.

Landungsbrücken (landing bridges)



The St. Pauli ship landings date back to 1839. Today's building opened in 1907 and is equipped with a clock tower, water level indicator, several shops and the entry to the old Elbe tunnel. The ship pontoons were rebuilt after World War Two.

The Landungsbrücken are a highly popular tourist destination. There is a transfer station for ships, buses and trains. The large pedestrian bridge was constructed in 1959.



Cap San Diego

The Cap San Diego was built in 1961 and is among the most famous museum ships in town. It was used as a freight ship in South America until 1986. After being refurbished, it attracts 100,000 visitors each year and contains a small hotel and restaurant. It leaves for trips to Helgoland, Cuxhaven, Rendsburg and Kiel multiple times per year. Watch for the ship between the busstops Baumwall and Landungsbrücken behind the flood protection walls.

Rickmer Rickmers



The other large museum ship at the Landungsbrücken is a steel sail freighter built in 1896 and named after Rickmer Clasen Rickmers, the owner of a shipping company in Bremerhaven. It got confiscated by Portugal in 1916 during the First World War where it served as a depot and training ship until 1983.

After swapping the ship for a yacht, an association from Hamburg brought the vessel back to the Hansestadt and refurbished it to make it a museum ship. It houses exhibitions and a restaurant.

Kehrwieder





Kehrwieder was an island in the Elbe and belongs to the northern Grasbrook. It can be reached by Niederbaum and Brooks bridge today and contains large parts of the Speicherstadt and the terminus of line 6 Auf dem Sande.

The name translates as "turn again" and originates in the narrow end of the island, where you had to turn around and go back before the first Niederbaum bridge was built in 1880.

You can see the Niederbaum on bus 111 between U Baumwall and Am Kaiserkai. The yellow building (see picture) is the harbor's police office from 1899.

Speicherstadt



The world's largest warehouse district Speicherstadt is part of the historic heart of the harbor. The name translates as warehouse city. The street Am Sandtorkai marks the border to the modern architecture of the HafenCity, although the Speicherstadt is now a part of the HafenCity city district.

You have several possibilities to enjoy views of the Speicherstadt on buses 6 and 111, e.g. between Bei St. Annen and Auf dem Sande on line 6 or between Baumwall and Am Sandtorkai on line 111.

The Speicherstadt was built on the Elbe islands Kehrwieder and Wandrahm and is roughly one mile long.

The warehouses are intersected by 5 canals that were used to get goods from the ships directly into the storages.

20,000 citizens were relocated to tear down a complete quarter and construct the Speicherstadt in 1883.

About 50% of the buildings had to be repaired or re-built after the Second World War.

Due to increase of container ships, the Speicherstadt somehow lost its commercial relevance, but still houses many carpet dealers and Hamburg's coffee exchange. The district was excluded from the free-port area in 2004 and became German territory in terms of customs law. The Hamburg free-port law, introduced at the end of the 19th century to boost trading in the city, was completely nullified in 2013.

The Speicherstadt is a tourist attraction today. A million visitors come to the world's largest model railroad each year or check out the Hamburg Dungeon and customs museum.

Elbphilharmonie



The cover image of this add-on shows the Elbphilharmonie, Hamburg's new concert hall which opened in 2016 after 9 years of construction works. However, this add-on is set at the end of 2015, so we do not have a finished Elbphilharmonie in the game. This means a lot less tourists there, which used to focus on the harbor area at Landungsbrücken back then.

The closest bus stop is Am Kaiserkai on line 111. The official address of the Elbphilharmonie translates as Place of German Unity 1. The whole building was put on the roof of an old warehouse from 1963.

Hauptbahnhof (central station)



You might already know the central station from line 109. Bus 6 stops around the corner in the Kirchenallee and has a high passenger demand in contrast to 109 at this stop. The train station is located right next to the central bus station (ZOB) and shopping streets Mönckebergstraße/Spitaler Straße. It was opened in 1906 and counts 500,000 travellers daily.

In the past, many small train stations were scattered over the city. Today, the central hub is said to be overstrained with passenger and train density.

HafenCity University



The university of architecture and city development (HCU) opened its new building at Überseeallee in 2014. The HCU is located right across the street from the terminus of line 111, Shanghaiallee.

Marco Polo Tower





The Unilever building opened 2009 and replaced the Unilever high-rise at Valentinskamp (bus 688) as a German headquarter of the company. The Marco Polo Tower with 55 m in height is located right next to it.

The tower mainly contains apartments that were sold as bare brickwork. This way, future owners were able to bring in their own favorite designs and furniture. These apartments were the most expensive living spaces at the time of construction. Gerald Asamoah und Wladimir Klitschko are said to live or have lived here.

You can see the tower from bus 111 at the stop Marco-Polo-Terrassen.

Millerntor Stadium



The soccer stadium of FC St. Pauli on the Heiligengeistfeld opened in 1963. It could not be used in the first years as a drainage was missing and the lawn was constantly flooded. There are 30,000 seats today.

First simple sports grounds already existed here after the First World War. Let me give a recommendation to all bus drivers: No discussion about soccer clubs with passengers!

The name Millerntor originates in the former western gate of

Hamburg's surrounding wall which separated St. Pauli and Altona. Today, the place is a large street crossing between Reeperbahn, Budapester Straße and Glacischaussee where subway station U St. Pauli is located as well.

The small house on the side of the street is an old guard house. It contains a small museum and had to be moved in 2004 because cars kept crashing into it.

Flakturm IV (flak tower IV)



The air-raid shelter in the Feldstraße is called flak tower IV and is placed on Heiligengeistfeld, as well as the Millerntor stadium and the Dom (fun fair). The bunker was built in 1942 in reaction to allied air attacks in Berlin and is made of 3.5 m thick walls. A base area of 5625 m² and height of 38 m make it one of the largest shelters ever built. It was equipped with an in-house power and water supply.

Housing shortage after the war made people use the bunker as a living space as well. A demolition was not possible without damaging the neighborhood, so the shelter remained and got reactivated in the Cold War.

It is in private ownership since 1990 and houses a media center, musical instruments store, a coffee shop and night club today.



The bunker is located directly at the terminus station of line 6 U Feldstraße.

Rindermarkthalle (cattle-market hall)



St. Pauli's old cattle-market hall opened in 1951 and is located at the intersection of Neuer Kamp and Budapester Straße. Different supermarkets used the lot after 1972. There is a parking garage in the upper level with a car ramp on the outside of the building.

After a large refurbishment, the place re-opened in 2014 with several stores and sociocultural facilities.

Hamburger Dom



The "Dom" is a fun fair that takes place on the Heiligengeistfeld three times a year. The name comes from the old Mariendom (cathedral) at another location, were dealers and jugglers were banished in 1804 and moved their "dom market" to this place. The fun fair was officially founded in 1893 and takes place each November, March and July for one month. Attractions open at 3 pm daily.

You can see the Dom from night bus 688 and line 6 at U Feldstraße, U St. Pauli and Budapester Straße.

The Heiligengeistfeld got its name from the "Hospital of the Holy Ghost" which existed here in and before 1497.

Fischauktionshalle (fish auction hall)



The fish auction hall at the fishing harbor in Altona was built in 1896. Altona was an independent city at that time, so Hamburg built its own auction hall a short time later.

Both auctions were combined in 1934. The halls were damaged in Second World War and repaired afterwards in a poor way. This resulted in the demolition of Hamburg's auction hall in 1971.

Altona's fish auction hall was refurbished in 1984 and used for events ever since. The traditional fish market on Sundays starts at 5 in the morning. Watch out for the detour until 1 pm when driving line 111 on Sundays.

Cruise Center Altona



The Cruise Center 2 in Altona is located next to the bus route 111. The landing station Dockland is also used by harbor ferries.

The Cruise Center building was put into service in 2011 and is equipped for ships up to 326 m in length. In 2014, 191 ship landings and 600,000 travellers were served here together with the HafenCity terminal.

The slant-style building called Dockland right next door was built in 2006 and contains offices, a public roof garden and diagonal elevators.

Davidwache (David guard house)





The 15th police commissariat of Hamburg is the most famous police office in town located right on the "Kiez", the Reeperbahn. With only 0,92 km² of assigned area, it services the smallest police district in Europe. The guard house was built in 1914 and is designed by Fritz Schumacher. A rear extension was added in 2005. If you haven't already seen the building on night bus 688, you will have the possibility on line 111 at the stop Davidstraße.

Planetarium



The old water tower in the municipal park was converted to a planetarium in 1930. It is equipped with state-of-the-art technology today.

300,000 visitors each year come to the shows and events in this landmark of Winterhude. There is an observation deck in the 8th floor. You will find the planetarium a few hundred meters north of the bus stop U Borgweg.

Rathaus Altona (city hall)



Altona used to be an independent city until 1938. The third town hall of Altona was opened 1898 in this former railroad office building.

Bus 111 stops right in front of it. Make sure to avoid the first bus stop in front of the traffic light coming from Bf. Altona, as this one is designated only for bus 15.

Schellfischtunnel (haddock tunnel)



The harbor railway tunnel, also known as haddock tunnel, is an abandoned railway tunnel in Altona. It connects the high-lying main station of Altona with the fishing harbor at the Elbe.



The connection was built in 1876 and later extended to 961 m length. Trains driven by steam as well as electricity served on the tracks. It was shut down in 1989 due to increasing truck haulage and decreasing fishing industry in the area.

Plans to reactivate the tunnel for pedestrian, cyclist or bus connections failed. The locked-down tunnel entries are hidden behind the main station Altona and at the round arch on line 111 close to the stop Neumühler Kirchenweg.

Appendix

Route outlines

The following outlines will show you all important terminus stations and turnarounds.

Wenden = Turnaround

Pause/Stellplatz = Waiting position

Ankunft = Terminus stop

Abfahrt = Departure stop



_



Linie 6 – Speicherstadt Auf dem Sande



Linie 6 – U Feldstraße



Aerosoft GmbH 2017



Linie 111 – Bf. Altona





Bus Company Simulator



Expand your world and fleet

NNERFOUR



www.aerosoft.com







With a large and modern MAN Lion's Coach Bus you experience the daily life of a long distance coach driver. Navigate through a complex Autobahn and road network to bus stations in the more than 40 implemented cities.

Fernbus Simulator



Turn on the emergency lights and sirens and experience one of the world's most exciting professions – the fire brigade. Emergency 112 CALL 112 The Fire Fighting Simulation

OFFICIAL AEROSOFT ADD-ON FOR FARMING SIMULATOR 17





www.aerosoft.com