

VIEWAPP



# OMSI 2 Add-on

# Vienna 1

Manual

Line 24A



Officially licensed product



WIENER LINIEN

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Applications & design e.U.**

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# MANUAL



# Vienna<sup>1</sup>

Line 24A

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Add-On for  
**OMSI 2 - The Omnibus Simulator**



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# Introduction

## Welcome to Vienna!

Vienna is a city with a long history and tradition, historic buildings, endless leisure activities and excellent local public transportation. This Add-On is an expansion for OMSI, in which you serve the public as a bus driver on the fabulous 24A line.

This authentic and realistic Add-On is modeled on the route of the 24A line as it developed over time – we guarantee a lot of variety and fun!

Go back to 2005 and 2006 when the bus line moved from the last generation of high-floor buses to the new generation of low-floor models. You will take the wheel of the LU 200 or the NL 205 model of the Wiener Linien and transport passengers safely to their destination.

## System Requirements

In order for the „Vienna 1 - Line 24A“ Add-On to play as smoothly as possible, your system should have the following minimum requirements:

- OMSI 2 – The Omnibus Simulator min. 2.2.032
- Operating system: Microsoft Win XP / Vista / 7 / 8 / 8.1
- Processor (CPU): 2,6 GHz Dual-Core
- Memory: 4 GB RAM
- Free disk space: 6 GB
- Graphic card with 1024 MB (DirectX: 9.0 or higher)
- Internet connection and Steam user account. A minimum age of 13 is required to create a user account with Steam.

**Please note: A Steam internet connection is required for the online activation.**



### Recommended Equipment

- Processor: 3.2 GHz Quad Core
- Memory: 8 GB
- 3D graphics card with a minimum of 2 GB of graphics memory
- Force Feedback steering wheel (best with 900 ° angle of rotation)

## Installation

You have to be logged in with administrator rights before you start the installation of “OMSI 2 Add-On Vienna 1 - Line 24A”. To start the installation simply insert the DVD into your DVD drive or run the file you downloaded from your shop account.

After you have chosen your preferred installation language, the welcome screen appears and you will be presented with some important information and the license agreement. Please read it carefully.

The installation program will attempt to locate the correct path. If you wish to install to another location, then you will have to enter the correct path for installation manually.

In order to do this, click on “Browse” and navigate to the correct path. Before the installation program starts to copy the files onto your hard disc, you will be presented with all the installation details.

The installation program will now copy all of the “OMSI 2 - The Omnibus Simulator” files onto your hard disk.

If you want to make any changes or to install any updates for this program you will need the DVD or the installation file from the download shop and your registration key again.

### Important note!

Subsequent to the installation the Aerosoft-Launcher will be started for the online registration. Learn more about this program in the next chapter.

## Aerosoft Launcher

### General information about the Aerosoft-Launcher

The Aerosoft-Launcher gives you an overview of all Aerosoft products installed on your computer. You will also have easy access to special features available for the several products.

Should the SOFTWARE PRODUCT require an Online Registration, the Aerosoft LAUNCHER will take you through this process. The Aerosoft-LAUNCHER will be automatically installed with the SOFTWARE PRODUCT and will launch at the end of the install process.

You can run the Aerosoft-Launcher at any time via the Windows START menu to check the activation state of your installed SOFTWARE PRODUCTS. Just follow this link:

START | ALL PROGRAMS | AEROSOFT | Aerosoft Launcher

The Aerosoft-Launcher starts up in the “Library” view by default. Here you can see an overview of all installed Aerosoft SOFTWARE PRODUCTS and their state of activation.

The following categories will be shown.

“Aircraft”, “Sceneries”, “Tools/Missions”, “Category-Unknown” and “Simulation”.

The SOFTWARE PRODUCT will be placed in one of these categories accordingly during installation. Older SOFTWARE PRODUCTS which do not need an online activation will be placed in the category “Category-Unknown”.

In the “Library” view you will also see an overview of current Aerosoft News.



## What is required for an installation?

For an installation and an online activation you will have to have administrator rights. Please make sure that you have these rights.

You will also need an active internet connection.

## How do I activate a SOFTWARE PRODUCT?

If necessary please change to the "Library" view and select the SOFTWARE PRODUCT for activation.

Click on the button "activate". The following screen will appear:

The screenshot shows a dialog box titled 'Info: This Dialog will lead you through the activation process. For the online activation you need your email address, your serial number and an active internet connection. Please fill in the information into the boxes.' It has two input fields: 'Serial Number' with a hint 'Info: Please fill in, the serial you got in the moment you bought the game.' and 'E-Mail' with a hint 'Info: Please enter your current email address. Please note that for the download products the e-mail address with which you registered in our download store is required!'. At the bottom, there are buttons for 'Online activation', 'Offline activation', 'Cancel', and 'OK'.

Please enter your email address and your registration key correctly and click on „Online activation“. You will need an active internet connection for this procedure.

Your registration data will be transferred to our Aerosoft server now.

Your information will now be transferred to the Aerosoft server. After a successful transfer your system will be activated and used without further limitations.

Please note that depending on the safety settings some data of the Aerosoft SOFTWARE PRODUCT need to be personalized.

## Information about the activation status

GREY == undefined

GREEN == active

YELLOW == reactivation required

RED == activation unsuccessful

## I want to install the SOFTWARE PRODUCT again. How do I do this?

The "Library" view will show the activation status of each SOFTWARE PRODUCT.

If it is shown in **GREEN**, the SOFTWARE PRODUCTS are active. A new activation is not necessary.

If it shows **YELLOW** the SOFTWARE PRODUCTS have at least been activated once but need a new online activation because of new hardware in your system. Click on the button "activate". Please note that all required information has been correctly filled in.

## There is an update available for the SOFTWARE PRODUCT. Does it change the activation status?

Normally the activation status will not be changed. It is possible though that an adoption of the activation status on to the new installed data is necessary.

If this is the case change to the "Library" view and select the appropriate SOFTWARE PRODUCT.

Click on the "refresh" Button to take over the activation status.

## I have to reconfigure my PC-System or I have got a new PC. What do I have to bear in mind?

A check of the activation keys commences every time the Aerosoft-LAUNCHER is started. Depending on the activation status, a new activation might be necessary.



## Removal

In order to fully remove **OMSI 2 Add-On Vienna 1 - Line 24A** run the Aerosoft-Launcher. Change to the „Library“ and select „OMSI 2 Add-On Vienna 1 - Line 24A“ in the „Simulation“ category. The information about „OMSI 2 Add-On Vienna 1 - Line 24A“ will appear.

Click on the „Uninstall“ button. The installation program will start to remove the program from your hard disk.

## Setting options for this Add-On in OMSI

The following settings are recommended for this Add-On to perform optimally in OMSI. Please go to the menu options and set the options as listed below:

Graphic:

- Number of neighbor tiles – 3

Expanded graphics:

- Use only low-resolution textures: No
- Set maximum memory requirements for high-resolution. Textures: 1024 MB
- Texture size real-time textures: 512

Sound:

- Maximum sound level: 1000

Area Transport:

- Schedule-priority: 4
- Reduced use AI-list: No

## About this manual

This manual is limited to describing and explaining this Add-On. It is a supplement to the manual for the main game „OMSI 2 - The Omnibus Simulator“.

The basic function descriptions and instructions for operation and configuration of OMSI simulation are in the OMSI manual. This Add-On manual uses explicit references to the OMSI handbook to provide clarification and optimal guidance.

If you have already installed and played the main game „OMSI 2 - The Omnibus Simulator“, you should not have to make any changes to the settings. This Add-On product was designed to work with the main game and can be played with the standard configurations.

## The Route

With this Add-On you plunge right into the action on the 24A Line in Vienna's 22nd district, Donaustadt.

The 24A Line is varied and beautiful. The route changed over time to adapt to transportation policies. The original route started in the Kagran center, one of the most important hubs in the district for connections to other bus and tram lines, and the U1 subway terminus. In 2006, the U1 subway line was extended from Kagran to Leopoldau, changing the line gradients on the street surface. The high-floor and low-floor buses, operated by the Vorgarten service garage, were in the last years of mixed-mode operation.

As part of the September 2006 extension of the U1, the 24A bus line was reduced in Kagraner square and the buses were completely switched to low-floor models. At the same time the buses were added to the RBL line, the computer-controlled train system.

The 24A line leads from the heart of the district to the outskirts in Neueßling and on to Invalidensiedlung. You'll quickly find that the mixture of tight, close city streets and idyllic outskirts flanked by fields makes this line uniquely attractive and challenging.

This Add-On offers 3 lines, as well as a few routes that operate on a limited schedule and provide interesting changes to the route.

The main routes of the 24A line are:

- Kagranner Platz (U) – Breitenlee School
- Kagranner Platz (U) – Neueßling
- Kagranner Platz (U) – Invalidensiedlung

In addition, the following routes run on a limited schedule:

- Trips across Breitenlee Nebenfahrbahn
- The Algenweg - Huflattichweg – Daphneweg loop
- Routes over Breitenlee in the morning and to Breitenlee School at noon

This line is operated with two different types of buses:

- LU 200, the last of the high-floor generation in Vienna
- NL 205, the first of the low-floor generation in Vienna



## The Vehicles

### LU 200 M11



The LU 200 M11 is an 11-meter long bus with a 200 hp engine under the floor. It is built with special Austrian construction by the ÖAF-Gräf & Stift and Steyr-Daimler-Puch companies for the Vienna Public Transport. The body is similar to the German VÖV standard city buses, but has a third entrance door in the rear in accordance with Vienna standards. (The VÖV is the German insurance standards association.) The bus engine runs on gasoline.

The LU 200 was by far the most numerous of the bus models in the history of Wiener Linien, with 345 buses purchased between 1978 and 1992. The last scheduled use of an LU 200 on regular Wiener Linien service took place on May 21, 2007.

The very last LU 200 was used as a school bus in its last years of operation. It was decommissioned on March 9, 2009 after almost 30 years of service in the Wiener Linien.





#### Technical data:

<b>Length</b>	11.5 meters
<b>Width</b>	2.5 meters
<b>Height</b>	3.057 meters
<b>Wheelbase</b>	5.6 meters

<b>Motor</b>	MAN G2566, 147kw with 2100 U/min (200 PS)
<b>Cubic capacity</b>	11413 ccm, Hub: 155 mm
<b>Gearbox</b>	Voith D851
<b>Highest speed</b>	71 km/h

<b>Fuel</b>	LPG gasoline
<b>Tank</b>	3x120 (96), 2x89 (71.2) liter
<b>Gas needed for 100km</b>	About 110 liters

<b>Empty weight</b>	9840 kg
<b>Maximum weight allowed</b>	16,000 kg

<b>Seats</b>	31
<b>Standing room</b>	58

#### NL 205 M12



The NL 205 M12 is a 12-meter long, 205 HP, 'low-floor' model bus. It is built with special Austrian construction by the ÖAF-Gräf & Stift and Steyr-Daimler-Puch companies for the Vienna Public Transport.

The story of this model goes further back than many would suspect. At the end of 1988, 70 of the last 200 model LU buses were still in production, when the Vienna Public Transport contracted Gräf & Stift and Steyr to design a new type of vehicle, which enabled the first stepless entry, the low-floor model in use today.

Design and model studies followed and finally, in 1991, two 'Gräf / Steyr M12 NL 205' prototypes were designed and in 1992, testing began.

Compared to the previous LU 200, the new model incorporated many revolutionary changes. In addition to the electronic destination display on the outside and the stop display inside the bus, the seats were upholstered. The gas tanks, which had been under the bus in the high-floor models like the LU 200, were moved to the roof to accommodate the low-floor construction and were hidden under a protective cover. These developments were later incorporated into German vehicle production. In 1994, the first of the NL 205 M12 models were put into service.





One of the special features of this generation of vehicles was the air conditioning built into some of the models. In 1997, air conditioning became standard equipment in all vehicles. In 1998, manually operated folding ramps were tested successfully. Thereafter, all new vehicles incorporated these ramps while older models were retrofitted.

In 1999, the Steyr plant in Vienna closed, and thus ended the production of the NL 205. The last scheduled deployment of the NL 205 for regular services on the Wiener Linien took place on June 27, 2014.

Currently there are eight NL 205 vehicles used as buses for the driving school of the Wiener Linien, as well as one converted NL 205 'Infobus'.

#### Technical data:

<b>Length</b>	11.85 meters
<b>Width</b>	2.5 meters
<b>Height</b>	3.34 meters
<b>Wheelbase</b>	5.88 meters

<b>Motor</b>	MAN G2866 DUH, 151kw with 2100 U/min (205 PS)
<b>Cubic capacity</b>	11967 ccm
<b>Gears</b>	Voith D851.2
<b>Highest speed</b>	80 km/h

<b>Fuel</b>	LPG gasoline (60% propane, 40% butane)
<b>Tank</b>	3x 200 liter
<b>Gas needed for 100km</b>	About 100 liters

<b>Empty weight</b>	11,330 kg
<b>Maximum weight allowed</b>	18,000 kg

<b>Seats</b>	27
<b>Standing room</b>	58



# Preparing to drive your route

To successfully master your first day as a bus driver, you should familiarize yourself with the technical specifications. If you're not very familiar with OMSI, we recommend you to read Chapter 2 of the OMSI manual.

## Starting the Add-On:



We have created two routes for the Route 24A line. Please select the appropriate version from the menu above:

- **Vienna 1 - Line 24A /2005**  
Kagran (U) – Invalidensiedlung Route  
→ A schedule with mixed operation of high-floor and low-floor buses
- **Vienna 1 - Line 24A /2006**  
Kagraner Platz (U) – Invalidensiedlung Route  
→ A schedule with low-floor buses

The first time you start, please choose from the options 'map without buses'. You can still set a desired date and time, press the 'Start!' button and you're on your way!

## Hints for driving the Vienna Bus Line

The main functions and key commands for controlling the Vienna buses is the same as that of the buses in the main OMSI game. The Add-On was created with ease of setup and compatibility in mind, so the keyboard layout and peripheral settings such as the steering wheel can remain as configured for the main OMSI game. This means that a majority of the keyboard shortcuts from the OMSI will apply to the Vienna line. Only the door control and operation of loud speaker control on the IBIS instruments are different. These are described separately.

## Your First Bus Trip: A Quick Start Guide

Once you have selected your bus from the menu and placed it at an entry point on the map (see Section 2.6 in OMSI manual), an introduction to the bus functions begins. With Quick Start you have an overview of the most important functions on the two buses allowing you to get under way:



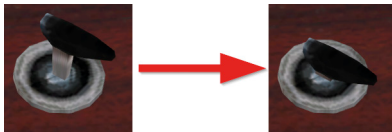
## Quick Start Guide: LU 200



When you first board the LU 200, no indicator lights are illuminated and many functions with closed circuit current are not yet working.

### Step 1:

Turn on the electricity by pressing the **[E] key**, or click on the **master battery key (1)** with your mouse.



**NOTE:** Only Door 1 can be opened without the master battery key by using sufficient compressed air, either by pushing the button on the driver's control panel or via a pin through the door opener at the nose of the vehicle.

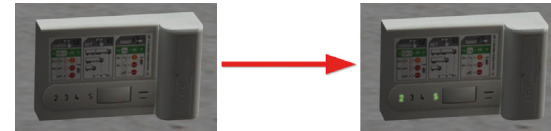
A few control lights will turn on.

### Step 2:

Click on **2** to activate the **voice control unit**. You can see that the announcements are activated and the number 1 button lights up.

### Step 3:

Check the GoBox before and after each journey by clicking on the button.



**NOTE:** The '2' and 'S' must briefly light up to confirm the correct number of axles.

### Step 4:

Turn on the ignition by pressing the **'M' key** or clicking the **ignition key (3)**.



**NOTE:** More lights will illuminate.

### Step 5:

Start the engine by pressing the **'M' key** again or clicking the **ignition key (3)**.

**NOTE:** It is only possible to start if the gear selector is in neutral!

### Step 6:

Wait for the pressure to build. The red warning light will go out.





Watch the white hands of the two double-gauges in the center of the dashboard: They should exceed 6.

**NOTE:** The operating pressure in the compressed air system must high enough for the brakes, air suspension and doors to work properly. Filling the compressed air system can take 1-2 minutes to complete.

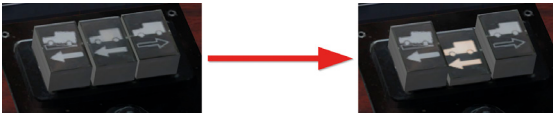
#### Step 7:

Choose the line and destination (via the menu).



#### Step 8:

Engage the gears by pressing the **[D]** key.



#### Step 9:

Release the parking brake by pressing the **[.]**.



**IMPORTANT:** Always activate the parking brake (the hand brake) as soon as the bus has stopped or when at a standstill! We recommend you use the parking brake when you're stopped at a long red light and do not want to permanently press on the brake pedal.

## Quick Start Guide NL 205

When you first board the NL 205, no indicator lights are illuminated and many functions with closed circuit current are not yet working.



#### Step 1:

Activate the electric and gas switches by pressing the **[E]** key, or by clicking the **battery master switch (1)** and **gas system switch (3)** with the mouse.



**NOTE:** Only Door 1 can be opened without the master battery switch by using sufficient compressed air, either by pushing the button on the driver's control panel or via a pin through the door opener at the nose of the vehicle. If the switch is turned off for the gas system, the connection to the gas tank is interrupted and the engine cannot be started.

A few control lights will turn on.

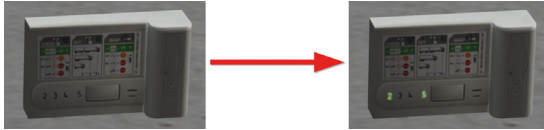
#### Step 2:

Click on **2** to activate the **voice control unit**. You can see that the announcements are activated and the number 1 button lights up.



### Step 3:

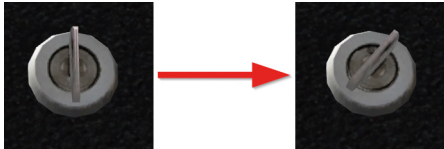
Check the GoBox before and after each journey by clicking on the button.



**NOTE:** The '2' and 'S' must briefly light up to confirm the correct number of axels.

### Step 4:

Turn on the ignition by pressing the '**M**' key or clicking the **ignition key (4)**.



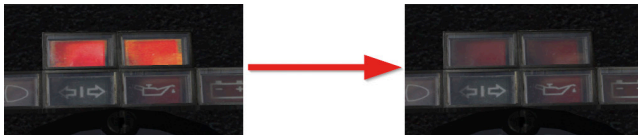
### Step 5:

Start the engine by pressing the '**M**' key again or clicking the **ignition key (4)**. Turn until it the engine catches.

**NOTE:** It is only possible to start if the gear selector is in neutral, "N"!

### Step 6:

Wait for the pressure to build. The red warning light will go out.



Watch the orange lights for the compressed air pressure gauge on the left of the speedometer, as well as the two red warning lights (= central warning lights) at the top. These indicate that the bus is not yet ready. These lights will extinguish when the pressure has reached 6 - then the bus is operational.

**NOTE:** The pressure in the compressed air system must high enough for the brakes, air suspension and doors to work properly. Filling the compressed air system can take 1-2 minutes to complete.

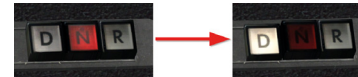
### Step 7:

Choose the line and destination (via the menu).



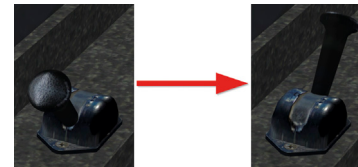
### Step 8:

Engage the gears by pressing the **[D]** key.



### Step 9:

Release the parking brake by pressing the **[.]**



**IMPORTANT:** Always activate the parking brake (the hand brake) as soon as the bus has stopped or when at a standstill! We recommend you use the parking brake when you're stopped at a long red light and do not want to continuously press on the brake pedal. In addition, the NL 205 leveling mechanism is activated by pressing the parking brake - use this whenever you need to change the level of the bus.



# LU 200 Bus Functions in Detail

## Overview of the Driver's Controls

Below you'll find a detailed description and overview of the driver's controls for the Vienna Line's LU 200 M11 model:



1. Parking Brake Light
2. Central Warning Light – the vehicle cannot be driven. Stop immediately!
3. Fuel Gauge
4. Fuel Tank Selection Switch (does not function)
5. Door Controls (this is explained below in detail)
6. Turn Signal Lever
7. Windshield Wiper Lever
8. Speedometer in km/h with clock
9. Odometer (set when adding the bus, taking into account average mileage and model year of the current year in OMSI using a plausible baseline). Make note in mileage book before departure.
10. Toggle Switches from Left to Right:
  - Rear Fog Light
  - Roof Vent (essential only in summer)
  - Passenger area heating
  - Fog Lights
  - Route Indicator Light (Display)

- Blue Route Light indicator (formerly used for signaling the last trip before closing, it has not been operated for some years)

11. Warning Light
12. Battery Key
13. Ignition/Start key
14. Gear selection: Important - there can be only one active button! The middle position „D“ is Drive. The left position is particularly useful when driving uphill, because only the first two gears are engaged. The vehicle is in neutral when none of the three keys is pressed. To release a button, press it a second time. The right button is for reverse. Confirm reverse after shifting by pressing „R-free“ (15). Only then is the reverse gear engaged. There is a distinctive sound when shifting into reverse.
15. “R-free” Button
16. Announcement Control Unit: Information stored in the respective coding card is displayed on this unit and indexed accordingly. The top number indicates the direction of travel and the numbers underneath show the next leg of the trip and corresponding stop. You can find a list of this in the appendix.
17. Double gauge: The LU200 has two brake circuits. The orange hand points to the current brake pressure (for example '0' bar or atmospheres when the brake is not active). The white hand points to the reservoir pressure in the corresponding air reservoir. To test: Press the brakes when the motor is disengaged. The brake pressure rises sharply; however, the reservoir pressure falls. Only when the engine is running will this fill up again. The parking brake and door control system use the air pressure from the respective tanks. This is why the doors work very slowly or not at all with too little air supply.
18. Double-Gauge Rear Axle
19. Coolant temperature: Measures whether the engine is too cold or too hot.
20. High Beams
21. Battery Light
22. Temperature Control Indicator (does not function)
23. Ignition Light
24. Blinker Light
25. Oil Pressure Light
26. Catalytic Converter Warning Light
27. Anti-Lock Brake Light





## Door Control Panel



1. **"Release" button:** Press this button when you load passengers at the bus stop. Press the button to enable doors to open when a passenger has made a stop request, or to enable the "open door" buttons on the outside of the bus that allow passengers at the bus stop to open the doors. The blue "Release" button is illuminated while it is active.

Key: [NUM /]

2. **"Clear Release" button:** As long as "Release" is enabled, all the doors (except for Door 1) are on automatic. Passengers can open doors and doors will close after a delay when no passenger is in the photoelectric field. Since Door 1 has no light barrier and is monitored by the bus driver, the driver must manually open and close the door (see below).

By pressing the "Clear Release" button you deactivate the automatic mode. The lights on the release button extinguish. Once all doors are closed (regardless whether the release is active or not), the green "Departure" signal will light up (see below) and a "Gong" is heard, signaling the driver that the bus is ready to proceed.

**NOTE:** The hand brake releases immediately when the "Clear Release" button is pressed. Therefore, if the "Clear Release" button is pressed while a door is still open, the bus may roll unexpectedly once all the doors are closed. For this reason, the brake pedal must always be pressed when dropping off and picking up passengers.

Key: [NUM \*]

3. **"Stroller" button:** This lights up when the Stroller button has been pressed. This signals the driver that a passenger with stroller wants to get on or off the bus at Door 2. (The Stroller button can also be pressed from the outside when a passenger wishes to get on the bus.) Once this is pressed, the door is no longer in the "automatic" mode. The door will no longer close automatically as long as this Stroller button is active. Only when the driver presses the button to release the Stroller mode will the door return to the automatic mode.
4. **"Door 1" button:** This opens Door 1, even if the battery master switch is turned off, and is independent of the automatic mode. As soon as Door 1 is open (only possible at a standstill or below the speed of 3 km/h), the brake pressure automatically rises and the vehicle cannot move so long as the door is open.

Furthermore, this door is always manually closed, whether the door has been manually or automatically opened by releasing the door at a stop request. As long as Door 1 is open, this button is lit.

Tastatur: [NUM -]

5. **"Door 2" button:** This button cannot actively open Door 2. It can only be opened in "Release" mode when a passenger presses the door button. When this happens, the door is "taken out of the automatic" as in the case with the stroller. Pressing "Clear Release" again puts it back into automatic. The button will also illuminate when Door 2 is opened.
6. **"Door 3" button:** See the notes for Door 2.
7. **"Door 4" button:** See the notes for Door 2.
8. **"Stop" indicator light:** The Stop light activates as soon as a passenger presses one of the stop request buttons on one of the three doors or if the passengers (or your) have activated the "Stroller" button at Door 2. In addition, a "Gong" sounds to alert you and the passengers that a stop has been requested.
9. **"Departure" indicator light:** The departure light indicates that the bus is ready to depart, and that all doors are closed. The indicator light turns off as soon as the accelerator pedal is pressed the first time.
10. **"Start" button:** The function of the Start button is to allow you to drive with Door 1 open. Press this button with Door 1 open, releasing the brake and allowing the bus to roll forward. Or, press the button before opening Door 1, and the brake will not stop the bus when the door opens.





## Scrolling Destination Display Control Panel



The Scrolling Display control panel is used to operate motorized scrolling display panels in the front and on the side of the bus. There are two modes available:

1. Manual: control of the display by direct touch on the keypad
2. Back and forward: Advance the destination one stop at a time by using the keypad

### Manual:

In this mode, the numbers on the display light up when pressed. On the left side you can see the current location. On the right you can set the desired destination using the keys on the numeric keypad and pressing "S". You can clear the entry by pressing "C".

### Forward and Back:

This mode is activated by the back and forward buttons. In this mode, the display can only move to the next destination.

1. Synchronization: The display rewinds automatically all the way back to the starting position and synchronizes with the front and side display. (Used in case of failure.)
2. Forward: The display advances one step to the next destination
3. Back: The display rolls back one step to the previous stop

To change the destination, click on the „Forward“ or „Back“ button. Alternatively, you can also press the [F8] key and then press the [Up] or [Down] key. The display changes on the front and the side.

**NOTE:** Only when the scrolling display is stopped, can it be moved by pressing a key.

It is possible that the destinations on the front and side displays get out of sync with each other. If this happens, press the „Sync“ button so that all the displays go back to „0“.

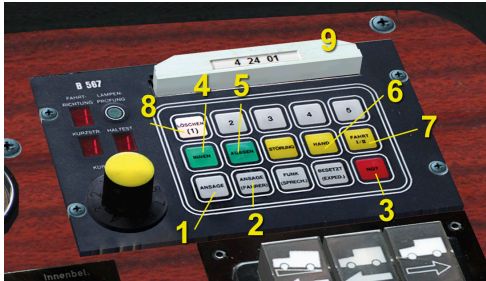
### Line Numbers in the Rear of the bus:

The line number display in the rear can be set individually with a mechanical crank on each display. In this simulation, the line displays are „cranked“ with the corresponding keyboard shortcuts:

First press [F5], [F6] or [F7] to select the first, second or third number display. Then press and hold [Up] or [Page Down] until the display has the desired number.



## Loud Speaker Controls



1. Announcement: To play an announcement, hold the [Q] Key. Alternatively, this can be operated by the left foot pedal.
2. Driver Announcement: In this mode, only you, the driver, can hear the announcement. If you press the button again, the same announcement will be played again in the passenger area.
3. Emergency: The emergency alarm is a safety device on the vehicle. Pressing the emergency alarm signal automatically sends a radio signal to the control center. Pressing the emergency alarm again will deactivate the alarm and the radio connection will be terminated.
4. Interior: Interior loud speaker. Does not function.
5. Exterior speakers: Used to mute an announcement in the interior and switch the announcement to the outside
6. Manual operation: Use to manually change direction. This button must be pressed first.
7. Drive I / II: Use to change the direction of travel. Manual operation must be activated first.
8. Extinguish: The key turns off the system. The light is always on when the loud speaker system is active.
9. Coding plug: This contains the information to play the announcements for the bus line. Every line uses its own coding plug. You can find a detailed list of announcements using the codes for the 23A Line as they are played over the loud speaker system. This system is very rigid and only complete announcements are available. It is therefore important to hear and understand the different routings and announcements before your first few trips, so you can play the right message for your passengers.

When deviating from the main route or only driving part of it, the corresponding announcements may not match the route you are driving. For this reason, we recommend using the Driver announcement button (2), to hear the announcement first. Once you have the right announcement cued, press the (2) button again to repeat it in the passenger compartment.

The announcements are not switched manually at the final stops „Kagran“ and „Hausfeldstraße“. This is done automatically. If you are at the end of the line, and switch your direction of travel, run through the announcements until they are at the desired point.

## Other Devices in the Vehicle



1. ASR button: When the ASR function is switched off --> the indicator light comes on
2. Heated side mirrors: The mirrors are heated and the button lights up when active
3. Regulator for heater (Bug-Akklimator): 3 different speeds
4. Handbrake
5. Announcement control footswitch



## Heater (Bug-Akklimator)



The heater (Bug-Akklimator) is turned on by the switch on driver's left side. The fan has 3 speeds. Below the windshield is the front fan. The position of the right lever (4) determines the air passing into the bus: fan-heated fresh air (top position), unheated fresh air (center position) or re-circulated air (down position)). The temperature is controlled by the second left, red lever (2).

1. Footwell heater regulator
2. Temperature (cold or hot) heating regulator
3. Bug heating regulator
4. Re-circulated heating regulator:
  - Level 0: Hot-air heating (footwell)
  - Level 1: Direct ventilation
  - Level 2: Fresh air heating
5. Defroster

**NOTE:** Be careful to select a pleasant interior temperature! It is also important for proper passenger compartment ventilation. For this you can open the sliding window or the driver's window and use the front fan to direct the fresh air heating. Additionally, the LU 200 has roof vents, which are essential, especially in summer! Whenever weather conditions permit, if the bus is parked for a period of time or is in the terminal the doors of the bus should be kept open.

Since in reality the LU200 has no thermometer in the driver's area, you have to monitor the current indoor temperature using the information system in the simulation **[SHIFT]-[Z]**. But don't worry. You will be very quickly advised if something is not to the passengers' satisfaction!

## NL 205 Bus Functions in Detail

### Overview of the Driver's Controls

Below you'll find a detailed description and overview of the driver's controls for the NL 205 M12 model of the Vienna Line:



1. IBS-Equipment (explained in detail below)
2. Various Lights (to be explained separately)
3. Compressed air pressure gauge (circuit 1 and circuit 2), including cool water temperature gauge
4. Speedometer in km/h with clock and odometer
5. Fuel Gauge – the level of the three gas tanks are displayed individually by percent
6. Ignition Lock with Key
7. Aisle selector button
8. Operating unit for door control (explained in detail below)
9. Starting prevention: can be operated with the door open by pressing 1
10. ASR bypass: The ASR will deactivate after about 10 seconds (TCS warning light will activate)
11. Various toggles (to be explained separately)
12. Turn signal control
13. Windshield washer control



## IBIS Board - Quick Start Guide



To use the IBIS-board, the **voltage must be switched on** (see chapter „Starting the Bus“). After switching on the current, the board starts up: „**Cold Start**“ will be displayed as below:

Kaltstart  
BF 3.02 20070406

After that, there is a **test in which all of the lights should light up**:



Once the test is complete, the IBIS is ready for use, but only if the code plug is plugged in. If not, a „**missing code**“ message will be displayed and the **numeric keys 1 through 6 will flash**.

The code programs the line and the course. Then the correct schedule sequence must be entered by the driver:

Z:1.2.1  
Invalidensiedlung

This entry must match the key „**Eing.**“ Messages are adjusted to display the correct passenger information on both the outdoor and indoor displays and the sequence of announcements is defined.

**Important:** When the „**Ans**“ key flashes, the **automatic announcement** is switched off. Pressing the „**Ans.**“ key activates the automatic display sequence. The current stop shows on the display with the time and date. From this point forward, the next bus stops are programmed and the announcements are played automatically.

For a detailed explanation of all functions of the IBIS display, refer to the chapter „IBIS display on the Vienna Lines - Detailed Explanation“.

## Explanation of indicator lights

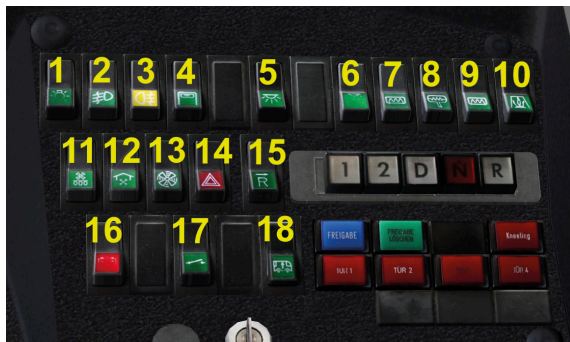


1. Air suspension interference
2. Hand brake
3. Fog lights
4. High beam
5. Red warning light
6. Blinker
7. Oil pressure
8. Battery charge indicator
9. Ignition
10. Heating – Windshield
11. Coolant Level
12. Coolant temperature
13. Transmission Fluid Temperature



14. E – Gas Failure
15. Brake fluid reservoir pressure
16. ABS
17. KAT
18. Angle articulation lock
19. ASR
20. Start prevention override
21. Low battery voltage
22. Disabled passenger stop request
23. Door release
24. Exit light
25. Stop Request Signal

## Toggle Switch Functions



1. Perimeter and Low Beam Lights
2. Fog Lights
3. Rear Fog Lights
4. Panel Route Lights
5. Interior Passenger Compartment Lights
6. Driver's Seat Lights
7. Windshield Defroster
8. Mirror and Driver's Left-side Window Defroster

9. Door 1 Window Defroster
10. Coolant Preheat – Instant Heat
11. Under Seat Fan
12. Roof Vent
13. Driver's Left-side Window Fan
14. Hazard Lights
15. Reverse Gear Light
16. Battery Switch
17. Gas System – On/Off
18. Vehicle Leveling Indicator – Raise/Lower

## Door Controls



1. **"Release" button:** Press this button when you load passengers at the bus stop. Press the button to enable doors to open when a passenger has made a stop request, or to enable the "open door" buttons on the outside of the bus that allow passengers at the bus stop to open the doors. The blue "Release" button is illuminated while it is active

Key: **[NUM /]**

2. **"Clear Release" button:** As long as "Release" is enabled, all the doors (except for Door 1) are in an automatic mode. Passengers can open doors, and doors will close after a delay when no passenger is in the photoelectric field. Since Door 1 has no light barrier and is monitored by the bus driver, the driver must manually open and close the door (see below).

By pressing the "Clear Release" button you deactivate the automatic mode. The lights on the release button will extinguish. Once all doors are closed (regardless whether the release is active or not), the green "Departure" signal will light up (see below) and a "Gong" is heard, signaling the driver that the bus is ready to proceed.





Note: The hand brake releases immediately when the “Clear Release” button is pressed. Therefore, if the “Clear Release” button is pressed while a door is still open, the bus may roll unexpectedly once all the doors are closed. For this reason, the brake pedal must always be pressed when dropping off and picking up passengers.

Key: [NUM \*]

3. **“Kneeling” Button:** Press this to lower the bus on the right side to allow strollers and passengers with limited mobility to get on or off the bus. The button is lit when the bus is being lowered or raised. By pressing the button again, the bus is raised to the normal level.
4. **“Door 1” button:** This opens Door 1, even if the battery master switch is turned off, and is independent of the automatic mode. As soon as Door 1 is open (only possible at a standstill or below the speed of 3 km/h), the brake pressure automatically rises and the vehicle cannot move so long as the door is open.

Furthermore, this door is always manually closed, whether the door has been manually or automatically opened by releasing the door at a stop request. As long as Door 1 is open, this button is lit.

Tastatur: [NUM -]

5. **“Door 2”:** This opens Door 2. If the door is already open, it can be kept open by holding the button until the release is canceled or the button is pressed again. This process will take the door out of the automatic mode, as in the case of “Kneeling” and “Clear Release”. By pressing the button again, the door switches back to automatic. The button is illuminated when Door 2 is open.
6. **„Door 3” button:** See the notes for Door 2.

## Other Devices on the Vehicle

### Driver’s Air Conditioning



All NL 205 vehicles, model 8950, are equipped with driver air conditioning. Use the rotary knob to select level 1 to 3. To turn it off, select 0.

**NOTE:** This cools only the driver’s area and not the passenger compartment!



## Heating



The NL 205 passenger compartment is heated by hot water that is produced when the engine coolant is heated.

The driver controls the heater's fan levels 1 to 3. To turn off, select 0.

**NOTE:** Level 2 and 3 are available only when the engine is running.

You can adjust the temperature with the plus and minus keys on the left hand side. The front fan normally operates by pulling in outside air; if you want to use re-circulated air, press the „SMOG“ button and if you prefer mixed air, press the middle button. DEF is „Defrost“ and is used to quickly heat the windshield.

## IBIS Unit for the Vienna Lines - Detailed Explanation



The IBIS Unit is responsible for the control of the indoor and outdoor message display, for playing recorded stop announcements, displaying delay messages and for driver announcements inside or outside the bus. In reality, it is also the radio connection between the control center, dispatchers and drivers (voice and data radio). It is also used for sending „coded messages“ (e.g. mechanical problems, short-term service changes, etc.) between the control center, dispatchers and the responsible drivers.

In normal operation, the current stop, time and date (day and month only) are alternately displayed on the first line of the screen. On the second line is the following information:

- **Type of vehicle (Bus type number 4)**
- **Line number (two digits)**
- **Course number (two digits)**
- **Distance** – the symbol „!“ could also be displayed here. This means that a temporary stop is scheduled. See IBIS functions for more details.





- **Destination number** ("TEK-Destination", two digits) - a "TEK Destination" is not unique destination number, but each line has its own destinations, which start at 1 and are consecutively numbered. Usually you go from Destination 1 to Destination 2 and back again. Destination 1 on the 24A line, for example, would be "Invalidensiedlung". For an unusual destination (eg. bus service to replace a rail route) "temporary" will be displayed (see *IBIS functions for more details*).
- **Direction** - 1 for one way or 2 for round trip
- **Short Haul** - Shows the current trip section. A section is usually composed of multiple stops - the so-called short-haul.
- **Bus stop number** - obsolete, no longer appears
- **Deviation** - shows delays, early arrivals and possible waiting times
  - **+1.5** – Delayed by 1 minute 30 seconds
  - **-1** – Early by 1 minute
  - **0** – On time
  - **===** – No deviating information receive; however, radio transmission is active and connected. In OMSI, it means that no schedule is active (on the Vienna maps).
  - **---** – Failed data transmission, no information is received. In OMSI, it means that no schedule is active (other maps).

### IBIS Key Functions:

1. **"Finish / 1":**
  - **Main mode:** Error beep (without function)
  - **Otherwise:** Input number 1 (with line, course, direction of travel, short-haul)
2. **"Line / 2":**
  - **Main mode:** Input "line"
  - **Other:** Input number 2 (with line, course, direction of travel, short-haul)
3. **"Course / 3":**
  - **Main mode:** Input "course"
  - **Other:** Input number 3 (with line, course, short-haul)
4. **"DR / 4":**
  - **Main mode:** Input "direction"

- **Other:** Input number 4 (with line, course, short-haul)
5. **"SH / 5":**
    - **Main mode:** Input "short-Haul"
    - **Other:** Input number 5 (with line, course, short-haul)
  6. **"Hst. / 6":**
    - **Main mode:** Error beep (without function)
    - **Other:** Input number 6 (with line, course, short-haul)
  7. **"Clock / 7":**
    - **Main mode:** Immediate time and date display, 2 second stop
    - **Other:** Input number 7 (with line, course, short-haul)
  8. **"Destination / 8":**
    - **Main mode:** Input "destination"
    - **Press "Display."** - Key: Input "temporary stop"
    - **Other:** Input number 8 (with line, course, short-haul)
  9. **"Station / 9":**
    - **Main mode:** Error beep (without function)
    - **Other:** Input number 9 (with line, course, short-haul)
  10. **"Delete":**
    - **Main mode:** Deactivate "Interior/← " and "Exterior / → "
    - **In "Line input mode:** Clear the current input and press again to change to the main mode
    - **In "Direction input" mode:** Change to the main mode
    - **In "Short-haul input" mode:** Delete current entry. Press again to change to the main mode
    - **In "Personnel number input" mode:** Clear current entry. Press again to change to the main mode
  11. **"Failure / 0":**
    - **Main mode:** Error beep (without function)
    - **Other:** Input "0" (with line, course, short-haul)
  12. **"Display":**
    - **Main mode:** circuit lamp test
    - **Command line mode:** Confirm and store the line. Change to the main mode + display the line number on the matrix
    - **Direction mode:** Confirm and store direction. Change to the



main mode + description of the respective travel direction on the matrix

- **Short-haul mode:** Confirm and store the short-haul and change to the main mode
- **Destination tracking mode:** Confirm and store the destination sequence and change to the main mode + description of the first destination entered on the matrix
- **Temporary stop mode:** Confirm and store the temporary destination. Change to the main mode + description of the temporary stop on the matrix
- **Input personnel number mode:** Confirm and save the personnel number. Change to the main mode

### 13. "Announcement"

- **When flashing:** plays the announcement for the current station in the passenger compartment and activates the automatic circuit switch ("Ans" button stops flashing.)
- **Otherwise:** moves to the next stop and plays the announcement

### 14. "Announcement back" button:

- Disables the automatic stop ("Ans" button flashes) and plays the announcement of the current station in the driver's compartment
- If you press the button, it will play the announcement for the previous stop in the driver's area.

### 15. "Emergency"

- **Not lit:** Press to activate an alarm siren, button starts to glow
- **Lit:** Press to deactivate the alarm siren, provided no emergency signal button on the individual doors is pushed

### 16. "Interior / ←"

- **Main Mode:** Button is lit if "Exterior /→" was active. "Exterior /→" will be disabled. This stops any active message. It has no other functions
- **Destination sequence mode:** Input for further destination

### 17. "Exterior / →"

- **Main Mode:** Button is lit if "Interior /←" was active. "Interior /←" will be disabled. This stops any active message. It has no other functions

- **Destination sequence mode:** Input a "dash" (= the next destination can be input)

### 18. "Code Plug-in"

- The announcements and all information on the current line are stored.

The other IBIS keys are not relevant or have no function.

### Normal route:

The line and course are already preset by the code, so that they no longer have to be entered. In contrast the so-called target sequence must be entered by the driver (see IBIS-target code list attached). When you press a roadmap you will be prompted to enter the target sequence. At the first bus stop, activate the automatic announcement pressing the „Ans.“ button. This stops flashing. The stops are automatically indexed from this point forward and the destination texts on the outside of the bus change in accordance with the stops.

Nevertheless, the IBIS has some features which will be explained in detail.

### IBIS Functions:

- **Switch on / basic use:** see "IBIS - Quick Start Guide"
- **Manually change lines**

1. Change using the "Input line" mode by pressing the "Line / 2" button in the main mode (display time, alternating with the current station). The key remains lit until the selected mode is activated.

2. The line can only be entered using numeric keys. The first digit is always "4", followed by a two-digit number. To enter a one-digit line, enter "4 + 0 + the number". A letter cannot be entered. It will automatically show as the letter "A".
3. If you enter the wrong information, you can reset the display by pressing the "Delete" button.
4. Press "Delete" a second time to leave the mode without saving the change.



5. Press the „Ins.“ button to save the line change and switch to the main mode. The line entered will be displayed on the bottom left of the display.

- **Manual course changes**

1. Change using the „Input direction“ mode by pressing the „FR / 3“ button in the main mode. The remains lit until the selected mode is activated.

Kurs: 12  
424 99101 ---

2. The course (this corresponds to the IBIS number on the schedule) can now be entered using the numeric keys; however, this has no effect in OMSI.
3. Press „Delete“ to leave the mode without saving the change.
4. Press the „Ins.“ button to save the course change and switch to the main mode. The new course is shown on the bottom left of the display.

- **Manually change direction**

1. Change using the „Input direction“ mode by pressing the „FR / 4“ button in the main mode. The remains lit until the selected mode is activated.

Fahrtricht.: 1  
42412 99101 ---

2. The direction can only be changed using the number keys „1“ or „2“, where 1 is the outward journey and 2 the return trip.
3. Press „Delete“ to leave the mode without saving the change.
4. Press the „Ins.“ button to save the line change and switch to the main mode. Changing the direction sets the current station as the starting station for the respective direction and interrupts the automatic announcements. They must then be manually activated at the starting station (see functions of the IBIS-keys).

- **Short-haul course changes**

1. Change using the „Short-haul“ mode by pressing the „KS / 5“ button in the main mode. The key remains lit until the selected mode is activated.

Kurzstrecke: 01  
42412 99201 ---

2. The short-haul can only be changed using the numeric keys; however, it has no effect in the OMSI and today is no longer used.
3. If you enter the wrong information, you can reset the display by pressing the „Delete“ button.
4. Press „Delete“ two times to leave the mode without saving the change.
5. Press the „Ins.“ button to save the short-haul change and switch to the main mode. The short-haul is displayed at the bottom center of the display according to the direction of travel.

- **Enter Personnel Number**

1. Change using the „Personnel number“ mode by pressing the „Stör / 0“ button in the main mode. The key remains lit until the selected mode is activated.

Pers.Nr.: 000007  
42412 99201 ---

2. Enter your six-digit personnel number using the numeric keys. This has no real effect in OMSI. In real operation it is required for radio communications to identify the vehicle.
3. If incorrect, press the „Delete“ button to reset.
4. Press „Delete“ two times to leave the mode without saving the change.
5. Press the „Ins.“ button to save the personnel number change and switch to the main mode.

- **Enter Destination Changes**

1. Change the mode to „Destination Sequence“ input by pressing the „Destination / 8“ key. The key remains lit until the selective mode is activated.

Z: 1,2,1  
Invalidensiedlung

2. The destination sequence, defined by the route map, is entered here. The numbers correspond to the route or course number. It defines the sequence of stops (hence the announcements) and the destination on the exterior display. Enter the two-digit destination numbers using the number buttons. Each two digit number is separated by a comma. Enter the comma with key „Exterior / →“. By pressing the „Interior / ←“ key, you can enter „Über-Ziele“, which are an intermediate destinations



that change with the line.

The last destination entered is shown in the second line of the display as you enter the destination sequence.

**NOTE:** The destination must always be “closed” meaning that the last destination must correspond to the first, to ensure that the route schedule time is not interrupted.

3. If incorrect, press the “Delete” key to reset.
4. Press „Delete” two times to leave the mode without saving the change.
5. Press the „Ins.” button after all of the correct information has been entered to save the destination changes and switch to the main mode. The first destination is shown on the external display. This will change automatically to the subsequent destinations as the bus makes its way to the final stop. After confirming the target sequence at the starting station, the automatic announcement system must be activated manually (see **IBIS key functions**).

- **Enter Temporary Stops**

1. Change the mode to Temporary Stops: Input by pressing the “Ins” key in the main mode and then the “Destination / 8” key. The key remains lit until the selective mode is activated.

übersch. Ziel: 901  
Sonderwagen

2. A destination can be selected and shown on the normal destination display (corresponding to the destination sequence). Example: “Special bus” or “Train replacement bus”. The three-digit number is associated with a destination code. Rewind or fast forward through the available destinations using the “Interior / ←” and “Exterior / →” keys. The corresponding destination is shown in the second line of the display.
3. If incorrect, press the “Delete” key to reset.
4. Press “Delete” two times to leave the mode without saving the change.
5. Press the “Ins.” button after all of the correct information has been entered to save the changes and switch to the main mode. The destination is shown on the external display.

## Conduct During Operation

### Parking the Bus at the Depot

The bus may only return to the depot if it is scheduled. “Special bus” should be displayed on the respective exterior destination signs on the NG235 205 and the LU200!

As noted in the OMSI manual, passengers pay careful attention to the signs displayed on the bus. You should have no problems with passengers who climb on or remain on the bus without a justifiable reason.

At the depot, the bus is properly shut down and the doors closed

### Signs

#### LU 200:

The rolling display band does not automatically adjust in the „Up / Down” or „Hand” mode. You are responsible to change the display at the end of each trip, according to the new destination. The change may be made no earlier than the next to last stop.

#### NG 235:

The destination display is changed at the end of every trip automatically by the IBIS system, according to the new route. However, you should check the display to ensure the information is correct.

**NOTE:** As noted earlier and in the OMSI manual, passengers pay careful attention to the signs displayed on the bus. Therefore, it is very important to select the correct display message; otherwise your passengers will not get on at the bus stop.

For trips that are not in regular service, the bus signs display appropriately (e.g. “Special Car”).



## Bus stops

Stops in Vienna are marked by blue-bordered signs. If no passenger has requested a stop and no passengers are waiting at the bus stop, this bus must drive past at a reduced speed. If passengers are at the bus stop or a passenger has pressed the stop request, the bus must stop.

## Correct Behavior at Bus Stops

At stops, the bus should stop with the center of the bus lined up with the bus stop sign. If a stop area is reduced (e.g. by cars at a traffic light), the front of the bus should line up with the sign.

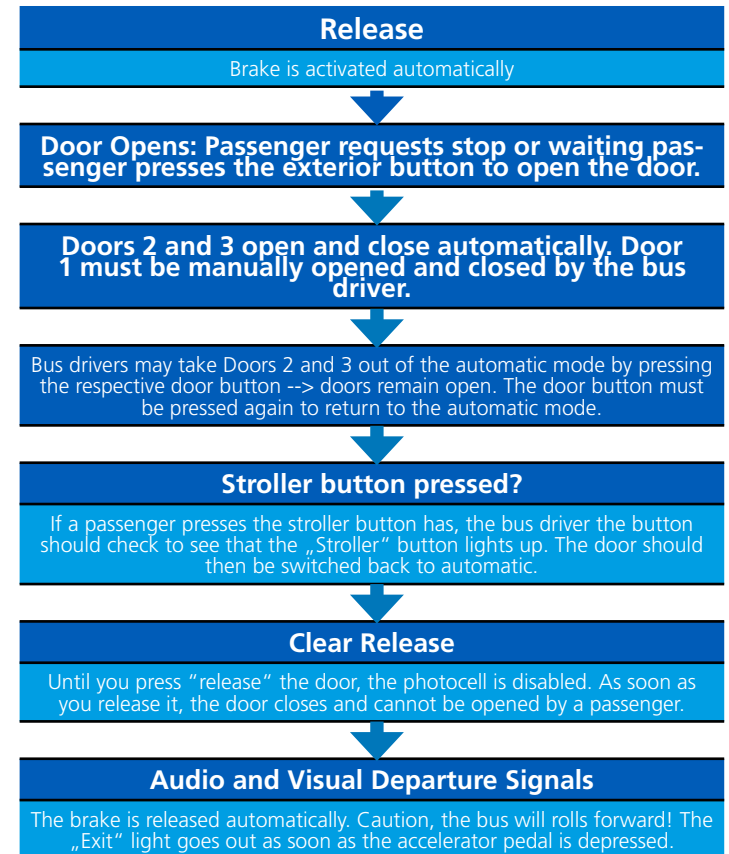
If another bus is stopped at a station, reduce your speed so that the bus in front of you has vacated the station by the time you arrive.

At a double bus station, there is enough room for two buses to stop at the same time.

Once you have stopped at the bus stop, activate the blue release button. If a passenger has made a stop request, the appropriate door opens automatically. Likewise, the waiting passengers press entry button on the outside of the vehicle door and it will open automatically. As long as the passengers are entering or exiting the bus, the doors are held open by the photocells. If the photocells do not detect any movement after 3 seconds, the doors close again automatically.

**NOTE:** Door 1 is not controlled automatically and must be monitored by the bus driver and manually closed!

## Flow Chart





## Double-stops

Double-stops are bus stations that are long enough for two buses to stop at the same time. They are a maximum of 30 meters long and are marked by a sign that says, „double-stop“. It is possible that your passengers do not realize that the other bus is also scheduled. From a friendly customer service perspective, we recommend you allow the passengers to get off or climb aboard.

## Passengers

Do not be surprised if the passengers in OMSI „talk“ to you! They will greet you sometimes when boarding and even criticize things if something is not to their liking. You will find that they do not spare criticism even while you are driving if you are not customer friendly.

If passengers want to get off, they press the button for the stop request on the nearest door. The information panel will light up and a “Stop Request” signal will light up on the dashboard. You will also hear a corresponding gong that signals the request.

You do not need to worry about ticket sales on this Add-On. The vast majority of passengers on the Vienna Lines are holders of annual or season tickets, all of which are purchased in advance of departure.

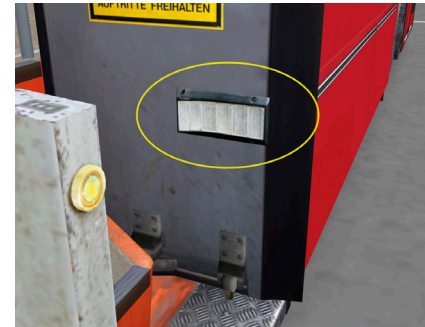
In reality, ticket purchases from the bus drivers are very rare occurrences. Tickets and change money are usually tucked into the shirt pocket or wallet carried by the bus drivers. We have chosen not to try and represent this on this implementation.

## Troubleshooting

### Door Malfunctions

Door malfunctions are one of the most common problems you will encounter. The common causes and manifestations depend on the vehicle type.

### LU 200:

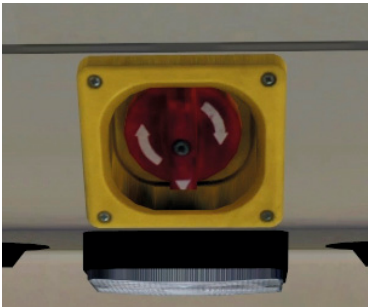


Most door problems occur in poor weather conditions, when dirt and debris cover the reflectors and the photocell connection is interrupted. This manifests itself by the door popping open during the closing process and cannot be closed completely. In this case, you have to go to the door and wipe the dirt from the reflectors. After that, the door should work properly again.

**NOTE:** Too little pressure in the compressed air system may be cause the door to take a long time or to not close completely.



NL 205:



A door failure on the NL 205 may be fixed by bleeding the air using emergency door knob. You can move the door manually and then move the emergency door knob back to automatic. If the door problem is still not resolved, the door pressure must be set, closed by hand and blocked from use on the outside. Transparent warning signs will be pasted on the door automatically.



Bus Traffic Signals

Bus traffic signals serve and support the conventional traffic light system.

You must pay attention to the bus traffic lights whenever you see them. When the light goes out or if the signals fail, you can continue the journey using the normal traffic light rules.

Signal	Meaning
	<b>This is the bus traffic light system display.</b>
	<b>Attention Signal</b>  The traffic signal will change in about 8 seconds and you will be free to drive forward.
	<b>Drive</b>
	<b>Stop</b>







## Tram Traffic Signals

If your route takes you through areas with tram lines, you must follow the tram traffic signals as well as the bus traffic signals:

Signal	Bedeutung
	Stop in all directions
 	<b>Stop in all directions + Attention Signal</b> The traffic signal will change in about 8 seconds.
 	<b>Drive – straight ahead</b> Once the signal is given, the light will extinguish.
	<b>Drive – straight ahead</b>

	<b>Drive – left turn</b>
	<b>Drive – right turn</b>

Tram traffic signals have a „Distant signal“ and a „Main signal“. The Distant signal shows you what to expect at the next Main signal.

## Bus and Schedule Selection

If you take over a bus at a bus stop, you do not need to do anything further. You take over its schedule automatically. The vehicle has already been prepared and is ready to proceed.

If you wish to take a bus from another place on the map, please refer to the OMSI Manual, Chapter 2.12 and follow the instructions for selecting and setting a schedule.

You should have everything you need and the most important information required for your first journey. We wish you a good trip and a lot of fun with this Add-On!



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**OMSI 2** Add-on

# Vienna 2

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