PC DVD

TML STUDIOS

aerosoft™

CITYBUS SIMULATOR MUNICH

Manual

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Citybus Simulator Munich

Manual

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General Information

Installation

You have to be logged in with administrator rights before you start the installation of "Citybus Simulator Munich".

To start the installation of "Citybus Simulator Munich" 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.

You will be asked to insert your email address and your registration key. Please insert it exactly the way it was written on the label or in the confirmation mail you received from your download shop.

Please keep your registration key on a safe place, you will need it again if a new installation will be necessary.

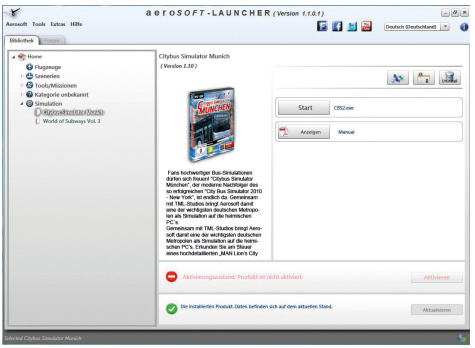
The installation program will attempt to locate the correct path. If you wish to install to another location, then you will have to enter the correct path for installation manually. In order to do this, click on "Browse" and navigate to the correct path. Before the installation program starts to copy the files onto your hard disc, you will be presented with all the installation details.

The installation program will now copy all of the "Citybus Simulator Munich" files onto your hard disk.

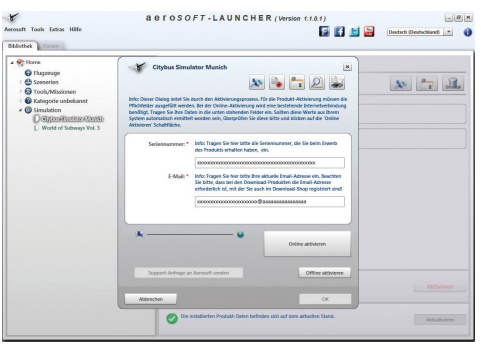
If you want to make any changes or to install any updates for this program you will need the DVD or the installation file from the download shop and your registration key again.

Important note!

Subsequent to the installation the Aerosoft-Launcher will be started for the online registration.



Click on the „Activate" button. Check your registration data in the next screen and click on „Online Activation".



After the activation process is finished successfully exit the Aerosoft-Launcher.

Learn more about the Aerosoft-Launcher in the next chapter of this manual.

To run "Citybus Simulator Munich" click on the new program icon on your windows desktop.

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?

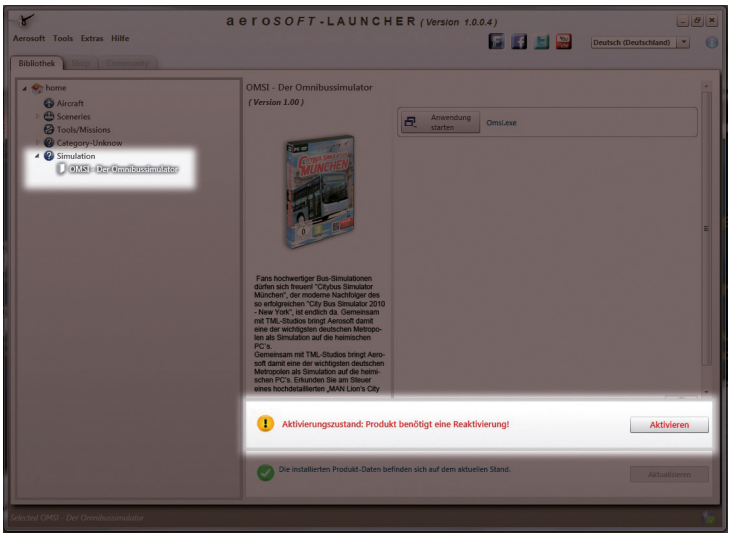
For an installation and an online-activation you will have to have administrator rights. Please make sure that you have these rights.

You will also need an active internet connection..

How do I activate a SOFTWARE PRODUCT?

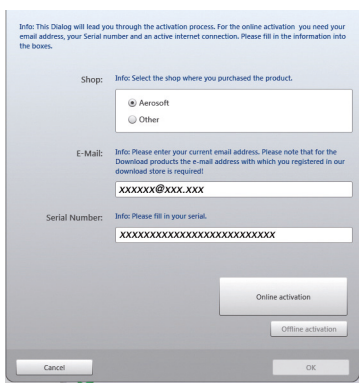
If necessary please change to the "Library" view and select the SOFTWARE PRODUCT for activation.

Click on the button "activate".



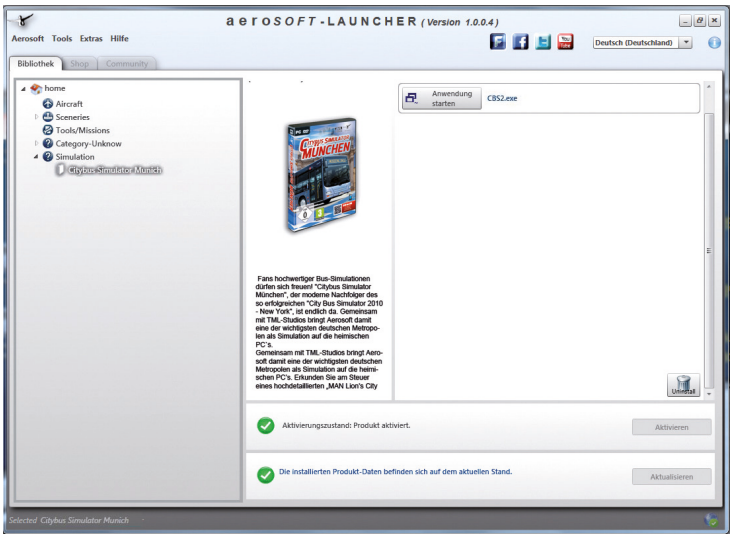
The following screen will appear:

Check your email address and your registration key is correct and click on „Online activation". Please note you will need an active internet connection for this procedure.



You registration data will 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.

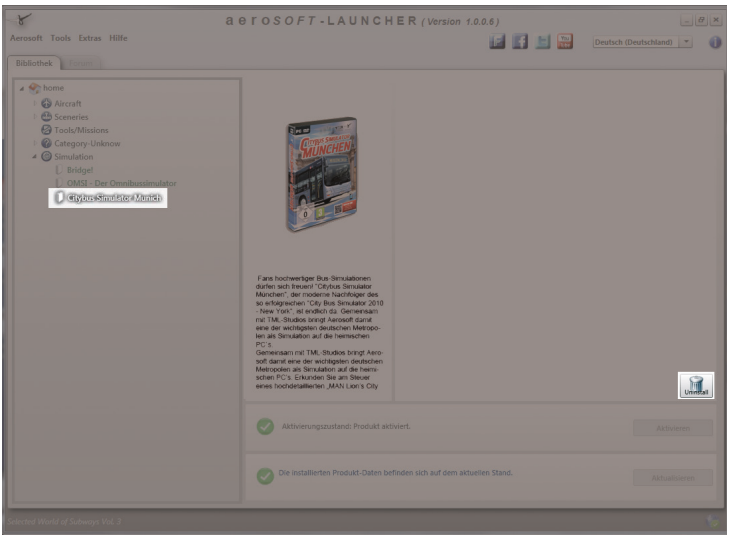
Click on the "refresh" Button to take over the activation status.

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.

Removing „Citybus Simulator Munich"

In order to fully remove "Citybus Simulator Munich" run the Aerosoft-Launcher. Change to the "Library" and select "Citybus Simulator Munich" category. The information about "Citybus Simulator Munich"" will appear.



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

Selecting A Game Version

There is a 32-bit and a 64-bit versionof the game. The 32-bit version can only be installed on a 32-bit operating system. Due to performance reasons, this version has some graphic restrictions.

Difference between the 32 bit and the 64 bit version

The most obvious difference is the genereal range of vision in the game. In the 32-bit version you can only select a medium range of vision. The 64-bit version, however, allows a far greater range of vision given you have the corresponding powerful hardware (see system requirements).

System requirements

Minimum

All graphic-, AI- and other options (e.g. no rain/snow) set as low as possible

- Windows 7 (32-bit or 64-bit version), Windows 8, Windows Vista
- Dual core 2.8 GHz
- 4 GB RAM
- GeForce 9800 GT or similar AMD
- Sound card
- DirectX 9.0c
- At least 5 GB of free disk space

For tips on improving the performance see chapter „Help and tips“

1 MAN Lion´s City Bus

The City Bus Simulator München features 3 versions of the MAN Lion´s City Bus:

- MAN Lion´s City 2doors
- MAN Lion´s City 3doors
- MAN Lion´s City articulated bus

1.1 The Driver's Workplace

Overview



Instrument panel on the left hand side (NUM 7)



1 - Light (Off/Parking light/Driving light)

2 - ASR

3 - Retarder - Intarder

4 – Hazard lights

5 – Fog-light/rear fog-light

6 – Interior lighting

7 – Cash desk lighting

8 - Sunblind up/down

9 – Lighting test

10 – Multi-function lever (Mouse operation only windshield wipers)

Display board in the front (NUM 8)



1 – Rev counter

2 - Speedometer

3 – Fuel level gauge

4 – Coolant temperature gauge

5 – Pressure indicator braking circuit 1

6 - Pressure indicator braking circuit 2

Instrument panel on the right hand side (NUM 9)



1 – Bus stop brake

2 – Levelling adjustment (Lifting/ lowering vehicle)

3 - activate/deactivate automatic kneeling

4 – Door lock on/off

5 - Gearshift

6 – School bus mode (Hazard lights on/off)

7 - Pushchairs

8 – Door release / Automatic door closing on / off

Dashboard on left hand side (NUM 4)



1 – Control unit auxiliary heating

2 – Open/ close skylights in the back

3 - Open/ close skylights in the front

4 – Emergency stop switch

5 – Control unit heating, ventilation, cooling

6 – Parking brake

7 – Bend protection

8 – Roof vents

9 – Mirrored window heating

10 – Platform heater blower

11 – Battery switch

Tachograph (NUM *)



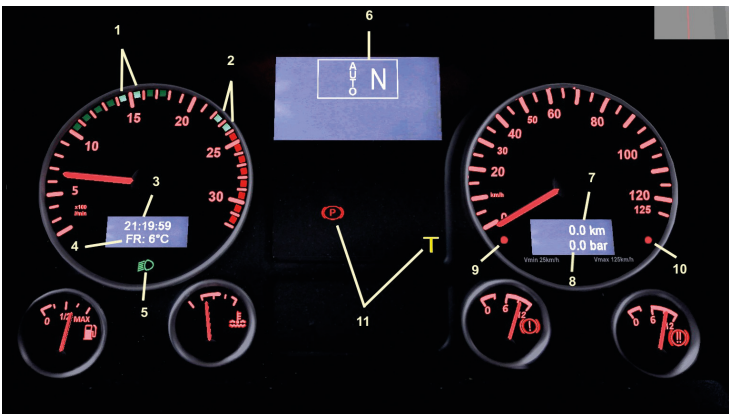
1 - Display viewing the following information:

- Current time
- Current speed
- Kilometres driven

2 – Card slot for the driver card

3 – Control element

1.2 Display Instuments



Rev counter

1 – Optimal rev range is indicated by 2 LEDs shining in light-green

2 – If the retarder is activated, the maximum available rev range is indicated by 2 LEDs shining in light-green

3 – Current time is shown

4 – Temperature gauge:

O: Outside temperature

DS: Driver seat temperature

PS: Passenger space temperature

5 – If the driving light is switched on, the green pilot lamps will turn on

6 – Driver display; informs about current operating states, disturbances, error messages and the current switch position of the vehicle

Switch positions:

N: Neutral

D: Drive

R: Reverse

Tachometer

7 – Indicates total mileage of the bus

8 – Indicates the current boost pressure of the turbocharger

9 – Lights up if the tachograph is not ready

10 – Lights up if the prescribed maximum speed of the vehicle is exceeded

Pilot Lamps

11 – You see warning lights and pilot lamps; they either light or flash red or yellow depending on the severity

1.3 Driver' Display And Pilot Lamps - Symbols And Their Meaning

1.3.1 Priorities Of Disturbances And Error Messages

Errors and disturbances are divided into 4 priorities:

Priority 1:

- STOP-Symbol appears in the driver display
- Error- or disturbance symbol appears in the driver display
- Red warning light
- Red pilot lamp
- Warning buzzer sounds

Example display



Example display

ABS	ABS (Anti-lock braking system) only works to a limited extent
ABS 1	No ABS available for the trailer (articulated bus)
ASR	ASR (Anti-Slip Regulation) is activated
	Skylight open
	Malfunction of the engine (e.g. air filter is blocked) or of the exhaust system relevant to emission
	Fluid level of windshield washer fluid reservoir is too low

	A passenger has pushed the stop button
	Windshield heater is switched on
	Air-conditioning is switched on (Driver seat and/or passenger space)
	Kneeling is activated (Vehicle is lowered)
	Air filter is blocked – Check air filter
	Regular vehicle level not reached
	Oil level automatic engine oil refill too low
	Tachograph: Driver card not inserted or disturbance
	Main warning light; flashes or lights combined with a disturbance or error message
	High beam or headlight flasher is switched on
	Electronic level regulation broke down

	Parking brake is applied
	Engine malfunction
	Transmission malfunction
	Bus stop brake is currently applied
	Recharge control test run during starting process
	Engine oil level is too low or too high
	Supply pressure brake system is too low or disturbance
	Main warning light; flashes or lights combined with a disturbance or error message; get vehicle to stop

Fahrerdisplay

	Priority 1 disturbance; the vehicle needs to be stopped immediately, another Description and/ or the corresponding symbol appear in the driver display and the pilot lamps (in red) plus warning sound
	Brake system is faulty (Supply pressure too low)

	Cooling system malfunction
	Brake system malfucntion (ABS)
	No driver card in the tachograph or malfunction
	Information display (plus description)
	Danger, black ice
	Oil level too high or too low
	Fuel injection system (engine) malfunction/ disturbance
	Brake system malfunction (parking brake)
	Fuel tank is faulty
	No idling; Take your foot off the accelerator as gear lever is in neutral position
	Level regulation is faulty

	Battery or alternator malfunction/ disturbance
	Neutral switch postion
	Drive switch position
	Reverse switch position

2 OCC - Operations Control Center

After having started City Bus Simulator Munich, you'll get straight to the OCC Desktop.

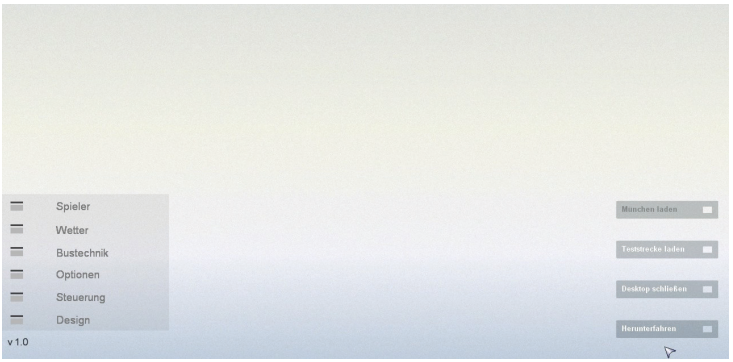
The OCC is an essential piece of the game.

In the OCC you can:

- Make basic and specific settings
- View statistics
- View the bus' malfunction status and activate or fix malfunctions
- Load the game world
- Load the test track
- End the game

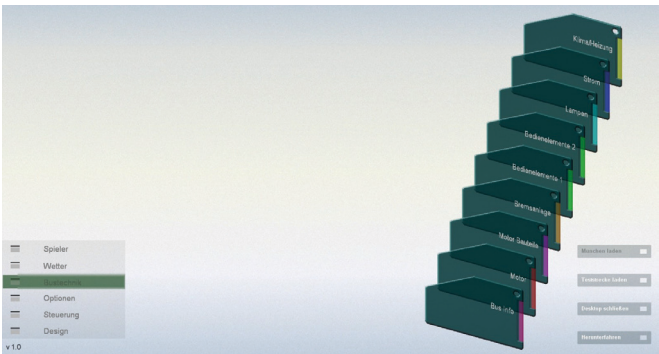
On the left hand side, you find the settings menu. On the right hand side, you have the menu for starting and ending.

OCC-Desktop



Settings can be made in the following 6 categories:

- Player (e.g. tutorials, malfunction director, error log = analyses, driver card)
- Weather (calendar, weather- and seasonal-options, temperature, rainfall)
- Bus technology (all technical bus setting-options)
- Options (graphic- and sound-, AI- and other game settings)
- Colour (Assignments vehicle, player, input devices such as steering wheel, keyboard, mouse)
- Design (selection of available bus-repaints)



All settings and changes made need to be confirmed by clicking on "Confirm". Clicking on the "Reset" button resets all values in this module to default. The calendar values, for example, are all being reset to the current system time.

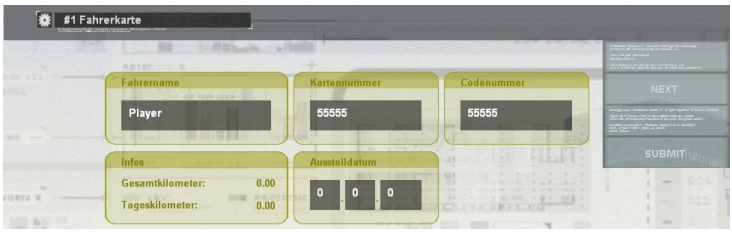
▶ Pressing ESC gets you back to the OCC – Desktop at any time. You don't have to leave the game!

2.1 „Player" Category

2.1.1 Driver card

In this category you'll find the driver card and the codenumber (has to be 4 digits long). The number can be changed individually before you start playing.

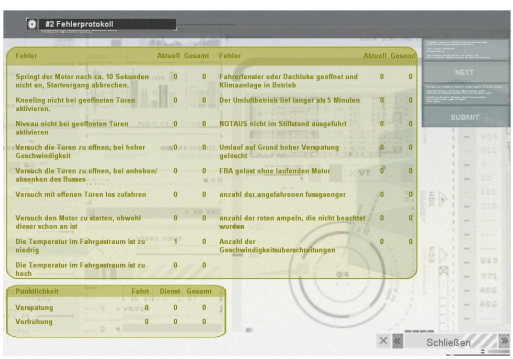
Info: Before closing, always confirm changes by clicking on "Confirm".



2.1.2 Error log

This is where you find the player's analysis. A comparison between the current performance and the last trip indicates if and in which aspect you have improved.

The upper and more extensive part of the error log is being reset with every new start of the game. The lower part (delays, early arrivals) is being reset with every new line you enter.



2.1.3 Malfunction Director

Optionally, the malfunction director can take over and simulate bus malfunctions that suddenly occur in the game.

It's another central piece of City Bus Simulator Munich. That's why it has its own chapter in this manual.

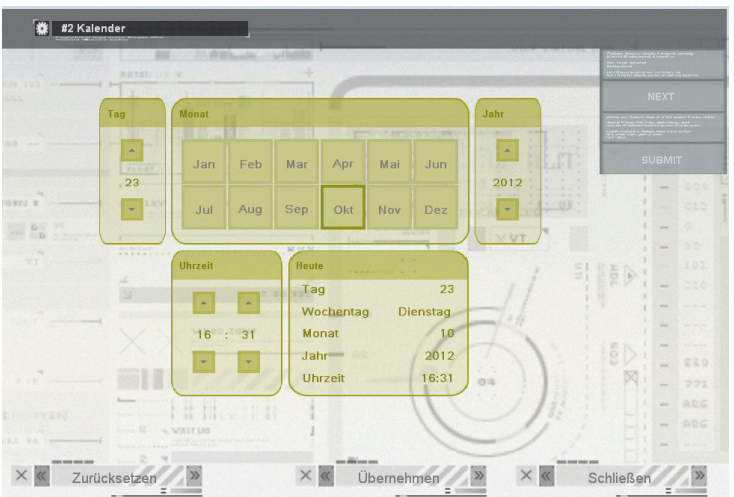
► **For an extensive description, see the chapter „NEW! Malfunctions“**

2.2 „Weather“ Category

2.2.1 Calendar

Here, you have a real calendar including seasons and weekdays. After a certain adjustment time, changes are immediately visible in the game.

Info: Before closing, always confirm changes by clicking on “Confirm”.
Info: The option „Reset“ resets the calendar to the current system time.



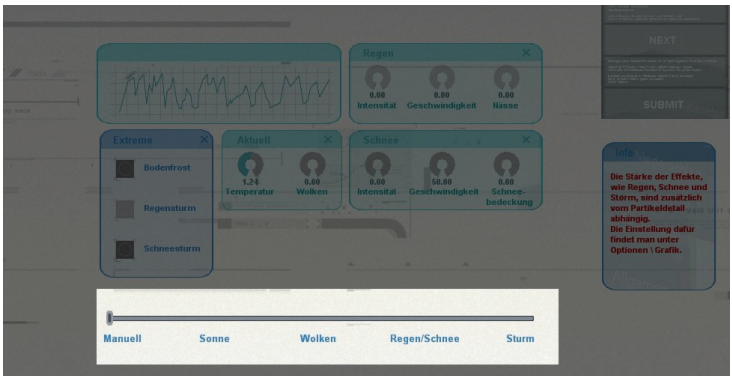
2.2.2 Weather in general

In general, the weather in City Bus Simulator is dynamic.

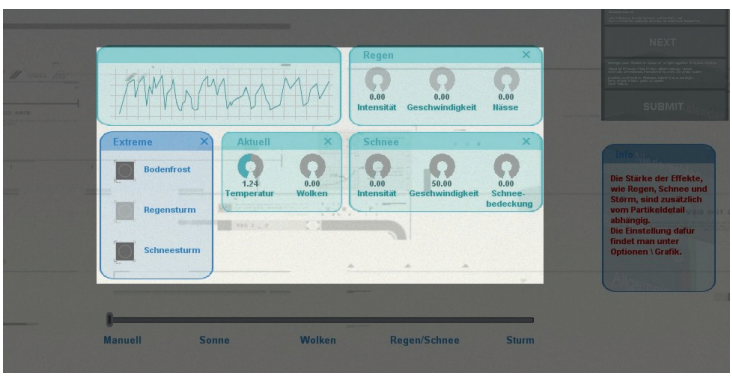
But you also have two options to change the weather individually RIGHT HERE and RIGHT NOW, give rise to extreme situations and adjust rainfall magnitude etc.

Info: Before closing, always confirm changes by clicking on "Confirm".

1. Default weather conditions (recommended):



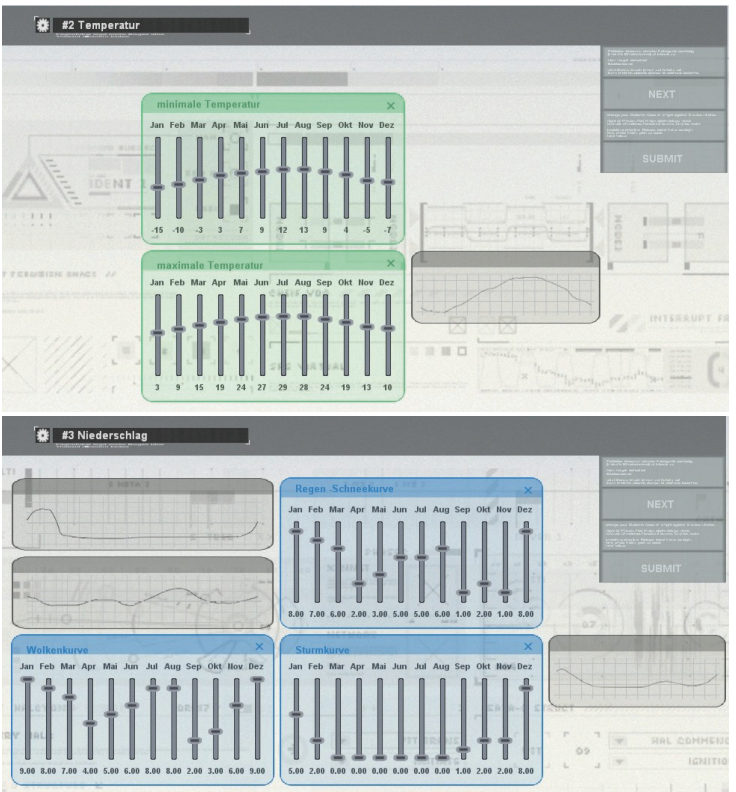
2. Individually adjustable options/ extremes:



2.2.3 Temperature/Rainfall

In general, the weather in City Bus Simulator is dynamic. The default annual graph is identical with the actual weather conditions in Munich.

In order to adjust the general dynamic weather generation, you can change the whole annual graph under temperature and rainfall.



2.3 „Bus-technology“ Category

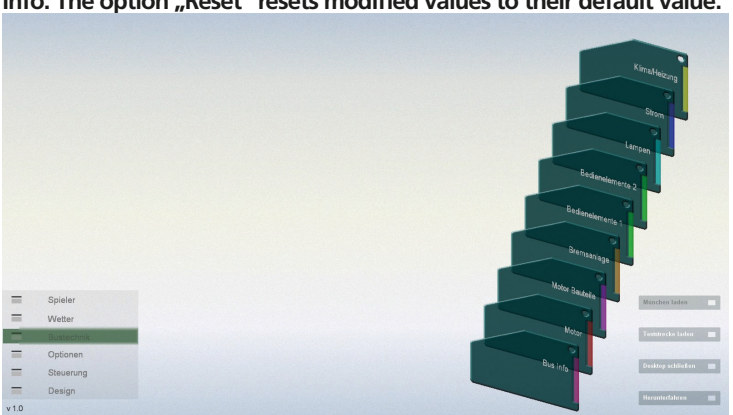
This is the centrepiece of this simulator.

We are glad to be officially supported by MAN and the Münchener Verkehrsbetriebe (MVG) with the City Bus Simulator Munich. That’s why it was possible to design the MAN Lion´s City Bus technology and communication via the co-pilot with the control center in such an authentic, detailed and extensive way.

In the subcategories you can

- View and adjust all bus information
- Tune engines and their components
- Undertake malfunction simulations and repairs (see chapter 3 „NEW! Malfunctions“)

Info: The option „Reset“ resets modified values to their default value.



Info: Players that are less keen on technology don’t need to be afraid. The default values are realistic and don’t need to be modified. If you drive in a reasonable way, you’ll only need a repair every now and then (do NOT activate the malfunction director!).

For a more detailed description of the repairs, see the chapter „General wear“.

► The test track is perfect for „experiments“. Here, you can try all sorts of settings like engine-tuning, malfunctions and immediately see the effect of other modified values.

Select “Load test track” on the OCC-Desktop



► At this point, we’d like to point out that in spite of the amount of authentic details this is NOT an official training simulator. Due to security reasons, some details were left out, slightly altered and partly simplified.

2.4 „Options“ Category

In this category, you can adjust graphic, sound and AI.

For tips on how to improve the performance, see chapter „Help and tips“.

2.5 „Control" Category

In this category, you can customise assignments for input devices, vehicles as well as players.

Keyboard

Keyboad control offers different control options:



Brake

Standard (Classic)

If the standard (classic braking response) is selected, the brake is applied as long as the key (by default down arrow key) is pressed. As soon as you release the key, the brake is released. You can adjust the brake force with the slide switch "Brake effectivenes" (slide switch on the left = weak brake force, slide switch on the right = high brake force).

Info: Emergency braking is not possible here.

Alternative brake

If the alternative braking response is selected, brake force will be increasing continously by pressing the key (by default down arrow) until the maximum brake force is reached.

The brake force can also be augmented by pressing the key repeatedly. The brake force is applied until you press the acceleration key (by default up arrow key).

Info: To perform emergency braking, press the braking key twice in quick succession.

Steering mode

Normal

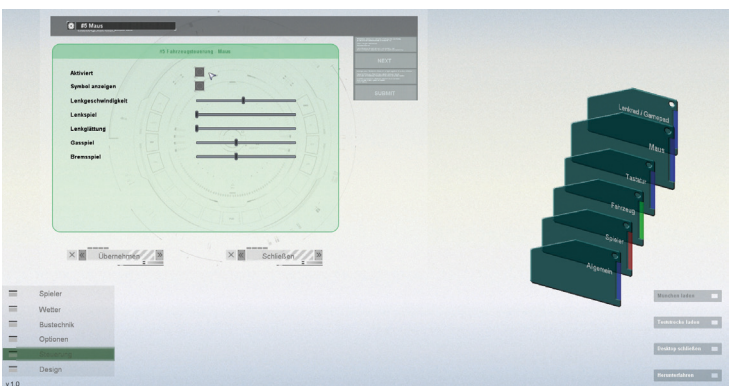
The „normal" steering mode turns the steering wheel in the desired direction as long as you press the corresponding key (by default left and right arrow key). If automatic back rotation is activated, the steering wheel automatically rotates back in zero position as soon as you release the key.

Alternative

The "alternative" steering mode rotates the steering wheel with every keystroke. The steering angle per keystroke can be determined using the switch slide "Steerig angle (alternative)". If the steering wheel is e.g. turned to the left, you can rotate it back into the central position by quickly double-tapping the right arrow key. In addition, you can continuously turn the steering wheel in the desired direction if you keep pressing the key.

Mouse

Mouse control offers an alternative to steering wheel, gamepad & co.



With active mouse control, the bus reacts to the mouse position relative to the centre of the screen. The bus accelerates in the upper screen area and brakes in the lower screen area. The bus turns left in the left screen area and turns right in the right screen area.

The slide control "Steering speed" adjusts the speed at which the steering movements follow the mouse movements. Slide control on the left = slow steering, slide control on the right = fast steering.

The slide control "Steering wheel clearance" determines the area, in which no steering movement takes place (Deadzone). Slide control on the left= no steering wheel clearance, Slide control on the right= high steering wheel clearance.

The slide control "Steering smoothing" smoothes the steering movements. Slide control on the left = no smoothing, Slide control on the right= high smoothing.

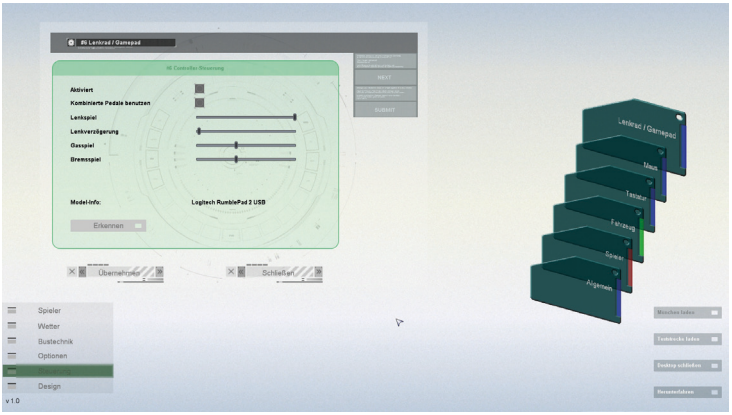
Info: For precise steering movements, we recommend to keep the slide control in the left area.

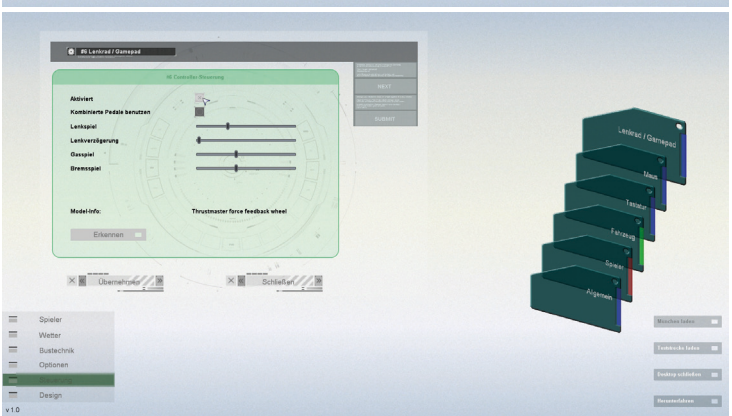
The slide control "Gas clearance" determines the area in which no gas is accepted (Deadzone). Slide control on the left= no gas clearance, Slide control on the right= high gas clearance.

The slide control "Brake clearance" determines the area in which no brake force is applied (Deadzone). Slide control on the left = no brake clearance, Slide control on the right = high brake clearance.

Steering wheel/Gamepad

Info: ATTENTION: Please make sure that the latest driver is installed. Usually, current drivers can be downloaded on the publisher's website.





The slide control "Steering wheel clearance" determines the area, in which no steering movement takes place (Deadzone). Slide control on the left= no steering wheel clearance, Slide control on the right = high steering wheel clearance.

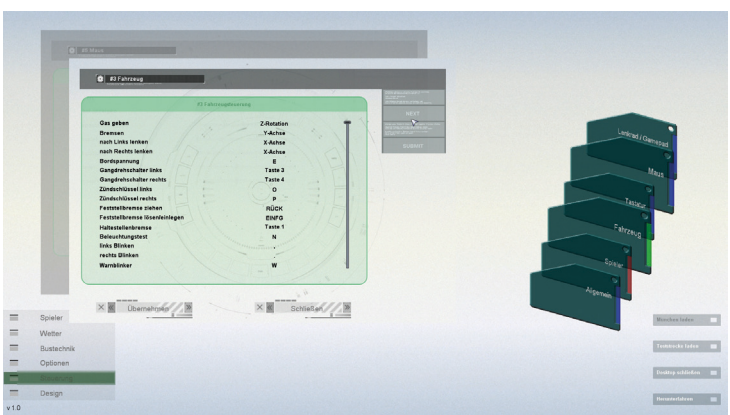
The slide control "Steering delay" delays steering movements. Slide control on the left= no steering delay, Slide control on the right = high steering delay.

Info: For precise steering movements, we recommend to keep the slide control in the left area.

The slide control "Gas clearance" determines the area in which no gas is accepted (Deadzone). Slide control on the left= no gas clearance, Slide control on the right= high gas clearance.

The slide control "Brake clearance" determines the area in which no brake force is applied (Deadzone). Slide control on the left = no brake clearance, Slide control on the right = high brake clearance.

The button assigenment of the steering wheel/ gamepad can be customised in the index-tab "Vehicle".



ATTENTION: If you have problems regarding axes/ pedal assignments, please deactivate "Combined pedals" in the steering wheel/ gamepad driver!

2.6 „Design" Category

In this category, you can set the repaints that are available for the player's busses.

For details on how to create these repaints, please check the section "Create repaints".

3 Gameplay

Essentially, the gameplay consist of 3 parts – the co-pilot, the malfunctions and the malfunction director. The co-pilot communicates with you via radio and assigns your routes, supervises their compliance, informs you about construction sites, weather conditions and more important information. At the same time, he is your connection to the control center. The malfunctions and the malfunction director ensure even more change during the game.

In the following, all components are described in great detail. Furthermore, you have the possibility have a better start using the tutorial "Gameplay" (see the chapter "Tutorials")

3.1 Copilot

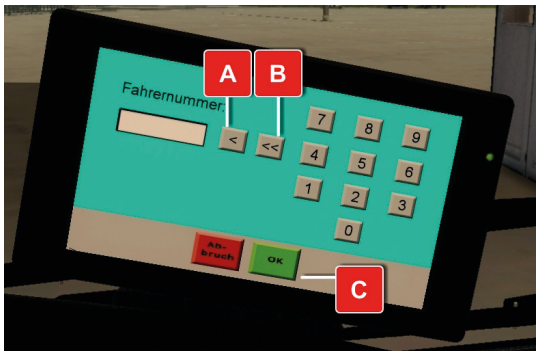
The co-pilot is an important, electronic helper for usual shift working. The driver communicates with the control center via the co-pilot which, in return, provides the driver with all important information during his shift.

Starting the co-pilot

After switching on the vehicle voltage and the ignition, a green LED flashes on the co-pilot case. After 5 sceonds, the system has booted and the co-pilot is ready for more input.

Entering the driver number

First, the driver needs to log into the system. In order to prevent third party use, the driver needs to log in using his personal identifaction number.



The identification number is a 5 digit figure. You find it in the player file or the driver card in the OCC.

A. Deletes the last digit

B. Deletes all digits in the array "Driver number"

C. Confirm the entry with a click on the "OK" button

Enter codenumber

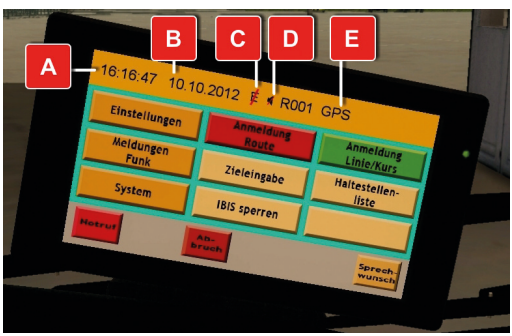
After entering the driver number, you also need a valid code number. You again find it in the player file in the OCC. The code number also is a 5 digit figure. The entry forms look very similar.



After entering the number, a window appears asking you to apply for a line/ course. You need to skip this window by clicking on abort.



Main menu



You can use the main menu to make according settings while you are driving

A. Indicates the current time

B. Indicates the current day and month based on the integrated calendar

C. This symbol signifies that the ticket canceller is switched off

D. The crossed out speaker indicates that bus stop announcements in the passenger space are switched off

E. Is the switched off GPS-signal

The next step would be to go to the submenu "Settings".

Settings



Unlock ticket machine

With this button, you can switch on the ticket machine. TIP: After switching on the ticket machine, it can also be switched on again using the same button.The text on the button will have changed. It now reads "Lock ticket machine".

On-board display off

This is the monitor in the passenger space. By default, it is switched on after activating the co-pilot. But you can also switch it off because of a malfunction etc. When the monitor is switched off, you will see a small symbol on the standard screen. ADVICE: the switched off monitor can ONLY be seen on the standard screen.





Announcements on

With this button, you can activate bus stop announcements. If you activate announcements in the passenger area, the symbol disappears from the co-pilot. The crossed out speaker is only visible if announcements are switched off.

Night display

If the co-pilot has a blinding effect on the driver, he has the possibility to reduce the brightness of the co-pilot with this button.

Bus stop advancing off

This function keeps the following four stops from being indicated on the monitor. As soon as you press the button, the display on the monitor freezes. This feature is used, for example, when you cannot stop at a certain bus stop because of an accident.

Lock destination display

The co-pilot automatically labels destination displays on the bus. But there is also the possibility to label the destination display manually. If this is necessary, the automatic labelling of the destination display needs to be switched off.

Abort

If you click on the button "Abort", you will get back to the main menu.

Report/ radio



To communicate with the control center, two requirements must be met

A. You must not be in a dead zone

B. You have to select the active radio channel

Dead zone

A dead zone is a radio interference and the sent/ received messages are lost.

You are in a dead zone if:

A. The channel buttons are coloured in gray (on the left



b) The icon symbolizing radio is crossed out 

The active radio channel

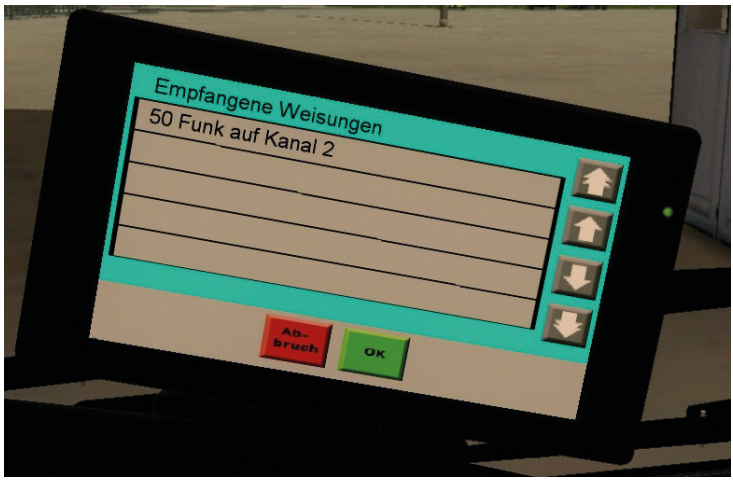
After activating the co-pilot, it automatically registers itself at the control centre. There, the registration gets noticed and is processed. After a certain time, you'll get a text message from the control centre informing you about the current radio channel.

CAUTION: There are two important things you need to keep in mind. There are people working at the control centre, so it is going to take a while until your request is being processed and answered. In rare cases, your request may even get lost. If this happens, you can only repeat your request.

CAUTION: The second important piece of advice is that radio channels might change during an operation due to safety reasons. This change is sent via text message ONLY. So you always need to check your text messages for important additional information.

Received orders

Using this button, you can read all your text messages. Up to 10 messages can be saved. If an 11th message is received, the oldest message will be deleted. The co-pilot automatically identifies messages that are relevant to the logged in driver. All other messages are automatically left out and subsequently not displayed.



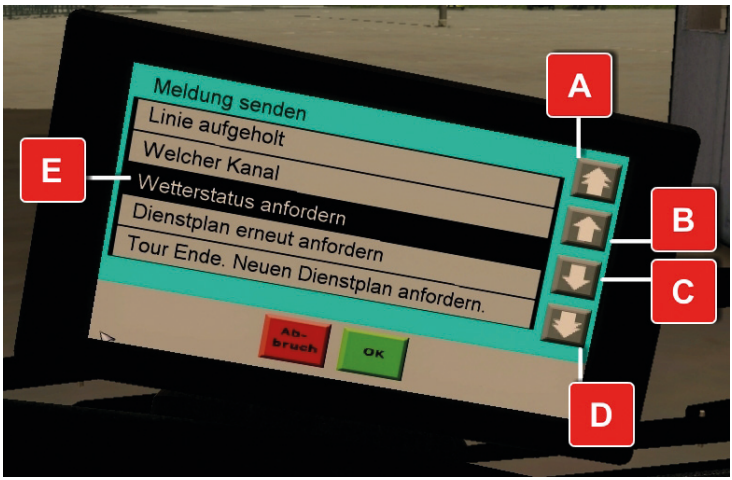
Structure of a message

Right in front of the text message you will always find a key number. This number is sent from the control centre. The co-pilot knows how to decrypt the respective key number and thus displays the corresponding text. If you are in the standard screen, the driver will see the key number for 5 seconds when a text message was received. This indicates to the driver that a new order has been received. Seasoned drivers know the meaning of the key numbers and do not need to reread the order.

Example:

Key number 50 indicates that the current radio curently takes place on the following channel.

Send message



You also can send messages, reports and requests to the control centre.

This is done via the window "Send message"

A. Scroll up 5 lines

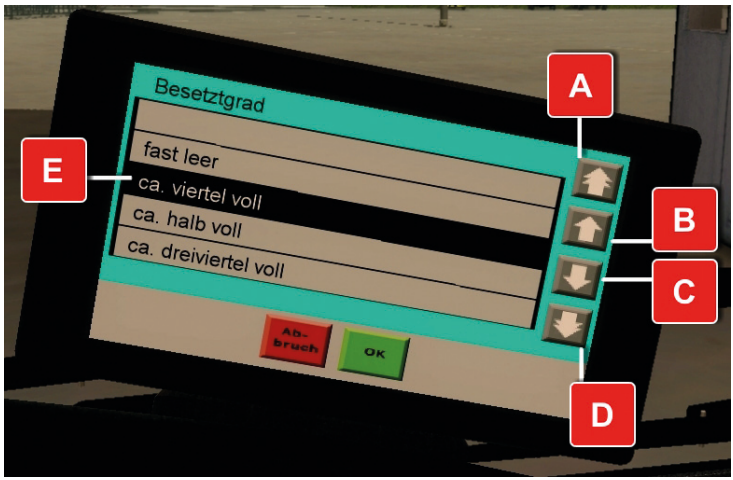
B. Scroll up 1 line

C. Scroll down 1 line

D. Scroll down 5 lines

E. Always shows the selected message. The selected line can ALWAYS be found in the centre of the display and cannot be pushed to the upper or lower edge. The message you need to send has to be put in the centre of the screen using the arrow keys. In this example, we would ask for a current weather report.

Passenger load



From time to time, the control centre will ask you for passenger load while driving for statistics and mission planning.

ADVICE: This message should be sent rather quickly.

A. Scroll up 5 lines

B. Scroll up 1 line

C. Scroll down 1 line

D. Scroll down 5 lines

E. Selected line that should be sent by clicking the "OK" button

End manual operation

This deletes the current route and you will hear an announcement in the passenger space. You should only use this function at final stops or in case of emergency. Another purpose can be to remind a passenger of the fact that this is indeed the last stop and he or she should get off the bus please.

Register route

You have now been informed by the control centre (Activating the radio channel) about the current service number. You can also reread it under "Received orders".

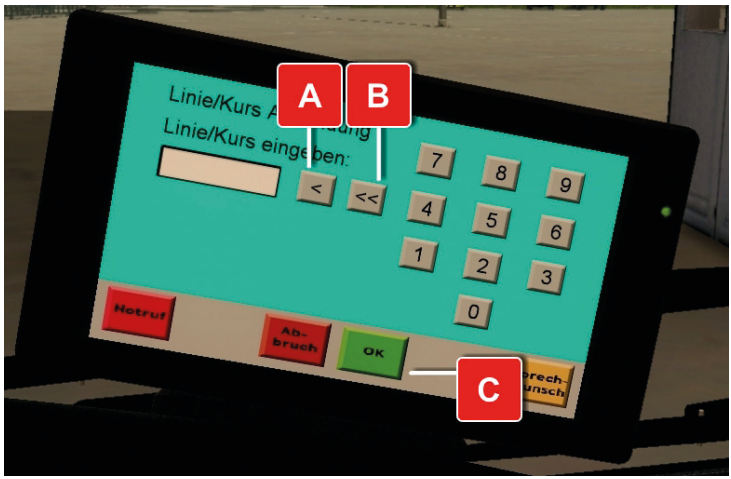
ADVICE: Please keep in mind that text messages cannot be reread immediately.



At the beginning of the shift you can register using the "red" button. If the control centre provides you with a new number during a shift, you need to use the "green" button.

A. Registration at the beginning of a shift

B. Registration during a shift



In this screen, you can enter the line number you received.

A. Deletes the last digit

B. Deletes all digits in the array "driver number"

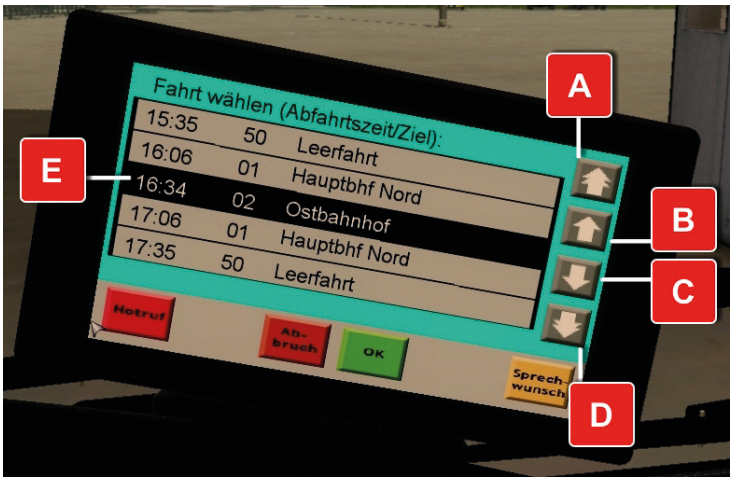
C. You confirm your entry by clicking on the "OK" button.

If you switch to this screen during an active line/ course, the active number is shown in the display. By clicking the "OK" button again, the current time switches to the next possible departure time.

This is similar to a new registration. After the confirmation, a new screen appears.

ADVICE: There are two ways to delete a trip.

1. You use the button "End manual operation" in the radio screen
2. You type in a "0" in the line/ course screen to cancel the current line



In this display, you can see the next possible departure times. On the left the departure time is indicated followed by the trip and the starting point of the journey. The driver should know his current position and estimate whether it is realistic to arrive at the departure point at the indicated time.

In case you decide that it is impossible to meet this departure time, the driver has the option to modify the time using the arrow keys and select a different departure time with a different departure point.

A. Scroll up 5 lines

B. Scroll up 1 line

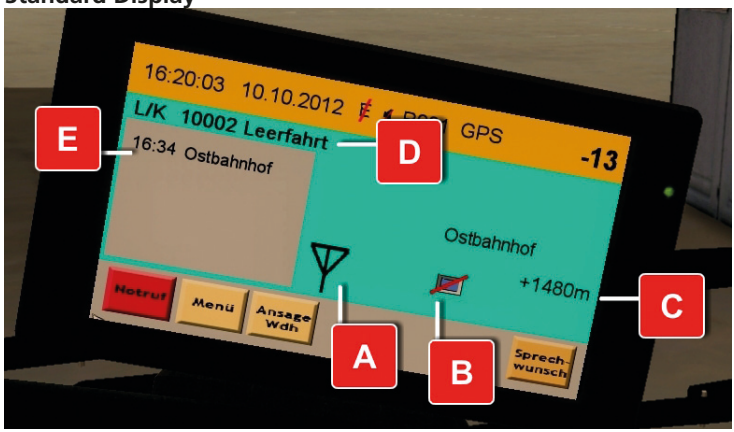
C. Scroll down 1 line

D. Scroll down 5 lines

E. Selected line that is sent by clicking the "OK" button

As soon as the driver confirms the entry, the selected line is activated and the co-pilot automatically edits the labelling given you have not changed this.

Standard Display



When you are driving, you should view the standard display. Newly received text messages will be shown here.

A. Is the icon symbolizing radio. If it is crossed out in red, you are situated in a dead zone.

B. The icon informs the driver that the screen in the passenger space is switched off.

C. This is next stop of the route. There is detailed information on the distance between your current location to the destination.

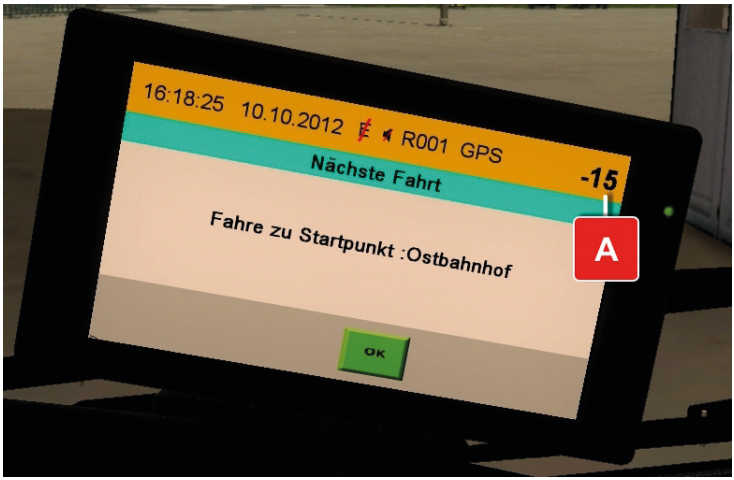
D. Shows the current line/ course.

E. This array features the next three stops, if available, with their current departure time. In this example, we are dealing with an empty run. That is why only the starting point of the next line and its departure time are indicated.

In this example the driver has 14 minutes left at the most to drive almost 1.5 kilometres in order to depart in time at Ostbahnhof.

Arriving at Ostbahnhof, the co-pilot will automatically show the following line and label the vehicle accordingly.

Information Display



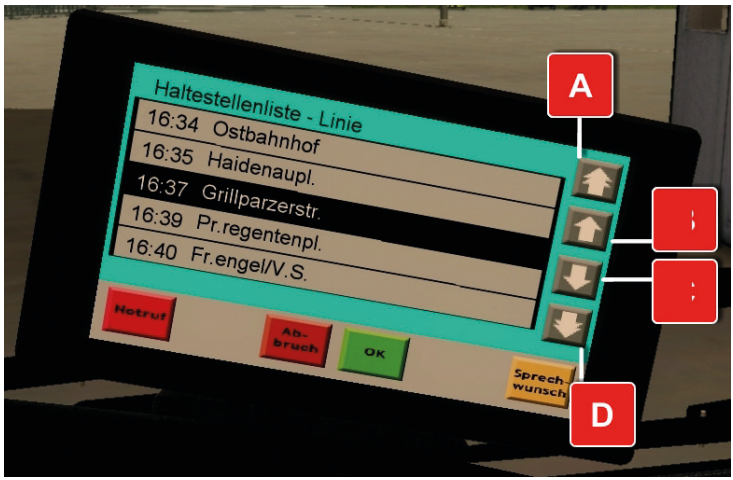
The information display provides the driver with additional orders.

ADVICE: „A" indicates whether we have a delay or an early arrival.

If there is a minus sign in front of the number, it is an early arrival.

A plus-sign in front of the number signifies a delay. The number itself is the time in minutes.

List of stops



The screen showing the list of stops gives the driver an overview of the departure times at the individual stops of the current route.

A. Scroll up 5 lines

B. Scroll up 1 line

C. Scroll down 1 line

D. Scroll down 5 lines

System Screen



A. List of errors: Error log. Only important for garage staff

B. Data version: current software number. Unimportant for the driver

C. Testfunction: can manually check the co-pilots' functionality

D. Bus stop number: Provides the ID of the current bus stop. But you need to be at the bus stop or you will get a -1.

E. Restart: the co-pilot is restarted. All settings are lost.

3.2 NEW! Malfunctions

The CBS Munich offers the option to simulate different malfunctions.

There are 3 possibilities for this:

- General wear or malfunctions that can occur during the game
- Manual malfunction simulation in the OCC category „Bus Technology“
- Controlled automatically by the malfunction director in the OCC category „Player“

3.2.1 General wear

Depending on the way you drive and handle the bus, wear and malfunctions will occur sooner or later – just as in real life.

In the event of wear or malfunctions, repairs can be undertaken in the OCC category “Bus Technology”.

A small example

After several trips, the following signals appear in the pilot display and the rev counter:

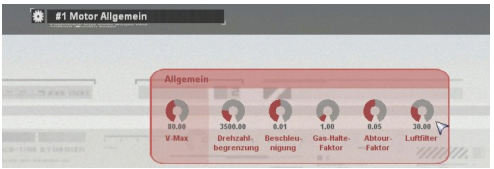


Cause: Various trips at very high speed with lots of emergency stops

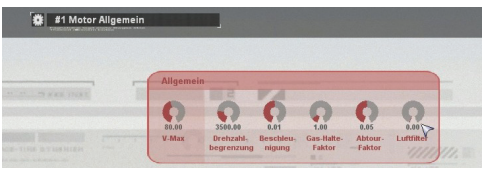
Diagnosis: The air filter is blocked

Repair: In the OCC category „Bus Technology“, subcategory „Engine“ “clean” the air filter

Before the repair



After the repair



3.2.2 Manual Malfunction Simulation

With the manual malfunction simulation you can immediately test how a certain malfunction affects the entire driving behaviour or the functionality of the bus.

Example: Category Bus Technology > Air conditioning/Heating:



Respective malfunctions can be simulated by checking the grey boxes. In this example, malfunctions on the blower and the passenger's air conditioning are activated. If you return to the game afterwards, you will immediately notice that both devices do not work anymore, e.g. windows steam up in the event of humidity, the passenger space gets too cold or too hot.

► The test track is perfect for „experiments". Here, you can try all sorts of settings like malfunctions and immediately see the effect of other modified values.

Info: Select “Load test track” on the OCC-Desktop



3.2.3 Malfunction Director

The malfunction director optionally takes over and simulates malfunctions on the bus that suddenly occur during the game. Depending on the degree of difficulty these malfunctions are more or less severe.

You find the malfunction director in the OCC category „Player“.



Individual settings in the malfunction director



On/Off

- Activates or deactivates the malfunction director

Difficulty

Beginner

- Only lights (interior/exterior) will be affected

Malfunctions in beginner mode need to be found and repaired manually. Category „Bus Technology“ >Subcategory „Lights“

Medium

- Lights plus ALL malfunction options that can be manually switched on or off in the category “Bus Technology” e.g. Bus Technolgy > Engine components > Fuel tank

Professional

- Lights plus ALL malfunction options that can be manually switched on or off. Additionally, various technical values can be modified by the malfunction director in this mode, e.g. power consumption of individual devices such as air conditioning, blower, etc.

Max. Duration

- After the set time (displayed in minutes) the malfunction director triggers the first malfunction.

Repairs (only in medium or professional mode)

Due to the possibly very complex malfunctions in medium and professional mode, this (optional) comfort function has been included.

- All malfunctions currently activated in the game by the malfunction directer can be repaired immediately with the exception of lights.

► Professionals may also ignore the "Repair" option and prefer to look for the Malfunction with the help of the corresponding error pattern. The malfunction can also be deactivated, i.e. repaired, manually in the respective subcategories in the category "bus technology".

Modified values (only professional mode) can only be reset to the condition before activating the malfunction director (not the default values!) by clicking the "Reset" button. That is important to know as every player can individually configure his bus technically. Thus, resetting to default values would be frustrating.

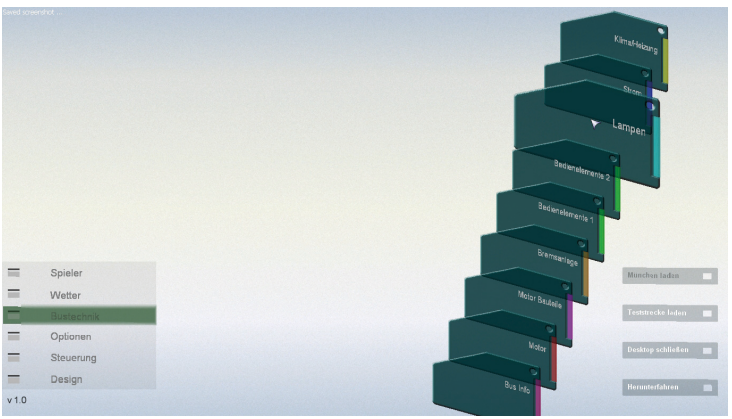
Identiying malfunctions in the game and repairing them manually

Here we explain how to repair a faulty light in the OCC category "Bus technology" – "Lights".

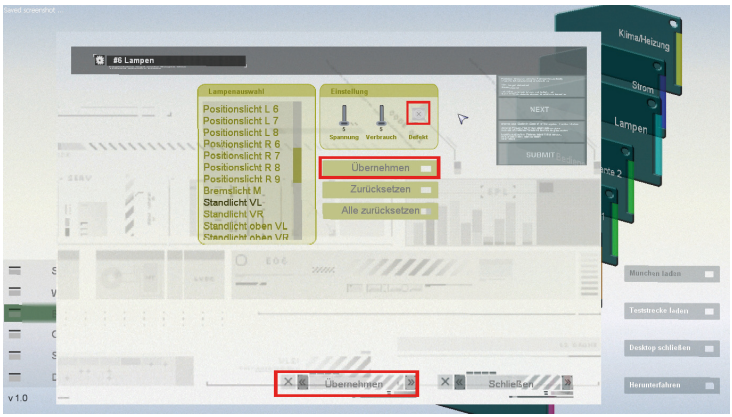
The left front light of the bus is faulty.



Select the OCC category “Bus technology” – “Lights”



Parking light FL is displayed as faulty. Click on “Malfunctions” once, “Confirm” and afterwards “Confirm” below in order to activate all settings made in the game.



Back in the game, you need to switch the light off first and on again to see the repair.



4 Initial Operation Of a Bus

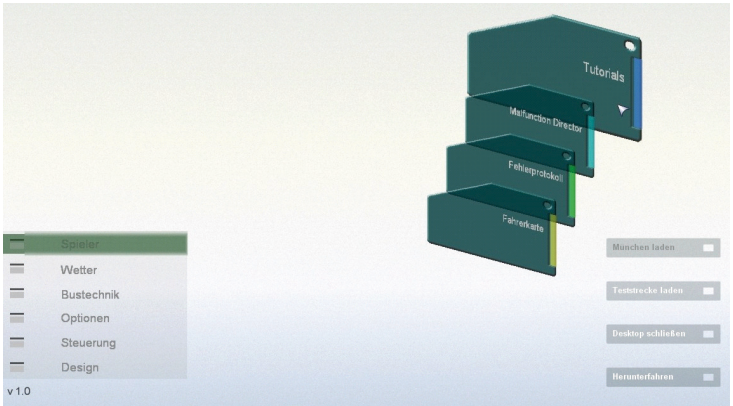
4.1 Tutorials

The tutorials help the player step by step to familiarize with operating a bus in City Bus Simulator Munich.

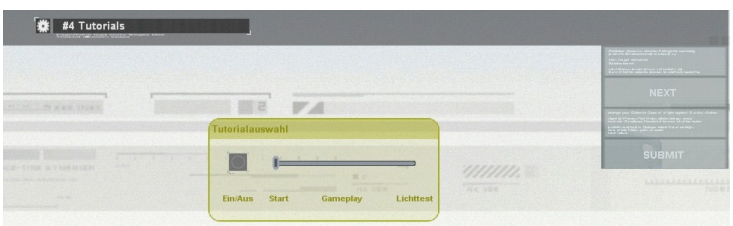
► We recommend ALL players to play the tutorials "START" and "GAMEPLAY" before starting the game for the first time!!!

Brief instruction for starting a tutorial:

- Start new game (do not start a tutorial during a game!)
- Open the index tab "Tutorials" in the OCC category "Player" (1)
- Check the box on/ off (2)
- Select the respective tutorial using the slide control (2)
- Before closing, confirm by clicking on "Confirm"
- Click on "Load Munich" on the OCC-desktop
- The tutorial starts (3)


Tutorials
Malfunction Director
Fehlerprotokoll
Fahrerkarte
Spieler
Wetter
Bustechnik
Optionen
Steuerung
Design
v 1.0
München laden
Teststrecke laden
Desktop schließen
Herunterfahren

(1)


#4 Tutorials
Tutorialauswahl
Ein/Aus
Start
Gameplay
Lichttest
NEXT
SUBMIT

(2)



(3)

4.2 Getting on the bus

Stand right in front of the front bus door. You find the door opener in the right lower area of the door. Place the mouse right there until the word "Door opener" pops up. Click the left mouse key and the door opens.

You can sit down on the driver seat by pressing the "C" key.

Brief instruction

- Key P – Ignition position 1
- Key E – switches on vehicle voltage

- Key P - Ignition position 2
- Press key P and up arrow key at the same time to operate the starter

► The ignition key can also be operated using the mouse. In order to start the engine (ignition position 3), the key P on the keyboard must be pressed at the same time.

Info: Ignition positions (Camera view ignition lock - NUM 6)

Tachograph (NUM *)



1 - Display viewing the following information:

- Current time
- Current travelling speed
- Kilometres driven

2 – Card slot for the driver card

To insert the driver card, you need to keep pressing the left mouse key and slide in the card by moving the mouse.

3 – Control element

After the card has been inserted, you need to finish the process by clicking on "OK"..

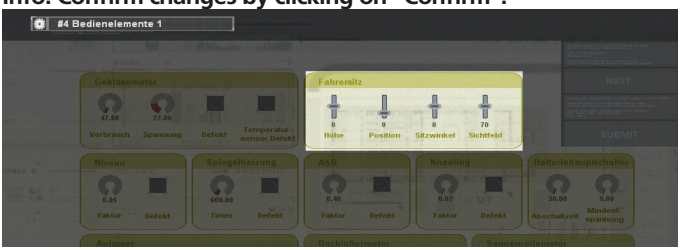
In case the engine is not running, you can go into pause mode.

Info: Also see the tutorial "START" in the OCC category "Player" – „Tutorials".

Settings for the driver seat

You find the settings for the driver seat in the OCC category „Bus technology“, subcategory „Control elements 1“

Info: Confirm changes by clicking on “Confirm”.



Heating, ventilation, cooling

The key “4” on the numpad takes you to the dashboard on the left hand side.

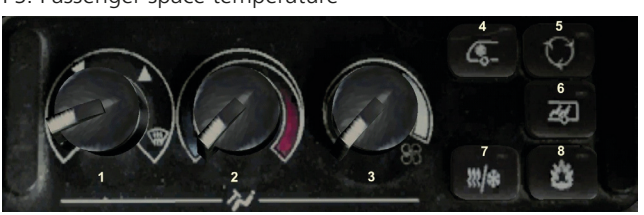
In order to activate the mouse cursor, press the key “F1”.

Air conditioning the passenger space or the driver’s work place is only possible when the engine is running.

O: Outside temperature

DS: Driver seat temperature

PS: Passenger space temperature



1. Air distribution – Driver area
2. Temperature contoller - Driver area
3. Blower - Driver area

4. Air conditioning - Driver area
5. Recirculating air - Driver area and passenger space
6. Heating/Air conditioning - passenger space
7. Reheat
8. Auxiliary heating

Passenger area

After switching on the passenger's air conditioning by pressing the button [6], the temperature in the passenger area automatically adjusts to about 20°C.

Driver's worklplace

Using the controllers [1-3] you can adjust the air distribution, temperature and blower level.

Air conditioning

Using the key [4] you switch on the air conditioning for the driver area. The following icon pop ups in the driver's display:



Recirculating air

You can switch the whole interior of the vehicle from fresh-air mode to air circulation mode by pressing the key [5].

Info: Air circulation mode should only be operated for a short time and with closed windows and skylights.

Reheat

Can be activated in case of high humidity in the interior (e.g. steamy windows in the passenger area) by pressing the key [7].

Reheat in fresh-air mode

- Press the key Reheat once

Reheat in air circulation mode

- Press the key Reheat once
- Press the key Recirculating air once

Info: When reheating in air circulation mode, switch on the air conditioning in the passenger space and driver's workplace to avoid steamy windows.

Info: In order to clear steamy windows, direct the air distribution [1] towards the front windows (controller to the right) and select the highest blower level.

Auxiliary heating / Parking heater

The key "-" on the numpad takes you to the dashboard on the left hand side.

In order to activate the mouse cursor, press the key F1.



1. Time
2. Programming
3. Immediate heating
4. Next menu

5. Previous menu

First switch on the heating (Air diffuser, temperature controller, see section "Heating, ventilation, cooling"). Now you can activate the auxiliary heating (key [8]). The display and the buttons of the control unit of the auxiliary heating are now illuminated.

Info: The auxiliary heating starts

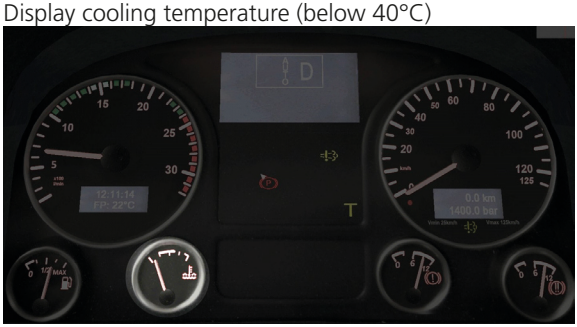
A. **Automatically (as auxiliary heating) starting at an outside temperature < 5°C and an operating temperature of the engine < 40°C**

B. **Manually using the key immediate heating [3]**

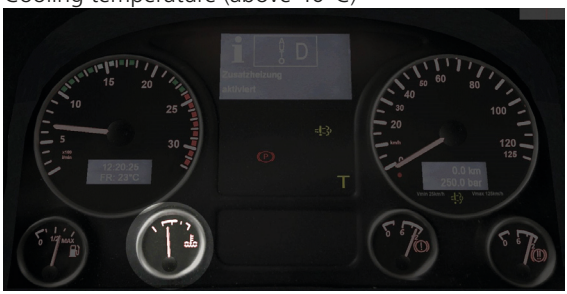
C. **Automatically (as parking heater) starting at a preset starting time**

Info: The auxiliary heating can be switched off with the key "Immediate heating". After a delay time of about 1 minute, the auxiliary heating switches off. When operating the "Emergency stop", the auxiliary heating switches off immediately.

Display cooling temperature (below 40°C)



Cooling temperature (above 40°C)



If the auxiliary heating is activated, the corresponding info pops up in the driver display.



Time

Key [1] views the current time as well as the weekday. The weekdays are abbreviated as follows SU, MO, TU, WE, TH, FR, SA.

Programming

Using key [2] you can program the parking heater. There are three different starting times possible: „-1-“, „-2-“ und „-3-“.

After pressing the key [2] once, the first memory location flashes.

Pressing the key [2] repeatedly leads to the selection of a memory location.

Selecting „- -“ deactivates all starting times.

Using the menu keys [4,5] you can determine the time and weekday for each memory location.

It is possible to determine every weekday individually, only business days, only weekends as well as all days.

If you press both menu keys [4 or 5] longer than 2 seconds, high-speed mode is activated.

Switch-on time

Using the menu keys [4,5] you can determine the switch-on time of the auxiliary heating in programmed operation. The switch-on time can vary between 10 and 120 minutes.

Remaining term

If you press key [4] during programmed operation, the remaining term is indicated in minutes. You can change the time using the menu keys [4,5].

Immediate heating

Constant heating is only possible by pressing key [3].

Info:

- **If air conditioning is running, the auxiliary heating does not switch on in order to not work against the air conditioning.**
- **If the auxiliary heating has been started manually or automatically with the ignition switched off, it switches off automatically after a maximum of 60 minutes.**
- **The maximum programmable heating duration of the auxiliary heating is 120 minutes.**

Example:

Programming the parking heater for Wednesday at 08.30 a.m.; Heating should run 30 minutes.

► Condition: Engine running; Auxiliary heating is activated [8] on dashboard on the left hand side (NUM 4)

- Open programming mode with key [2]
- Select starting time - 1 -
- While starting time -1- is still flashing, click ONCE on key [5] = previous menu
- Now use the menu keys back/ forth [5 or 6] to select the starting hour = 08
- Wait until the hour display stops flashing
- Now the minute display starts flashing
- Now use the menu keys back/ forth [5 or 6] to select the starting minute = 30
- Wait until the minute display stops flashing
- Now the weekday display starts flashing
- Now use the menu keys back/forth [5 or 6] to select Wednesday=WE
- Wait until the flashing stops

Now the parking heater is programmed. The final step is to determine the heating duration (in minutes).

This is very easy:

- Use the menu keys back/ forth [5 or 6] to select the heating duration in minutes = 30

Info: Engine and ignition can now be switched off. You can see that the battery main switch and the auxiliary heating stay activated on the dashboard on the left-hand side although the ignition is switched off.

Do not switch off the key auxiliary heating/ parking heater by any means now; otherwise the programming of the parking heater will be lost!

Lighting test

During the lighting test, the exterior lighting including the direction indicators are fully functional.

This is how the lighting test works:

- Apply the parking brake
- Switch on the ignition (Ignition position 2 – see also the section „Switching on the ignition“)
- Press the button lighting test (N) for about 1 second, LED flashes



- Use the headlight flasher (key M) for about 1 second
- Now the lighting test starts; display in the driver display appears



- Using the key C the bus driver goes outside and makes sure that all the lights outside are working when he circles the bus.





- Get on the bus again by pressing C
- After the internal system check the following information appears in the driver display



- If all lights are fully functional, use the headlight flasher (key M) again for about 1 second
- Lighting is enabled; the following information appears in the driver display



Now the bus is ready. You now need to contact the OCC so the route can be assigned. A detailed description on how that is done in the section "Gameplay" "Co-pilot".

5 Help and Tips

PC is lagging – Tips for improving

Here's a few tips that could help improve the performance during the game

- Close as many background applications as possible
- If the game does not start after a Windows Update or crashes, there are 3 ways to continue:

  1. Start the game with a different starting point

  2. Change the resolution

  3. If the first two tips did not work,you probably would have to delete your Save Game (C:\Users\Username\MyDocuments\City Bus Simulator Muenchen\Save)

- To improve the performance, it is recommended to set several settings to "low". Here you have a list of known "performance-klillers" and their setting:

  - Environemt reflection - static

  - Mirror detail – low

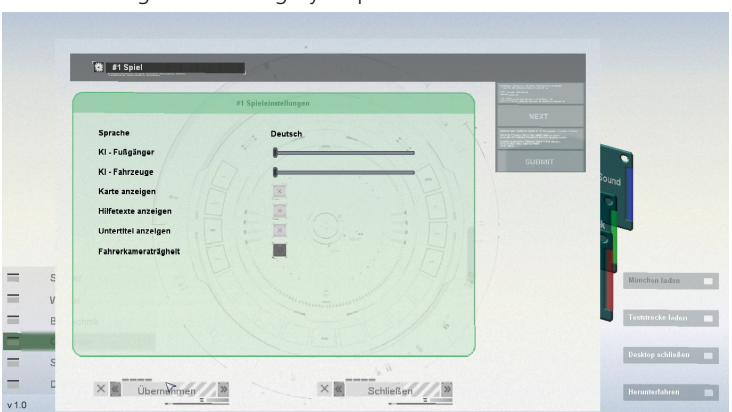
  - Range of vision – low (IMPORTANT: Set to low immediately even in case of micro lagging; otherwise the game could crash)

  - Particle detail – Slide control on the far left

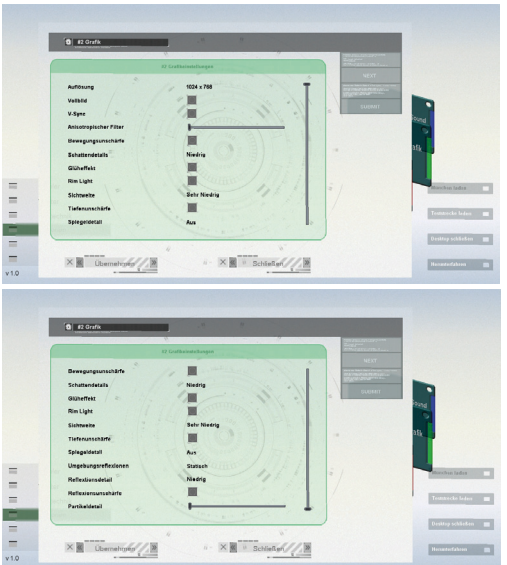
  - Use a lower resolution

  - V-Sync – off

Lowest settings in the category "Options" – "Game"



Lowest settings in the category "Options" – "Graphic"



6 Create Repaints

Repaints can be found in the game's main directory/Data/Repaints/. Every repaint has its own folder that can be named freely. You can find a fitting texture for the respective bus type in every repaint folder.

The 12-metre MAN Lion's City with 2 doors uses the texture „Bodymap_12M_Bus.DDS"

The 12-metre MAN Lion's City with 3 doors uses the texture „Bodymap_12M_Bus_3Door.DDS"

The 18-metre MAN Lion's City articulated bus uses the texture „Bodymap_18M_Bus.DDS"

IMPORTANT: The textures must NOT be renamed, the texture format MUST be *.DDS!

Not every graphics software supports the *.DDS format, but there are plugins available for many graphics softwares that can read and write the *.DDS Format.

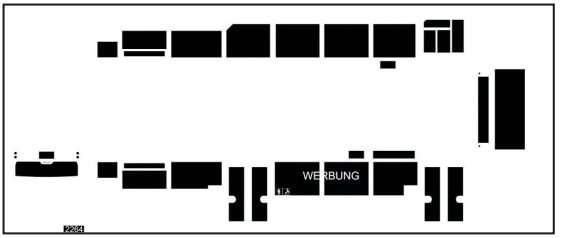
There is a „config.XML“ for every repaint which e.g. indicates the name of the repaint, a description, a version number and the name of the author that is shown in the game when you select a repaint.

The „Bodymap_******.DDS“ has an „Alpha-Channel“ that is e.g. responsible for transparencies on the glas. Here, hub caps can be set to transparent.

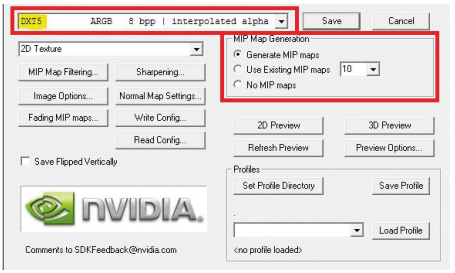
In order to cut out the hub caps, you have to select the area of the texture in which the hub caps are situated; This area needs to be filled with absolute black (RGB-value 0,0,0) in the alpha-channel. Inorder to, e.g. put promotional stickers on the glass/ chassis, the are on the glass/ chassis has to be textured accordingly and the contours of the promotional stickers need to be filled with absolute white (RGB-value 255,255,255) (see example).



The writing/advertising etc. needs to be filled with absolute white (RGB-value 255,255,255) so the changes are visible in the game



The finished texture must be saved in *.DDS-format with the exact same name with the settings (see example). (Example image from Nvidia-DDS-plugin for Photoshop)



Finished repaints can be found in the OCC category „Design“.

Info: Further information, template repaints and links to repaints made available by the community can be found on http://www.world-of-busdriver.com/ and in the TML-NetCom on http://www.tml-edition.com/.

7 Credits

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The following users on TML-NetCom:

„datoneer“• „berry93“• „BUS“• „Florian T“• „Maxim Redlinger“ „Yusuf Bölükbasi“

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Uses Xaitment AI Technologie. http://www.xaitment.com/

Rocketbox Studios GmbH http://www.rocketbox.de/



FT Software http://ftsoftware.eu/



Support:

If you experience problems with the game, register for free in our support-centre http://support.tml-studios.com and send us your request via support-ticket.





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