



aeroSOFT™

OMSI 2 Add-on



Citybus Series

Manual



Developed by: Christian Rolle
Manual: Christian Rolle / Aerosoft



OMSI 2

MAN Citybus Series

Manual

Copyright: © 2016 / **Aerosoft GmbH**

Airport Paderborn/Lippstadt
D-33142 Bueren, Germany

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

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

E-Mail: info@aerosoft.de

Internet: www.aerosoft.de
www.aerosoft.com



a e r o s o f t™

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

Add-on for

OMSI 2



Content

Words from the developer	6
Introduction	7
System requirements	8
Technical information	8
MAN A21:	8
MAN A23:	9
MAN A26:	9
MAN A20:	10
Controls and operation.....	11
IBIS	15
Air conditioning	16
Ticket printer.....	17
Customisation	18
Create your own repaints	18
Modding the vehicle	18
*.cti variables	18
CTI Variables control / vehicle modification	25
Start screen	25
Model configuration	26



Words from the developer

Thank you for having purchased the add-on „MAN Citybus Series“. Inspired by the idea of bringing home-grown busses to the screen, I created a collection of vehicles with a lovingly attention to detail. In order to appeal to every player, I tried to realise a high level of modularity in the 9 months of development. This project has cost me and my team a lot of work, sweat and nerves and I am happy to present you the product now.

I want to express my gratitude to the OMSI community that pointed out mistakes and errors to me and my team at any time – only with that help could we create such a high fidelity model. Additionally, I would like to thank all the people that helped me out with materials, personal support and their competent opinion.

I also want to give special praise to the following people. Without them, this project wouldn't have been possible in this way:

- Chilco, whose “harsh” criticism and engagement helped the project tremendously
- Morphi, who showed us his tips and tricks for the sound design and provided us with his VDV scripts
- Tatra-Fan, who reliably supported us all the time with his sounds
- Homery, who also provided us with sounds
- Schultersack, whom we could ask scripting questions at any time
- _FreD for his personal support and sounds
- Feindflug, who motivated us with his open attitude
- LizaOmsi, who made the modelling of the base mesh possible with her photos
- Nick Zimmermann, who made the documentation of a MAN NL313-15 possible
- Avaralion for door sounds and help with photos
- Tempelhofer Reisen, that had to endure us multiple times during documentation of their vehicles

Furthermore we want to thank all beta testers who reported every single little bug to us:

Chilco | Feindflug | _FreD | Jonezz | LizaOmsi | Morphi | Nick Z. | Pedro | Perotinus | SchulterSack | Tatra-Fan | BahnFanX

...and of course all people and companies that helped us finishing this project!

I hope you have a lot of fun driving these busses and that a slowly dying bus series can at least live on on your PC's screen.

Introduction

In this add-on we recreated 4 typical bussed from the manufacturer “MAN”. These include the solo bus MAN A21, the articulated bus MAN A23, the interurban solo bus MAN A20 and the 15 metres long MAN A26. First introduced in 1996, these vehicles were produced in series since 1998. After Mercedes-Benz unveiled their competing model “Citaro”, MAN launched a visually revamped series in 1998. This “facelift” is what we recreated in this add-on. The vehicle is mainly manufactures in Salzgitter and rose to popularity all over Europe due to its quality. While the busses may be slowly taken out of service in Germany, they characterised the urban image of many cities and one will still encounter them frequently, especially in foreign countries.

As every vehicles has customer-specific equipment, I tried to realise as much of those options as possible in OMSI as well. For example, you can use more than 40 so called “CTI variables” to adapt the vehicle to your liking. Find more information about that in the chapter “Customisation”.



System requirements

In order for the “MAN Citybus Series” add-on to play as smoothly as possible, your system should meet the following minimum requirements:

- OMSI 2 – The Omnibus Simulator mind. 2.2.032
- Operating system Win 7 / 8 / 8.1 / 10
- Processor (CPU): min. 2,8 GHz
- Graphics card: min. 1 GB VRAM (2 GB strongly recommended)
- RAM: min. 4 GB
- Free hard disk space: min. 1,5 GB
- DirectX: 9.0c or higher
- Internet connection and user account at Steam required. You need to be at least 13 years old to create a Steam user account.

Please note: OMSI 2 - The Omnibus Simulator must be installed in order for the add-on to operate.

For the best possible game experience, you should activate texture filtering and anti-aliasing in your graphics card options.

Technical information

MAN A21:

Length:	11,980 mm
Width:	2,500 mm
Height:	2,880 mm (without air conditioning)
Engine:	D2XX6LUH 220-310 HP

Gearbox:	Voith DIWA 4 speed automatic with retarder
Top speed:	85 km/h
Unladen weight:	11,900 kg
Total weight:	18,000 kg
Seating places:	38
Standing places:	49

MAN A23:

Length:	17,950 mm
Width:	2,500 mm
Height:	2,880 mm (without air conditioning)
Engine:	D2XX6LUH 220-360 HP
Gearbox:	Voith DIWA 4 speed automatic with retarder
Top speed:	85 km/h
Unladen weight:	16,800 kg
Total weight:	28,000 kg
Seating places:	52
Standing places:	101

MAN A26:

Length:	14,675 mm
Width:	2,500 mm
Height:	2,880 mm (without air conditioning)



Engine:	D2XX6LUH 310-360 HP
Gearbox:	Voith DIWA 4 speed automatic with retarder
Top speed:	85 km/h
Unladen weight:	14,300 kg
Total weight:	24,730 kg
Seating places:	40
Standing places:	81

MAN A20:

Length:	11,980 mm
Width:	2,500 mm
Height:	2,880 mm (without air conditioning)
Engine:	D2XX6LUH 220-310 HP
Gearbox:	Voith DIWA 4 speed automatic with retarder
Top speed:	95 km/h
Unladen weight:	11,900 kg
Total weight:	18,000 kg
Seating places:	48
Standing places:	49

Controls and operation

This chapter describes the usual operation of the busses. The VDV dashboard is standardised and used in many other vehicles, so you might already be familiar with its controls. In the following sections you'll find images of all operable elements with a corresponding description/function.

First of all, press "F1" on your keyboard to jump to the interior view of the vehicle.



1. Dashboard
2. Payment counter & ticket printer
3. IBIS
4. Sun shield
5. Roof hatch controls/various switches



Dashboard signs red

1. Tachometre
2. Time
3. Odometre
4. VDV info display

Dashboard signs yellow

1. STOP | vehicle not ready for operation | when driving: halt and call workshop
2. ATTENTION | danger for operational/traffic safety
3. Indicator
4. Supply pressure
5. Stop request
6. N/A
7. High beams
8. Control light ABS/ASR
9. N/A
10. N/A

Dashboard switches blue

1. ASR on/off
2. Warning lights on/off
3. Light modes
4. Interior lighting
5. Cash lighting
6. Switching through VDV display
7. Kneeling up/down
8. Door leaves lock
9. Door release automatic door
10. Gear shift button
11. Door 1
12. Door 2
13. Bus stop brake
14. Steering wheel lever Indicator/Wipers/Horn



Dashboard – left side

1. Parking brake
2. Microfone button
3. N/A
4. Window pane heating
5. Exterior mirror/Driver's window heating
6. Podium heater fan FAP
7. Controls roof switch



IBIS

1. Route input
2. Line input
3. Destination input
4. Delete
5. Enter/Confirm
6. Bus stop forward (mute)
7. Bus stop forward (Announcement)
8. Bus stop backward (mute)
9. Automatic forward switching on/off

INFO: Displays and notifications on the IBIS can be confirmed with button "5"

The IBIS controls are similar to the standard vehicles from OMSI.

The button "2" chooses the line, button "1" chooses the route and button "3" the destination. The buttons "6-9" are used to switch forward the bus stops, while buttons "4" and "5" confirm or delete the inputs, respectively. Entering line "00000" resets the IBIS completely.



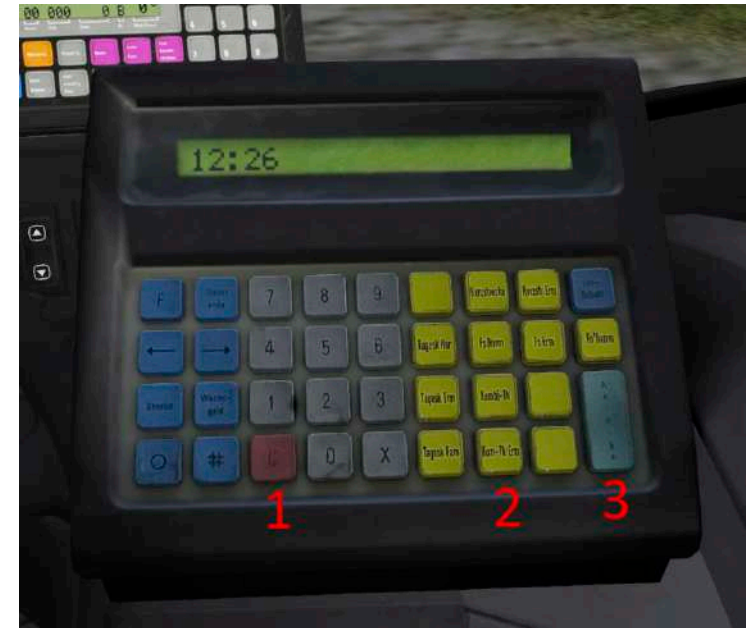
Air conditioning



1. Air distribution driver's area
2. Temperature driver's area
3. Fans driver's area
4. Air conditioning driver's area
5. Fresh air/recirculating air
6. Air conditioning/heating passenger cabin
7. Reheat | dehumidification for active air conditioning
8. Auxiliary heater

INFO: The vehicle has air conditioning. It cooles (only when air con is active) or heats the interior to a comfortable temperature. Changing the temperature via the panel is not possible! To turn on conditioning/heating simply press button "6". Should the humidity become to high, the vehicle can be dehumidified using the "Reheat" button (7).

Ticket printer



1. Button „Cancellation“
2. Selection ticket
3. Button „output“ | prints the ticket

INFO: The ticket printer with payment counter can be freely adapted to the personal seating position. Both the payment counter and the lever between driver's door and cash can be moved with a mouse click.



Customisation

Create your own repaints

If you've already got experience in repainting, you can create your own liveries for the busses. The templates necessary for that can be found in the subfolder "OMSI 2\Add-ons\MAN Citybus Series\Templates". Templates for the interior, wheels and the dashboard can be found here as well.

Modding the vehicle

Some models are available in the .obj format, which allows the community to create extensions and mods. Also, all switches on the dashboard are available and using their own texture. For experienced modders, adapting and changing the dashboard is no problem! You can ask the developers of the vehicles at any time if you've got questions about modding the busses.

*.cti variables

This section of the manual describes the use of the variables found in the *.cti file to activate, deactivate or change various vehicle features. These features are embedded directly into the repaint and cannot be changed from within the game for now. Please use one of the included *.cti files as an example and change it to your liking based on the following table:

[setvar]	mögliche Werte	Beschreibung	Fahrzeug
vis_hubcap_v_NG	0/1	0 – no front hubcaps 1 – front hubcaps new	MAN A23

[setvar]	mögliche Werte	Beschreibung	Fahrzeug
vis_hubcap_m_NG	0/1	0 – no central hubcaps 1 – central hubcaps new	MAN A23
vis_hubcap_h_NG	0/1	0 – no rear hubcaps 1 – rear hubcaps new	MAN A23
vis_hubcap_v_alt_NG	0/1	0 – no front hubcaps 1 – front hubcaps old	MAN A23
vis_hubcap_m_alt_NG	0/1	0 – no central hubcaps 1 – central hubcaps old	MAN A23
vis_hubcap_h_alt_NG	0/1	0 – no rear hubcaps 1 – rear hubcaps old	MAN A23
vis_hubcap_v	0/1	0 – no front hubcaps 1 – front hubcaps new	MAN A20 MAN A21 MAN A26
vis_hubcap_m	0/1	0 – no central hubcaps 1 – central hubcaps new	MAN A20 MAN A21 MAN A26
vis_hubcap_h	0/1	0 – no rear hubcaps 1 – rear hubcaps new	MAN A20 MAN A21 MAN A26



[setvar]	mögliche Werte	Beschreibung	Fahrzeug
vis_hubcap_v_alt	0/1	0 – no front hubcaps 1 – front hubcaps old	MAN A20 MAN A21 MAN A26
vis_hubcap_m_alt	0/1	0 – no central hubcaps 1 – central hubcaps old	MAN A20 MAN A21 MAN A26
vis_hubcap_h_alt	0/1	0 – no rear hubcaps 1 – rear hubcaps old	MAN A20 MAN A21 MAN A26
vis_clima	0/1	0 – no air conditioning 1 – air conditioning front	all
vis_clima_h	0/1	0 – no air conditioning 1 – air conditioning rear	MAN A23
vis_camera	0/1	0 – no cameras in the interior 1 – cameras in the interior	all
vis_3rd_brakelight	0/1	0 – no brake light in rear window 1 – brake light in rear window	all
vis_havelschiss_innenraum	0/1	0 – normal interior 1 – interior type „Havelbus“	MAN A21

[setvar]	mögliche Werte	Beschreibung	Fahrzeug
vis_bvg_spiegel	0/1	0 – normal external mirror 1 – external mirror type „long“	all
vis_vogel_sitze	0/1	0 – seats type „Kiel“ 1 – seats type „Vogel“	MAN A21 MAN A23 MAN A26
vis_entwerter	0/1	0 – endorser type „Elgeba“ 1 – endorser type „Klüssendorf“	all
vis_infrarot	0/1	0 – no infrared beacons 1 – infrared beacons at car body	all
vis_mirrors_int	0/1	0 – no door mirror 1 – door mirror	all
vis_MANLOGO_vorn	0/1	0 – no front MAN logo 1 – front MAN logo	all
vis_MANLOGO_hinten	0/1	0 – no rear MAN logo 1 – rear MAN logo	all
vis_MANLOGO_innen	0/1	0 – no interior MAN logo 1 – interior MAN logo	all



[setvar]	mögliche Werte	Beschreibung	Fahrzeug
vis_MANLOGO_seite	0/1	0 – no side MAN logo 1 – side MAN logo	all
vis_haltefaden	0/1	0 – no hand straps 1 – hand straps	all
vis_Innenanzeige	0/1/2	0 – inner display type „Havelbus“ 1 – inner display type „BVG“ 2 – inner display type „DVB“	all
vis_Seitenschild	0/1	0 – no side shield 1 – left side shield	all
vis_Seitenschild_vorn	0/1	0 – no front side shield 1 – front side shield	all
vis_speakers	0/1	0 – no speakers 1 – speakers in roof panel	all
vis_dooropener_body	0/1	0 – no outer door opener 1 – outer door opener	all
vis_windows_splitted	0/1	0 – single-part wind shield 1 – parted wind shield	all

[setvar]	mögliche Werte	Beschreibung	Fahrzeug
vis_has_rampe	0/1	0 – no ramp at door 2 1 – ramp at door 2	all
vis_nebelscheinwerfer	0/1	0 – no fog lights 1 – fog lights	all
vis_schmutzfaenger	0/1	0 – no dirt traps 1 – dirt traps	all
vis_doorwarm	0/1	0 – no door alert 1 – door alert	all
vis_Matrixtype	0/1/2	0 – Flipdot matrix 1 – LCD matrix 2 – LED matrix	MAN A21 MAN A23 MAN A26
vis_Fonttype	0/1	0 – Matrix upper case 1 – Matrix lower case	all
vis_driverside_matrix	0/1	0 – no matrix on driver's side 1 – matrix on driver's side	MAN A21 MAN A23 MAN A26
vis_rearend_bigmatrix	0/1	0 – small rear matrix 1 – large rear matrix	MAN A21 MAN A23 MAN A26
vis_Motor_PWR_mode	0/1/2/3/4/5	0 – 310 HP 1 – 260 HP 2 – 270 HP 3 – 280 HP 4 – 220 HP 5 – 360 HP	all



[setvar]	mögliche Werte	Beschreibung	Fahrzeug
vis_doortype_v	0/1/2	0 – inner swing door front 1 – swing door front 2 – outer swing door front	MAN A21 MAN A23 MAN A26
vis_doortype_m	0/1/2	0 – central inner swing door 1 – central swing door 2 – central outer swing door	MAN A21 MAN A23 MAN A26
vis_doortype_h	0/1/2	0 – inner swing door rear 1 – swing door rear 2 – outer swing door rear	MAN A21 MAN A23 MAN A26
vis_number	0/1	0 – vehicle has wagon number 1 – no wagon number	all

CTI Variables control / vehicle modification

All the features a vehicle has to offer can be adapted dynamically from within the vehicle as well, independently from the settings specified in the repaint. When a vehicle with specific settings is loaded, the function display has a higher priority and will overwrite the preset variables for the current game session. This allows the player to edit pre-configured repaints without having to go to the configuration files. The panel is located in the upper panel above the driver's seat, just as the air conditioning and tachograph.

Start screen





Turning on the onboard electronics will also start up the screen. Following a short loading time, the following options are available:

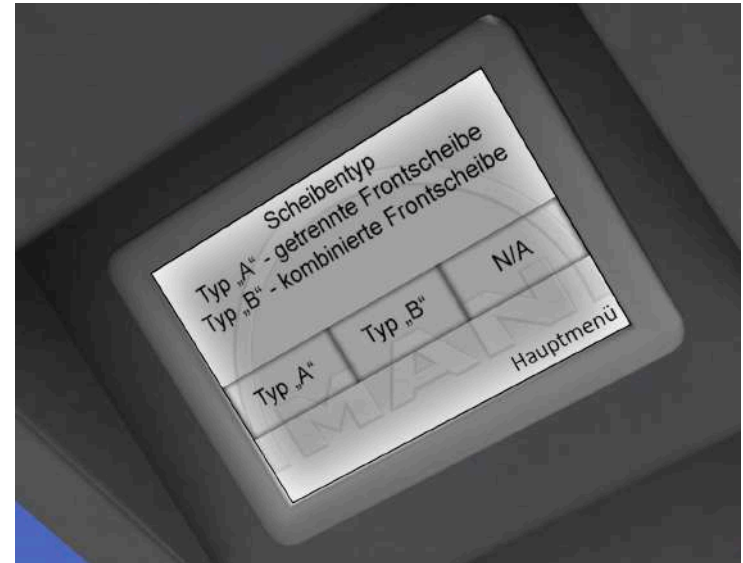
1. Display the current schedule (if schedule is activated)
2. Display the list of lines
3. Display submenu "model configuration"

Model configuration



In the submenu model configuration all available settings options can be modified dynamically. Variables that aren't modifiable for the selected vehicle will be greyed out and have no function.

With a click on for example "screen type" a submenu opens where the available modes can be configured:



Depending on the complexity this menu might have a submenu as well; it works the same way, though, and doesn't need further explanation:



Click targets with "N/A" are not used and have no function.

Clicking on "main menu" will bring you back to the start screen. The labels of each of the menu items are self-explanatory or have a short description above the click targets.

OMSI 2 Add-on

PROJECT

Gladbeck



**More than 35 lines, 500 km of route
Discover the Ruhr region in the
largest OMSI add-on!**



aeroSOFT™

OMSI 2 Add-on

Citybus 0405



NEW for OMSI 2:

Experience the next classic in the world of public buses: the Citybus O405 belongs to the last generation of high-floor buses. Including the O405 and O405G!