

OMSI 2 Add-on

Digibus Phantom



User manual
for version 1.1

Developed by:
Manual:

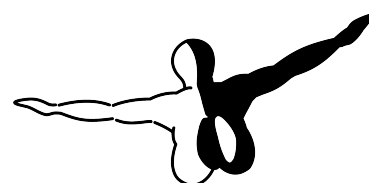
V3D
V3D, Aerosoft

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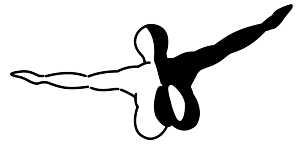
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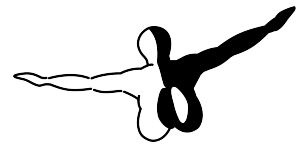
English

Add-on for

OMSI 2 - The Omnibus Simulator

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GENERAL INFORMATION

About this Manual

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

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

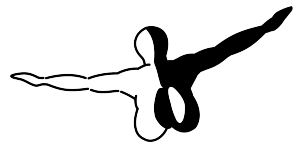
System Requirements

In order for the add-on Digibus Phantom to run as smoothly as possible, you need the following:

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

Installation

You have to be logged in with administrator rights before you can start the installation of OMSI 2 add-on Digibus Phantom. To start the installation, please open Steam in your library view. Click the button "Add a game..." in the lower left-hand corner and then click on "Activate a Product on Steam...". A new window opens. Follow the steps and enter the product key you purchased when prompted.



Removal

In order to fully remove OMSI 2 Add-on Digibus Phantom right click the "OMSI 2" entry in your Steam library, select "Properties" and open the "DLC" tab. Here, remove the checkmark next to the "OMSI 2 Add-on Digibus Phantom" entry.

ABOUT THIS ADDON

The Developer

V3D is well known in the OMSI community as the developer of popular buses such as the free A20/21, ALX400 and the 200 MMC.

He is the lead in a small and dedicated group of enthusiasts called Digibus Preservation who are equally passionate about making simulated buses as realistic as possible.

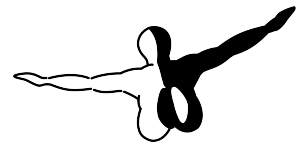
Visit www.digibus-preservation.co.uk for more information and links to his other projects.

Addon Description

The Phantom is based on a popular UK integral bus which used the DB250RS chassis and first appeared on our roads in 1992. It was well received by regional operators but appeal was limited abroad with very small numbers being sold to Turkey and New Zealand.

It's successor, the DB250RS LF, was Britain's first true low-floor and was manufactured from 1998 to 2005.

Though most are now withdrawn due to tighter emission controls, many have found a second life by either being preserved or exported to various places all around the world.



Features

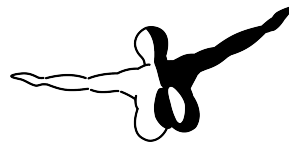
- Three drivable buses which include both low and standard heights for the standard floor variant (DB250RS) and low height for the more modern low floor variant (DB250RS LF)
- Sounds recorded from preserved bus 3127 (L127 ELJ)
- 272hp RS200 engine with 1010Nm of torque
- 4 speed automatic gearbox
- Three types of destination equipment: Rollerblinds, flip-dot or LED
- Functional dashboard with working warning lamps, faults, switches and gauges plus unique engine start-up procedure
- Low floor variant includes kneeling front suspension, wheelchair ramp and flip seats that are automatically occupied by passengers
- Detailed ticket machine from the 90s which allows for up to 6 preset fares and map dependent button textures
- Bench or coach style seating (Bench style not available on the LF)
- Plenty of optional setvars which include the ability to customise your bus with a tree protection bar, side reflectors, wheel trims, varied front, side and rear blind configurations and a partial cab assault screen
- 21 unbranded liveries (Download the free branding pack from digibus-preservation.co.uk)
- Templates are included to assist repainters with their favourite livery recreations for parts such as the body and interior

CHANGELOG

Version 1.1

Many improvements have been made for this latest update in order to improve your experience with the Phantom in-game. The most notable of those are listed below:

- Added new low-floor variant with kneeling front suspension, wheelchair ramp and flip seats
- All variants now have an initial choice of roller-blind, flip-dot or LED destination equipment
- Added standard height variant to standard floor bus
- Engine and axle sounds have been tweaked to improve the on-load / off-load experience
- New separate in-cab blind controllers for either rollerblinds or flip-dot and LED displays
- Higher quality rebaked interior and cab
- Optional dashboard overlays have been made to help you understand the different switch functions on dashboard at a glance
- Many textures have been converted to DDS to reduce latency and memory usage, including repaints (Though you can still choose the format of your own)
- LODs (Simplified models loaded at distance) have been made to help reduce lag when the game is loading the Phantom in AI traffic
- Seat fabric and floor now use smaller tileable textures to reduce memory footprint
- Many additional repaints have been included and are now specific to the type of blind the bus has and therefore helping you to separate older and newer livery versions easily

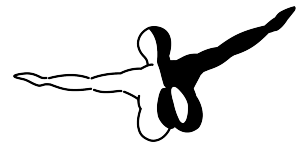


REFERENCE



Dashboard Instruments

1. Warning lamps
2. Battery voltage
3. Fuel level
4. Engine coolant temperature
5. Air pressure for tanks 1 & 2
6. Engine RPM
7. Speedometer
8. Total mileage
9. Stop request lamp

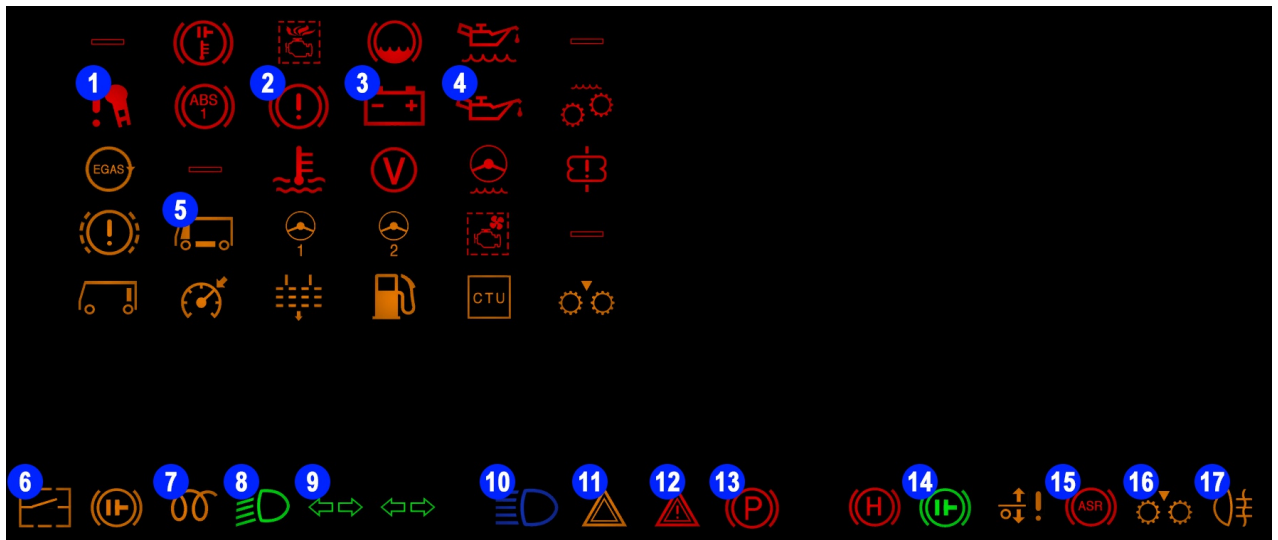


Dashboard Switches

1. Instrument backlight dimmer
2. Exterior lights (Off-Sidelights-Headlights)
3. Instrument backlights
4. Rear foglamp
5. Pre-glow (Warms up engine injectors on cold starts)
6. Hazard lights
7. Engine start
8. Engine stop and ignition
9. Battery master
10. Reversing horn mute
11. Windscreen demister
12. Windscreen demister boost
13. Lower saloon lights
14. Upper saloon lights
15. Cab light
16. Kneeling function (Not shown)

Note: To start the engine, ensure you have switched on the battery-master (9) first. Click the right side of the Igniton (8), then click and hold the Engine Starter (7) until the engine turns over (Ensure you are in neutral or it won't start).

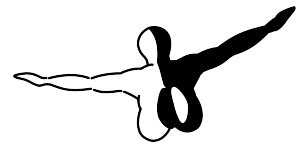
To stop stop the engine, click the left side of the ignition (8) and the engine will stop. Clicking the battery-master (9) once again will cut power from the batteries to the bus.



Warning Lights

Below are some of the more common dashboard warning lights you may experience while operating the Phantom.

1. Gearbox fault
2. Low air pressure
3. Low battery voltage
4. Low oil pressure
5. Front door open
6. Battery master switch
7. Pre-glow
8. Dipped beams
9. Indicators
10. High beam
11. Caution (Minor fault or alert)
13. Major fault (Stop the bus)
14. Retarder in operation
15. ABS and ASR active
16. Chassis lube in operation
17. Rear fog lamp



Multi-Function Indicator Stalk

1. Wiper speed (intermittent, off, normal, fast)
2. Windscreen washer
3. Horn



Ticket Machine

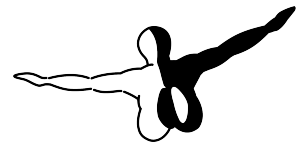
- 1-6. Preset tickets
7. Clock or ticket price display
8. Clear ticket selection
9. Issue displayed ticket



Electronic display controller

Using the blind controller found with LED or flip-dot destination equipment, just follow these simple steps:

1. Using your mouse, click N for the route number. If the number was 76, you would enter 07600, if it was 176, you would enter 17600. Finish by clicking 'Ent'. As this uses a similar system to IBIS, find more information in the OMSI manual.
2. For the trip number (or destination), click R. Usually it's either 1 or 2, depending on the direction you are travelling, and once you have typed this in, finish by clicking 'Ent' . More information can be found on this with the map documentation.
3. For special destination codes, enter these after clicking D, followed by 'Ent'.



Roller-blind controller

Default buses will use an automatic roller-blind selection controller and it's very easy to use. Use the following steps:

1. For the route number, use the click-spots above and below the numbers on the right to go up or down until you have entered the correct number. Click the green button below it to activate and the blinds will start scrolling until they show the correct route.
2. For the destination either refer to the guide above the controller (Depending on the map) or check the map documentation for the correct codes. Once you know what the correct code is, enter it using the clickspots above and below the numbers on the left and finish by clicking the green button below. This will activate the blind and will scroll until the correct one is displayed. If for some reason the blinds are out of sync, click the red button to reset.

Don't forget you can use the flap above the windscreen, inside the cab, to view the blinds to ensure you have selected the right ones without leaving the bus.

CUSTOMISATION

Setvars

The following setvars can be used in your CTI files in order to make your new repaints unique or operator specific:

vis_assault_screen

- 0 - Hide assault screen
- 1 - Show assault screen

vis_ceiling_carpet

- 0 - Hide carpet on ceiling
- 1 - Show carpet on ceiling

vis_dashboard_overlay

- 0 - Hide dashboard overlay
- 1 - Green demonstrator style dashboard overlay
- 2 - White tape style dashboard overlay

vis_frontblind*

- 0 - Route on offside
- 1 - Route on nearside

vis_norearcamera

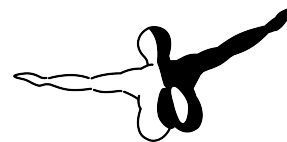
- 0 - Show rear reversing camera
- 1 - Hide rear reversing camera

vis_rearblind

- 0 - No rear blind is displayed
- 1 - Show rear blind
- 2 - Show extended rear blind**

vis_seating¹

- 0 - Use bench style seating
- 1 - Use coach style seating



vis_sideblind

- 0 - No side blind is displayed
- 1 - Only show route number as side blind²
- 2 - Only show destination as side blind*
- 3 - Show route number and destination as side blind*

vis_side_markers¹

- 0 - No side reflectors are shown
- 1 - Side reflectors are shown

vis_stickers

- 0 - Hide operator decals
- 1 - Show operator decals

vis_treebar

- 0 - No front upper windscreen tree protection is shown
- 1 - Upper windscreen tree protection is shown

vis_wheeltrim

- 0 - No wheel trims are shown
- 1 - Show only front chrome hub trims
- 2 - Show chrome wheeltrims on all wheels

vis_wscreen_divider

- 0 - Hide upper windscreen divider
- 1 - Show upper windscreen divider

* Only applies to buses fitted with roller-blinds

** Only applies to buses fitted with LED blinds

¹ Only applies to standard floor variant

² Buses with flip-dot or LED will show a full display

Repaintable Textures

The following textures names can be referenced in your CTI files in order to make your new repaints unique or operator specific. Use the templates found in "../textures/templates" to create your masterpiece:

BODY (Body exterior and windows)
body.dds / body_sh.dds / body_lf.dds

BODY_PARTS (Grill colour)
body_parts.dds

CAB (Cab moulding texture)
cab_lf.dds

CCTV (CCTV monitor texture)
cctv_monitor.dds

FLOOR (Shadow texture for the floor)
floor.dds / floor_lf.dds

FLOOR_TILE (Repeating tile texture for floor)
floor_tile.png

MOULDINGS (Interior mouldings)
mouldings.dds / mouldings_lf.dds

WALLS (Interior walls and ceiling)
walls.dds / walls_lf.dds

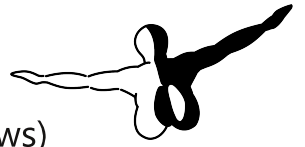
FABRIC (Repeating tile texture for seating fabric)
fabric.png

FABRIC_CEILING (Repeating tile texture for ceiling fabric)
fabric_ceiling.png

INTERIOR_PARTS (Corporate decals)
interior_parts.dds

DOOR_DECALS (Door, assault screen and lower cab windows)
door_decals.png

NOTICE_BOARD (Operator specific A4 poster)
notice.bmp



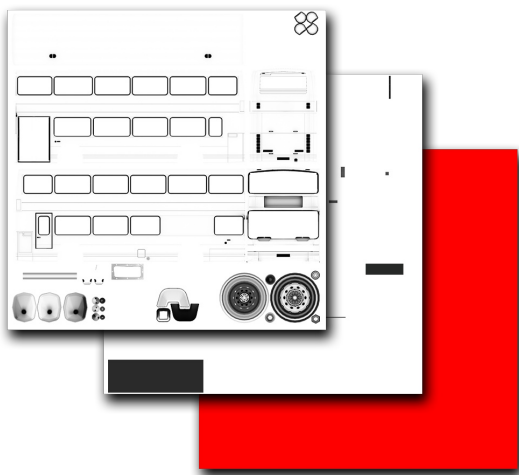
Creating a custom livery

Note: This guide is assuming you are using Photoshop and know your way around the application

Locate the directory '..\Vehicles\V3D - Digibus Phantom\Texture\Templates' where you will find all you need to make your new repaint. Go into the 'body' directory and find body.png then open it in Photoshop. Set the layer to multiply

Add body_colour.png as the next layer below which will add details like engine grills.

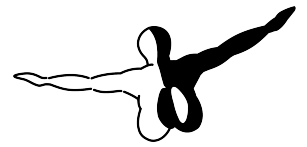
Add your repaint masterpiece below this.



To ensure you don't paint over parts you don't need to, add body_uv.png as a new layer. This is a flattened wireframe view of the bus which will help you to see what parts you need to paint. It will also show you where parts such as the mirrors and wheels are.

Once you're finished you will need to remove the windows from your repaint to prevent them being textured in-game and therefore being unable to see through them. With the main body texture highlighted, use the magicwand to select within the windows and create a layer mask.

Save this new file as a PNG in the repaint folder (Note: If you have installed



the branding pack then add to Repaints_Branded, otherwise add it to Repaints). Ensure your PNG is saved as a compressed type to reduce the file size.

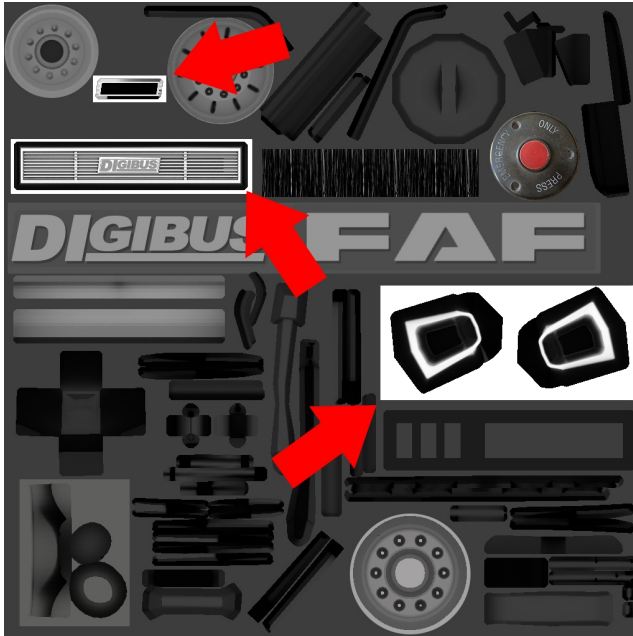
We will assume you're creating a new repaint file so do the following. Make a new text file with the extension .cti and customise with the following basic information and save:

```
[item]
repaintname
Body
myrepaint_body.png
```

Load OMSI 2 and start a fresh game. Find your new repaint name under [V3D] Digibus Phantom in the load bus window
Hopefully it's all worked fine. If not, follow the previous steps again or ask in forums such as Fellowsfilm for tips.

Repainting the grill

Find body_parts.png in the ..OMSI 2\Vehicles\V3D - Digibus Phantom\Texture\Templates\ directory and open in Photoshop. Set the layer to multiply.

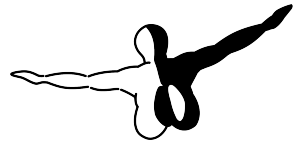


You will notice that certain areas are more white than others, these are the areas you need to paint under in order to change the grill colour. Make sure you don't paint anywhere else as the main texture is set to multiply and will show what's underneath it.

Save your finished work to one of the repaint directories (Depending on if you have the branding pack or not as explained above) and ensure it's a compressed PNG using your repaint name as the first part of the file name, such as myrepaint_body_parts.png

In order to utilise it you need to add some information about it in the repaint CTI file (located in one of the repaint directories):

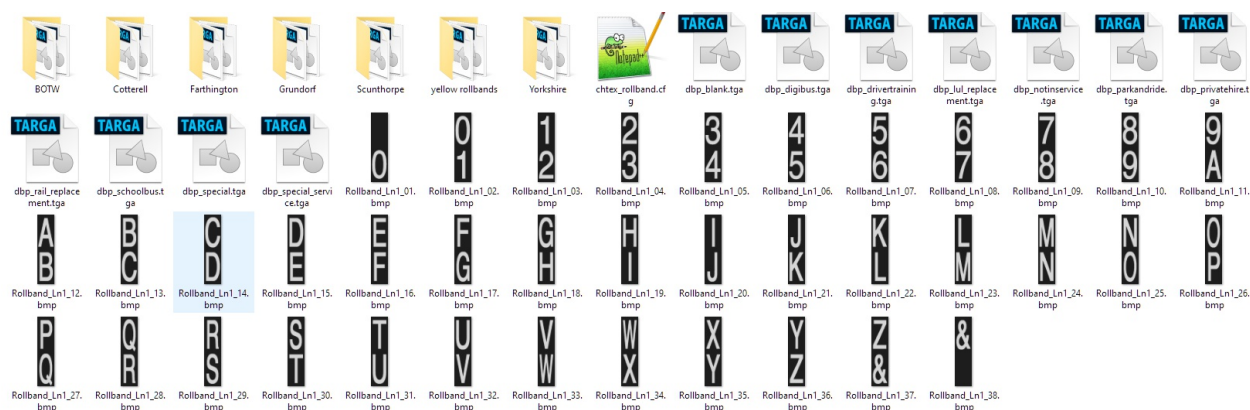
```
[item]  
repaintname  
Body_parts  
myrepaint_body_parts.png
```



Custom roller-blinds

It's quite a simple process that looks more complicated than it actually is if you're never done it before. I'm assuming that you are using Photoshop but other applications are similar in process but the order of layers may need to be reversed.

Find the directory '..\Vehicles\Anzeigen\Rollband_Phantom' where you will see all the blinds that I have already made.



Open any one of the .tga files in your graphics editor such as Photoshop.

To ensure all blinds look similar, copy the background colour (hex: 1d1d1d) and create a new fill layer with it.

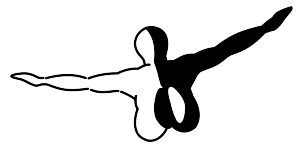
Make a new layer for your text and put whatever you need to show for your destination in it.



Save in the directory already mentioned above but with a new file name of your choice. Remember, it needs to be saved as a 32bit TGA to ensure that when you are scrolling through the blinds in-game it will not jump.

If you wish, you can save it in a subdirectory, such as is done with BOTW, to keep things more organised.

Open any one of the HOF files I have included and you will see where I have



added the new blind filenames

Use the same process in your hof, or use the HOF Editor to make it even simpler.

If you saved your files in a subdirectory, make sure to add it to your file name, such as BOTW\destination.tga

Custom ticket machine textures

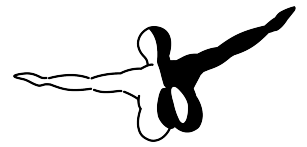


If you are playing a map that has not been recognised by the Phantom's ticket machine you will observe that the preset ticket buttons are blank. This is easy to solve. You will need to know two things before you proceed, what is the name of the map and what are the names of the tickets being used. Let's use BOTW as an example in order to continue.

Open up the HOF file for it (More than likely called BotW 2.9.hof) and locate [name]. Under it is the name of the hof and you'll need to make a note of this. Your next job is to find out which ticket pack the map is using. Locate global.txt in ..\OMSI 2\maps\BotW 2.9 and in it you will see [ticketpack]. Under it is the file that contains the information we need. Locate that file in ..\OMSI 2\Ticketpacks. Once opened you will see sections called [ticket]. These are the names of each preset that you will need to remember.

Open ..\OMSI 2\Vehicles\V3D - Digibus Phantom\Texture\seafarer_II.png in your graphics editor.

The numbers in red (see image) are the ticket presets. Apply text to each one of these in the order found in the ticketpack we looked at earlier. Colour the background of each button if required. The next step is important if you want to make sure you see your new texture in the correct



map. Use the name we found in the hof as the first part of the texture's filename and end with _seafarer_II.png. So the result is BotW 2.9_seafarer_II.png Save this new file to the directory ..\Vehicles\V3D - Digibus Phantom\Texture\seafarer_II

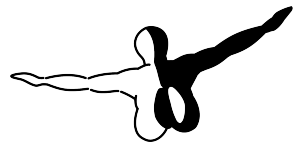
Load up OMSI 2 and start a fresh game with the map intended to be used. Load the Digibus Phantom bus and inspect the ticket machine to see if your efforts have worked. If not, you've either looked at the wrong information or the filename is incorrect. Follow the steps again to ensure you haven't missed anything.

If you don't want to go through these steps and the map ticketpack uses similar presets ticket types to one of the default textures, then just copy and paste the texture you want to use and rename the first part of the filename using the hof name

Free branding pack

For copyright reasons it was not possible to include branding of any kind on this paid-for product.

To apply real manufacturer names and logos to the in-game vehicle loading screen, buses and equipment visit www.digibus-preservation.co.uk for a free branding pack and enjoy the buses as they are found on our streets.



CREDITS

Beta Testers

0118999, BMF_NJ, Danny Brooks, Dylan11003, Jake Gooding, Road-Hog123, Sambob_12, TecnoSam6, Wiltsdorsetspectra

With additional input from Fulleylove, Mystic Greg, Onionwolf & Sylar

Main Credits

M&R Software - Default scripts and linking to some sounds

Aerosoft - Allowing me the opportunity to share my passion

Darren Johnson - Sound recording session with preserved 3127

Random OMSI player - Krüger matrix mod

And you!

Thanks for keeping OMSI 2 alive well past its sell by date