

# MMSEV UACS

Add-On for Orbiter 2016 (v.160828)

## Credits:

Gattispilot  
NASA resources  
Buck Rogers  
Martin Schweiger & Orbiter Forum members

## REQUIREMENTS

D3d9 Client(tested with R4.4-r1306)  
<https://www.orbiter-forum.com/resources/d3d9-for-orbiter-2016.5493/>  
Activate "Enable absolute animation handling" in the Video/Advanced tab.

UACS (Universal Astronaut and Cargo System)  
<https://www.orbiter-forum.com/resources/universal-astronaut-and-cargo-system-uacs.5610/>

## INSTALLATION

Extract all files in the orbiter2016 folder to the root of your Orbiter program directory, preserving the directory structure. This should NOT overwrite anything in the standard Orbiter package.

## SPACECRAFT SPECS and CONTROLS

Length: 4.5 m (180 in)  
Wheelbase: 4 m (160 in)  
Height: 3 m (120 in)  
Speed: 10 km/h (6 mph)  
Range: 125 km (78 mi)  
Mass: 3,000 kg (6,614 lb)  
Payload: 1,000 kg (2,205 lb)  
Wheels: 12 wheels with each at 99 cm (39 in) in diameter, 30.5 cm (12.0 in) wide.

### Driving:

Numpad + = Forward Gear  
Numpad - = Reverse Gear  
Numpad 8 = Accelerate  
Numpad 2 = Brake  
Numpad 1 = Steer Left  
Numpad 3 = Steer Right  
Numpad 4 = Rotate Left  
Numpad 6 = Rotate Right  
Numpad 5 = Center Wheels

Ctrl+L = Lights

### Solar Panel:

K = Deploy/Stow  
3 = Solar Tracking On/Off

J = Camera Boom Deploy/Stow

F8 = Toggle Virtual Cockpit    Ctrl+arrow = Change Seats

### Glass Cockpit only:

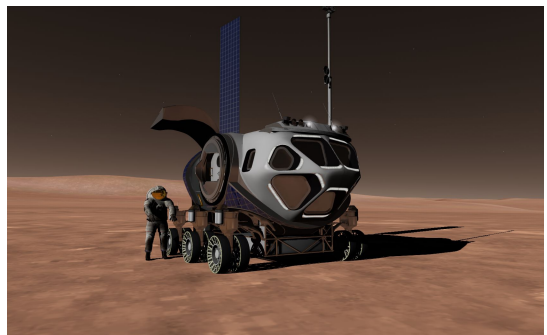
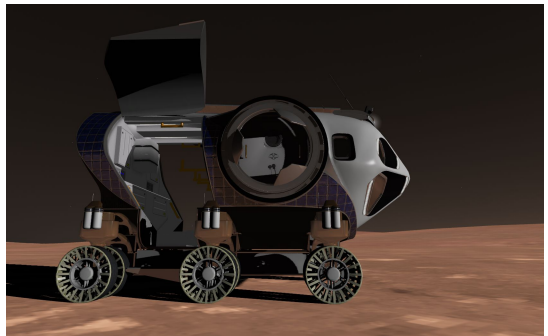
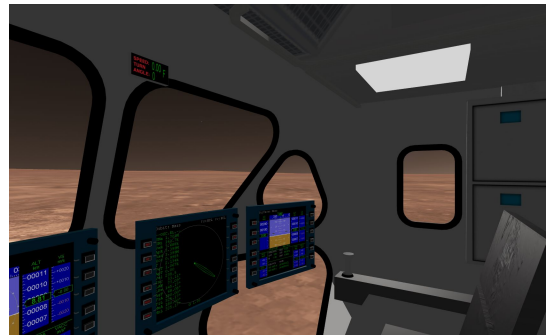
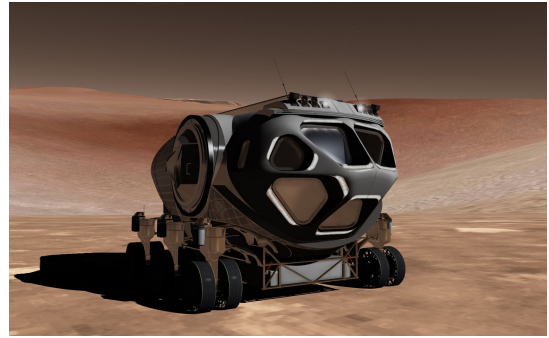
Alt+M = UACS cycle pages: Off/Cargo+EVA/Help

### Doors:

Select one of the rear Airlocks in the UACS Cargo+EVA page  
Ctrl+D = Open/Close door

### EVA:

If there is no crew aboard create one  
R Alt+A = Create Crew  
Select a crew member in the UACS Cargo+EVA page  
Alt+Numpad 8/2 = Select crew  
Select one of the rear Airlocks in the UACS Cargo+EVA page  
Alt+Numpad 7/9 = Select Airlock  
Ctrl+D = Open the door  
R Alt+E = EVA



NASA is testing concepts for a new generation of roving space exploration vehicles. These new ideas will help future robots and astronauts explore more than ever before, build a long-term space presence and conduct a wealth of science experiments. Roving vehicles proved invaluable during the Apollo missions, enabling astronauts to complete almost 20 trips across the surface of the moon. With each successive mission, NASA improved the rovers' capacities, increasing the number and duration of exploration missions. NASA is still building on the lessons learned during the Apollo missions, and also incorporating the experience gained operating unmanned rovers on Mars. Using them, NASA has developed the multi-mission Space Exploration Vehicle, or SEV. The SEV cabin concept could be coupled with a flying platform for use near the International Space Station, satellite servicing and near-Earth asteroid missions. -NASA

The SEV is the size of a small pickup truck, it has 12 wheels, and can house two astronauts for up to two weeks. The SEV consists of a chassis and cabin module. Designed for two occupants, this vehicle is capable of supporting four in an emergency. With wheels that can pivot 360 degrees, the SEV is able to drive in any direction. Astronauts can enter and exit without space suits directly from an airlock docking hatch, or through a suitport without the need to depressurize the habitat module. -wikipedia