



Oolite

Version 1.75

Installation

Mac OS X

Drag the 'Oolite' folder (containing Oolite, this ReadMe, the License and the 'AddOns' folder) to any convenient place on your hard drive. If you are upgrading from a previous version of Oolite then drag the Oolite application from this disk's Oolite folder to your own Oolite folder.

To run the game, double-click on the file 'Oolite.app' (the Oolite icon) in the 'Oolite' folder.

Note that Oolite will only work with Mac OS X 10.3 or higher, Mac OS 10.4 is recommended.

Windows

A folder called 'Oolite' has been created in Start -> Program Files. This folder has icons for running the game, the reference sheet, the link to the official Oolite website, the Advice for New Commanders guide, this ReadMe and an uninstall program.

To run the game, choose the Oolite icon in the 'Oolite' folder.

Basic Instructions

Mac OS X

Oolite is mostly controlled from the keyboard and joystick, although the mouse can also be used in full-screen mode.

Windows and Linux

Oolite can be controlled from the keyboard, joystick or mouse

In Dock Commands:

- 1 or f1**
 - **Launch.** Propels your spacecraft from docked station.
- 2 or f2**
 - **Quick-Save / Save / Load / Begin New Game**
Use **up** and **down** cursor keys to select, **return** to choose.
 - **Game Options...**
 - **Autosave**
Use **left** and **right** to enable/disable the autosave feature.
When enabled, Autosave will create a saved game every time you launch from a planetary station.
 - **Sound Volume**
Use **left** or **right** to adjust the volume for effects and spoken messages.
 - **Show Growl Messages (Mac only)**
Use **left** or **right** to toggle the priority of messages you want to be shown.
 - **Spoken Messages**
Use **left** or **right** or **return** to toggle speech on/off.
Spoken messages uses the default voice chosen in System Preferences.
 - **Music**
Use **left** and **right** to toggle music on/off.
(Mac only): Also used to toggle the iTunes integration on/off.
See below for more details about iTunes integration.
 - **Full Screen Mode**
Use **left** or **right** to select screen size and refresh rate.
Changes will only apply the next time you switch into full-screen mode.
 - **Play in Full Screen / Play in Window (Windows / Linux only)**
Press **Enter** to toggle between Window and Full Screen game view.
(Mac: Press **⌘F** during flight to toggle between the two.)
 - **Reduced Detail**
Use **left** and **right** to turn reduced detail on/off.
Removing some graphic complexity increases the frame rate on slower Computers.
 - **Wireframe Graphics**
Use **left** and **right** to select/deselect retro-look wireframe graphics mode.
 - **Detailed Planets**
Use **left** or **right** to select/deselect procedurally generated planet rendering.
 - **Shader Effects**
Use **left** or **right** to adjust the desired level of shaders utilisation between None, Simple and Full.
(Not available if your graphics hardware has no shaders support.)
 - **Joystick Configuration**
Press Enter to go to the joystick calibration and configuration screen.
 - **Back**
Brings you back to the previous screen.
 - **Reset to strict gameplay / Reset to unrestricted play**

- Press return to reset the game.
 Strict play disables any expansion packs and places gameplay into 'classic' mode.
- **Exit (Windows / Linux only)**
 Press **Return** to quit the game.
- 3 or f3** **Ship Outfitting / Ship Purchase** (toggles between the two)
 Use **up** and **down** cursor keys to select, **return** to purchase.
 Use **left** and **right** cursor keys to move between pages.
- 5 or f5** **Status / Ship's Manifest** (toggles between the two)
- 6 or f6** **Short Range Chart / Galactic Chart** (toggles between the two)
 Use **cursor keys** or the **mouse button** to select a hyperdrive target system.
 Use **Home** key to select the current system.
 On the Galactic Chart only, you may type a star name to locate it.
 Also on the Galactic Chart:
 '^' plots the route from your current system to your target system (requires advanced navigational array).
 '?' takes you directly to the Carrier Market.
 On the Short Range Chart:
 'i' shows information for each system (economy, government and tech level).
- 7 or f7** **Planetary Database** (shows data on the selected system)
- 8 or f8** **Commodity Market / Carrier Market**
 (toggles between the two)
 On the Commodity Market:
 Use **up** and **down** cursor keys to select,
 right to purchase commodity, **left** to sell commodity.
 Return buys or sells as much of the selected commodity as possible.
 On the Carrier Market:
 Use **up** and **down** cursor keys to select, **Return** to agree the contract,
 pressing **'?'** takes you to the Galactic Chart with the destination system selected.
 Taking passenger contracts requires a passenger berth.

Flight Key Commands:

Attitude Controls:

Left & Right	Roll
Up & Down	Pitch
, & .	Yaw

Drive controls:

w	Increase Speed
s	Decrease Speed

Hyperspeed:

j	Toggle the in-system hyperspeed drive ("Torus Jump Drive") on and off. The drive is disabled by nearby mass/gravity effects.
----------	--

Hyperdrive:

h	Activate the hyperdrive, also known as the witchspace jump drive. This drive must have a target destination selected in one of the charts.
g	Activate the Galactic Hyperdrive (if installed).

Fuel Injection:

i	Activate the afterburner Witchdrive Fuel Injectors (if installed).
----------	--

Other controls:

p	Pause / un-pause the game (only during flight). While paused you can access some elements of the Options menu by pressing 2 or f2 . Also while paused you can access the following debugging options:
o	Dump a list of all entities in the log-file.
b	Enables collision test debugging.
c	Enables octree debugging.
d	Enables all debug flags.
o	Hides the HUD. Useful for taking screenshots.
s	Enables shader debug messages.
x	Enables drawing of bounding boxes around all entities.
n	Disables all debug flags and displays HUD again.
Left/Right	Halve/Double Time Acceleration Factor

Weaponry:

a	Fire main weapon for the facing chosen
Underscore	Toggle weapons lockdown on/off

Missiles, mines and pylon mounted equipment:

r	Activate target identification system (deactivating the missile/mine system).
t	Enable targeting for the current missile, or arm the current mine. If the target identification system is active and locked on, then this also locks a missile onto the selected target.
y	Switch to the next missile or mine available (requires Multi-Targeting System).
Shift + t	Immediately target nearest incoming missile.
u	If target identification is active, deactivate it and reactivate the missile/mine system. If missiles are active, clear any targets (places them in safety mode).
m	Launch the current missile or mine (it must be locked on target, or armed first), and switch to the next missile available.

Selectable Equipment:

Shift-n	Next selectable equipment
Shift-Ctrl-n	Previous selectable equipment
n	Activate selectable equipment

Target System Memory Expansion:

- +** Lock on to next target in memory (if installed).
- Lock on to previous target in memory (if installed).

Anti-Missile ECM:

- e** Activate anti-missile Electronic Counter-Measures (if installed).

Scanner:

- z** Adjust scanner zoom ratio (only during flight).
This allows you to 'zoom in' to navigate around small, close-to objects.
A small indicator next to the compass indicates the current scanner ratio (from 1:1 to 5:1).
- Z (shift-z)** Zoom out to 1:1 scanner ratio.

Advanced Space Compass:

- ** Change compass mode (if the Advanced Space Compass is installed). This toggles your compass between showing the location of the planet, main station (if close enough), sun, your current target, the station beacon, witchpoint buoy, and various additional beacons.

Communications:

- `** View communications log.
Allows you to see recent ship-to-ship communications.
- L (shift-l)** Request / Cancel / Renew docking clearance.

View screens:

- 1 or f1** View forward
- 2 or f2** View aft
- 3 or f3** View port
- 4 or f4** View starboard
- v** Toggle between external views
- 5 or f5** Status / Ship's Manifest (see above)
- 6 or f6** Short range Chart / Galactic Chart (see above)
- 7 or f7** Planetary Database (see above)
- 8 or f8** Commodity Market (see above)

Automated Docking:

- c** Begin/Abandon automated docking sequence with the main station, or current target.
If only one station is in range, no targeting necessary (requires Docking Computer).
- s** Toggle docking music on/off (requires Docking Computer).
- C (shift-c)** Fast docking (without docking sequence), advances the game clock by 20 minutes.
(requires Docking Computer).

Ejecting cargo items:

- d** Eject one cargo pod.
- R (shift-r)** Rotate cargo to determine what will be ejected.

Escape Pod:

- Esc-Esc** Launch Escape Pod (if installed). Requires fast double tap of the Escape key.

Specialist Equipment:

- 0 (zero)** Activate/deactivate specialist equipment (if installed).

Energy Bomb:

- Tab** Activate energy bomb (if installed).

Other Commands:

- * (asterisk)** Take screenshot (writes a '.png' file to the oolite-saves folder under oolite.app)
- ⌘Q** (Mac only): Quit
- shift-esc / shift-Q** (Windows / Linux only): Quit
- ⌘F** (Mac only): Switch between full-screen and windowed mode.
(Windows: Choose 'Play in Full Screen / Play in Window' in the Game Options.)
- F (shift-F)** Toggle FPS and Objs debugging display on and off.
(In full-screen only) Toggle mouse control on and off. X-axis is mapped to roll. To map the x-axis to yaw, use **Ctrl+Shift+M**:
- M (shift-M)**
 - Mouse left-right** controls roll.
 - Mouse forward-back** controls pitch.
 - Left mouse button** fires weapons.
 - Right mouse button** cancels roll and pitch, centering the controls.
- ⌘?** (Mac only): Display control keys and license in a Help window (in windowed mode).

iTunes Integration in Mac OS X:

iTunes integration allows you to choose the music to be played in the background as you are running Oolite. With iTunes integration switched on, Oolite looks for music in iTunes playlists with the following names:

- Oolite-Inflight** should contain music tracks to be played during flight,
- Oolite-Docked** should contain music tracks to be played while in dock,
- and **Oolite-Docking** should contain music tracks to be played during the docking sequence.

You should set up these playlists yourself, choosing whatever music you like to listen to while playing Oolite. iTunes integration relies on Applescript and the ability to run iTunes and Oolite simultaneously and therefore may not be a good choice on a slower machine. If your Mac is fast enough to allow you to do this normally then there should be no problem.

Changing user preferences in Windows:

The user preferences defaults file .GNUstepDefaults

The file <installation dir>/oolite.app/GNUstep/Defaults/.GNUstepDefaults contains the current settings for fullscreen mode and display resolutions, together with the user preference settings for sound volume, reduced detail (Yes/No), wireframe graphics display (Yes/No), and the shader effects level (Off, Simple, Full), in case your system supports shaders. All these can be changed by either the Game Options... menu, or by directly editing the .GNUstepDefaults file. The recommended way to change settings is to use the in-game menu. See below for examples of directly editing the preferences file. Note that .GNUstepDefaults will not be present immediately after the game's installation. You will need to run Oolite at least once to have it created.

Switching between full screen and windowed mode, or changing resolution

The long standing issues with textures being corrupted when resizing the game window have been resolved as of version 1.73. If in doubt, delete .GNUstepDefaults and restart the game. This will start you in windowed mode.

To change the fullscreen mode resolution, you can use the Game Options... menu or alternatively edit the .GNUstepDefaults file by changing the display_width and display_height values, and ensuring the fullscreen property has a value of <*BY>.

.GNUstepDefaults editing examples

These settings will give a fullscreen display of 800x600, about one third sound volume, reduced detail set to 'No', wireframe graphics set to 'Yes', and shader effects set to 'Simple':

```
{
    NSGlobalDomain =
    {
    };
    oolite.exe =
    {
        display_width = <*I800>;
        display_height = <*I600>;
        fullscreen = <*BY>;
        "reduced-detail-graphics" = *BN>;
        "shader-effects-level" = <*I2>;
        volume_control = <*R0.26>;
        "wireframe-graphics" = <*BY>;
    };
}
```

And these settings will give a fullscreen display of 1400x1050, full sound volume, reduced detail set to 'No', wireframe graphics set to 'No', and shader effects set to 'Full':

```
{
    NSGlobalDomain = { };
    oolite.exe = {
        display_width = <*I1400>;
        display_height = <*I1050>;
        fullscreen = <*BY>;
        "reduced-detail-graphics" = *BN>;
        "shader-effects-level" = <*I3>;
        volume_control = <*R1>;
        "wireframe-graphics" = <*BN>;
    };
}
```

There are quite a few other settings that can be used inside .GNUstepDefaults, some are:

```
"use-texture-lod-bias" = NO;
"splash-screen" = NO;
"mouse-control-in-windowed-mode" = YES;
```

For more information please refer to http://wiki.alioth.net/index.php/Hidden_Settings_in_Oolite.

Helpful Information

For more information on playing Oolite visit <http://www.oolite.org> .

Read the tutorial before you begin (<http://oolite.aegidian.org/tutorial>)!

Oolite Development Project Page at <https://developer.berlios.de/projects/oolite-linux> (for all platforms, including Macs and Windows)

Browse the Oolite Wiki at http://wiki.alioth.net/index.php/Oolite_Main_Page .

Frequently Asked Questions at http://wiki.alioth.net/index.php/Oolite_FAQ .

Most Oolite eXPansion Packs (OXPs) are available at <http://wiki.alioth.net/index.php/EXP> .

For answers to questions about playing Oolite, customising Oolite and anything else Oolite related, post to the Oolite Bulletin Boards at <http://www.aegidian.org/bb> .

I am immensely grateful to all the people who have been testing Oolite and slowly bringing it towards perfection.

Thanks to all of you!

Note: my email address for feedback is AHRUMAN@OOLITE.ORG

You can also report bugs and give feedback at <http://www.aegidian.org/bb>

In the event this application crashes, please send an email to oolite.bug.reports@gmail.com, and attach the crash log (found at `~/Library/Logs/CrashReporter/Oolite.crash.log` for the Mac version, `<Oolite installation folder>/oolite.app/Logs/Latest.log` for the Windows version and `~/Oolite/Logs/Latest.log` for the Linux version).

License

Copyright © 2004-2011 Giles C Williams and contributors.

This work is licensed under the GNU General Public License version 2.

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA.

Additionally, all artwork – 3D models, images and sounds – included in the work, as well as configuration files, are also licensed under the Commons Creative Attribution-Non Commercial-Share Alike License version 3.0. This means that these files may be distributed under either license at your discretion.

To view a copy of Attribution-Non Commercial-Share Alike license, visit <http://creativecommons.org/licenses/by-nc-sa/3.0/> or send a letter to Creative Commons, 559 Nathan Abbott Way, Stanford, California 94305, USA.

You are free:

- to Share — to copy, distribute and transmit the work
- to Remix — to adapt the work

Under the following conditions:

- Attribution. You must attribute the work in the manner specified by the author or licensor (but not in any way that suggests that they endorse you or your use of the work).
- Noncommercial. You may not use this work for commercial purposes.
- Share Alike. If you alter, transform, or build upon this work, you may distribute the resulting work only under the same or similar license to this one.

For any reuse or distribution, you must make clear to others the license terms of this work. Any of the above conditions can be waived if you get permission from the copyright holder. Apart from the remix rights granted under this license, nothing in this license impairs or restricts the author's moral rights

Your fair dealing and other rights are in no way affected by the above.
This is a human-readable summary of the Legal Code (the full license).

The source code distribution and the Mac OS X version of Oolite contain parts subject to the following license:

VirtualRingBuffer

Copyright © 2002, Kurt Revis. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- Neither the name of Snoize nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

Oolite is making use of various external open source libraries, some of them modified to fit certain requirements of the game. For more information about where to find the source code of those libraries, as well as information about the modifications required to make them build for Oolite, please refer to the file `ExternalLibrariesSourceCodeChanges.txt`, found inside the Doc folder of the game's source code distribution. Visit <https://developer.berlios.de/projects/oolite-linux> for details and Oolite's source code download.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.