

A wireframe 3D scene showing a room with a table, a chair, and a window. The text "SMART POLY" is overlaid in a large, outlined font.

SMART POLY

Manual for version: 1.30

[Helpfile Index]

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[1.0.0] System Requirements

For a good performance of Smart Poly you should use a System between "Minimum" and "Recommended". Because of the multiple System settings sometimes Smart Poly can work slow also at "Recommended" systems.

[1.1.0] Minimum

Mouse & Keyboard

Pentium 1; 800 Mhz

64 MB RAM

Voodoo 2

Windows98

Microsoft DirectX 8

Approx. 20 MB of free memory

Write access to the "Smart Poly" folder!

[1.2.0] Recommended

Mouse & Keyboard

Pentium 3 - 2200 Mhz

512 MB RAM

GeeForce 3

WindowsXP + Servicepack1

Microsoft DirectX 9

Approx. 20 MB of free memory

Write access to the "Smart Poly" folder!



[2.0.0] Startup with Smart Poly

[2.1.0] What is Smart Poly?

Smart Poly is a 3d modelling tool for creating simple 3d Objects in the GML format [Game Maker language]. You can create complex models and export your creation in a few steps as Primitive or Model code. Also you can use Texture Materials and Color Maps and export their settings too.

[3.0.0] Menu Interface

[3.1.0] File menu

In the File menu you find all functions that deal with external files. Smart Poly can load and save files *.scr [Smart Poly Scene] and Import and Export Files as *.txt [Textfile] or *.gml [Game Maker language].

| | |
|-----------------|---|
| New Scene | Creates a new Scene in the 'free' view. (shortcut: F,N) |
| Open Scene | Opens a saved Smart Poly Scene file (.scr). (shortcut: F,O) |
| Recent Files | If you have already saved some Smart Poly Scenes, in this action will show a button for each file. Normaly 10 files will saved. |
| Save Scene | Saves Scene file under its current name. If no name was specified before, you are asked for a new name. (shortcut: F,S) |
| Save Scene as | Saves the Scene file under a different name. You are asked for a new name. (shortcut: F,A) |
| Export Scene | Will export the current Scene as GML-code to the indicated folder. (shortcut: F,E) |
| Exit Smart Poly | Will end Smart Poly after a dialog. (shortcut: F,X) |

[3.2.0] Edit menu

The Edit menu will change by the Editmodus is chosen. You can switch between the Modus "Dummie", "Vertex", "Primitive" and "Extended".

[3.2.1] Edit menu Dummie

Change X

Change Y

Change Z

Lock/Unlock

[3.2.1] Edit menu Vertex

Change X

Change Y

Change Z

Set X Map

Set Y Map

Set Alpha

Set Color

Change Group

Lock/Unlock



[3.2.1] Edit menu Primitive

Change X

Change Y

Change Z

Set X size

Set Y size

Set Z size

Set X rotation

Set Y rotation

Set Z rotation

Set X scaling

Set Y scaling

Set Z scaling

Set X translation

Set Y translation

Set Z translation

Hor. texture repeat

Ver. texture repeat

Set Alpha

Set Color

Set Texture

Set Segments

Set Closed

Set Type

Lock/Unlock



[3.2.1] Edit menu Extended

Change X

Change Y

Change Z

Set X size

Set Y size

Set Z size

Set X rotation

Set Y rotation

Set Z rotation

Set X scaling

Set Y scaling

Set Z scaling

Set X translation

Set Y translation

Set Z translation

Hor. texture repeat

Ver. texture repeat

Set Alpha

Set Color

Set Texture

Change Code

Lock/Unlock

[3.3.0] View menu

| | |
|---------------------|--|
| Camera Free | This action loads the Free Camera settings. The Camera shows an isometric view of the current Scene. (shortcut: V,F) |
| Camera Left | This action loads the Left Camera settings. The Camera shows an planar view of the current Scene. (shortcut: V,L) |
| Camera Right | This action loads the Right Camera settings. The Camera shows an planar view of the current Scene. (shortcut: V,R) |
| Camera Top | This action loads the Top Camera settings. The Camera shows an planar view of the current Scene. (shortcut: V,T) |
| Camera Bottom | This action loads the Bottom Camera settings. The Camera shows an planar view of the current Scene. (shortcut: V,B) |
| Hide all Dummies | This option will remove all Dummie objects from the scene for the moment. |
| Hide all Vertex | This option will remove all Vertex objects from the scene for the moment. |
| Hide all Primitives | This option will remove all Primitive objects from the scene for the moment. |
| Hide all Extended | This option will remove all Extended objects from the scene for the moment. |
| Hide all Objects | This option will remove all objects from the scene for the moment. (shortcut: V,H) |

Unhide all Dummies

This option will show all hidden Dummie objects in the scene.

Unhide all Vertex

This option will show all hidden Vertex objects in the scene.

Unhide all Primitives

This option will show all hidden Primitive objects in the Scene.

Unhide all Extended

This option will show all hidden Extended objects in the Scene.

Unhide all Objects

This option will show all hidden objects in the Scene. [shortcut: V,U]

[3.4.0] Settings menu

| | |
|----------------------------|--|
| Vertex Group Color | Set a Color for the indicated Vertex-Group used when the Group has no Color Map. |
| Vertex Group Alpha | Set a global Alpha value for the indicated Vertex-Group, used for all Vertex-Objects in the Group |
| Vertex Group Texture | Set for the indicated Vertex-Group, a Background Texture, a Sprite Texture or no Texture. |
| Vertex default Group | Indicated the Group-Number, new Vertex-Objects get when created. |
| Vertex Group Pointlist | The Vertex Objects in the current Scene will form a pointlist, in the range of their creation. |
| Vertex Group Linelist | The Vertex Objects in the indicated Group will form a linelist, in the range of their creation. |
| Vertex Group Linestrip | The Vertex Objects in the current Scene will form a Linestrip, in the range of their creation. |
| Vertex Group Trianglelist | The Vertex Objects in the indicated Group will form a Trianglelist, in the range of their creation. |
| Vertex Group Trianglestrip | The Vertex Objects in the indicated Group will form a Trianglestrip, in the range of their creation. |
| Vertex Group Trianglefan | The Vertex Objects in the indicated Group will form a Trianglefan, in the range of their creation. |

Vertex Group No Map

For the indicated Vertex-Group will set no Color- or Texturemap.

Vertex Group Color Map

For the indicated Vertex-Group will set a Colormap using the Colors of the Vertex-Objects in the Group.

Vertex Group Texture Map

For the indicated Vertex-Group will set a Texturemap using the Texture set for the Group with the UV values of the Vertex-Objects in the Group

Vertex Group All Maps

Using Color- an Texturmap for Drawing indicated Vertexgroup.

Load Texture as sprite

This action let you, to choose one of ten available Sprite Texture slots. Then to choose an external BMP, JPEG or GIF file to load for it.

Load Texture as Back...

This action let you, to choose one of ten available Background Texture slots. Then to choose an external BMP or JPEG file to load for it.

[3.5.0] Options menu

Polygone Edged Faces

This functions draw the Polygons of the Vertex Groups a second time as an Outline. This function is a little slow!

Polygone Wireframes

This functions will draw the Polygons of the Vertex Groups only as an Outline.

Polygone Culling

This functions will activate and deactivate the Culling. Backsides of Polygons will not be visible when Culling is activated.

Camera Scrolling Speed

This action will ask You to change the Camera Scrolling speed. The default is "3". This is the Speed for the movement of the Camera.

Camera Selection Range

This action will ask You to change Camera Selection Range. The default is "20". This is the Range for manipulate objects with the cursor.

Camera Gizmo Size

This action will ask You to change Camera Gizmo Size. The default is "25". This is the Size the Transform Gizmos drawn by manipulating objects.

World Grid Show

This action will hide or unhide the Grid.

World Grid Snap

This action will activate and deactivate the Grid-Snapping Function for the Scene.

World Grid Size

This action will ask You to change World Grid Size for the Scene. The default is "200". This is the Size the world grid is drawn in the view. The Camera settings will react on changes.

World Grid Unit

This action will ask You to change World Grid Unit for the Scene. The default is "10". This is the number of Units the World Grid is divided into.

World Fog Show

This action will activate or deactivate the World Fog for the Scene.

World Fog Range

This action will ask You to change the World Fog Range for the Scene. The default is "1000".

World Fog Color

This action will change the Fog Color for the Scene.

World Background Color

This action will change Background Color for the Scene.

Export Type Settings

Here You can indicate, that the Scene should be exported as Primitive or Model-Code. The Model-Code is only usefull for Game Maker 6.1.

Export with XYZ string

Here You can indicate, that the objects should be exportet with x, y, and z strings in the Functions. If the Function is activated Smart Poly will export "Smart-Code". Otherwise "Static-Code" will be exported.

Export as Identity

Here You can indicate that all Objcets should be Identitys, the full code set as Identity or not Identity-Functions used to export code.

Export Index Name

Here You can change the Name of the Model-Index, used by exporting Scene as Model-Code.

Export Filetype

Here You can indicate, that the Scene should be exported as .txt or .gml file. When .gml format is choosen, some extra lines for importing the script in the Game Maker will be created.

Window Fullscreen

This action switch between the Fullscreen and the Windowmodus. If the Fullscreen-modus is choosen the Windowsize will be ignored.

Window Default

With this action you can load the Window default settings. Normaly the windowsize is 800x600 pixel and is centered on the screen.

Set Text Editor

Here You can choose a Text Editor, used for Editing drawcodes etc. The default is the Notepad.exe, included in Windows©.

[3.6.0] Plugins menu

In the Plugins menu, all Plugins installed to the Smart Poly Engine will appear. Note that the Plugin-Actions saved with the Smart Poly Scene.

How to Install a Plugin?

Simple extract all Files, included in the Archive, to the "Plugin"-Folder, stored defaultly in the "data" Directory.

[3.7.0] Help menu

Smart Poly Manual

This action will load this Manual.

Smart Poly Keyboardmap

This action will show the Keyboardmap with all Shortcuts of Smart Poly.

Smart Poly ReadMe

This action will open the Smart Poly Readme.txt file, stored in the Main directory.

Smart Poly Website

This action will open the Smart Poly website with the Microsoft© "Internet explorer".

VectorGames Website

This action will open the VectorGames.de website with the Microsoft© "Internet explorer".

About Smart Poly

This action will show a Window with some Informations about Smart Poly.

[4.0.0] Toolbar Interface

[4.1.0] Modification Tools

Creation Tool



The Creation Tool changes with the Edit Modus. It will Change the icon for the Modus is chosen (There are the Modi: Dummie, Vertex Primitive and Extended). (Shortcut: C)

Movement Tool



With the Movement Tool you can move all selected objects in the activated Axis (X,Y, and Z). While the Grid Snapping Option is activated, the Objects will move snapped to the indicated Grid. (Shortcut: M)

Rotation Tool



With the Rotation Tool you can rotate the Objects in the Selection in the indicated Axis. (Shortcut: R)

Sizing Tool



With the Sizing Tool you can change the Size of the Objects in the Selection in the indicated Axis. (Shortcut: I)

Scaling Tool



With the Scaling Tool you can change the Scaling-Factor of the Objects in the Selection in the indicated Axis. (Shortcut: L)

Lock X Axis



When Lock X Axis is Activated all Tools will Modify the x values of the Objects in the Selection. (Shortcut: X)

Lock Y Axis



When Lock Y Axis is Activated all Tools will Modify the y values of the Objects in the Selection. (Shortcut: Y)

Lock Z Axis



When Lock Z Axis is Activated all Tools will Modify the z values of the Objects in the Selection. No other Axis can modified whit the Z Axis. (Shortcut: Z)

Grid Snapping



This Tool will activate and deactivate the Grid-Snapping Function for the Scene. (Shortcut: G)

Default Color



This Tool will change the Color, that is used for creating new objects in the Scene. (Shortcut: D)

Edit Dummies



Will change modus to “Edit Dummies”. Now only Dummie objects could be selected and modified.

Edit Vertex



Will change modus to “Edit Vertex”. Now only Vertex objects could be selected and modified.

Edit Primitives



Will change modus to “Edit Primitives”. Now only Primitive objects could be selected and modified. Note that you can open a small menu to indicate the type of Primitive should be created with the Creation-Tool.

Edit Extended



Will change modus to “Edit Extended”. Now only Extended objects could be selected and modified.

UV Map Editor



Will open the Vertex Group UV Map Editor, to edit the UV values (x and y Mapping). (Shortcut: U)

Render Scene



Will render a bitmap of the Scene and save it in the Renderings Folder. With a dialog you can delete the Image. (Shortcut: F10)

[5.0.0] The Key Allocation

Smart Poly has a lot of functions you can call by pressing one or more keys simultaneously. This is called a Shortcut. Its useful to know some of these Shortcuts to have a good workflow. Some of the functions, executed with a Shortcut, can also be called with a menu or a Toolbar icon, but the use of shortcuts is very much faster.



[5.1.0] Engine Shortcuts (green)

- | | |
|-------------|--|
| N + Control | Creates a new Scene after a dialog. |
| S + Control | Saves the current Scene. If no name was set before, you will be asked for a filename. |
| S + Shift | Will open the "Save Scene as" dialog. You will be asked for a filename the Scene will be saved as. |
| O + Control | Will open the dialog to open a Scene. |
| E + Control | If the scene is saved, the Export dialog will start. |
| Q + Control | Will end Smart Poly after a dialog. |
| F1 | This action opens the Smart Poly Helpfile. |
| F3 | Switch between the Fullscreen- and the Window mode. |
| F9 | Saves a Rendering of the Scene, normally in the folder "Images\Renderings". |
| F10 | Saves a Screenshot of the Scene, normally in the folder "Images\Renderings". |
| F12 | Will open or close the Console. Note that the most shortcuts won't work in Console mode! |

[5.1.0] Menu Shortcuts (yellow)

| | |
|---|------------------------------|
| F | Will open the File menu. |
| E | Will open the Edit menu. |
| V | Will open the View menu. |
| S | Will open the Settings menu. |
| O | Will open the Options menu. |
| H | Will open the Help menu. |

[5.2.0] Toolbar Shortcuts (blue)

| | |
|---|---|
| C | Activates the Creation Tool. |
| M | Activates the Movement Tool. |
| R | Activates the Rotation Tool. |
| I | Activates the Sizing Tool. |
| L | Activates the Scaling Tool. |
| G | Activates or deactivates the Grid snapping. |
| D | Change the default Color. |
| X | Activates or deactivates the X Axis. |
| Y | Activates or deactivates the Y Axis. |
| Z | Activates or deactivates the Z Axis. |

[5.3.0] Camera Shortcuts (cyan)

| | |
|----------------------|---------------------------------------|
| Arrow up | Moves Camera forward. |
| Arrow down | Moves Camera backward. |
| Arrow left | Moves Camera left. |
| Arrow right | Moves Camera right. |
| Arrow up + Shift | Rotate camera up. |
| Arrow down + Shift | Rotate camera down. |
| Arrow left + Shift | Rotate camera left. |
| Arrow left + Shift | Rotate camera right. |
| Arrow up + Control | Moves Camera in the z axis up. |
| Arrow down + Control | Moves Camera in the z axis down. |
| Arrow left + Control | Rotate camera left around the scene. |
| Arrow left + Control | Rotate camera right around the scene. |
| Spacebar | Will the Camera let follow the cursor |
| G + Control | Will show or hide the Grid. |
| F4 | Loads the "Free" Camera settings. |
| F5 | Loads the "Left" Camera settings. |
| F6 | Loads the "Right" Camera settings. |
| F7 | Loads the "Top" Camera settings. |
| F8 | Loads the "Bottom" Camera settings. |

[5.4.0] Object Shortcuts (red)

| | |
|-------------|--|
| A + Control | Select all of the current Edit Modus type in the Scene. |
| D + Control | Unselect all of the current Edit Modus type in the Scene. |
| C + Control | Creates "Clone"-Objects of the selected Objects. The Clones will have the same Properties as the Parent Objects. |
| Delete | Will delete all selected objects in the Scene after a dialog. |

[8.0.0] Smart Poly License

The program which can be installed you "as it is" to the order posed, without guarantee any kind, neither expressly nor implicitly. The entire risk, which results from using or the achievement of the program, remains with you. The manufacturer does not take over any guarantee for this software. He takes over in particular no adhesion for the fitness, the suitability for a certain purpose and the not injury of the rights third.

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