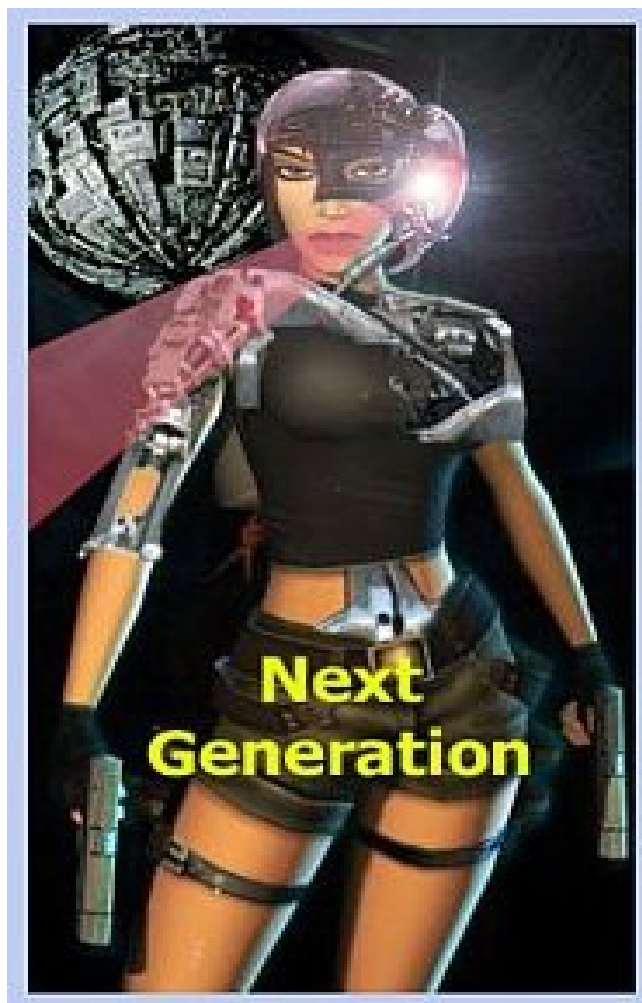


TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION



TOMB EDITOR

VERSION 1.3.10

TOMB EDITOR MANUAL

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TOMB RAIDER NEXT GENERATION



TOMB EDITOR

INTRODUCTION

TOMB EDITOR MANUAL

TOMB EDITOR INTRODUCTION

Tomb Editor is an unofficial level editor for Tomb Raider 4 custom levels. It is a modern replacement for the **RoomEdit** level editor from Core Design. This was known as "**TRLE**" and it was released to the public in 2000 with Tomb Raider Chronicles. It was the original in-house tool used by the development team to produce levels for Tomb Raider 4.

The new **Tomb Editor** is compatible with modern systems from **Windows 7** to **Windows 10** and supports both 32-bit and 64-bit CPUs. It takes advantage of modern GPUs capabilities through the use of DirectX 10 and has a more standard user interface utilizing a spectrum of mouse controls. **Tomb Editor** allows for import of RoomEdit (**NGLE**) Prj project files and use of Wad object files and TGA texture sets. It introduces its own proprietary Prj2 format for project files and Wad2 format for object files which lifts the limitations imposed by the original formats.

All of the crucial, basic functionality for level editing has been ported from RoomEdit (**NGLE**), with some of it extended to new abilities and new additional tools developed from scratch to aid the editing process.

COMPATIBILITY WITH NGLE/TRNG

Years after the original **RoomEdit/TRLE** was released, an unofficial patch was developed by the user **Paolone** called the **NGLE** (Next Generation Level Editor), along with an extension to the Tomb Raider 4 game engine executable called the **TRNG** (Tomb Raider Next Generation). **NGLE and TRNG** introduced a number of enhancements along with new capabilities, such as the use of bigger texture tiles and more-detailed objects in levels and a scripting system to invoke new game behaviours.

MAIN DIFFERENCES FROM ROOMEDIT

Tomb Editor does not support the saving of Prj files and it will not support it in the future.

Prj files can be imported but not written to. This is due to the complicated structure of the Prj file format, its unreliability, high probability of corruption and general lack of official documentation.

Prj import is capable of reading Prj files at nearly 99% accuracy, but nevertheless, some issues might occur. Please always report issues with Prj import to the development team.

Projects are saved in the new Prj2 file format. It is designed to be more reliable than the Prj file format and more flexible in case changes and/or improvements are introduced.

Wad files are supported and can still be used in conjunction with Prj2 files in the same way they were used with Prj files.

Tomb Editor comes with its own built-in compiler and produces complete TR4 format level files. It does not need an external compiler such as the **tomb2pc** (or **NG_tomb2pc**) compiler used with **TRLE** (or **NGLE/TRNG**).

TGA texture sets are still supported, along with PNG and BMP files. When using PRJ2 files with "wide" texture sets (width larger than 256 pixels) they are no longer "broken" to accommodate a 256 pixel wide texture panel as they were in **TRLE/NGLE**.

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Sky texture (**pcsky.raw**) and font texture (**font.pc**) files can be chosen on a per-project basis; necessary options are available in the Level Settings panel under Tools in the main menu.

File paths for texture files, object files and sound sample files used in the Prj2 project file, along with directory paths for Tomb Raider 4 game engine files can be manually adjusted, also in the Level Settings panel.

Texture selection can now be modified by moving the corner points of the default square shape, it is no longer limited to a pre-defined grid size and texture sizes and it can be mixed within a single level.

Diagonal walls and steps can be shaped in the room geometry.
Rooms can be moved up and down even after doors/portals are created.

Doors/portals on triangulated sectors are handled automatically, meaning there is no need to apply "no collision" to triangles. Instead, a "Force solid floor" function is implemented to override this automatic handling of doors/portals on triangles.

Objects (moveables, statics, lights, cameras, etc.) and room sectors can both stay selected at the same time.

Modifier keys are assigned differently (read on for specifics).

BASIC USAGE

Tomb Editor is generally self-explanatory. All principles from RoomEdit (**NGLE**) are retained, differences are mainly within the user interface.

Each button within the editor window has a tooltip to explain its function.

The standard keyboard controls for geometry editing **Q/A W/S E/D R/F**
and **CTRL** (arrows pointing to sector corners) are still in use.

Some other keyboard shortcuts and mouse controls are different to RoomEdit (**NGLE**):

CTRL	mirrors textures.
SHIFT	rotates textures.
Right Mouse Button	rotates the room in 3D view.
Middle Mouse Button	panns the 3D view camera up, down, left & right.
SHIFT with Left Mouse Button	panns the 3D view camera up, down, left & right.
CTRL with Left Mouse Button	zooming.
Moving the mouse wheel	zooming.
ALT with Left Mouse Button	used to pick textures.

TOMB EDITOR MANUAL

Some of the new keyboard and mouse controls for editor functions include:

- | | |
|--|--|
| ESC | resets all current selection / deselects;
also by clicking with Left Mouse Button outside of the room.
(where the background colour is seen) in the 3D view;
object selection can be reset using the Reset button in the
Object Browser panel. |
| double click Right Mouse Button | anywhere in the 3D view resets the 3D view camera. |
| SHIFT with Left Mouse Click | on a floor or ceiling step rotates the step in a sector. |
| ALT with Left Mouse Click | on a triangulated sector toggles it between
a "raised" and "collapsed" variant. |
| CTRL with Left Mouse Click | allows free-roaming selection of textures in the
Texture Panel and free-roaming movement of
texture selection corners.

The movement is with a 16 pixel increment
by default when the CTRL key is not pressed. |
| CTRL with Right Mouse Click | Cursor in the Texture Panel.
zoom the texture set in and out. |
| Moving the mouse wheel | Cursor in the Texture Panel.
zoom the texture set in and out. |

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NEW GEOMETRY AND TEXTURING TOOLS:

Aside from the improved 3D view rendering **Tomb Editor** comes with a selection of tools to aid geometry shaping and texturing, which were developed largely by **Lwmte**.

When the Geometry mode or Face edit mode are active, a Tool Palette bar is visible in the 3D view. The bar can be moved around the 3D view freely.

It can also be docked among other panels in the main window, or it can be completely disabled.

Appropriate options are located in the **Window > Tool Palette menu**.

Geometry tools:	Selection
	Drag
	Brush and shovel
	Pencil
	Bulldozer
	Smooth
Texturing tools:	Selection
	Brush
	Pencil
	Fill
	Group texturing
	Eraser
	Invisible
	Fix texture co-ordinates

Tips for using the Geometry and Texturing tools:

Remember that all tools only work within a selected area.

If a tool appears not to work make sure that there is no selection outside of the area where you are trying to use the tool

In order to deactivate both the Eraser and Invisible tools select a texture in the Texture Panel.

TOMB EDITOR MANUAL

ANIMATION RANGES PANEL:

For setting up animation ranges a more feature-rich panel is implemented which allows for managing of individual frames within a set. The Animation Ranges button under the textures area brings up the Animated textures window with the following option areas:

Animation set choose a set to view or modify from the drop down menu:

press the **+ button** to add a new set.

press the **Bin button** to delete the currently selected set.

Frames shows frames within the currently selected set:

click on a frame entry to highlight the texture tile in the textures view.

press the **Bin button** to remove the frame.

press the **+ button** to add the texture tile currently selected in the textures view as a new frame.

press the **Left Turn Arrow button** to replace the texture tile in the currently selected frame with the texture tile that is currently currently selected in the textures area.

change the value in the Repeat field to specify how long a frame is going to be shown for within the range.

Preview showcases the currently selected animation set.

Tips for using the Animated textures window:

Changes to animated ranges are currently always applied regardless of whether you press the OK button on the bottom of the window or close the window with the X button.

Similarly to how textures can be selected in the Texture Panel, each tile selected for an animation frame can have a different orientation, which indicated by a highlighted triangle.

Make sure all your frames in a set have the desired orientation.

TOMB EDITOR MANUAL

EDITOR CONFIGURATION

A lot of **Tomb Editor** settings can be customized by editing the **TombEditorConfiguration.xml** file located in the main directory.

Any text editor, including Notepad, should be suitable for editing the XML file. Be sure to make your edits before you launch **Tomb Editor**. Changes to the file will not be saved when the editor is running.

Only edit the values between the `<...>` `</...>` brackets, not the names of the brackets.

Do not change the entries after the `<Window_Layout>` line, as they are used to remember the editor's interface layout, unless you want to modify it with the settings file.

Most of the setting entries are self-explanatory, but below is a general description of some entries and sections related to the user experience:

Editor_DiscardSelectionOnModeSwitch	selection of objects and/or sectors will be reset when you switch between Geometry, Face edit and Lighting modes.
RenderingItem section	adjusts mouse control and field of view for the Object Browser 3D view.
Rendering3D_DrawRoomsMaxDepth	the number of rooms connected to the currently edited room to be shown in the 3D view when the Draw portals button is ON.
Rendering3D section	adjusts mouse control and field of view for the room 3D view.
Rendering3D_LineWidth	adjusts the thickness of the black lines of the room wireframe in the 3D view.
Rendering3D_BackgroundColor, _BackgroundColorFlipRoom, _TextColor	adjusts the color of the background and text in the 3D view. X Y Z values stand for Red Green and Blue and the W value stands for alpha. values range from 0 to 1, so white is X,Y,Z : 1, black is X,Y,Z : 0 light grey is X,Y,Z : 0.65
Map2D section	adjusts mouse control for the 2D level map.
TextureMap section	adjusts mouse control for the Texture Panel.

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TextureMap_UseAdvancedTexturingByDefault

"advanced texturing" is selecting texture tiles with a **CTRL key** pressed for free-roaming selection. This option toggles it on/off as the default method.

Tool_DefaultGeometry and DefaultFaceEdit indicates which tool from the Tool Palette should be on by default after you switch between Geometry and Face edit modes.

Gizmo section adjusts the size of the 3D elements which make up the "gizmo" used to move, rotate and scale objects.

TranslationCone is the "arrows".

LineThickness is the thickness of the arrow lines.

CenterCube cubes in the center and in the middle of the arrow lines (for future implementation).

ScaleCube cubes in the center and in the middle of the arrow lines (for future implementation).

Window_Position and _Size used to store the position of the editor window when it is not maximised.

Window_Maximized whether the editor should start up as maximized.

WIP: IMPORTED GEOMETRY (W.I.P FEATURE)

Tomb Editor allows for importing of 3D objects stored in various popular 3D software formats directly into the rooms of levels. In the main menu go to **Items > Add imported geometry**.

The cursor will change into a cross.

Click on a sector in the room to place a placeholder mesh for the imported geometry object. Double click the placeholder to open up the Imported Geometry Settings window. Press the + button to load your object file and press Assign to assign the loaded object to the currently selected placeholder and press OK to confirm.

You can load multiple objects in the Imported Geometry Settings window but only one can be assigned to a current placeholder.

Your imported geometry object assignment will be saved with the Prj2 file, but the object file must be kept at the same location in order to load correctly later.

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New sound system guide (by Dustie)

After issues with the previous ("dynamic") sound system the TE development team decided to go back to an approach which is closer to the sounds.txt-based one of TRLE/NGLE.

To sum it up, **Tomb Editor** will now use XML files akin to the **sounds.txt** file, containing information about sound slots (IDs) parameters, with the difference that multiple XML files will be allowed for a level. This will allow the builder to split all sound information across multiple XMLs

If you want you can still use a single file for all level sounds so that you are no longer forced to change/overwrite information in any "main" sounds file (like **sounds.txt**) or recreate sound files for your level Wad each time you want to alter just one or few sounds.

Following a priority rule, information from XML files higher on the XML list takes priority over information from files lower in the list - you can store dedicated XMLs for your object Wads or any groups of sounds (in theory you can have a single XML for every sound slot/Id!).

Tomb Editor will assemble sounds from all provided XML files at the compilation stage and add them to the level and it will include engine-required sounds. You will also have the ability to forcefully add or exclude sounds for the level in the editor itself on a special list of sounds serving as a base, but you can not edit their parameters.

This might sound confusing or not entirely clear at first, but the development team came up with this approach by starting with the simple scenario: let us say you have a dedicated **sounds.txt** file for each level, but you want to be able to alter only some sounds without changing the file. Or you want some changes to have effect across multiple levels (batch changing). This will be covered by the XML files which can serve both as a complete sounds file (like **sounds.txt** before) and as additional overrides, which will take priority depending on their place on the list of all sound files. Information from files higher on the list will have priority over those lower on the list.

The support for multiple sound files is in line with our move towards multiple Wad and multiple texture set approach where every texture, object or group of objects can be stored in separate files and assembled in the **Tomb Editor** project, without the need to make a complete designated Wad and texture set for each level.

This new system comes with plenty of freedom and some challenges. You can keep all sounds in a single file as before and no sound slot/Id conflicts will happen, but with multiple XML files conflicts can arise if more than one file has information about the same slot/ID - this is where the priority rule applies and only information from the highest file on the list will be used. You will be able to store your sound sample files across multiple folders (this is already possible in **Tomb Editor**), keep them with your object Wad files folders or elsewhere you like, but each needed folder path must be provided in your project settings. Priority rule will also apply here - some sample names might be duplicated by accident in different folders, so **Tomb Editor** will take the sample from the folder highest on the paths list and ignore further occurrences of the file.

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In additions to this, you can also use old Sfx and Txt files together with XML files if you are still using classic Wad files. Our tools are compatible with all of them.

Tomb Editor Main Developer.

TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION



TOMB EDITOR

INSTALLATION

TOMB EDITOR MANUAL

INSTALLATION OF THE TOMB EDITOR

Installation of the **Tomb Editor** is simple.

Extract (unzip) the TE***.zip file onto the computer Laptop hard disc.

Extract (unzip) any update patch(s) into the same folder on the computer Laptop hard disc.

Using **C:\TombEditor** works well with no problems.

Generally it is best to use the latest full version of the **Tomb Editor zip file** to install onto the hard disc.

SOUND FILE

To ensure that the sfx sounds (for tr4 files) all work run the **Sound Tool**.

Load the **sounds.tr4** file in the **Catalogs** folder.

Save a copy called **your_level_name.xml** in your project level folder.

Run the **Tomb Editor** and load your project.

Go to **Tools\Level settings\sound paths**

Set the path to the **your_level_name.xml** in your project level folder.

Go to **Tools\Level settings\sound infos**.

See that the **your_level_name.xml** is active for your level.

This should now give a listing of all 369 sounds in the sound infos list.

If any sound is missing from your project level then left mouse click the sound to tick it and include it in the next build for your project level.

Wad Tool - a modern Wad Merger and TR Viewer replacement

Wad Tool is made as a replacement for outdated, inconvenient and unstable applications like **Wad Merger** and **TR Viewer**. It should greatly simplify your workflow, for now at least in part of animation importing and editing. Eventually, it will include functionality of such tools as Strpix and allow you to import multi-mesh models with already applied attributes, such as shiny, blending modes, and so on.

Wad Tool is available with the Tomb Editor download package.

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NOTES READ ME

THE FIRST PART OF THE [TOMB EDITOR](#) MANUAL DETAILS THE FUNCTION OF THE WINDOWS, MENUS AND ICONS.

THE SECOND PART OF THE [TOMB EDITOR](#) MANUAL GIVES PRACTICAL ADVICE ON CREATING A PROJECT.

ALSO READ THE [TOMB IDE MANUAL](#) ESPECIALLY THE SECTION ON CREATING A NEW PROJECT.

IMPORTANT NOTE: [See the Tomb IDE MANUAL for additional information.](#)

READ THE WAD TOOL MANUAL TO SEE HOW TO EDIT THE WAD2 FILE FOR A PROJECT LEVEL.

READ THE SOUND TOOL MANUAL TO SEE HOW TO CREATE A SOUND XML FILE FOR A PROJECT LEVEL.

READ THE TOMB IDE FLEP MANUAL TO SEE HOW TO EDIT THE TOMB.EXE FILE FOR ADDITIONAL FEATURES.

READ THE TOMB EDITOR REFERENCE DOCUMENTS FOR ADDITIONAL INFORMATION.

READ THE TOOLS_NG_CENTER DOCUMENTS FOR ADDITIONAL INFORMATION.

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TOMB RAIDER NEXT GENERATION



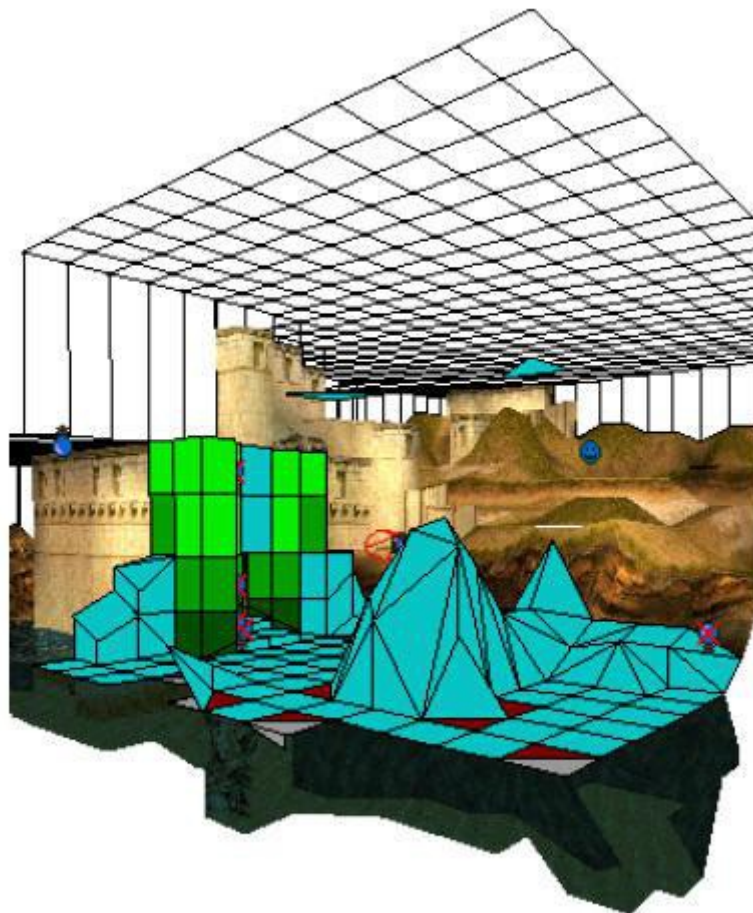
TOMB EDITOR

LEVEL BUILDING EDITOR OVERVIEW

TOMB EDITOR MANUAL

LEVEL BUILDING EDITOR OVERVIEW (from Original Level Editor Manual)

- How it Works:** Blocks, squares and clicks.
The Tomb Editor is designed to work with a basic “building block” proportioned to Lara and her movements. Texture “tiles” equal in scale to these basic “building blocks” are applied to the rooms comprising each level. Lights, objects, enemies and sounds are placed within the model to create the world for Lara’s adventure!
- Building Rooms:** Levels are built by connecting a series of rooms comprised of walls and “building blocks.” The floors and ceilings of these rooms are sectioned into squares. The “building blocks” are created when you raise a square up from the floor or lower one down from the ceiling. **Four clicks** up or down **equals the width of a square section** and creates a perfect cube. Building blocks can range in height from one click all the way up (or down) to however far you are willing to push the limits! However bear in mind **Lara is only 3 clicks tall** and certain texture limitations must be considered in order to create a believable world.



SAMPLE ROOM

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The building blocks are not limited to cubes or columns with flat tops. Corners of the surfaces can be pulled up or down to create angled slopes and “organic” surfaces, great for creating rocky caves or sand dunes.

Applying Textures: Textures are applied to the surfaces of the blocks to further define the block shapes and ultimately define Lara’s environments. Each level has a specific texture file that must be loaded in order to apply the textures.

A texture file is comprised of many “texture tiles”.

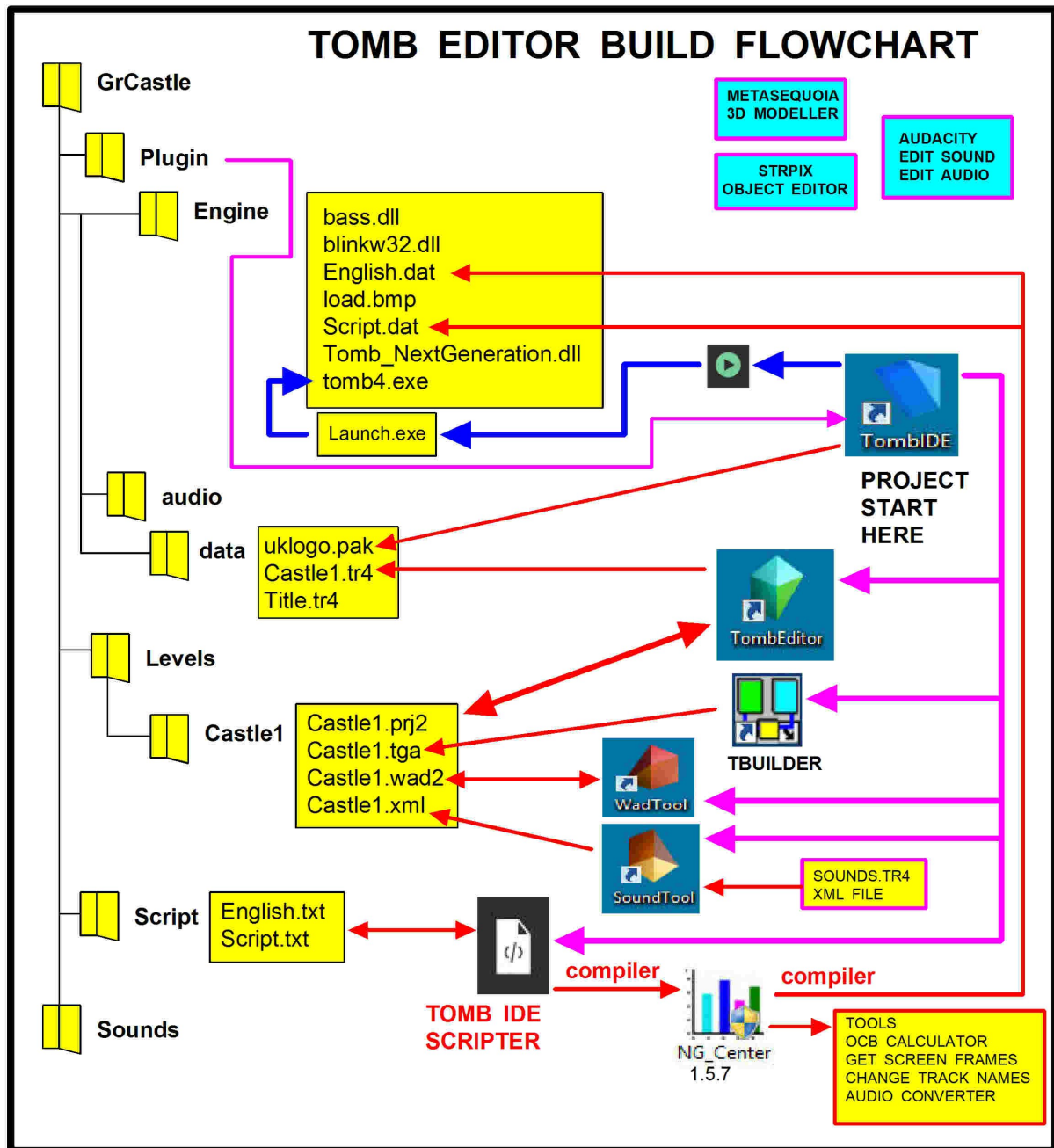
Ideally, textures are placed on square block surfaces since textures will stretch or compress to fit the space defined by the size of the building blocks. Overly stretched or compressed textures do not look their best so to allow for this, all the vertical surfaces can be broken into smaller segments.

Lighting Effects: Every room has an RGB ambient light capability ranging from zero to 100% white light, with every color in between. Lights, spotlights, effect lights, sunlight and shadows add drama and help to create a real world ambience.

Placing Objects: What would Lara’s world be without objects to pick up or enemies to fight? Each project has a specific file, or Wad (object set), that must be loaded before the placement of objects or baddies is possible. Wad files include the specific objects, from ammo to animated water fountains, and at least three or four baddies per level. Animations take up a lot of memory. So forget about a room with 1000 scorpions!

Audio Tracks: Audio tracks play an important role in setting the various moods within a level and are as easy as objects to trigger. After you have listened to the audio tracks, try to imagine how and where they will add to the overall ambience, the “drama” and game play of your level.

TOMB EDITOR MANUAL



English.dat	data file containing english text for the game
English.txt	text file containing english text for the game
Script.dat	data file containing levels information
Script.txt	text file containing levels information
Load.bmp	Graphic file for the load screen
tomb4.exe	Executable to play the game
Castle1.prj2	Tomb Editor project file
Castle1.tga	Tomb Editor project texture tiles file
Castle1.wad2	Tomb Editor project objects file
Castle1.xml	Tomb Editor project sounds file (links with Sounds folder)
Castle1.tr4	Compiled level
uklogo.pak	Compiled graphic for Game Start Menu

TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION



TOMB EDITOR

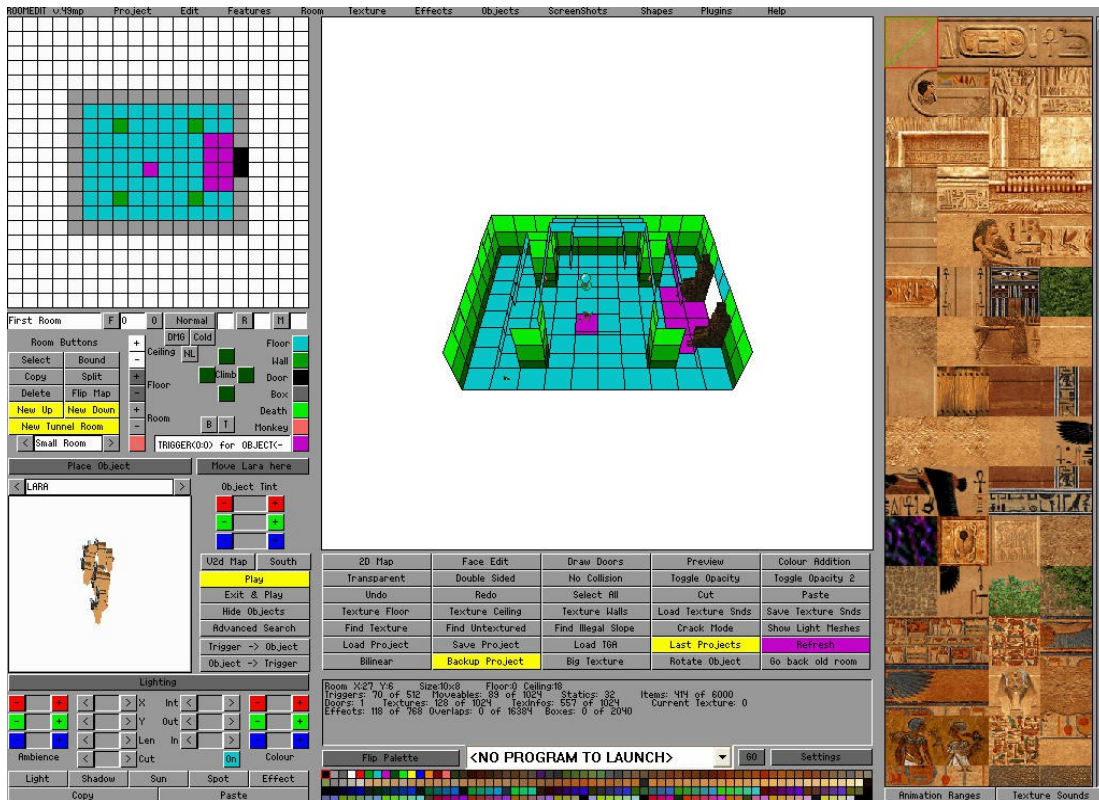
USER INTERFACE

TOMB EDITOR MANUAL

TOMB EDITOR

For additional information on level building see the [Original Level Editor Manual](#), tutorials on the [TR Forum website](#) and tutorials on the [Skribblerz website](#).

The **NGLE** interface is shown below. The **Original LE** and the **NGLE** have a fixed window size of 1024 by 768 pixels. The display of the windows in the interface are a fixed size and fixed arrangement.



The **Tomb Editor** is a modern upgrade for the **NGLE**. The interface is flexible and will expand to fill the current screen resolution above 1024 by 768 pixels.

The window arrangement of the interface can be changed during the design building process. To remove a window in the interface close the window.

Windows can be resized and arranged in the interface to suit your needs.

To reset the default arrangement of the **Tomb Editor** interface select the pull down menu Window and select Restore default layout.

The **Tomb Editor** is normally started via the **Tomb IDE** when a project has been set up.

See the [Tomb IDE MANUAL](#) for additional information.

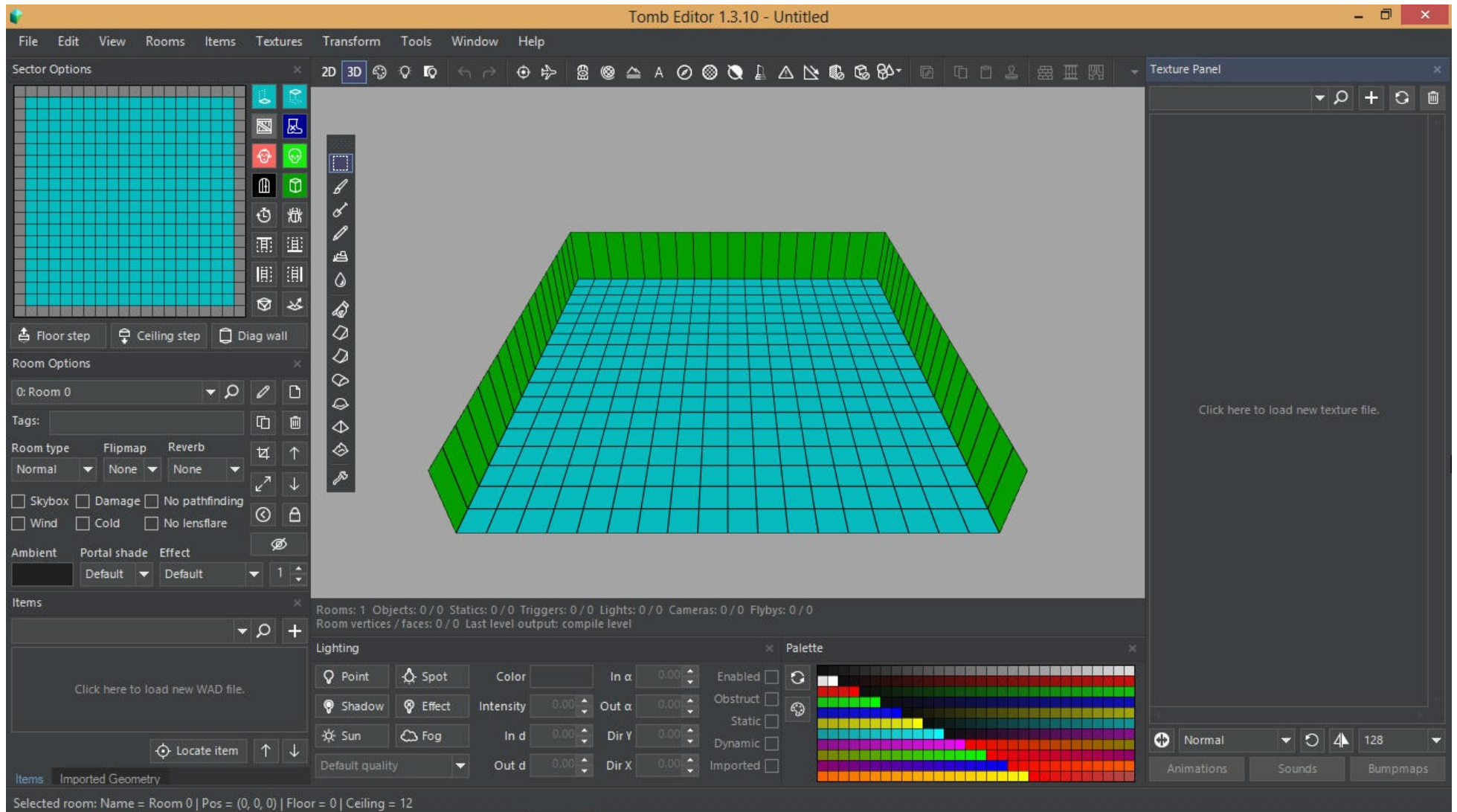
The **Tomb Editor** interface is shown on page 31.

TOMB EDITOR MANUAL



TOMB EDITOR MANUAL

TOMB EDITOR LAYOUT



TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION

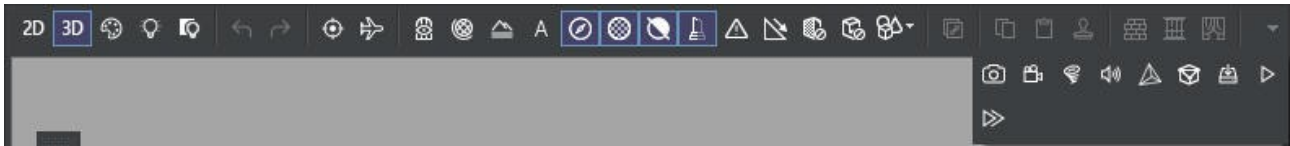


TOMB EDITOR

MAIN INTERFACE ICONS

TOMB EDITOR MANUAL

MAIN INTERFACE ICONS



Note: To display icons: Camera to Build select down triangle icon.



2D VIEW

HOTKEY: F1

Displays a plan view of the entire project in the Editor window.



3D VIEW

HOTKEY: F2

Displays a 3D View of the room in the Editor window.



TEXTURE VIEW

HOTKEY: F3

Displays a 3D textured view of the room in the Editor window.



LIGHTING VIEW

HOTKEY: F4

Displays a 3D textured view of the room with lighting effects in the editor window.



DRAW UNTEXTURED IN LIGHTING VIEW **HOTKEY:**

Displays a 3D untextured view of the room with lighting effects in the Editor window.



UNDO

HOTKEY: CTRL + Z

Works with the “Feature” functions and the texture placement.

See Pull down Menus Edit Menu for full text.



REDO

HOTKEY: CTRL + Y

Allows multiple re-do's with all the functions under “Features” in the Drop Down Menu. Also works with texture placement.

See Pull down Menus Edit Menu for full text.



RESET CAMERA POSITION

HOTKEY: F6

Good for recovery as it re-centers the room.

See Pull down Menus View Menu for full text.



FLY MODE

HOTKEY: SHIFT + Z

Toggles the fly mode for the room image in the 3D View Editor window.
Press **Escape** key to exit mode.

TOMB EDITOR MANUAL



DRAW PORTALS

HOTKEY:

Displays the adjoining rooms in the 3D View Editor window.



DRAW ALL ROOMS

HOTKEY:

Displays all of the rooms in the 3D View Editor window.



DRAW HORIZON

HOTKEY:

Draws the horizon in the 3D View Editor window.



DRAW ROOM NAMES

HOTKEY:

Draws the room names in the 3D View Editor window.



DRAW CARDINAL DIRECTIONS

HOTKEY:

Draws the cardinal directions North South East West in the 3D View Editor window.



DRAW EXTRA BLEND MODES

HOTKEY:

Draws the extra blends modes.



HIDE TRANSPARENT FACES

HOTKEY:

Hides the transparent faces.



SHOW TINT FOR OBJECTS

HOTKEY:

Show the real tint for objects.



DRAW ILLEGAL SLOPES

HOTKEY:

Highlights the illegal slopes in the room in the 3D View Editor window.



DRAW SLIDE DIRECTIONS

HOTKEY:

Draws arrows in the 3D View Editor showing the slide direction for Lara.

TOMB EDITOR MANUAL



DISABLE GEOMETRY PICKING

HOTKEY:

Disables geometry picking.



DRAW:

DRAW MOVABLES
DRAW STATICS
DRAW IMPORTED GEOMETRY
DRAW GHOST BLOCKS
DRAW VOLUMES
DRAW OTHER OBJECTS
DRAW LIGHT RADIUS

Select/deselect category to display in the 3D View Editor window.
Enables hiding items to aid editing.



TOGGLE FLIP MAP

HOTKEY:

Toggles between the Flip map and the normal room for editing.

Flip maps are used to create events or changes of state.

They are great for floods, earthquakes, changing water currents, making doors disappear, turning lights on or off, and so on. Flipped rooms are basically copies of an existing room that can be triggered to turn on and off. Generally the triggers for flip maps are set up out of sight of the actual flip map room because you do not want to see the map flip from one state to the other.



COPY

HOTKEY: CTRL + C

Allows you to copy areas from an existing room to the clipboard.

Does not actually cut them from the map.



PASTE OBJECT

HOTKEY: CTRL + V

Pastes the areas that were copied (cut) into another room or another area within the same room.



STAMP OBJECT

HOTKEY: CTRL + B

Puts the copied object into the 3D View Editor window.

TOMB EDITOR MANUAL



NO OPACITY

HOTKEY:

Sets no opacity. A solid opaque surface.



TOGGLE OPACITY 1

HOTKEY:

When creating a transparency in a “portal”, this button is used to allow texturing of the “portal” and to PREVENT Lara going through the opening. Must be applied to both sides of the opening.

For example a cage effect or a window looking through into another area.



TOGGLE OPACITY 2

HOTKEY:

When creating a transparency in a “portal”, this button is used to allow texturing of the opening and to ALLOW Lara to go through it.

Used to create water surface, cobweb effects, hanging foliage, etc.



ADD CAMERA

HOTKEY: ALT + C

Adds a camera. Basic or Fixed.



ADD FLYBY CAMERA

HOTKEY: ALT + M

A series of cameras placed to create a “flyby” or “fly through” effect.

TOMB EDITOR MANUAL



ADD SINK

HOTKEY: ALT + K

For use in water rooms to create currents.



ADD SOUND SOURCE

HOTKEY: ALT + X

Used mainly for water surface sounds.

Generally works by Lara's proximity and it is not triggered.



ADD IMPORTED GEOMETRY

HOTKEY: ALT + I

Adds imported geometry into the 3D View Editor window.

Tomb Editor allows for importing of 3D objects stored in various popular 3D software formats directly into the rooms of levels.

In the main menu go to Items > Add imported geometry.

The cursor will change into a cross - click on a sector in the room to place a placeholder mesh for the imported geometry object. Double click the placeholder to open up the Imported Geometry Settings window.

Press the + button to load your object file and press Assign to assign the loaded object to the currently selected placeholder and press OK to confirm. You can load multiple objects in the Imported Geometry Settings window, but only one can be assigned to a current placeholder. Your imported geometry object assignment will be saved with the PRJ2 file, but the object file must be kept at the same location in order to load correctly later.



ADD GHOST BLOCK

HOTKEY:

Modify the collision of the floor and ceiling.



BUILD LEVEL

HOTKEY: SHIFT + F5

This button builds the level.



BUILD LEVEL AND PLAY

HOTKEY: F5

This button builds the level minimises the Tomb Editor and plays the level.

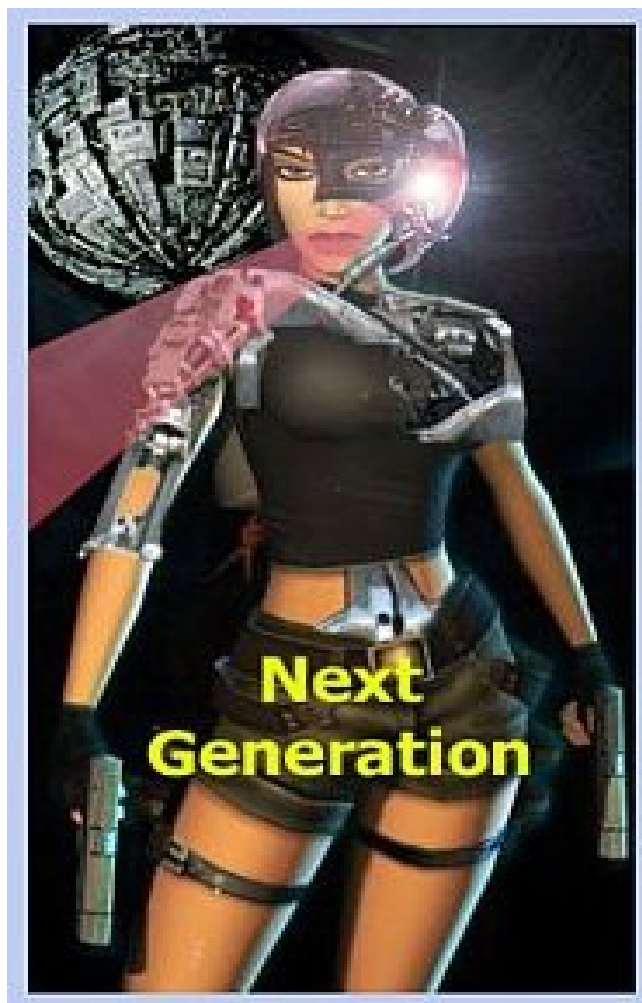


BUILD LEVEL AND PLAY PREVIEW **HOTKEY:**

This button builds the level and plays the level in Preview mode.

TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION



TOMB EDITOR

2D VIEW EDITOR WINDOW

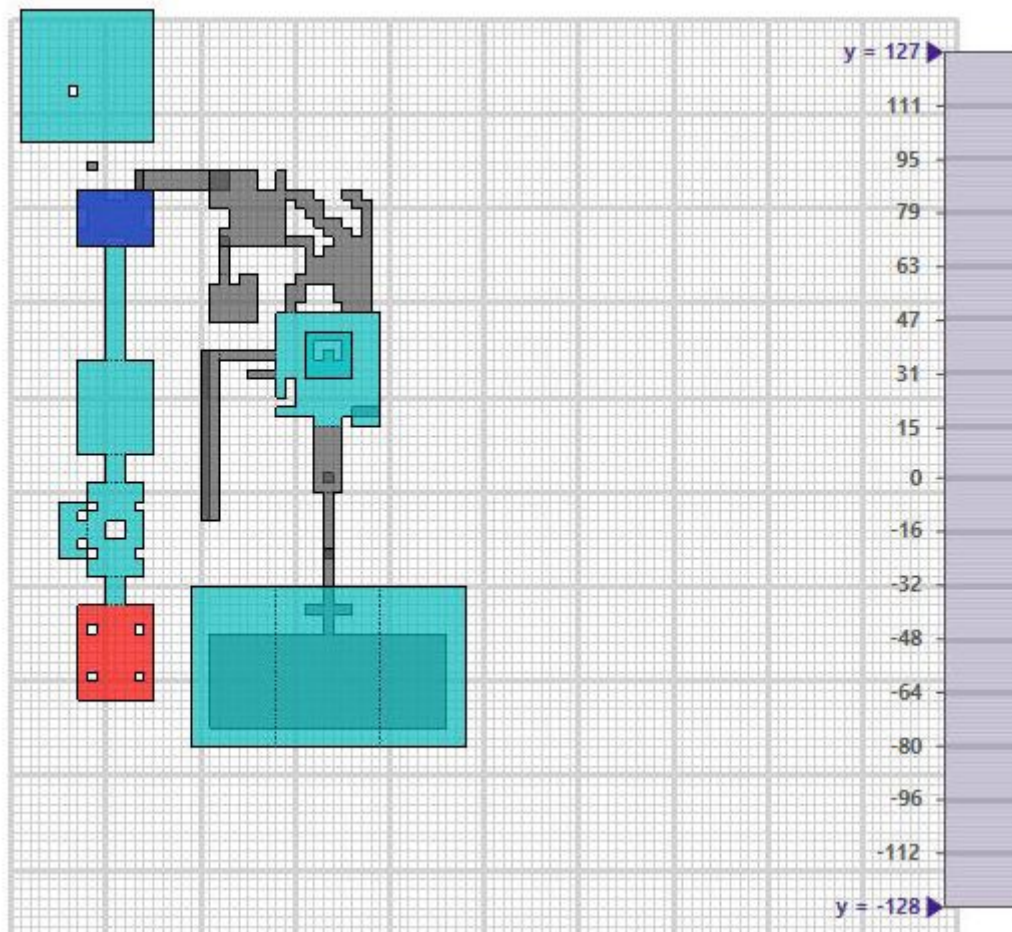
TOMB EDITOR MANUAL

2D

2D VIEW

HOTKEY: F1

Displays a Plan view of the entire project in the Editor window.



The selected current room is **Red**.

Rooms on the same level as the selected current room are **Blue**.

Rooms higher than the selected current room are **Light Grey**.

Rooms lower than the selected current room are **Dark Grey**.

The side panel shows the **Depth Of View Bar**.

Move the top and/or bottom arrow head to adjust the depth of view.

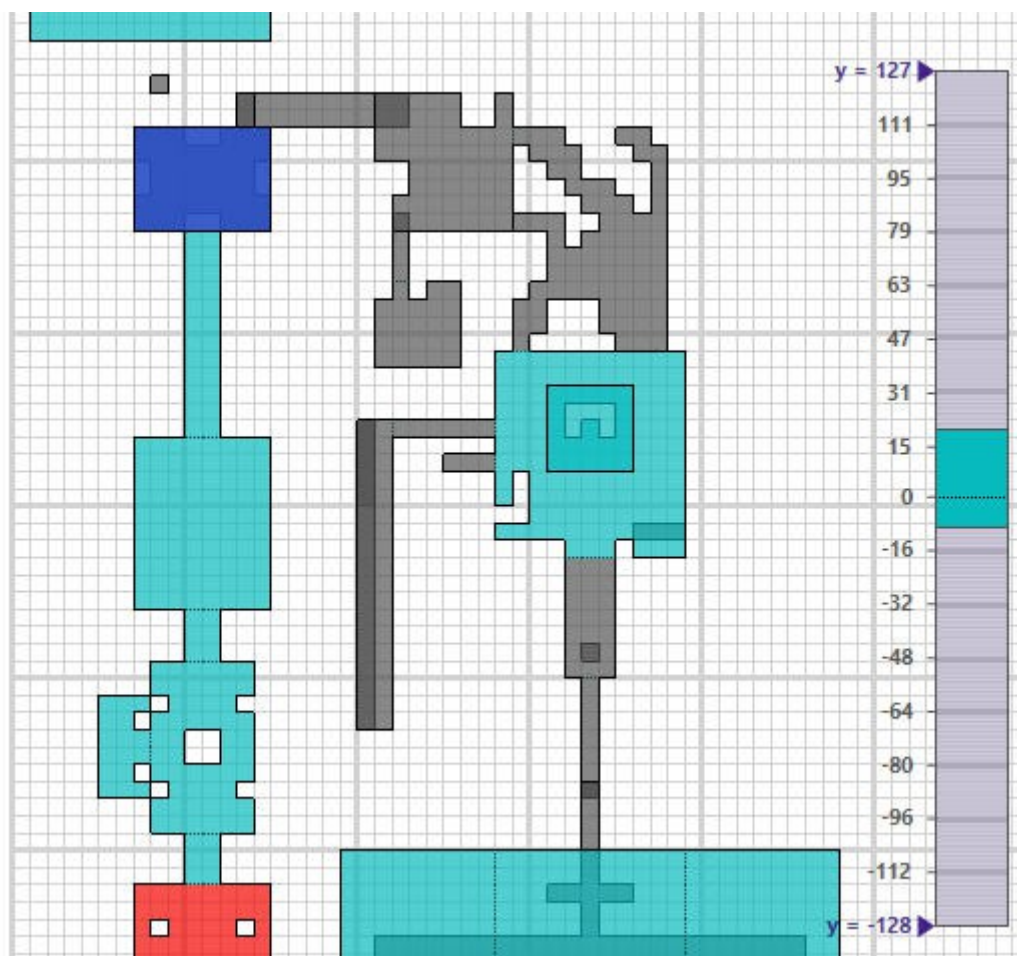
This makes it easy to locate rooms and see their connections.

TOMB EDITOR MANUAL

Use the mouse scroll wheel to zoom the 2D View in and out.

Use the **mouse right button** and hold with mouse movement to Pan the view up, down, left, right.

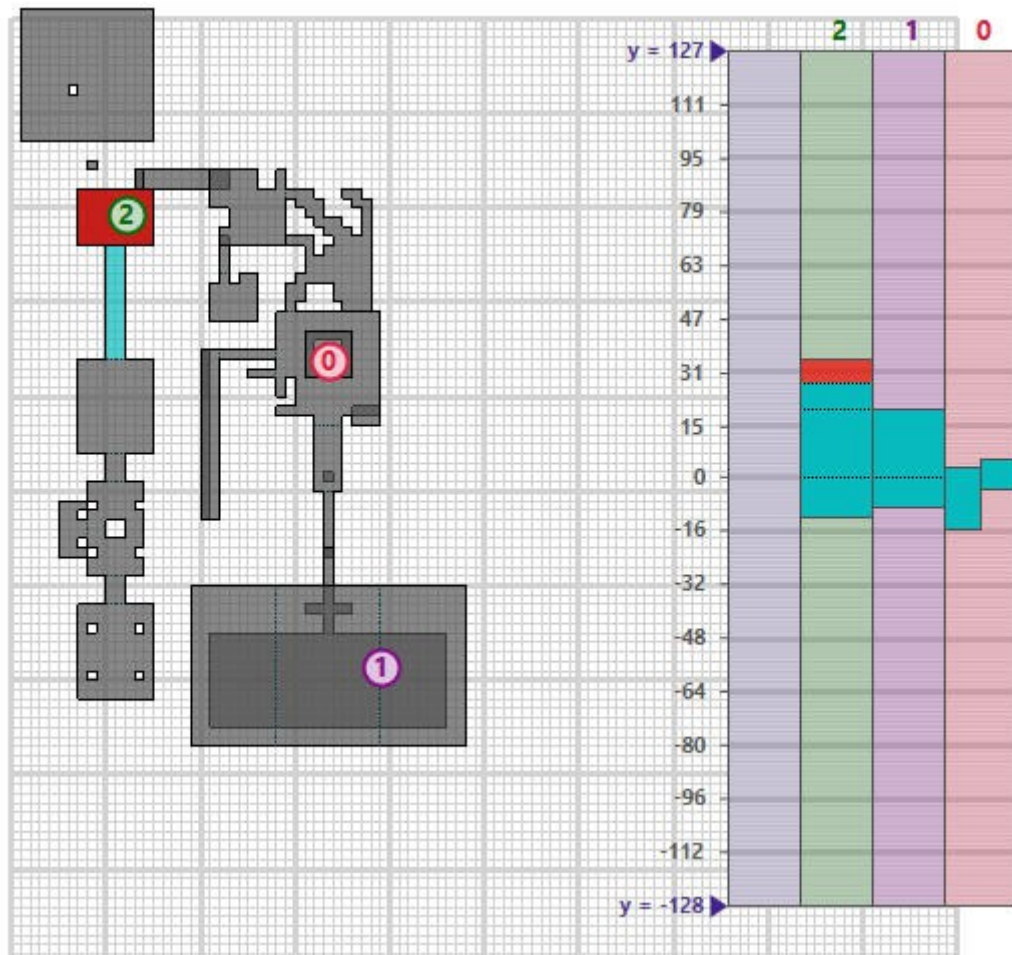
Use the **mouse left button** with hold on a room and mouse movement to move the room in the 2D View. The room(s) move in the Plan.



TOMB EDITOR MANUAL

DEPTH OF VIEW BARS

To set additional **Depth Of View Bar(s)** **Mouse double left click** on a room.
The **Depth Of View Bar** appears on the right and is given a number on the Plan map.
To delete a **Depth Of View Bar** **Mouse double left click** on the number on the map.



To move a **Depth Of View Bar** **Mouse left Button click and hold** and drag the number on the map to a new location.

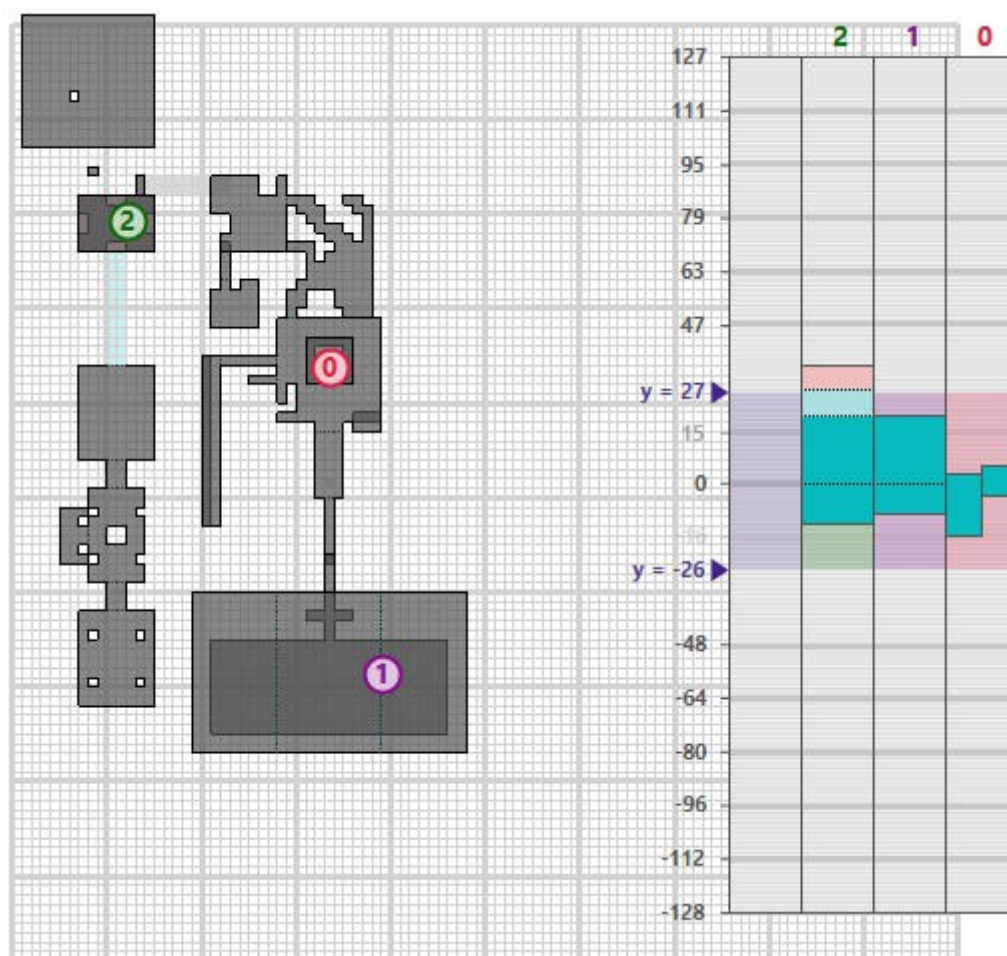
A room can be selected by a **mouse left click** on the room elevation block in the additional **Depth Of View Bar**.

TOMB EDITOR MANUAL

To adjust the depth of view limits for the **Depth Of View Bar** **mouse left click** and **hold on** the arrow head and drag it up or down.

Using this procedure rooms will disappear from the 2D View Editor when they are outside the range of depth.

This makes it easier to locate a room hidden under other rooms in the 2D View Editor.



TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION



TOMB EDITOR

3D VIEW EDITOR WINDOW

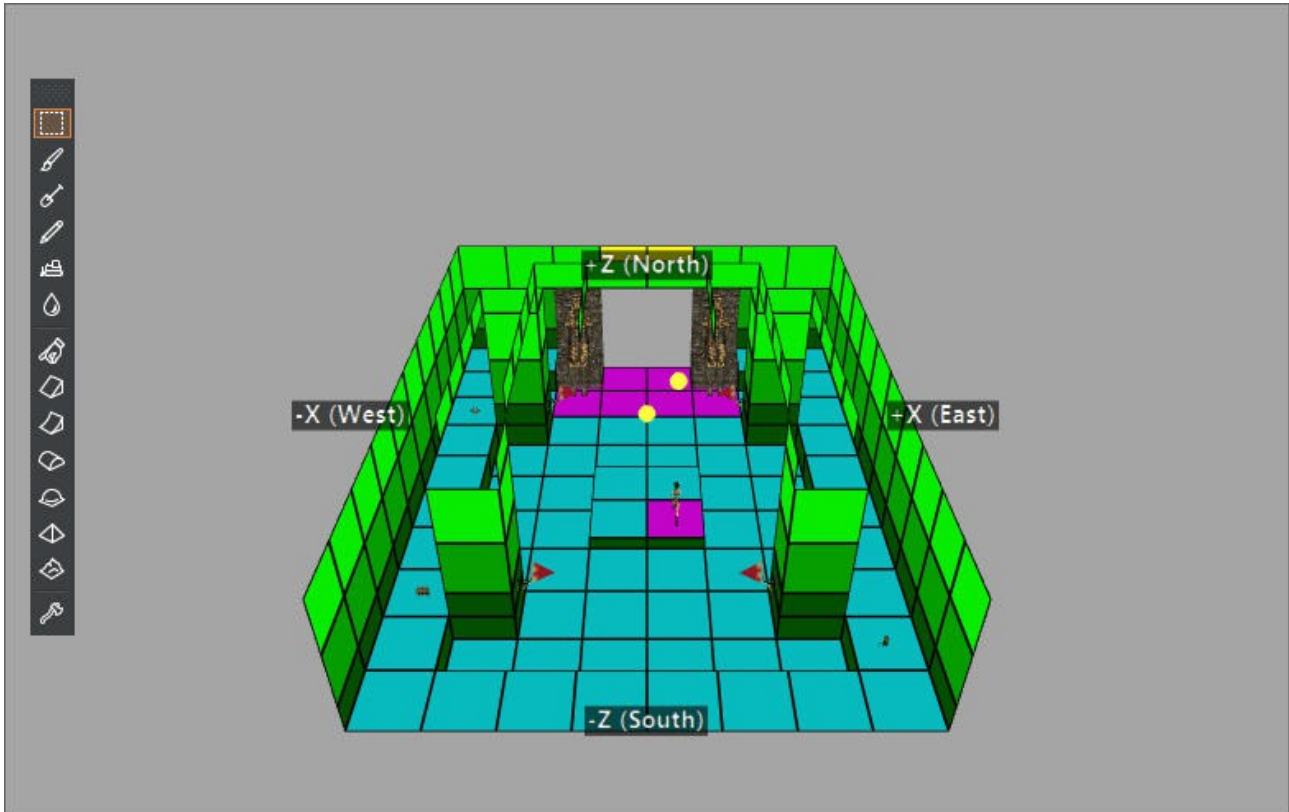
TOMB EDITOR MANUAL



3D VIEW

HOTKEY: F2

Displays a 3D View of the room(s) in the Editor window.



This is the view to generate room geometry, add objects, add lights, add triggers etc.

The defaults for a **Tomb Editor** new empty room:

room size of 18 squares by 18 squares by 3 squares (12 clicks) high.

This is a good maximum height as it avoids any stretched texture tile problems if there is a portal.

The defaults for a **NGLE** new empty room:

room size of 18 squares by 18 squares by 5 squares (20 clicks) high.

A 5 square high room with a 1 tile portal connection will give stretched texture tiles.

So try to avoid this condition in your level building.

TOMB EDITOR MANUAL

TO SET A ROTATION POINT IN THE ROOM:

ALT key + Z key (cursor changes to +) and **mouse left button click** in the room, then press **ESC key** to reset the cursor to normal.
The room will rotate around and zoom to this point.

Right Mouse Button	Rotates the room in the 3D View. (Move mouse).
Middle Mouse Button	Pans the 3D View camera up, down, left & right.
Moving the mouse wheel	Zooming the 3D View in and out.

TO RESET THE ROTATION POINT IN THE ROOM:



RESET CAMERA POSITION

HOTKEY: F6

Good for recovery as it re-centers the room.

TOMB EDITOR MANUAL

INFORMATION BOXES

LEVEL INFORMATION BOX

```
Rooms: 1 Objects: 0 / 0 Statics: 0 / 0 Triggers: 0 / 0 Lights: 0 / 0 Cameras: 0 / 0 Flybys: 0 / 0  
Room vertices / faces: 0 / 0 Last level output: compile level
```

INITIAL START NEW PROJECT

- Rooms:** Total number of used rooms in the level.
- Objects:** Moveable Objects in selected room / Moveable Objects Total in the level.
- Statics:** Static Objects total in selected room / Static Objects Total in the level.
- Triggers:** Triggers total in selected room / Triggers Total in the level.
- Lights:** Lights total in selected room / Lights Total in the level.
- Cameras:** Cameras total in selected room / Cameras Total in the level.
- Flybys:** Flyby Cameras total in selected room / Flyby Cameras Total in the level.
- Room Vertices / Faces:** Number of Vertices for selected room.
Number of Faces for selected room.

Last Level Output: Type of last level output.

```
Rooms: 15 Objects: 11 / 12 Statics: 9 / 9 Triggers: 12 / 13 Lights: 0 / 0 Cameras: 0 / 0 Flybys: 6 / 13  
Room vertices / faces: 490 / 439 Last level output: compile level
```

VALUES DURING A PROJECT

```
Rooms: 15 Objects: 1 / 12 Statics: 0 / 9 Triggers: 0 / 13 Lights: 0 / 0 Cameras: 0 / 0 Flybys: 2 / 13  
Room vertices / faces: 189 / 153 Last level output: 79 boxes, 608 overlaps, 2953 texinfos
```

VALUES DURING A PROJECT

TOMB EDITOR MANUAL

INFORMATION BOXES

SELECTED ROOM INFORMATION BOX

At the bottom of the **Tomb Editor** Interface is the Information box for the selected active room:

Selected Room name, Room position (x, z, y) floor height, ceiling height.

```
Selected room: Name = Room 0 | Pos = (0, 0, 0) | Floor = 0 | Ceiling = 12
```

INITIAL START NEW PROJECT

When a square or floor area is selected (red squares) the following information is displayed:

Selected Room name, Room position (x, z, y) y = floor height, ceiling height.

Global area selected squares in active room. (x, z) to (x, z) y = floor height, ceiling height.

Local area selected squares in active room. (x, z) to (x, z) y = floor height, ceiling height.

The Global area uses absolute co-ordinates for the whole level.

The Local area uses co-ordinates based on the selected room.

```
Selected room: Name = Room 0 | Pos = (0, 0, 0) | Floor = 0 | Ceiling = 12 Global area = (7, 9) → (9, 12) | y = [0, 12] Local area = (7, 9) → (9, 12) | y = [0, 12]
```

```
Selected room: Name = Room 0 | Pos = (15, 0, 11) | Floor = 0 | Ceiling = 12 Global area = (20, 22) → (22, 24) | y = [0, 12] Local area = (5, 11) → (7, 13) | y = [0, 12]
```

FLOOR AREA SELECTED IN THE ROOM EXAMPLES

TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION



TOMB EDITOR

CREATING WALL SECTORS

TOMB EDITOR MANUAL

CREATING WALL SECTORS

To divide a wall into sectors, select the wall, (mouse left button hold and move mouse).

Divide into 3 sectors.

Select the wall sectors.

Then press the **CTRL key** and **3 key**.

Or select the wall sectors and then
select **Transform > Grid walls in 3**.

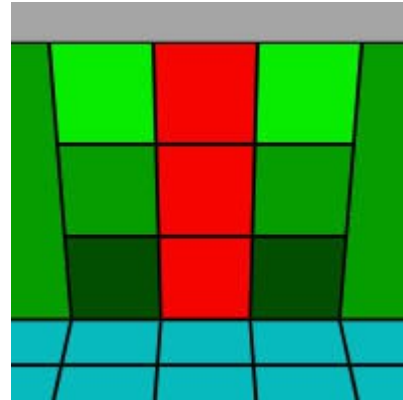
Alternatively:

Divide into 5 sectors.

Select the wall sectors.

Then press the **CTRL key** and **5 key**.

Or select the wall sectors and then
select **Transform > Grid walls in 5**.



Note: The normal spacing for wall sectors is 4 clicks

So a 12 click high room will have 3 sectors.

The texture tile will correctly fit a 4 click square on the wall, floor, ceiling.

TOMB EDITOR MANUAL

WALL SECTORS MOVING

Select a wall sector(s) by **mouse left click**.
It is possible to select more than one sector.

Press **mouse left click** again to select active function for movement as displayed.

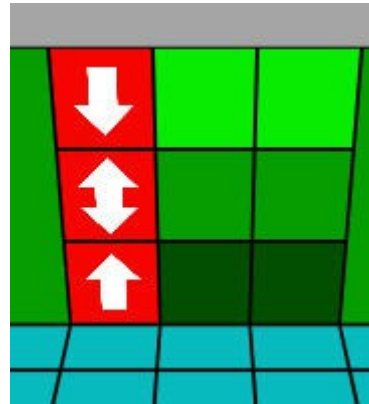
Press **Q key** to raise floor primary 1 click.
Press **A key** to lower floor primary 1 click.

Press **W key** to raise ceiling primary 1 click.
Press **S key** to lower ceiling primary 1 click.

Press **E key** to raise floor secondary 1 click.
Press **D key** to lower floor secondary 1 click.

Press **R key** to raise ceiling secondary 1 click.
Press **F key** to lower ceiling secondary 1 click.

UP DOWN MOVEMENT



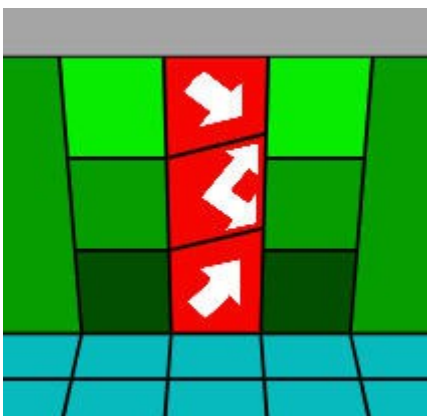
OR

Select Drag function in the tool menu.

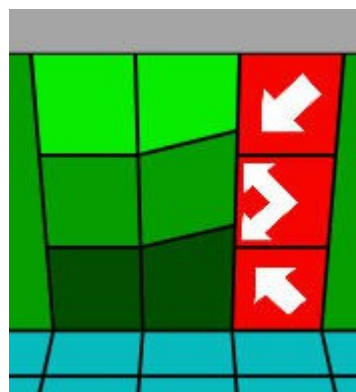


Mouse left button hold on. Move the mouse to raise lower the selected sector line in 1 click steps.

RIGHT END UP DOWN



LEFT END UP DOWN



TOMB EDITOR MANUAL

CRACKING PROBLEM ON WALLS

Crack mode is a very useful but under used feature of the **TRLE (TOMB RAIDER LEVEL EDITOR)**.

The **Tomb Editor DOES NOT HAVE A CRACK MODE** function.

However knowing what Cracking is and its causes and effects the problem can be avoided by good practice during the level building stage.

The Crack mode purpose is to highlight badly aligned texture wall panel segments. When these segments are aligned correctly there are several benefits:

- It ensures that lighting features of a room have continuity. (e.g. shadows and the way light features fall on a wall).
- It helps eliminate 'cracks' in walls. This can be seen as fine white lines of speckles between wall panels when texture panels are badly aligned. When the wall panels segments are correctly aligned the ugly lines will no longer be visible.
- It highlights the gaps in wall panels in underwater rooms. It looks like the texture panels are splitting apart. When the wall panel segments are properly aligned the underwater wall will appear sealed and no longer splits apart.

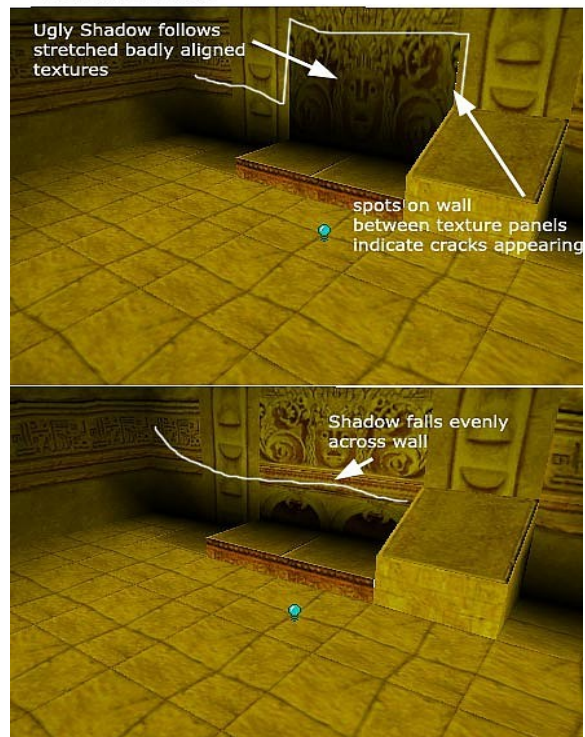
While it is best to use the "Crack Mode" to avoid all cracks keep things reasonable - judge for yourself if or how much harm the cracks do. You will see that it makes a difference in underwater rooms or rooms with atmospheric lighting.

In the example shown to the right the wall texture boundary is showing spots of light and the texture is stretched.

In an underwater room you will see the wall waving about and coming apart at the texture tile boundaries.

If you have stretched textures then try to add an additional sector line if that is possible.

In this example you can see how poorly aligned textures affect the way light and shadows fall on a wall surface. You can also see the tell-tale white spots indicating that the wall is cracking



To eliminate cracking have continuous sector lines across the wall.

If you have sections that are not rectangular this is not a problem in the **Tomb Editor** as it is possible to adjust the rectangular shape to apply in the texturing mode.

TOMB EDITOR MANUAL

EXAMPLE A SLOPPED PASSAGE WITH BAD SECTOR DIVISIONS

The following diagram shows a slopped passageway with badly aligned wall sectors. To solve the problem select a wall sector and slope the wall sector tile boundaries.

Select a wall sector(s) by **mouse left click**.

mouse left click to obtain arrows pointing to the end of the sector lines to edit.

Determine the keys to use to raise or lower the end of the sector line.

Press **Q key** to raise floor primary end 1 click.

Press **A key** to lower floor primary end 1 click.

Press **W key** to raise ceiling primary end 1 click.

Press **S key** to lower ceiling primary end 1 click.

Press **E key** to raise floor secondary 1 click.

Press **D key** to lower floor secondary 1 click.

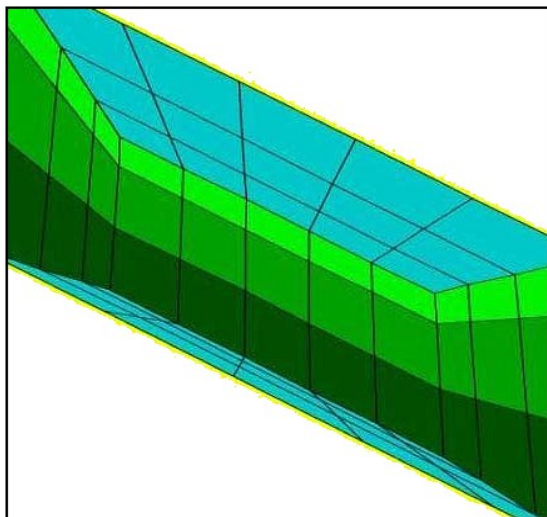
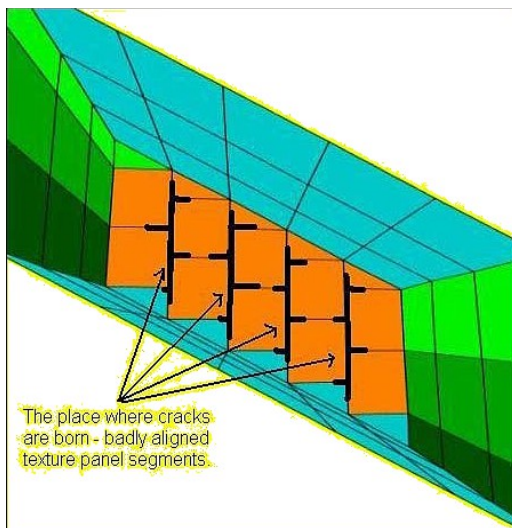
Press **R key** to raise ceiling secondary 1 click.

Press **F key** to lower ceiling secondary 1 click.

Do this for all of the wall sectors until you have achieved continuous slopped boundary lines for texturing.

The crack problem is now solved for this situation.

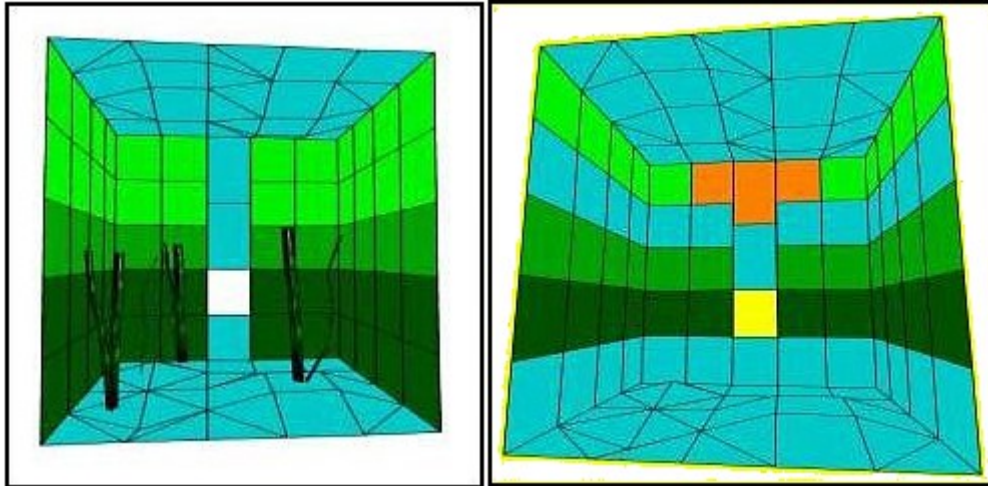
This is shown in the right hand diagram.



TOMB EDITOR MANUAL

EXAMPLE AN UNDERWATER CAVE ROOM WITH BAD SECTOR DIVISIONS

The following diagrams shows an underwater cave room with badly aligned wall sectors. To solve the problem select a wall sector and slope the wall sector tile boundaries.



Select a wall sector(s) by **mouse left click**.

mouse left click to obtain arrows pointing to the end of the sector lines to edit.

Determine the keys to use to raise or lower the end of the sector line.

Press **Q key** to raise floor primary end 1 click.

Press **A key** to lower floor primary end 1 click.

Press **W key** to raise ceiling primary end 1 click.

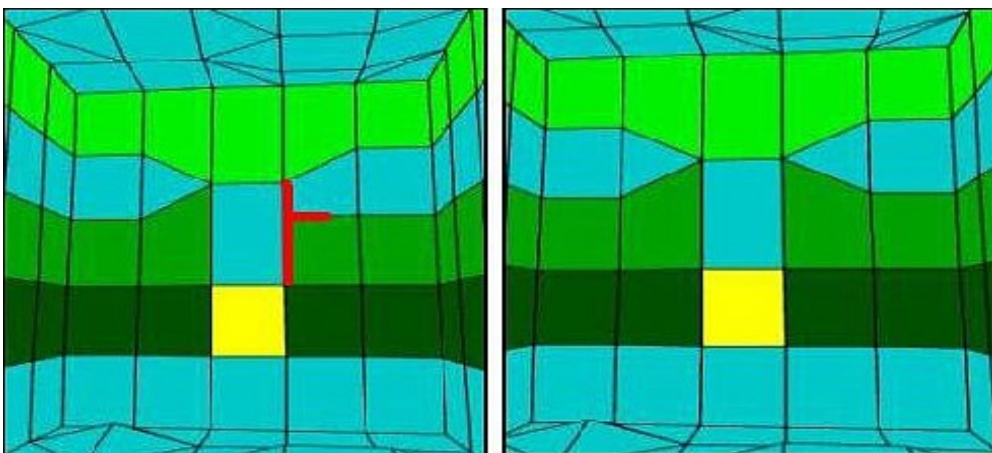
Press **S key** to lower ceiling primary end 1 click.

Press **E key** to raise floor secondary 1 click.

Press **D key** to lower floor secondary 1 click.

Press **R key** to raise ceiling secondary 1 click.

Press **F key** to lower ceiling secondary 1 click.



Do this for all of the wall sectors until you have achieved continuous boundary lines for texturing. The crack problem is now solved for this situation.

This is shown in the right hand diagram.

TOMB EDITOR MANUAL

EXAMPLE A STAIRWAY PASSAGE WITH BAD SECTOR DIVISIONS

The left hand diagram shows a stairway passage with badly aligned wall sectors. To solve the problem select a wall sector and add a sloped the wall sector tile boundary.

Select a wall sector(s) by **mouse left click**.

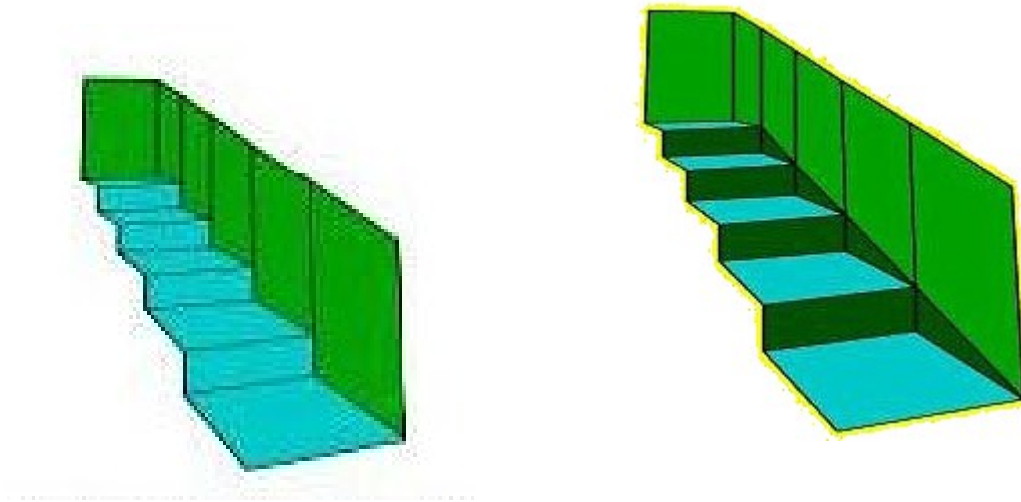
Press **Q key** to obtain a sector line.

Raise the sector line.

mouse left click to obtain arrows pointing to the end of the sector line to edit. Slope it as shown in the right hand diagram.

Press **Q key** to raise floor primary end 1 click.

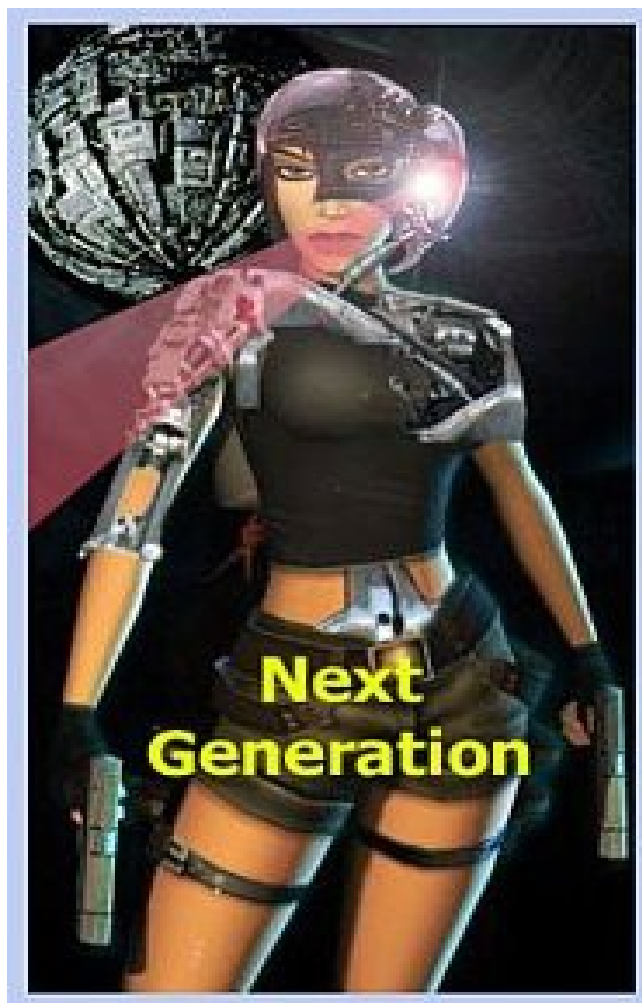
Press **A key** to lower floor primary end 1 click.



Do this for all of the wall sectors until you have achieved boundary lines for texturing. The crack problem is now solved for this situation. This is shown in the right hand diagram.

TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION



TOMB EDITOR

CREATING GEOMETRY

TOMB EDITOR MANUAL

CREATING BASIC FLOOR GEOMETRY

Select a floor square(s) by a **mouse left click**.

It is possible to select more than one square by hold and drag the mouse.

Press **Q key** to raise floor 1 click.

Press **A key** to lower floor 1 click.

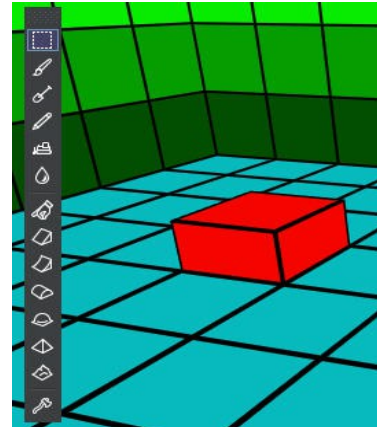
OR

Select drag function in the tool menu.



Mouse left button hold on.

Move the mouse to raise lower floor in 1 click steps.



Select a floor square(s) by **mouse left click**.

It is possible to select more than one square.

Press **mouse left click** again to select active edge.

Press **Q key** to raise floor edge 1 click.

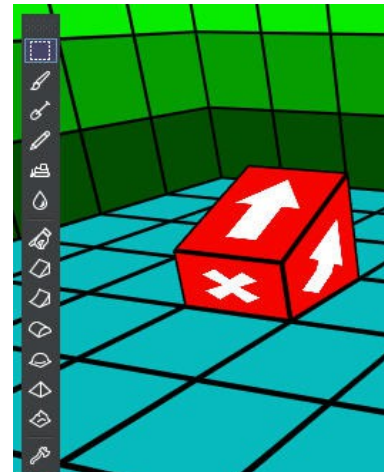
Press **A key** to lower floor edge 1 click.

OR

Select drag function in the tool menu.

Mouse left button hold on.

Move the mouse to raise lower floor edge in 1 click steps.



Select a floor square(s) by mouse left click.

It is possible to select more than one square.

Press **CTRL key** and

Press **mouse left click** to select active corner.

Press **Q key** to raise floor corner 1 click.

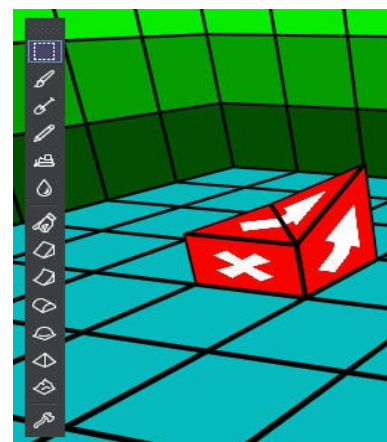
Press **A key** to lower floor corner 1 click.

OR

Select drag function in the tool menu.

Mouse left button hold on.

Move the mouse to raise lower floor corner in 1 click steps.




TOMB EDITOR MANUAL

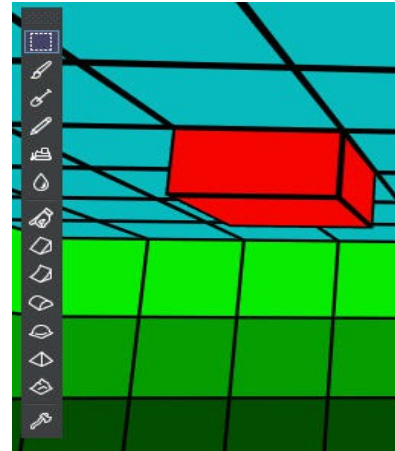
CREATING BASIC CEILING GEOMETRY

Select a ceiling square(s) by **mouse left click**.
It is possible to select more than one square.

Press **W key** to raise ceiling 1 click.
Press **S key** to lower ceiling 1 click.

OR

Select drag function in the tool menu. 
Mouse left button hold on.
Move the mouse to raise lower ceiling
in 1 click steps.

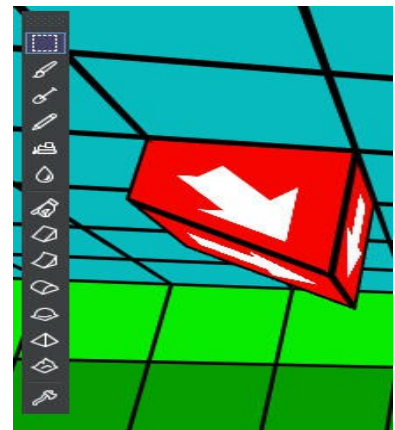


Select a ceiling square(s) by mouse left click.
It is possible to select more than one square.
Press **mouse left click** again to select active edge.

Press **W key** to raise ceiling edge 1 click.
Press **S key** to lower ceiling edge 1 click.

OR

Select drag function in the tool menu.
Mouse left button hold on.
Move the mouse to raise lower ceiling edge
in 1 click steps.

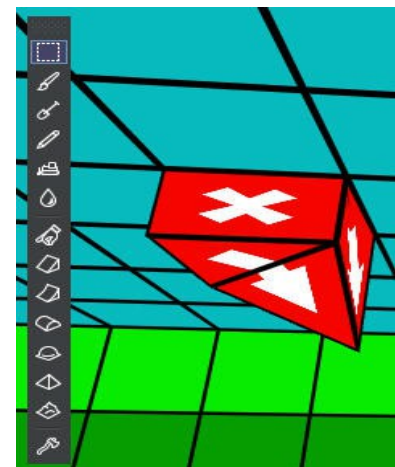


Select a ceiling square(s) by mouse left click.
It is possible to select more than one square.
Press **CTRL key** and
Press **mouse left click** again to select active corner.

Press **W key** to raise ceiling corner 1 click.
Press **S key** to lower ceiling corner 1 click.

OR

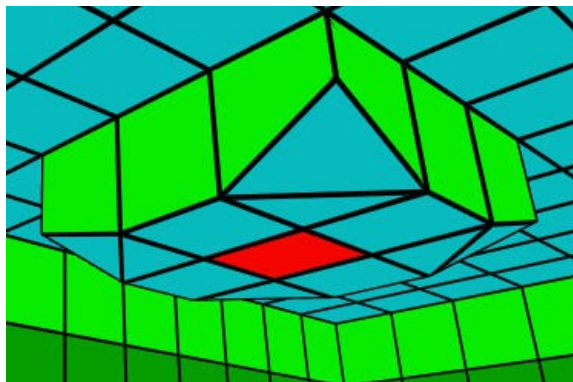
Select drag function in the tool menu.
Mouse left button hold on.
Move the mouse to raise lower ceiling corner
in 1 click steps.



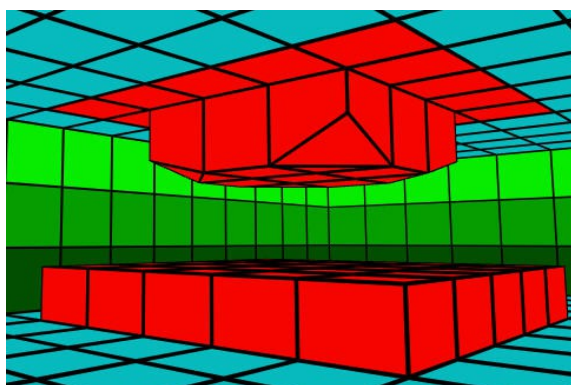
TOMB EDITOR MANUAL

CREATING A FLOOR IMPRESSION USING LOWERED CEILING GEOMETRY

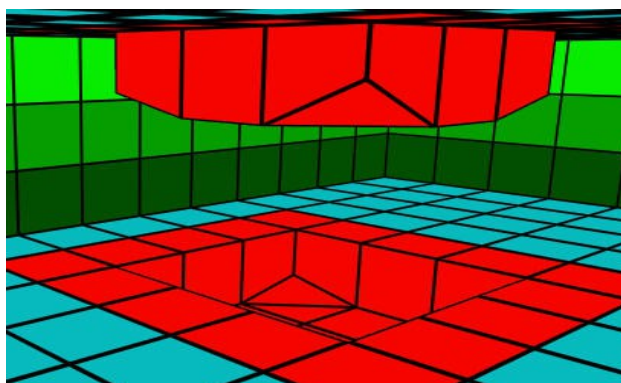
Select a ceiling square(s) by **mouse left click**.
It is possible to select more than one square.
Press the **S key** to lower the ceiling 1 click.
Create the ceiling sections to impress into the flat floor.



Select the flat floor squares by **mouse left click**.
Press the **Q key** to **raise the floor into the ceiling**.



When the floor impression depth has been made by raising it,
Press the **A key** to **lower the floor**.
The floor geometry will be an impression of the ceiling geometry.



TOMB EDITOR MANUAL

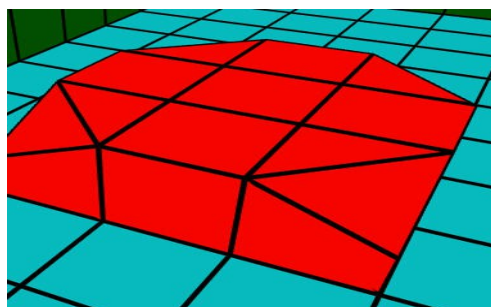
CREATING A CEILING IMPRESSION USING RAISED FLOOR GEOMETRY

Select a floor square(s) by **mouse left click**.

It is possible to select more than one square.

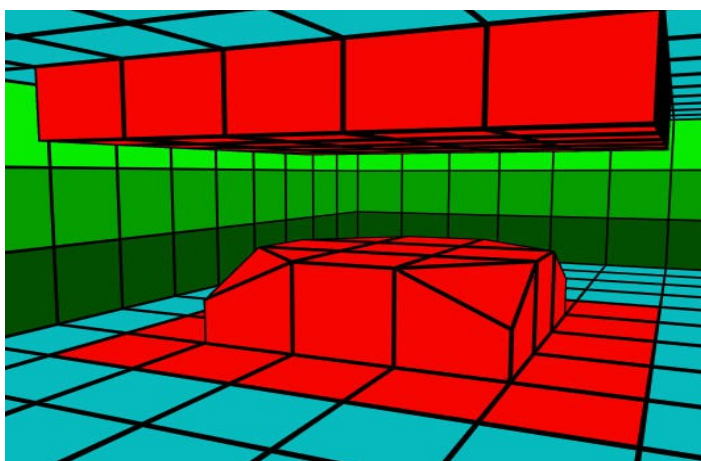
Press **Q key** to raise floor 1 click.

Create the floor sections to impress into the flat ceiling.



Select the flat ceiling squares by **mouse left click**.

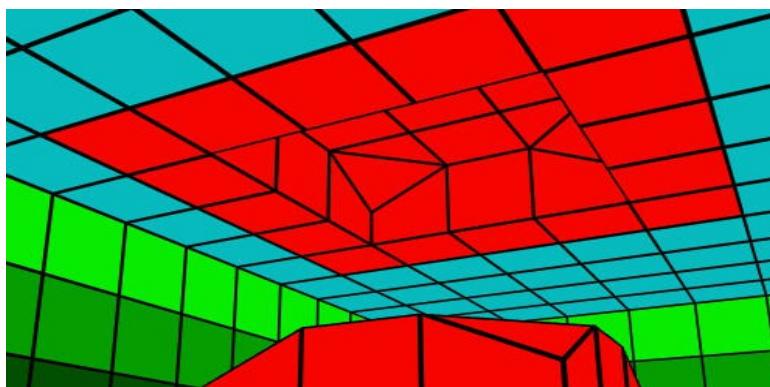
Press the **S key** to **lower the ceiling into the floor**.



When the ceiling impression depth has been made,

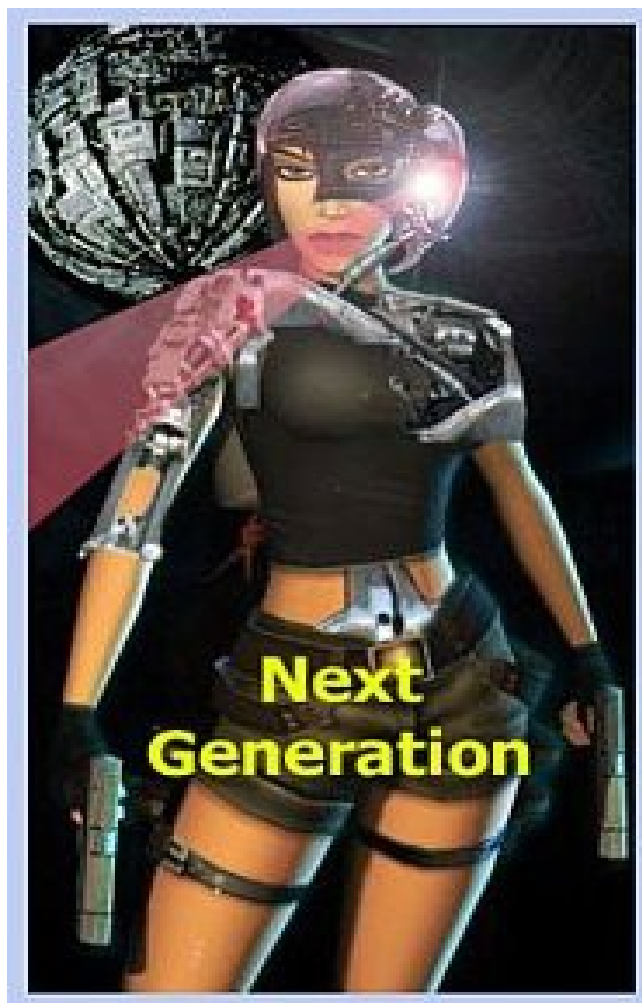
Press the **W key** to raise the ceiling.

The ceiling geometry will be an impression of the floor geometry.



TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION



TOMB EDITOR

MOVING AND EDITING OBJECTS

TOMB EDITOR MANUAL

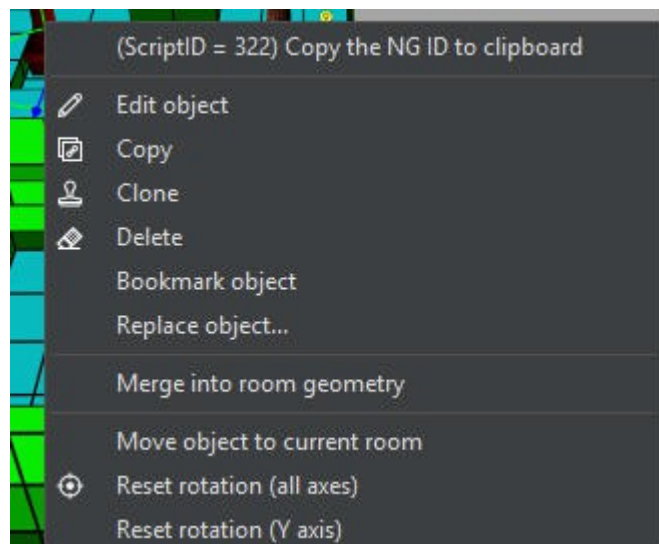
MOVING OBJECTS IN THE 3D VIEW EDITOR WINDOW

To place an object, select the required image in the **Object Browser window** and drag it into the **3D View Editor window**. Release the **mouse left button** to place the object.

To select an object in the **3D View Editor window** mouse left button click. This will display the movement axes and information for the object.

To move the object **mouse left button click and hold** one of the axes arrowheads and move the mouse. Movement is in 1 click steps on the selected axis.

STATIC OBJECT

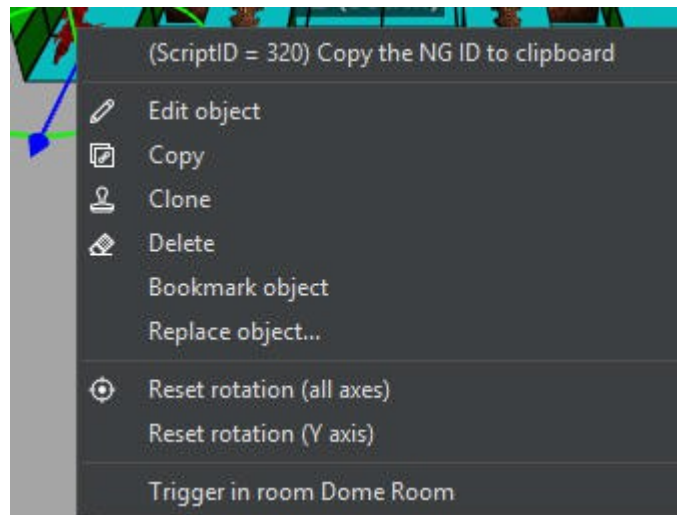


To Edit the Static object **mouse right button click** to display the edit menu. Select the required action from the Static Object edit menu.

To rotate the Static object **mouse left button click and hold** the axis ring and move the mouse. The object rotation is not limited to 45 degree changes. To release the object movement axes etc. press the **ESC key**.

TOMB EDITOR MANUAL

MOVEABLE OBJECT

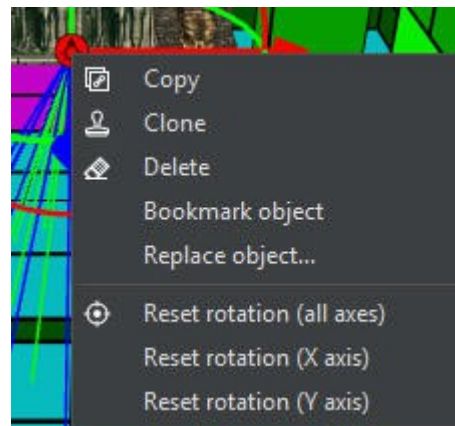
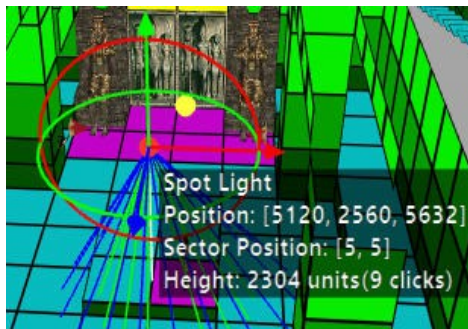


To Edit the Moveable object **mouse right button click** to display the edit menu.
Select the required action from the Moveable Object edit menu.

To rotate the Moveable object **mouse left button click and hold** the axis ring and move the mouse. The object rotation is not limited to 45 degree changes.
To release the object movement axes etc. press the **ESC key**.

TOMB EDITOR MANUAL

LIGHT OBJECT

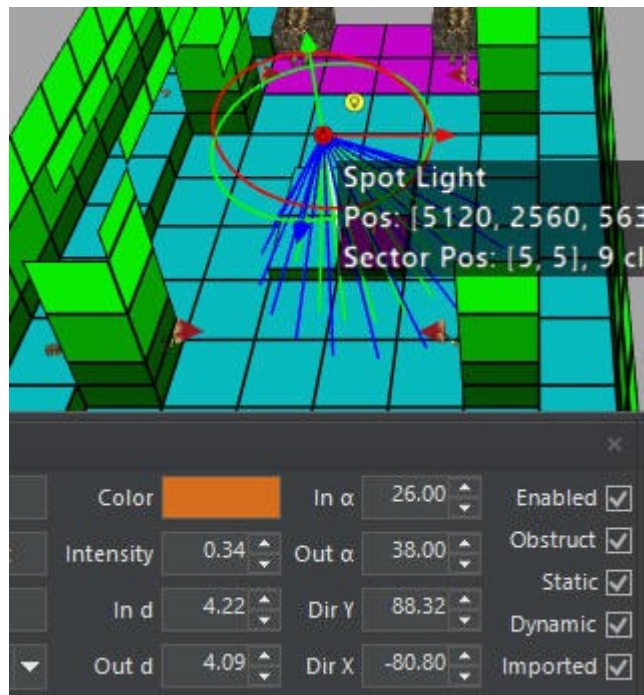


To Edit the Light object **mouse right button click** to display the edit menu. Select the required action from the Object edit menu.

To rotate the Light object **mouse left button click and hold** the axis ring and move the mouse. The Light object rotation is not limited to 45 degree changes. To release the object movement axes etc. press the **ESC key**.

To adjust the Light object values select the box in the Lighting Panel and edit the value.

The Light object rotation can be set to exact degrees.



TOMB EDITOR MANUAL

OBJECTS IN ROOM

To display this window it is necessary to make space on the main interface by temporarily removing some unwanted windows (for example the Room Options Window).

After you have finished using the Objects in the Room listing the default windows display can be restored by selecting the **pull down menu Window** and selecting **Restore default format**.

An Object can be selected in the Objects in Room window which will select it in the 3D Editor view window.

An object can be deleted from the room by selecting the delete icon.

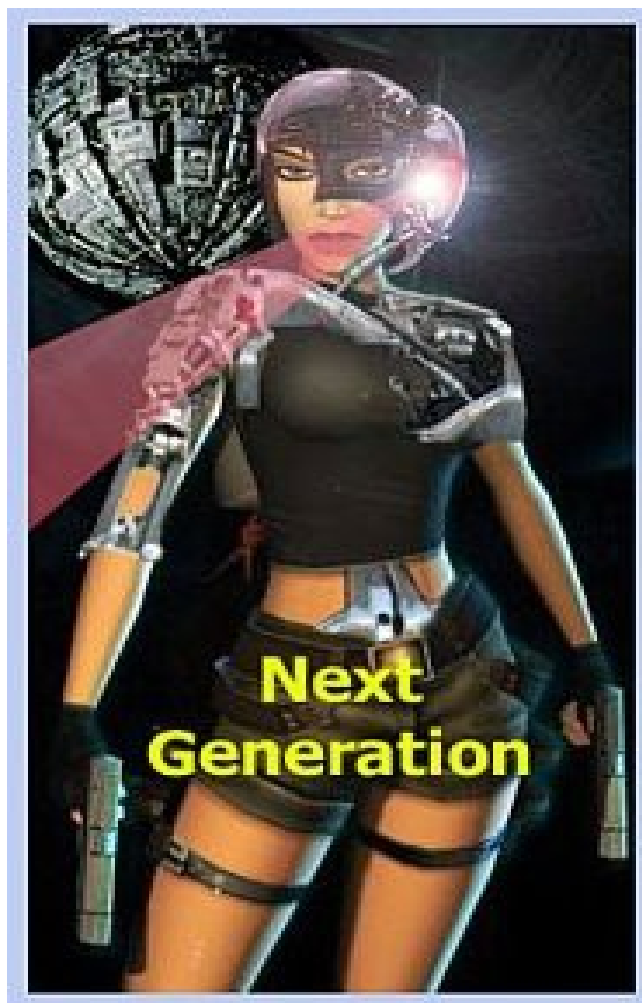
An object in the room can be edited in the Objects in Room window.

The edit window displayed depends on the type of object selected for editing; moveable, static, flyby camera, sound, etc.



TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION



TOMB EDITOR

ADDING AND EDITING TRIGGERS

TOMB EDITOR MANUAL

TRIGGERS

Triggers cause events to happen and ultimately have everything to do with how much fun your level is to play. Triggers activate when Lara moves onto a square that has been designated as a trigger. Any trigger placed under Lara at her starting position will activate as the level begins. Triggers appear as purple squares and make the square(s) as well as the vertical space above, an active zone. This way, Lara can not jump to avoid a trigger, unless it is designated as a “Pad trigger”.

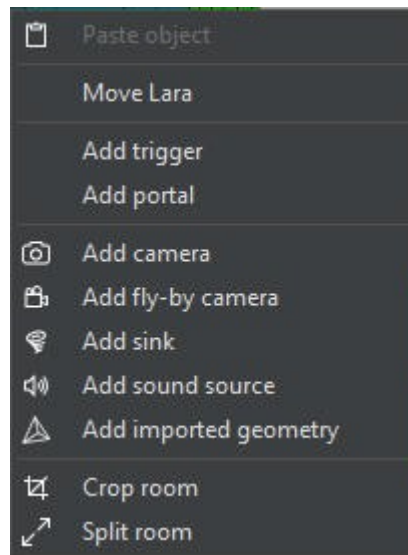
See Triggers document for full information.

TO ADD A TRIGGER

Select a square in the **3D View Editor window** **Left Mouse button click**, then:

Right Mouse button click to display menu

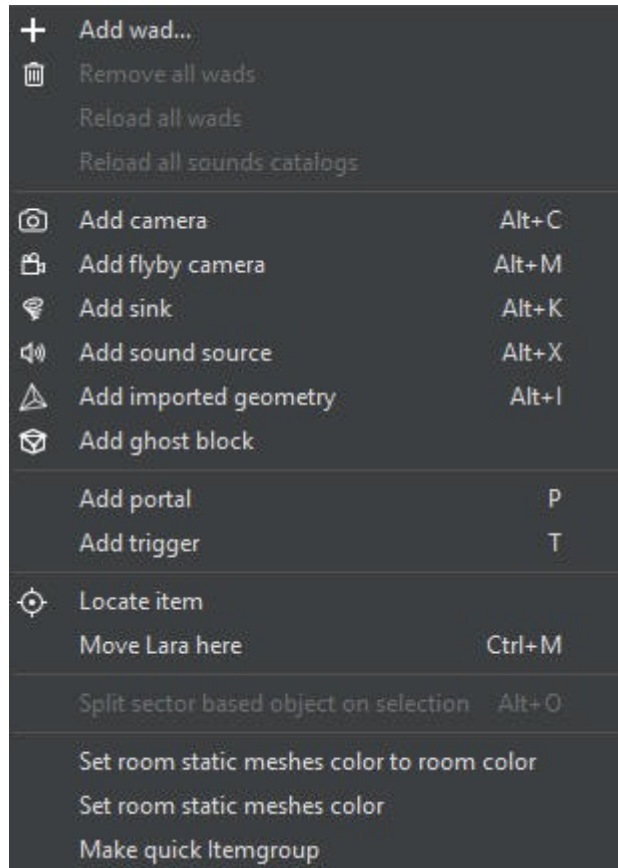
Select **Add trigger** to display Trigger Editor menu.



TOMB EDITOR MANUAL

OR

Select Pull down Items Menu and select Add trigger to display the Trigger Editor menu.



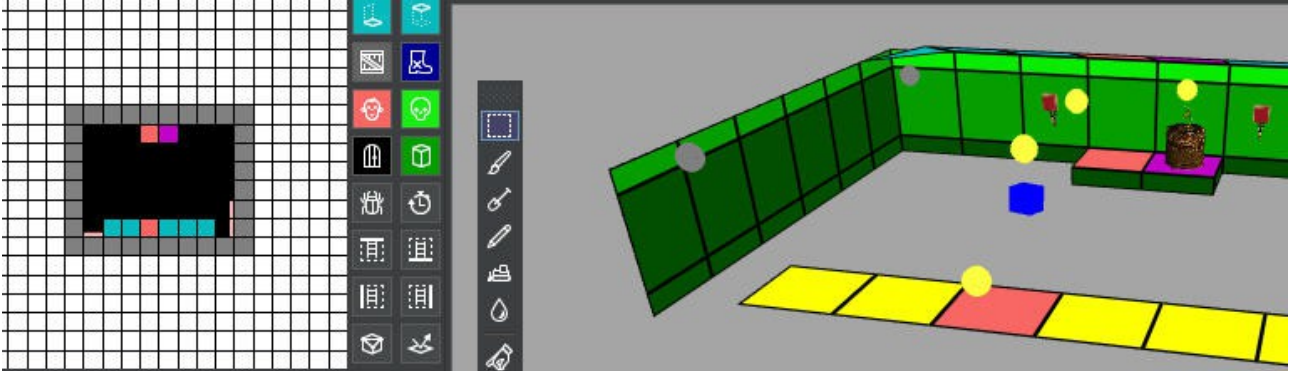
OR Select a square in the **3D View Editor window** and press the **T key** to display the Trigger Editor menu.

The Trigger window is displayed. Set the Trigger fields and click **OK**.

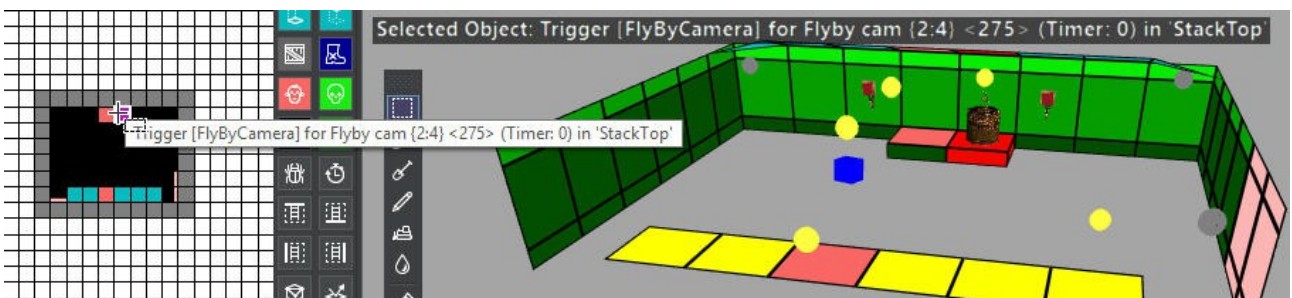
TOMB EDITOR MANUAL

VIEWING AND EDITING TRIGGERS

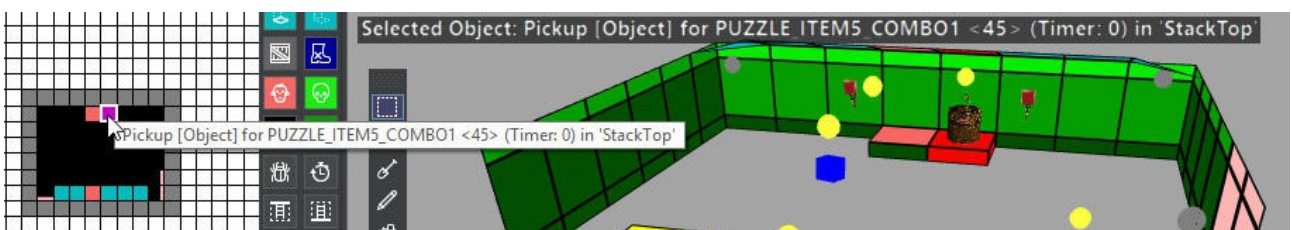
Also see the Triggers List Window.



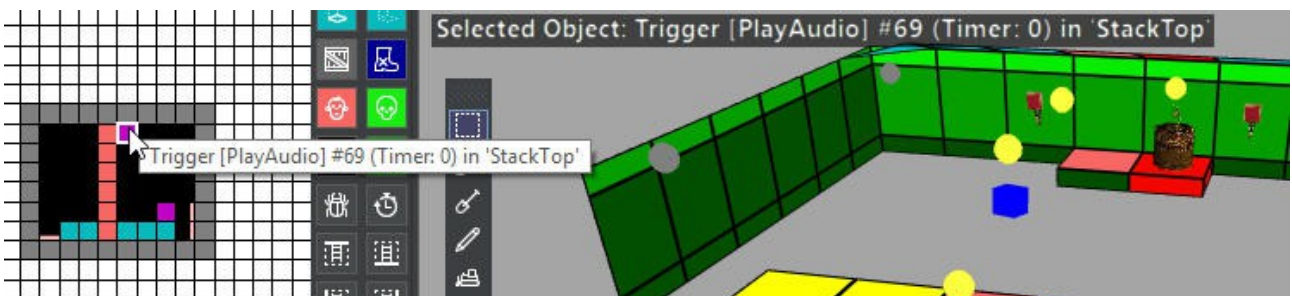
To view the triggers that are stacked on a square **mouse right click** the trigger square in the Room Sector view as shown.



To see the next trigger in the stack **mouse right click** again the trigger square in the Room Sector view as shown.



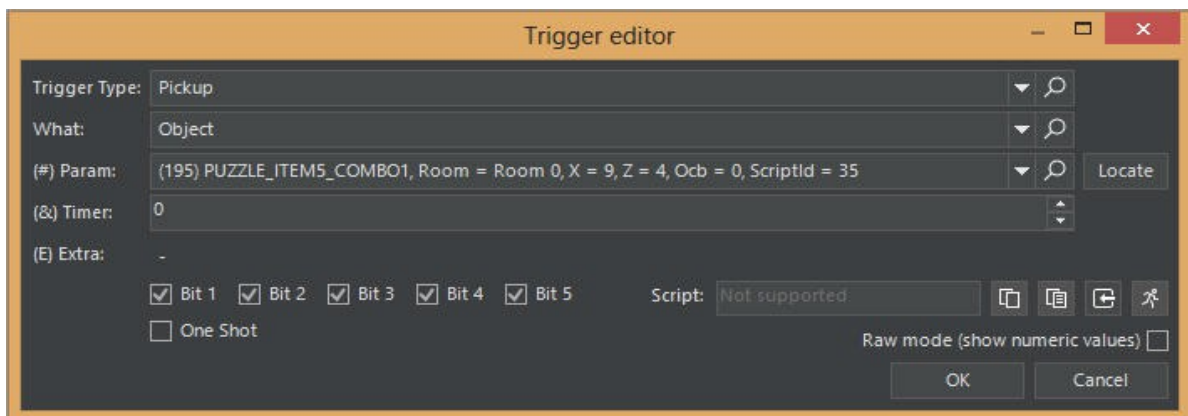
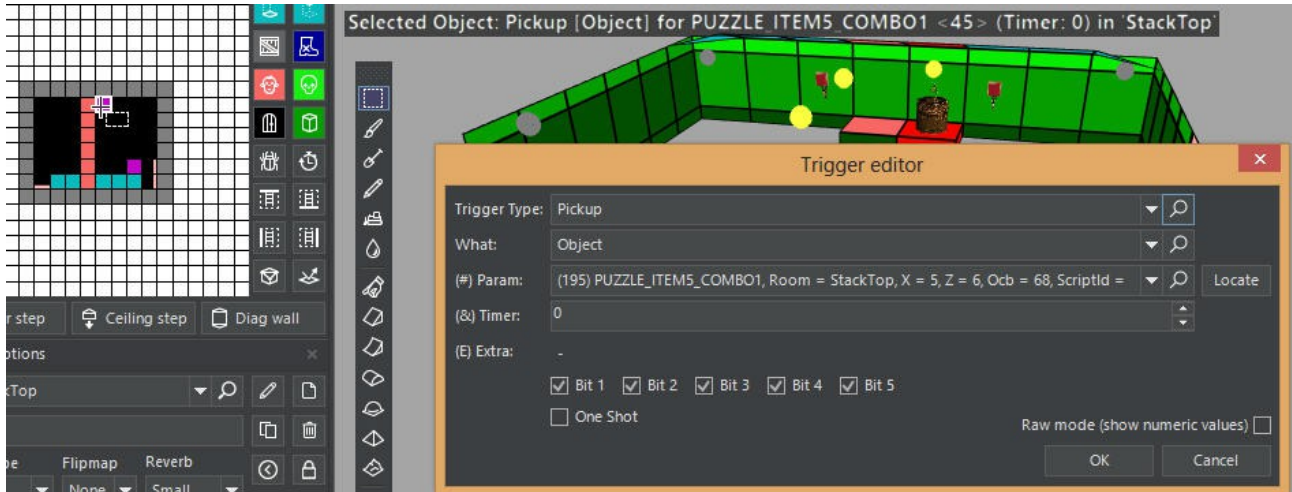
To see the next trigger in the stack **mouse right click** again the trigger square in the Room Sector view as shown. Repeated mouse right clicks cycle through all of the triggers on the square.



TOMB EDITOR MANUAL

To edit a trigger **mouse right click** on the trigger square in the Room Sector view to select the required trigger. Then **mouse left click** to open the Trigger Window.

Edit the trigger as required. To delete a trigger have it display as above and then press the **Delete** key.



TOMB EDITOR MANUAL

TRIGGERS LIST WINDOW

To display this window it is necessary to make space on the main interface by temporarily removing some unwanted windows (for example the Room Options Window). After you have finished using the Triggers Listing the default windows display can be restored by selecting the **pull down menu Window** and selecting **Restore default format**.

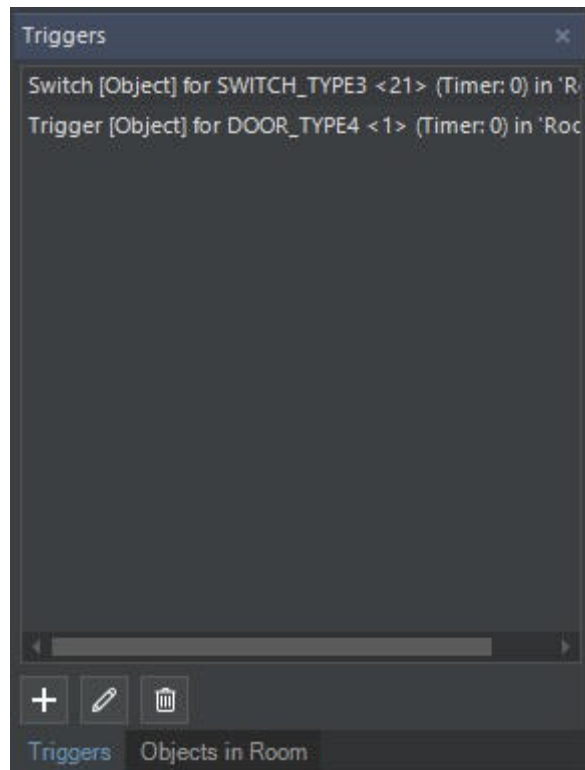
Select a trigger square in the 3D View Editor window.
The triggers that are stacked on the square will be listed in the Triggers List window.

Select a trigger in the Triggers List.

A trigger can be deleted from the room by selecting the delete icon.

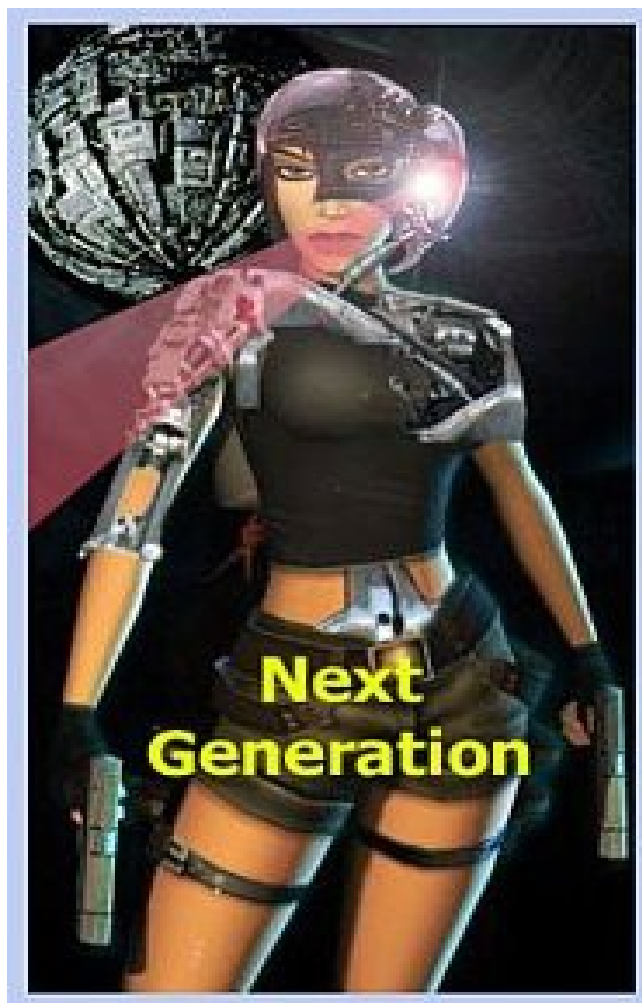
A trigger can be edited by selecting the edit icon.

A trigger can be added to the square by selecting the add icon.



TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION



TOMB EDITOR

**TOOL ICONS
IN THE 3D VIEW EDITOR WINDOW**

TOMB EDITOR MANUAL

TOOL ICONS IN THE 3D VIEW EDITOR WINDOW



SELECTION
BRUSH
SHOVEL
PENCIL
BULLDOZER

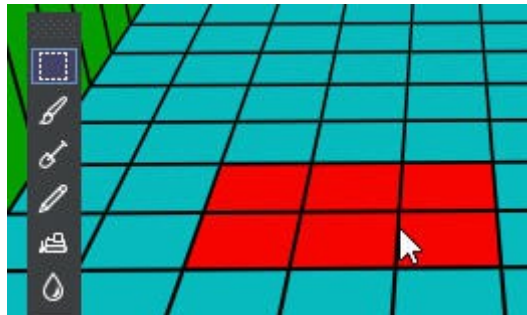
SMOOTH
DRAG
RAMP

QUARTER PIPE
HALF PIPE
BOWL
PYRAMID

TERRAIN
PORTAL DIGGER



SELECTION
Selects an area or object in the 3D View by pressing and holding the **Mouse Left Button** while moving the cursor.



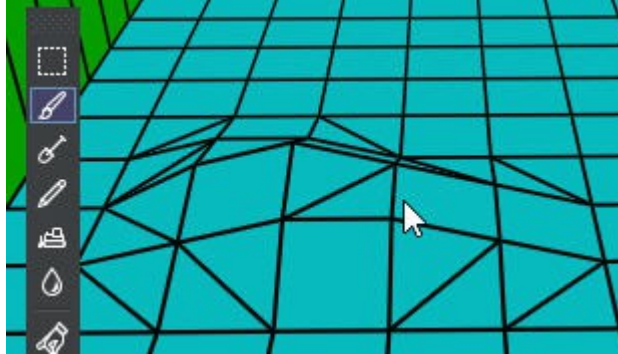
TOMB EDITOR MANUAL



BRUSH

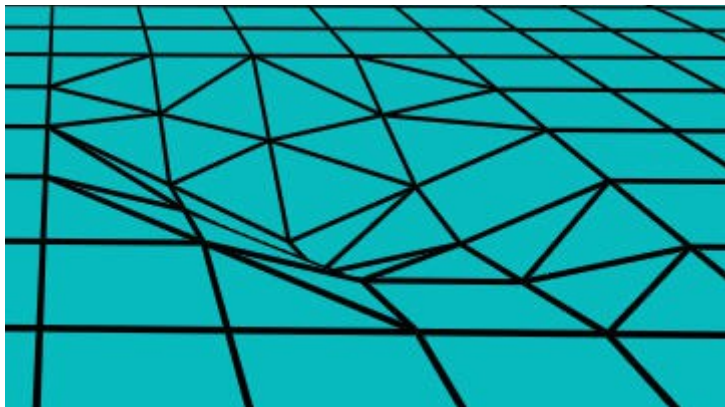
Rises floor geometry in a smooth manner without breaking up sector connections.
Lowers ceiling geometry in a smooth manner without breaking up sector connections.

It is ideal for shaping of natural landscapes. It is used by pressing and holding the **Left Mouse Button** while moving the cursor or by applying single clicks to a sector.



SHOVEL

Lowers floor geometry in a smooth manner without breaking up sector connections.
Raises ceiling geometry in a smooth manner without breaking up sector connections.
It is ideal for shaping of natural landscapes. It is used by pressing and holding the **Left Mouse Button** while moving the cursor or by applying single clicks to a sector.



TOMB EDITOR MANUAL

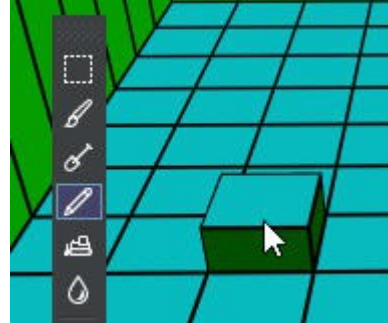


PENCIL

Rises single floor sectors by a click of the **Left Mouse Button**.

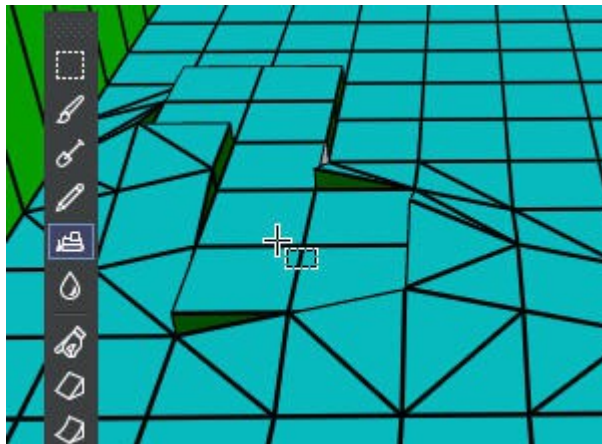
Lowers single ceiling sectors by a click of the **Left Mouse Button**.

Unlike the Brush tool, further changes are not applied when the button is pressed and held on and the cursor is moved around. Another click is required.



BULLDOZER

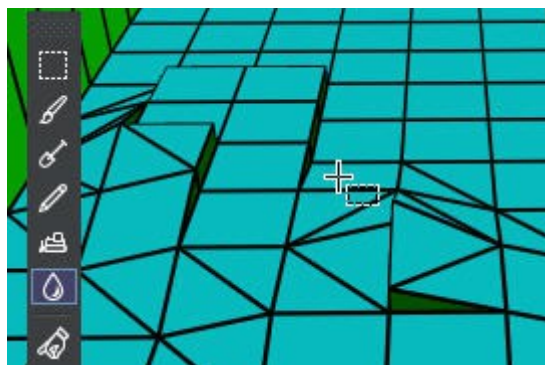
Flattens an area (Floor or Ceiling) to an averaged level based on the surrounding geometry. It is used by pressing and holding the **Left Mouse Button** while moving the cursor.



SMOOTH

Smooths the geometry by adjusting it to the shapes of the surrounding sectors.

It is used by pressing and holding the **Left Mouse Button** while moving the cursor or by applying single clicks to a sector.



TOMB EDITOR MANUAL

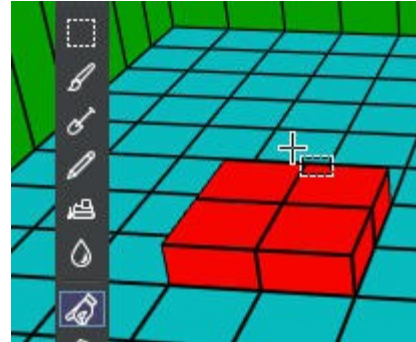


DRAG

Drags selected geometry up and down. It can also be used to "drag" primary divisions in walls made with the **Q**, **A**, **W**, **S** keys.

Secondary wall divisions made with the **E**, **D**, **R**, **F** keys are not affected.

After activating the tool select an area to be modified. Then press and hold the **Left Mouse Button** and move the mouse to move the geometry up or down.



TOMB EDITOR MANUAL



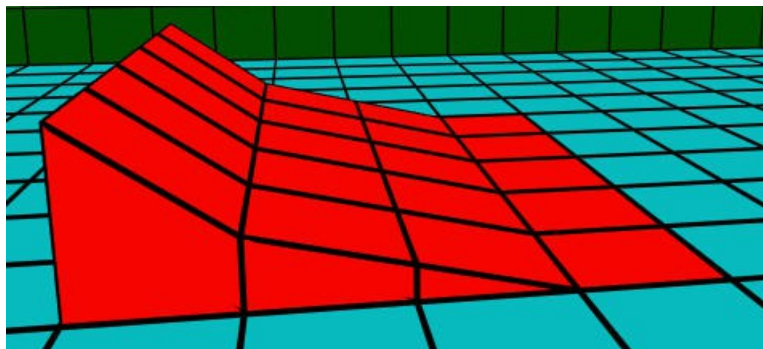
RAMP

Creates a ramp. Select an area of squares. **Mouse left click** to display arrows. Select the Ramp tool. **Mouse left click and hold** in the selected area. Move the mouse upwards or downwards to create a ramp.



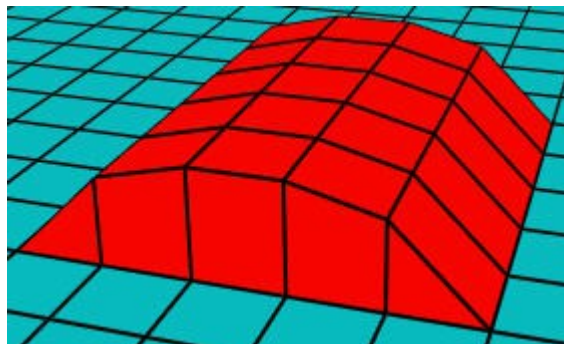
QUARTER PIPE

Creates a quarter pipe section. Select an area of squares. Select the Quarter Pipe tool. **Mouse left click and hold** in the area. Move the mouse upwards or downwards.



HALF PIPE

Creates a half pipe section. Select an area of squares. Select the Half Pipe Tool. **Mouse left click and hold** in the area. Move the mouse upwards or downwards.



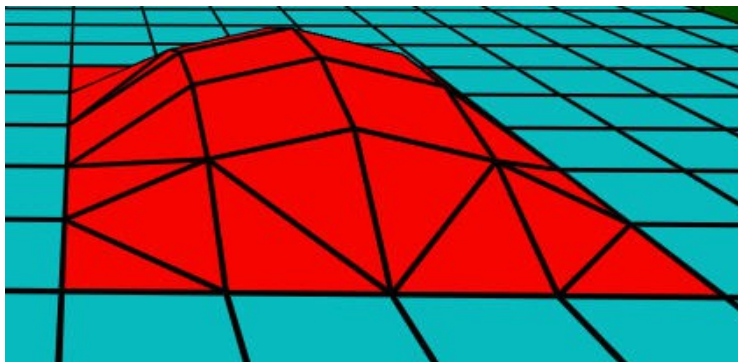
TOMB EDITOR MANUAL



BOWL

Creates a bowl section. Select an area of squares. Select the Bowl Tool.

Mouse left click and hold in the area. Move the mouse upwards or downwards.

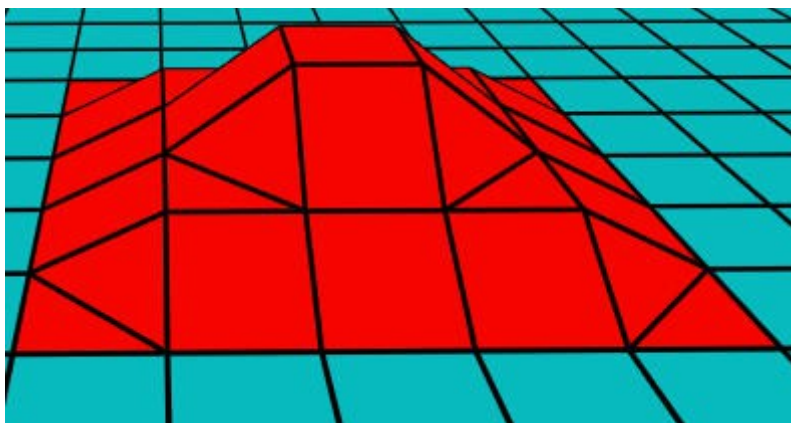


PYRAMID

Creates a pyramid section. Select an area of squares. Select the Pyramid Tool.

Mouse left click and hold in the area.

Move the mouse upwards or downwards.



TOMB EDITOR MANUAL



TERRAIN

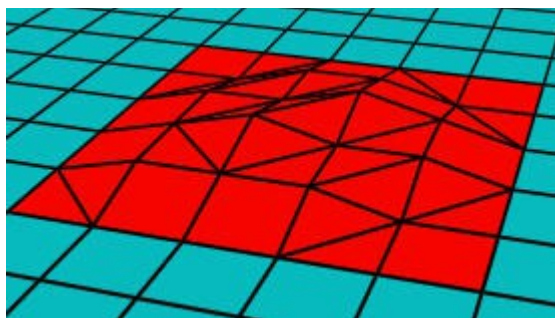
Creates terrain.

Select an area of squares.

Select the Terrain Tool.

Mouse left click and hold in the area.

Move the mouse upwards or downwards.



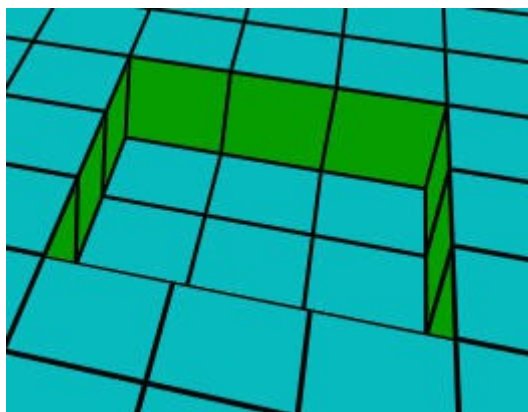
PORTAL DIGGER

Creates a connected room below the active room.

Select an area of squares.

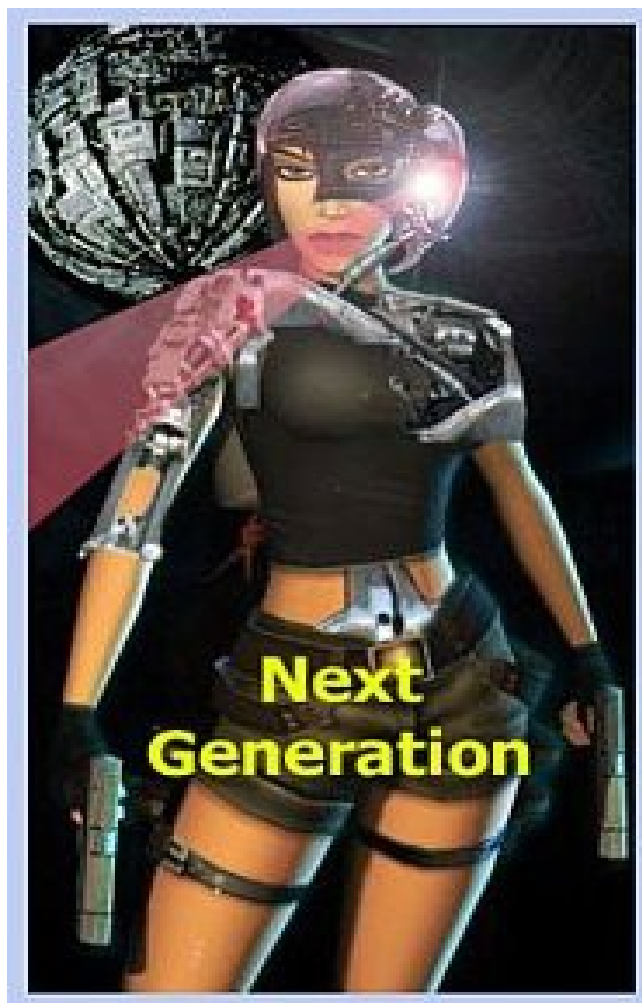
Select the Portal Digger tool.

Mouse left click.



TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION



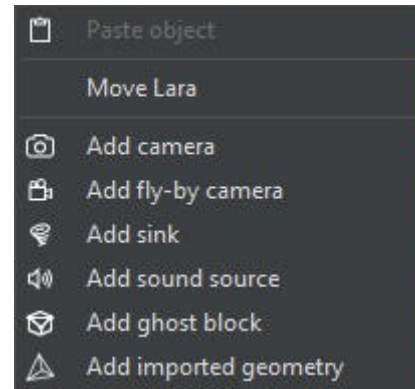
TOMB EDITOR

**MOUSE RIGHT CLICK
IN THE 3D VIEW EDITOR WINDOW**

TOMB EDITOR MANUAL

Mouse Right click in the 3D VIEW EDITOR WINDOW to display the following menu:

Use this method as an alternative to selecting the icons displayed under the pull down menus on the **Tomb Editor** interface.



PASTE OBJECT

HOTKEY: CTRL + V

Pastes the object that was copied onto the clipboard onto the selected sector.

MOVE LARA HERE

HOTKEY: CTRL + M

This moves Lara from any position in the map and puts her on the selected square.



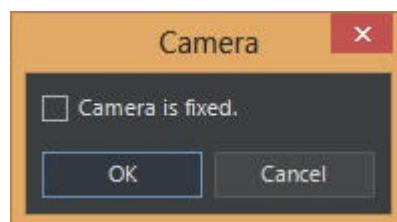
ADD CAMERA

HOTKEY: ALT + C

The camera is added at the selected square.

This is initially a **Basic Camera**.

Select the Camera. Press the **O** key to display the Camera Window.



Set the Fixed Camera box if required:

A **Basic Camera** tracks Lara's movements or gives a special view of places and/or enemies. This camera view can be broken out of using the **LOOK** key.

A **Fixed Camera** does everything the Basic Camera does but the view cannot be broken until Lara steps off the trigger for the camera.

TOMB EDITOR MANUAL



ADD FLYBY CAMERA

HOTKEY: ALT + M

A series of cameras places to create a “flyby” or “fly through” effect.



ADD SINK

HOTKEY: ALT + K

For use in water rooms to create currents.



ADD SOUND SOURCE

HOTKEY: ALT + X

Very rarely used for anything except water noises.



ADD GHOST BLOCK

HOTKEY:

Modify collision of floor and ceiling.



ADD IMPORTED GEOMETRY

HOTKEY: ALT + I

Add imported geometry into the 3D View Editor window.

Tomb Editor allows for importing of 3D objects stored in various popular 3D software formats directly into the rooms of levels.

In the main menu go to Items > Add imported geometry.

The cursor will change into a cross - click on a sector in the room to place a placeholder mesh for the imported geometry object. Double click the placeholder to open up the Imported Geometry Settings window.

Press the + button to load your object file and press Assign to assign the loaded object to the currently selected placeholder and press OK to confirm. You can load multiple objects in the Imported Geometry Settings window, but only one can be assigned to a current placeholder. Your imported geometry object assignment will be saved with the PRJ2 file, but the object file must be kept at the same location in order to load correctly later.

TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION



TOMB EDITOR

**3D VIEW EDITOR WINDOW
DRAW PORTALS**

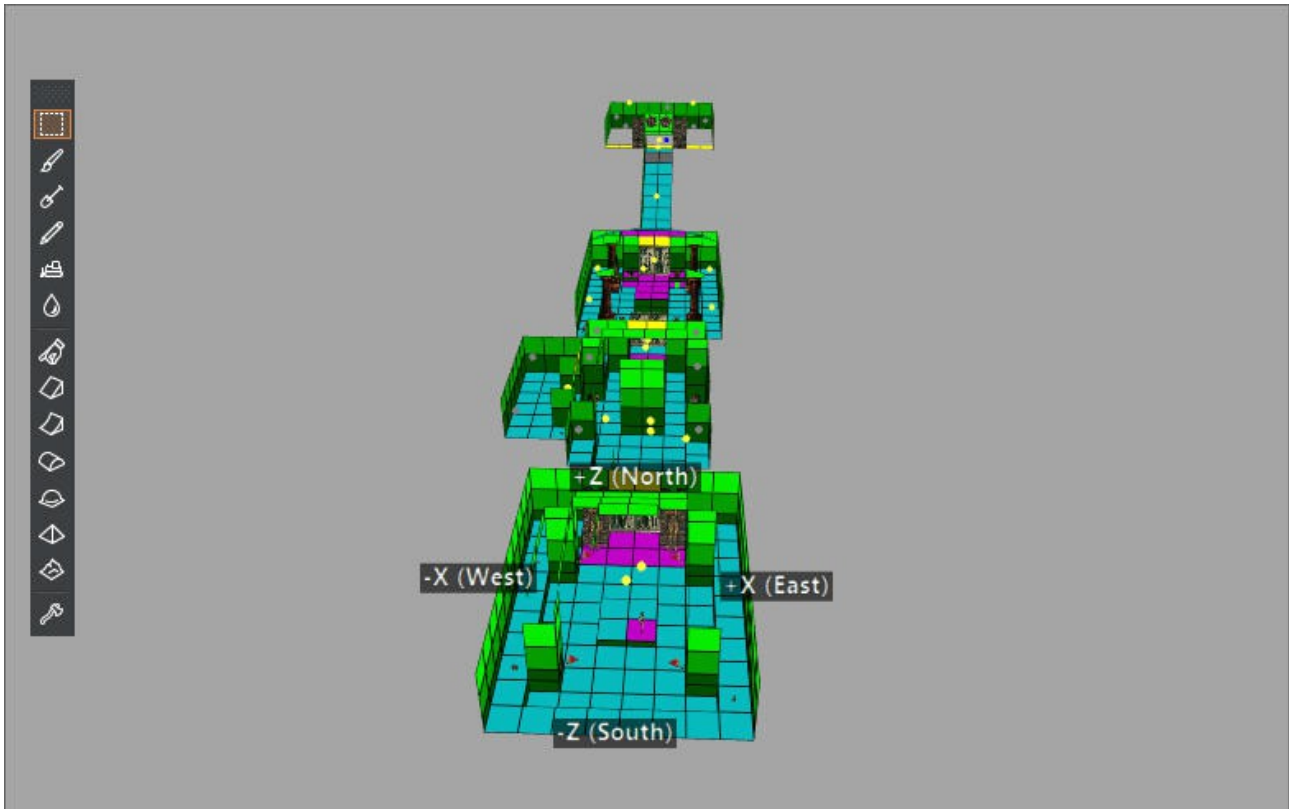
TOMB EDITOR MANUAL



DRAW PORTALS

HOTKEY:

Displays the adjoining rooms in the 3D View Editor window.
That is rooms connected by a portal.



To select a different active room for editing :

Enable room select by mouse in the **Tools > Editor Options > 3D window**
select **Automatically switch current room on mouse action**

mouse double left button click on the room to change rooms.

Or **ALT key Z key** (cursor changes to +) and **mouse left button click** on the room,
then press **ESC key** to reset the cursor to normal.

Right Mouse Button

Rotates the room in 3D View Editor. (Move mouse).

Middle Mouse Button

Pans the 3D View Editor camera up, down, left & right.

Moving the mouse wheel

Zooming the 3D View in and out.

TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION



TOMB EDITOR

**3D VIEW EDITOR WINDOW
DRAW ALL ROOMS**

TOMB EDITOR MANUAL



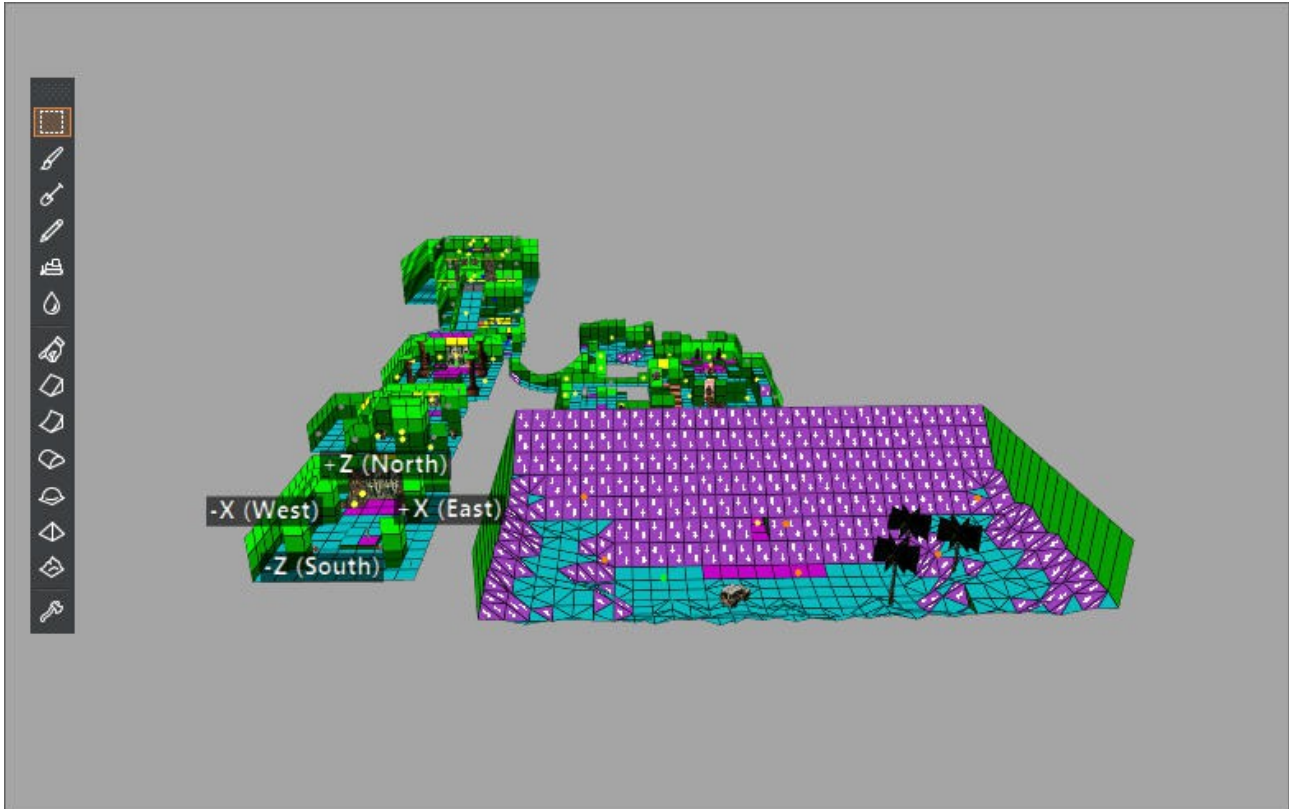
DRAW ALL ROOMS

HOTKEY:

Displays all of the rooms in the 3D View Editor window.

That is all of the rooms in the level.

This makes it easy to see the layout and to select a room to edit.



To select a different active room for editing :

Enable room select by mouse in the **Tools > Editor Options > 3D window**
select **Automatically switch current room on mouse action**

mouse double left button click on the room to change rooms.

Or **ALT key Z key** (cursor changes to +) and **mouse left button click** on the room,
then press **ESC key** to reset the cursor to normal.

Right Mouse Button

Rotates the room in the 3D View Editor. (Move mouse).

Middle Mouse Button

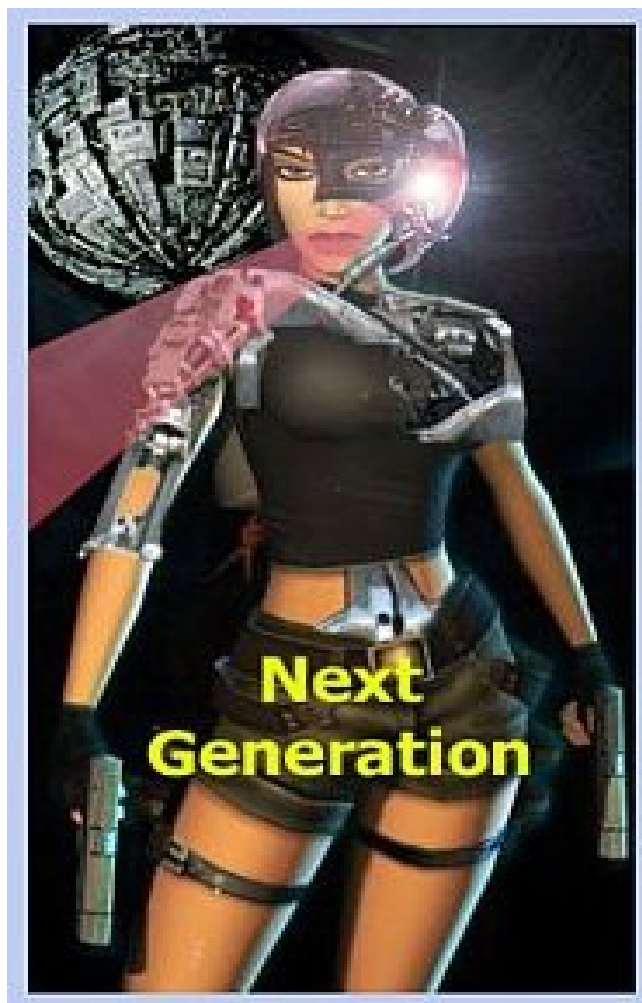
Pans the 3D View Editor camera up, down, left & right.

Moving the mouse wheel

Zooming the 3D View in and out.

TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION



TOMB EDITOR

**3D EDITOR WINDOW
TEXTURE VIEW**

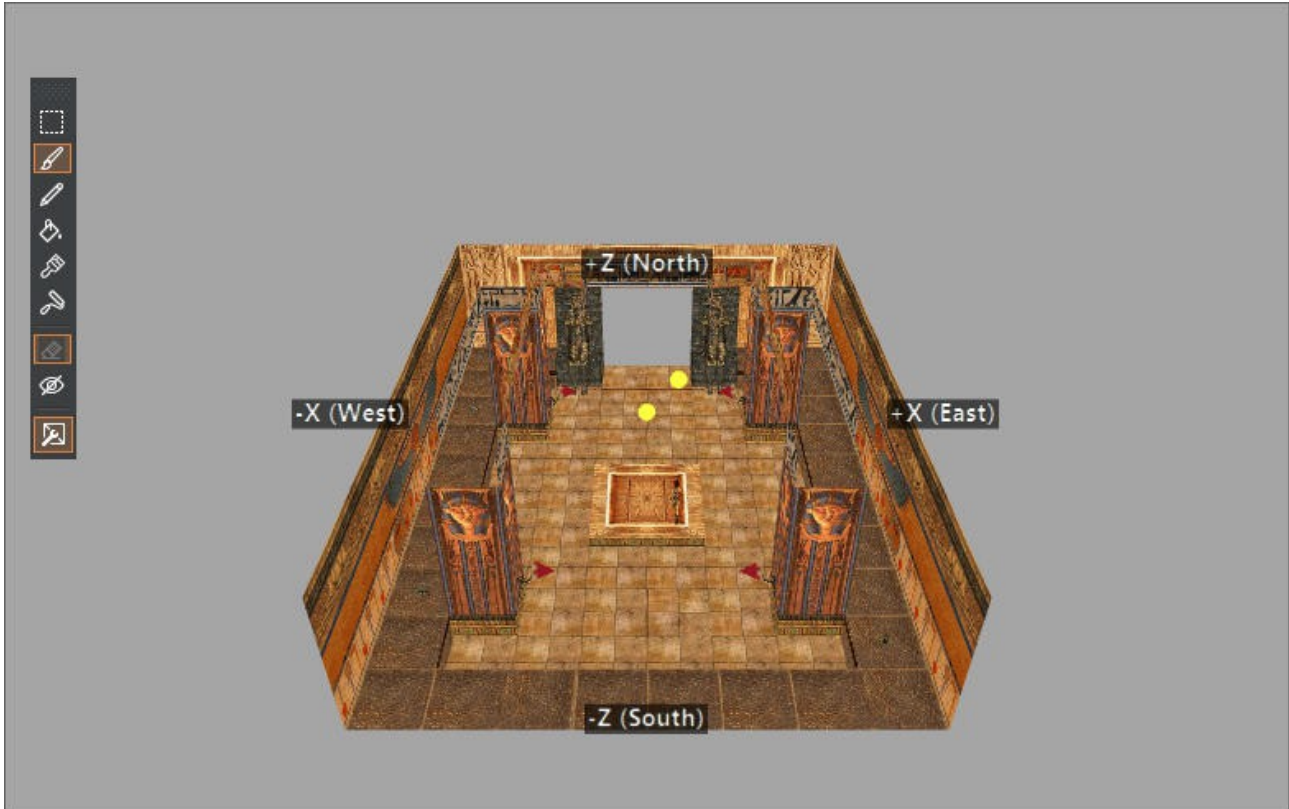
TOMB EDITOR MANUAL



TEXTURE VIEW

HOTKEY: F3

Displays a 3D textured view of the room in the Editor window.
(The example shown is room 0 from the tut1 project.)



This is the view to texture the room.

To select a active tile in the Texture Panel from the 3D Texture View do the following:
ALT key and **Mouse left click** on the texture tile in the 3D Texture View.

To make the texturing easy rotate and zoom the room to get a good view of the area to texture. Also use the room rotate target function (**ALT + Z and Mouse left click**) to achieve a good view for texturing.

TO TEXTURE ONE SECTOR AND THEN ANOTHER.

Select a texture tile from the **Texture Panel window**.

Select the **BRUSH Tool** in the 3D Texture View.

Mouse left click and **hold** in the 3D Texture View to apply the texture tile.

Move the mouse to apply the texture tile to the next sector(s).

TOMB EDITOR MANUAL

TO TEXTURE ONLY ONE SECTOR AT A TIME.

Select a texture tile from the **Texture Panel window**.

Select the **PENCIL Tool** in the 3D Texture View.

Mouse left click in the 3D Texture View to apply the texture tile.

To rotate the texture tile in the 3D Texture View **SHIFT key** and **Mouse left click**.

To mirror the texture tile in the 3D Texture View **CTRL key** and **Mouse left click**.

TO TEXTURE ALL OF THE FLOOR, ALL OF THE CEILING, ALL OF THE WALLS .

Select a texture tile from the **Texture Panel window**.

Select the **FILL Tool** in the 3D Texture View.

Mouse left click in the 3D Texture View on the floor, ceiling, wall to apply the texture.

TO STRETCH ONE TEXTURE TILE ONTO FOUR SECTORS.

Select a texture tile from the **Texture Panel window**.

Select the **GRID PAINT Tool** in the 3D Texture View.

Mouse left click in the 3D Texture View to apply the texture tile.

To rotate the texture tile in the 3D Texture View **SHIFT key** and **Mouse left click**.

To mirror the texture tile in the 3D Texture View **CTRL key** and **Mouse left click**.



TO STRETCH ONE TEXTURE TILE ONTO A SELECTED AREA.

Select a texture tile from the **Texture Panel window**.

Select the **SELECTION Tool** in the 3D Texture View.

Mouse left click and **hold** and drag in the 3D Texture View to select the area.

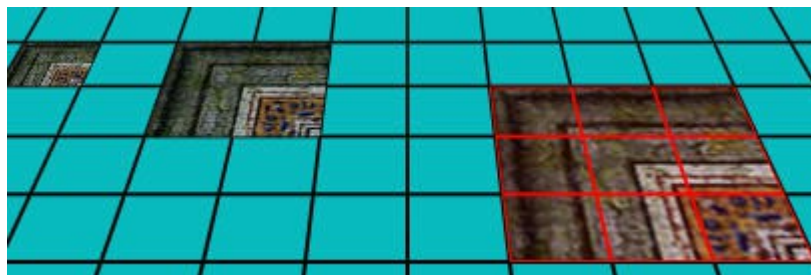
The selected sectors turn red.

Select the **GROUP TEXTURE Tool** in the 3D Texture View.

Mouse left click in the 3D Texture View to apply the texture tile.

To rotate the texture tile in the 3D Texture View **SHIFT key** and **Mouse left click**.

To mirror the texture tile in the 3D Texture View **CTRL key** and **Mouse left click**.



TOMB EDITOR MANUAL

TO ERASE TEXTURES IN THE 3D TEXTURE VIEW.

Select the **ERASER Tool** in the 3D Texture View.

ONE SECTOR AND THEN ANOTHER.

Then Select the **BRUSH Tool** in the 3D Texture View.

Mouse left click and **hold** in the 3D Texture View.

Move the mouse to erase the texture(s).

ONLY ONE SECTOR AT A TIME.

Then Select the **PENCIL Tool** in the 3D Texture View.

Mouse left click in the 3D Texture View to erase the texture.

ALL OF THE FLOOR, ALL OF THE CEILING, ALL OF THE WALLS.

Then Select the **FILL Tool** in the 3D Texture View.

Mouse left click in the 3D Texture View on the floor, ceiling, wall to erase textures.

TO TEXTURE INVISIBLE IN THE 3D TEXTURE VIEW.

(used to display the horizon and sky in the level.)

Select the **INVISIBILITY Tool** in the 3D Texture View.

ONE SECTOR AND THEN ANOTHER.

Then Select the **BRUSH Tool** in the 3D Texture View.

Mouse left click and **hold** in the 3D Texture View.

Move the mouse to texture invisible texture(s).

ONLY ONE SECTOR AT A TIME.

Then Select the **PENCIL Tool** in the 3D Texture View.

Mouse left click in the 3D Texture View to texture invisible.

ALL OF THE FLOOR, ALL OF THE CEILING, ALL OF THE WALLS.

Then Select the **FILL Tool** in the 3D Texture View.

Mouse left click in the 3D Texture View on the floor, ceiling, wall to texture invisible.

USING RISING BLOCKS

From the NG Tutorial: One major problem with raising blocks, however, which can be easily avoided, is that when triggered and lowered on floor tiles which are textured, you get horrid zig zag lines showing through. This effect will ruin the atmosphere of your level. The fix is to texture the ground below the raising block with the grey color from the palette.

For the **Tomb Editor** select the **PENCIL INVISIBILITY TEXTURE TOOL** to set a grey color square under the rising block.

TOMB EDITOR MANUAL

GETTING RID OF THE WALLPAPER EFFECT

LARGE WALL AREAS.

Rotate every second wall brick tile 180 degrees.
Mirror some of the wall brick tiles.

WATER SURFACE. (LAVA, MUD ETC.)

There are many water texture sets now that do not require matching up.
If you use a water texture set that requires matching, this method will save a lot of time.

Mentally number the water texture set 1 to 8 for example.
Texture the water (lava, mud etc.) surface using the texture tile sequence as follows:

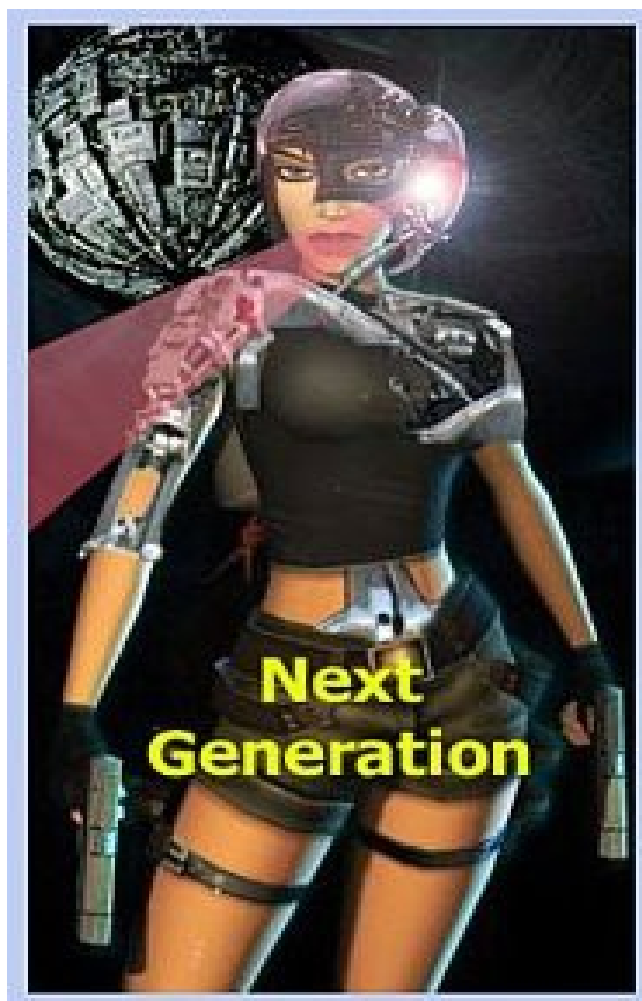
1 - 2 - 3 - 4 - 5 - 6 - 7 - 8
2 - 3 - 4 - 5 - 6 - 7 - 8 - 1
3 - 4 - 5 - 6 - 7 - 8 - 1 - 2
4 - 5 - 6 - 7 - 8 - 1 - 2 - 3
5 - 6 - 7 - 8 - 1 - 2 - 3 - 4
6 - 7 - 8 - 1 - 2 - 3 - 4 - 5
7 - 8 - 1 - 2 - 3 - 4 - 5 - 6
8 - 1 - 2 - 3 - 4 - 5 - 6 - 7

Mentally number the water texture set 1 to 4 for example.
Texture the water (lava, mud etc.) surface using the texture tile sequence as follows:

1 - 2 - 3 - 4
2 - 3 - 4 - 1
3 - 4 - 1 - 2
4 - 1 - 2 - 3

TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION

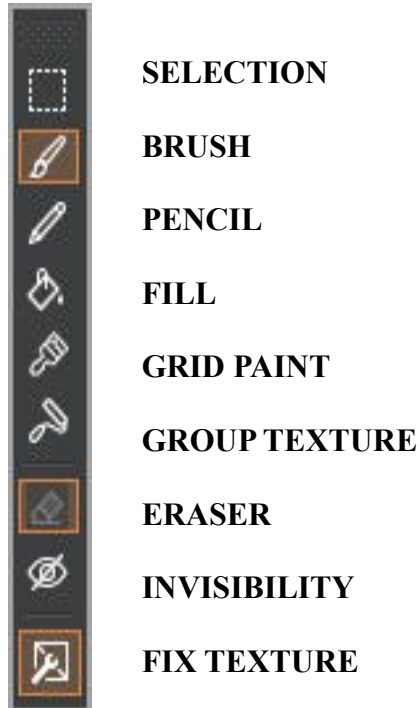


TOMB EDITOR

**3D EDITOR WINDOW
TOOL ICONS IN THE TEXTURE VIEW**

TOMB EDITOR MANUAL

TOOL ICONS IN THE TEXTURE VIEW



SELECTION

The same function as the Geometry tool (3D View).

It is used to pre-select an area where further operations will be performed.

Note that selection will not be visible on sectors where textures are applied so the 2D room Sector Options grid must be used as reference.



BRUSH

The default texturing tool. Applies the selected texture by pressing and holding the **Left Mouse Button** while moving the cursor or by applying single clicks to a square or triangle.



PENCIL

Applies the selected texture to single squares or triangles by clicking the **Left Mouse Button**. Unlike the Brush tool textures will not be applied further when the button is pressed and the cursor is moved around.

TOMB EDITOR MANUAL



FILL

Applies the selected texture to the floor, ceiling or wall faces all at once. Similar to **Texture all floor**, **Texture all ceiling** and **Texture all walls** buttons.



GRID PAINT

Textures a four tile area with a single texture tile.



GROUP TEXTURE

Allows applying the selected texture to more than 1 square by having it "stretched" over the squares within a selected area.

After activating the tool, select an area to be affected. Unless you have already done it with the Selection tool.

Note that the selection is not visible on textured faces so refer to the 2D room Sector Options grid. Click with the **Left Mouse Button** within the selected area to apply the texture over all the squares within it.



ERASER

Erase the texture from the face. This returns the square back to its initial state (Blue square). It will **toggle on/off**.



INVISIBILITY

Apply an invisible texture instead of applying the texture selected in the Texture Panel. It is the equivalent of applying the black color from the color palette. It will **toggle on/off**.

It is used to display the horizon and sky in the level. Also the texture under the rising block (Grey square).

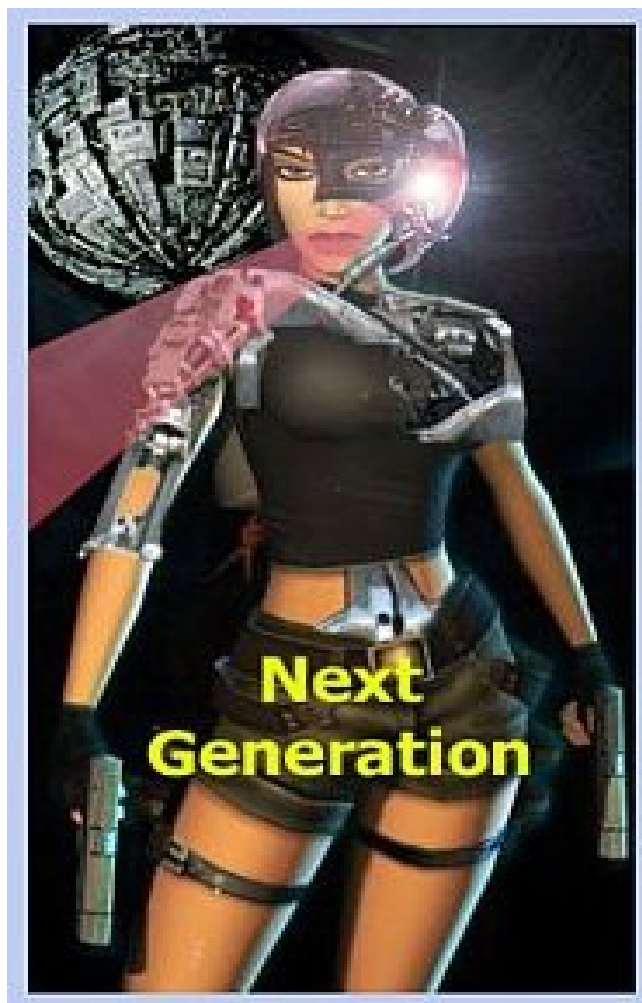


FIX TEXTURE CO-ORDINATES

Causes all texturing tools to apply textures to triangles without distortions. **toggle on/off**.

TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION



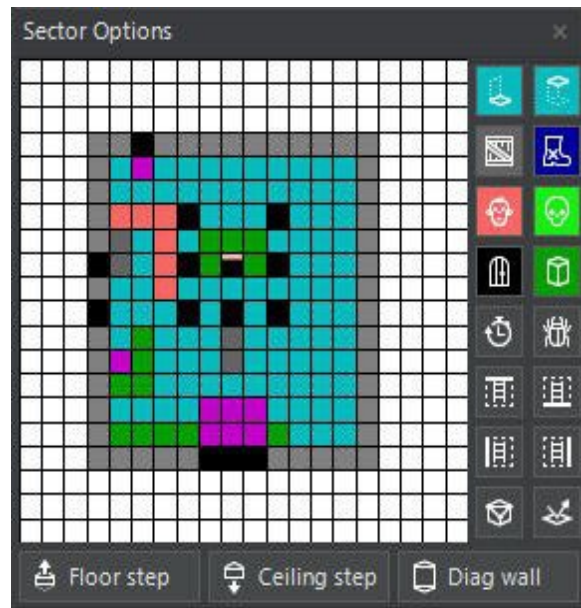
TOMB EDITOR

SECTOR OPTIONS WINDOW

TOMB EDITOR MANUAL

SECTOR OPTIONS

Sector Options Window



Set Floor			Set Ceiling
Set Box Section			Set Non Walkable Floor
Set Monkey Swing			Set Death Sector
Add Portal			Set Wall
Set Trigger Triggerer			Set Beetle Checkpoint
Climb North Wall			Climb South Wall
Climb West Wall			Climb East Wall
Ghost Block			Force Solid Floor

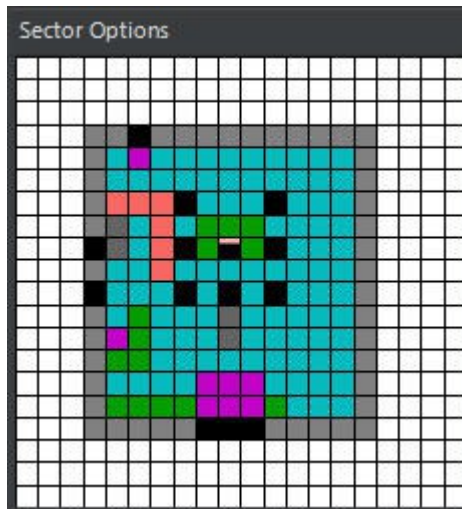


Set Diagonal
Floor Step

Set Diagonal
Ceiling Step

Set Diagonal Wall

TOMB EDITOR MANUAL



PLAN VIEW GRID

A top down view of the selected room will appear blue on this grid.

The surrounding grey squares represent the walls of the room and are not counted as part of the actual room dimensions (the grey squares do not represent wall thickness).

Doors or “portals” to adjacent rooms are indicated in black.

Within the room Walls appear as green squares.

Within the room Triggers appear as purple squares.

Within the room Monkey bars appear as pink squares.

TOMB EDITOR MANUAL



SET FLOOR

HOTKEY:

Changes a selected diagonal floor back to a normal floor surface.
Changes a selected floor back to a flat floor surface.
Changes a selected wall back to a flat floor surface.



SET CEILING

HOTKEY:

Changes a selected diagonal ceiling back to a normal ceiling surface.
Changes a selected ceiling back to a flat ceiling surface.
Changes a selected wall back to a flat ceiling surface.



SET BOX SECTION

HOTKEY:

Prevents enemies from passing over squares with this designation.



SET NON WALKABLE FLOOR

HOTKEY:

Sets a non walkable area. No Collision.



SET MONKEY SWING

HOTKEY:

Creates monkey swing squares.
Must always be placed on the lowest elevation below the “swing” textures.
If there is a water room below set the squares at the bottom of the water room.
On the ceiling of the highest room place a texture to indicate a monkey swing.
For more effect, in more recently built levels you can find an object that is visually a monkey bar.

To set a **monkey swing** select the square in the 3D View Editor window.
Or the square in the **Sector Options Window**.

Click on the monkey Swing button in the **Sector Options Window**.

To **Delete** a **monkey swing** select the square in the 3D View Editor window.
Or the square in the **Sector Options Window**.

Click on the Monkey Swing button in the **Sector Options Window**.



SET DEATH SECTOR

HOTKEY:

Makes a death square(s).

To set a **Death Sector** select the square in the 3D View Editor window.
Or the square in the **Sector Options Window**.

Click on the Death Sector button in the **Sector Options Window**.

To **Delete** a **Death Sector** select the square in the 3D View Editor window.
Or the square in the **Sector Options Window**.

Click on the Death Sector button in the **Sector Options Window**.

TOMB EDITOR MANUAL



ADD PORTAL

HOTKEY:

Creates either a vertical or horizontal portal (doorway) between rooms. Use “Portals” to create water, mist or cobweb passages and with any use of transparent textures such as window panes, cell bars and cyclone fences. These portal connections can either be on a horizontal or vertical plane.



SET WALL

HOTKEY:

Changes a selected square(s) into a wall.

Walls are always shades of green and able to be segmented for texturing purposes.

To return a wall square back to a flat floor, flat ceiling, click the **SET FLOOR** button, or click the **SET CEILING** button.



SET BEETLE CHECKPOINT

HOTKEY:

Mark for clockwork beetle.

For information on setup see a tutorial.



SET TRIGGER TRIGGERER

HOTKEY:

Used to designate a **Trigger Triggerer**.



CLIMB NORTH WALL

HOTKEY:

Creates a climbable North wall for Lara. The Inside of the square tile.



CLIMB SOUTH WALL

HOTKEY:

Creates a climbable South wall for Lara. The Inside of the square tile.



CLIMB WEST WALL

HOTKEY:

Creates a climbable West wall for Lara. The Inside of the square tile.



CLIMB EAST WALL

HOTKEY:

Creates a climbable East wall for Lara. The Inside of the square tile.

TOMB EDITOR MANUAL



ADD GHOST BLOCK

HOTKEY:

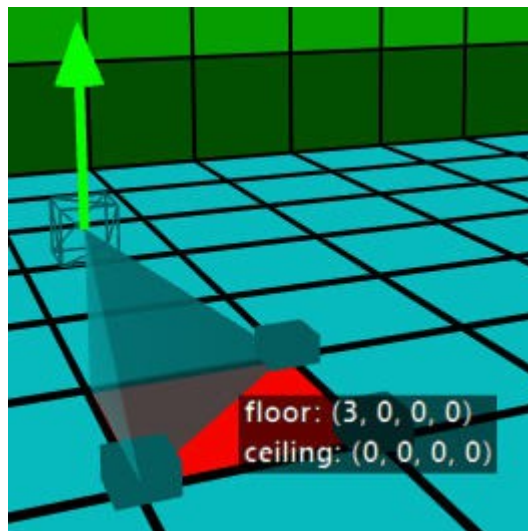
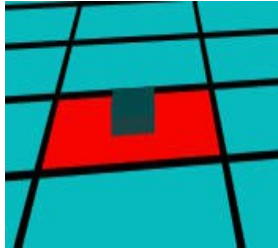
Adds a ghost block. This modifies the floor, ceiling collision.

Select a square(s) in the 3D View Editor window. Add the Ghost Block.

Select the Ghost Block icon on the square.

It will divide into an icon on each corner of the square.

Select an icon **mouse left click** and hold, move the mouse to drag it.

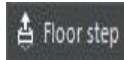


FORCE SOLID FLOOR

HOTKEY:

Sets an area as a walkable solid floor.

TOMB EDITOR MANUAL



SET DIAGONAL FLOOR STEP

HOTKEY:

Select square. **Left mouse button** click Floor step icon to select diagonal split.
Left mouse button click Floor step icon again to rotate triangle section.

The primary section is bright red.
The secondary section is dark red.

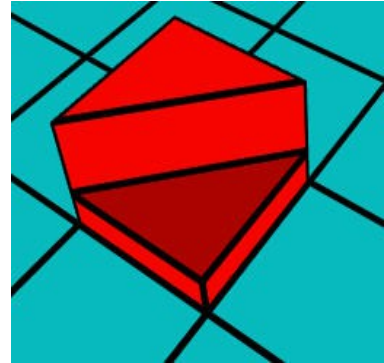
Use **Q** to raise the diagonal primary section.
Use **A** to lower the diagonal primary section.

Use **Y** to raise the diagonal secondary section.
Use **H** to lower the diagonal secondary section.

The secondary section can not be higher than the primary section.

The primary section can not be lower than the secondary section.

The primary section can only slope up on the diagonal corner from the secondary section.



Use **E** to raise second division section line from the floor.
Use **D** to lower second division section line from the floor.



SET DIAGONAL CEILING STEP

HOTKEY:

Select square. **Left mouse button** click Ceiling step icon to select diagonal split.
Left mouse button click Ceiling step icon again to rotate triangle section.

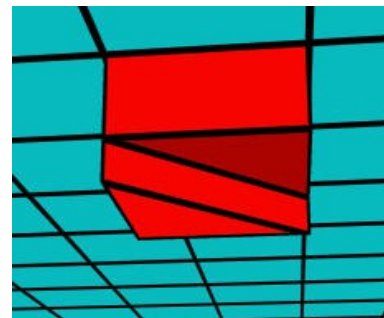
The primary section is bright red.
The secondary section is dark red.

Use **W** to raise diagonal primary section.
Use **S** to lower diagonal primary section.

Use **U** to raise the diagonal secondary section.
Use **J** to lower the diagonal secondary section.

The secondary section can not be lower than the primary section.
The primary section can not be higher than the secondary section.
The primary section can only slope down on the diagonal corner from the secondary section.

Use **R** to raise second division section line from the ceiling.
Use **F** to lower second division section line from the ceiling.



TOMB EDITOR MANUAL



SET DIAGONAL WALL

HOTKEY:

Select square. **Left mouse button** click Diagonal wall icon to select diagonal split.
Left mouse button click Diagonal wall icon again to rotate triangle section.

The primary section is bright red.

The secondary section is dark red.

Use **Q** to raise division section line from the floor.

Use **A** to lower division section line from the floor.

Use **E** to raise second division section line from the floor.

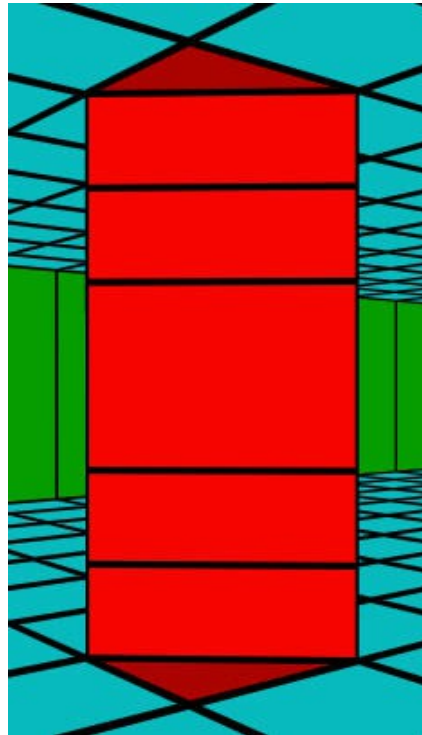
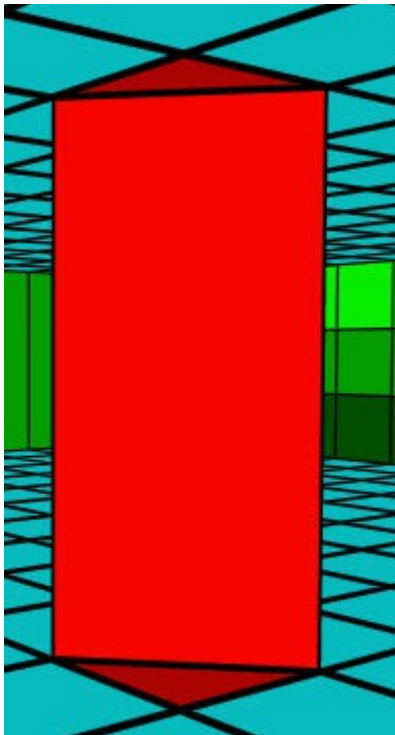
Use **D** to lower second division section line from the floor.

Use **W** to raise division section line from the ceiling.

Use **S** to lower division section line from the ceiling.

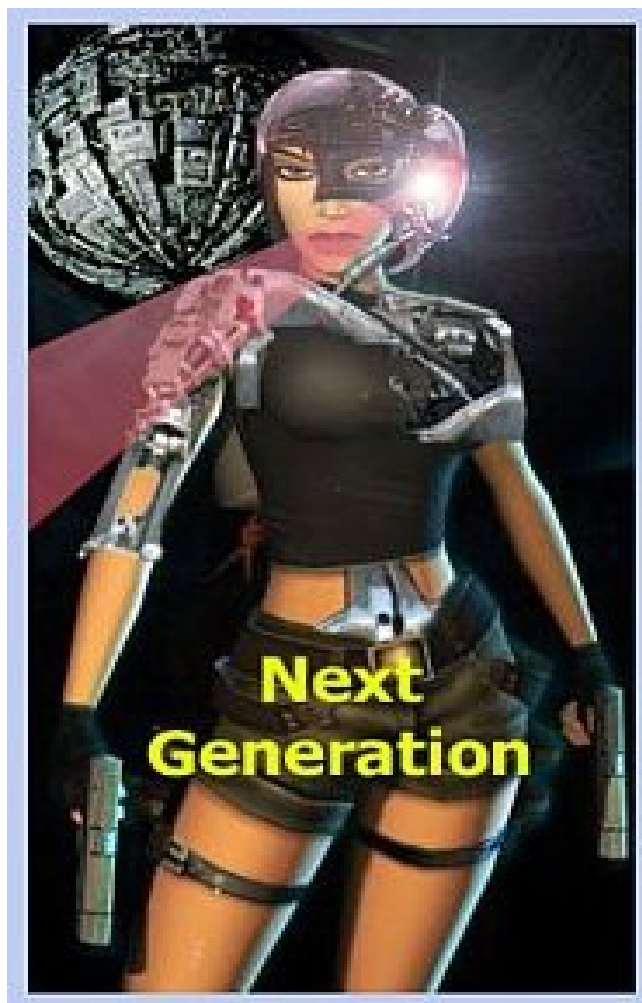
Use **R** to raise second division section line from the ceiling.

Use **F** to lower second division section line from the ceiling.



TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION



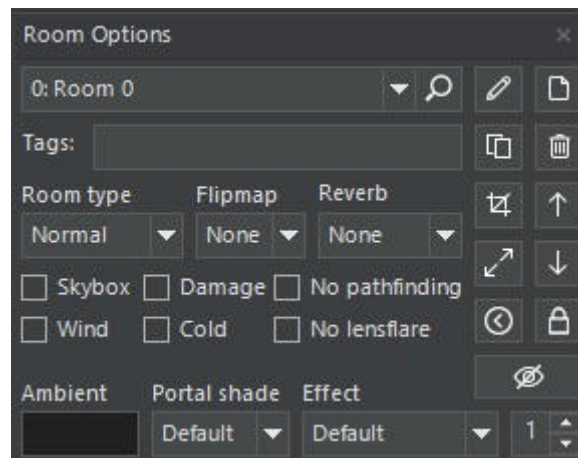
TOMB EDITOR

ROOM OPTIONS WINDOW

TOMB EDITOR MANUAL

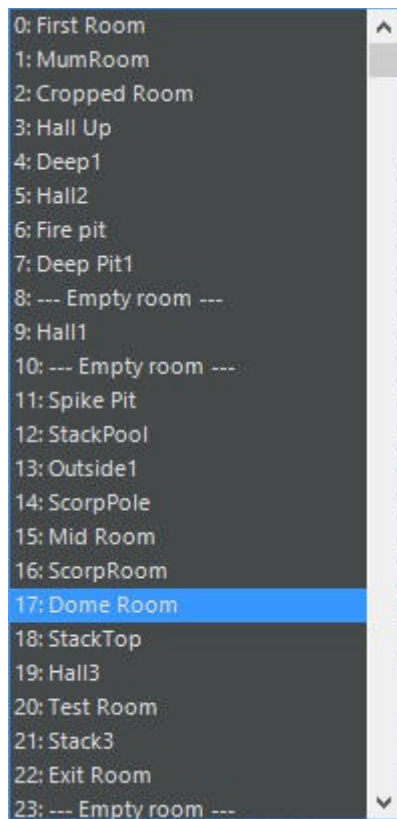
ROOM OPTIONS

Room Options Window



Room Number/Name

Select the required room to edit.



TOMB EDITOR MANUAL



SEARCH

Input text to find the required room.

TAGS

Sets room tags.

Room Type : Select a Room type from the list

Normal
Water
Quicksand
Rain 1
Rain 2
Rain 3
Rain 4
Snow 1
Snow 2
Snow 3
Snow 4

Rain 1 is small droplets (rain drizzle), Rain 4 is big droplets (rain monsoon)
Snow 1 is small flakes (snow drizzle), Snow 4 is big flakes (snow blizzard)

Flip Map: None, 0 to 15

Flip maps are used to create events, changes of state.

Flipped rooms are basically copies of the existing room that can be triggered to turn on and off. Flip maps are great for floods, earthquakes, changing water currents and so forth.

Reverb: None, Small, Medium, Large, Pipe

This is the echo effect for the room.

SKYBOX

Set the Sky-box to show the horizon used in the wad and the sky in the room.

That is the Room is designated as a Outside area.

In the Script file have the following in the Level section:

```
Horizon=  ENABLED
Layer1=   128,128,128,0      (Red, Blue, Green, Scroll speed)
ColAddHorizon=  ENABLED
```

TOMB EDITOR MANUAL

DAMAGE

Set room to damage Lara (**TRNG only**).

NO PATHFINDING

Exclude from path finding.

WIND

Set room to windy. **Lara's ponytail** hair moves.

COLD

Set room to cold (**TRNG only**). Lara blows cold breath.

NO LENSFLARE

Disable Global Lens flare.

Ambient

The room ambient light. Set a color.

The Default Ambient Light used in the Original Editor is:

Red = 128, Blue = 128, Green = 128.

Portal Shade : **Default**
 Smooth
 Sharp

Effect: **None**
 Default
 Reflection
 Glow
 Move
 Glow and Move
 Mist

Reflection Applies light reflections on the tiles from the water movement.

Glow Makes the room Glow.

Move Makes the floor move in waves like a water surface.

Mist The **Mist** room (like a water room) must be fairly shallow since Lara would look a little odd walking through eye level mist. If you make a larger area of mist and want to poke some “islands” through it, build the top portions of the “islands” on the upper of the two rooms before you make a portal opening. To create an effect of mist over water build a shallow mist room above the water room.

TOMB EDITOR MANUAL

Light Transform Effect Strength box :

For water: Height of the waves on the water surface 0 to 3.
0 is still water
3 is large waves.

Edit Room Name

Duplicate Room

Crop Room

Split Room

Previous Room

Hide Room



New Room

Delete Room

Room Up

Room Down

Lock Room

TOMB EDITOR MANUAL



EDIT ROOM NAME

HOTKEY:

Edit the room name from the default text.



ADD NEW ROOM

HOTKEY:

Add a new room.



DUPLICATE ROOM

HOTKEY: CTRL + SHIFT + ALT + U

Makes a copy of the room.



DELETE ROOM

HOTKEY: CTRL + SHIFT + ALT + D

Delete the room.



CROP ROOM

HOTKEY: CTRL + SHIFT + ALT + O

Crop the size of the room.



ROOM UP

HOTKEY: ALT + PAGE UP

Move the room vertically up one click per **mouse left button** press.



SPLIT ROOM

HOTKEY: CTRL + SHIFT + ALT + S

Split the room into two rooms.



ROOM DOWN

HOTKEY: ALT + PAGE DOWN

Move the room vertically down one click per **mouse left button** press.



PREVIOUS ROOM

HOTKEY:

Go to the previous room for editing.



LOCK POSITION

HOTKEY:

Lock the position of the room.

Locks a room so that it can not move in the 2D Editor View.



HIDE ROOM

HOTKEY:

Hides the room.

TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION



TOMB EDITOR

ITEM BROWSER WINDOW

TOMB EDITOR MANUAL

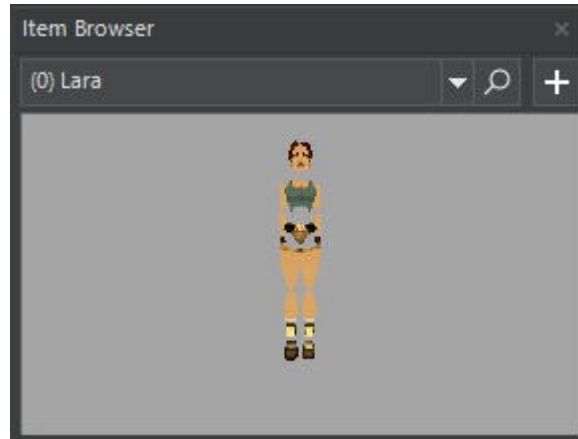
ITEM BROWSER

Item Browser Window

Select object name to display list of objects in the wad.

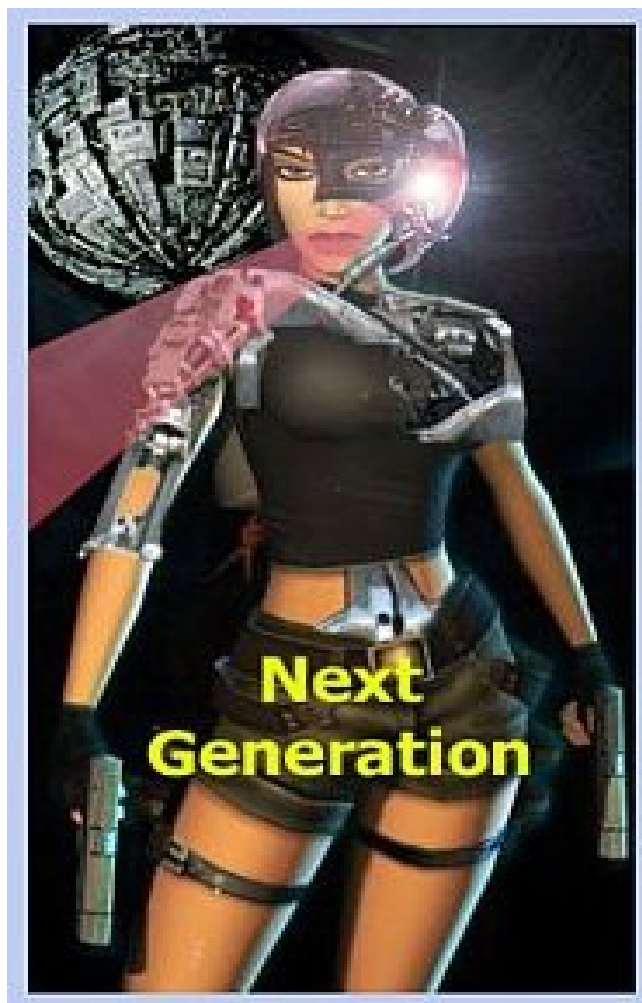
Select the object from the list to display it in the browser.

Drag the object into the 3D View Editor window to use it.



TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION



TOMB EDITOR

IMPORTED GEOMETRY

IMPORTED GEOMETRY BROWSER

Imported Geometry Browser Window

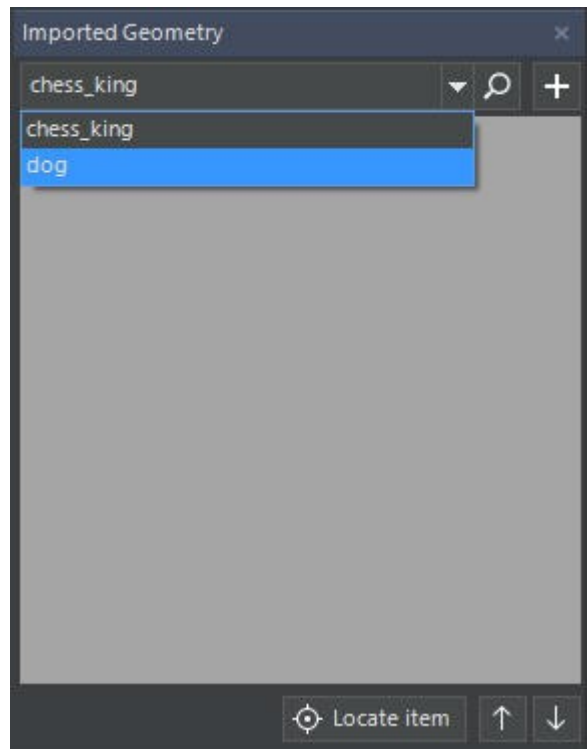
To display this window it is necessary to make space on the main interface by temporarily removing some unwanted windows (for example the Room Options Window). After you have finished the default windows display can be restored by selecting the **pull down menu Window** and selecting **Restore default format**.

Tomb Editor allows for importing of 3D objects stored in various popular 3D software formats directly into the rooms of levels. In the main menu go to **Items > Add imported geometry**.

Select the **Add Geometry** icon. The cursor will change into a cross. Click on a sector in the room to place a placeholder mesh for the imported geometry object. **Double click the placeholder** to open up the Imported Geometry Settings window. Press the **+ button** to load your object file and press **Assign** to assign the loaded object to the currently selected placeholder and press **OK** to confirm.

You can load multiple objects in the Imported Geometry Settings window but only one can be assigned to a current placeholder. Your imported geometry object assignment will be saved with the Prj2 file, but the object file must be kept at the same location in order to load correctly later.

Select the Imported Geometry Item then select the Locate Item button to find it in the 3D View.



TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION



TOMB EDITOR

3D EDITOR WINDOW

LIGHTING VIEW

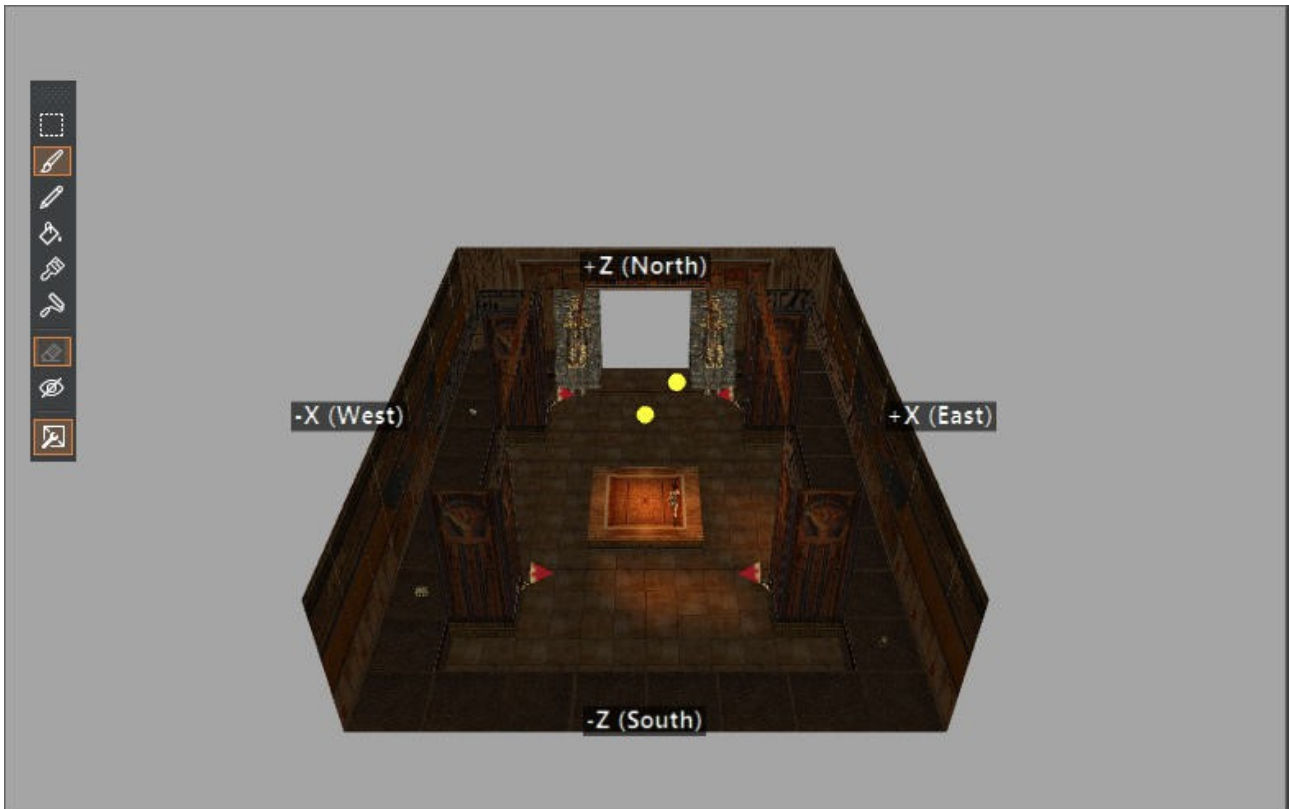
TOMB EDITOR MANUAL



LIGHTING VIEW

HOTKEY: F4

Displays a 3D textured view of the room with lighting effects in the Editor window.
(The example shown is room 0 from the tut1 project.)



This is the view to see how the room will look during the game.
Use this view to adjust the lighting and the lights.

- | | |
|-------------------------------|---|
| Right Mouse Button | Rotates the room in 3D View. (Move the mouse). |
| Middle Mouse Button | Pans the 3D View camera up, down, left & right. |
| Moving the mouse wheel | Zooming in and out. |

To add lights use the **3D View Editor window**.
Select the light in the Lighting Panel Window and then
select where to place it in the room in the 3D View Editor window.

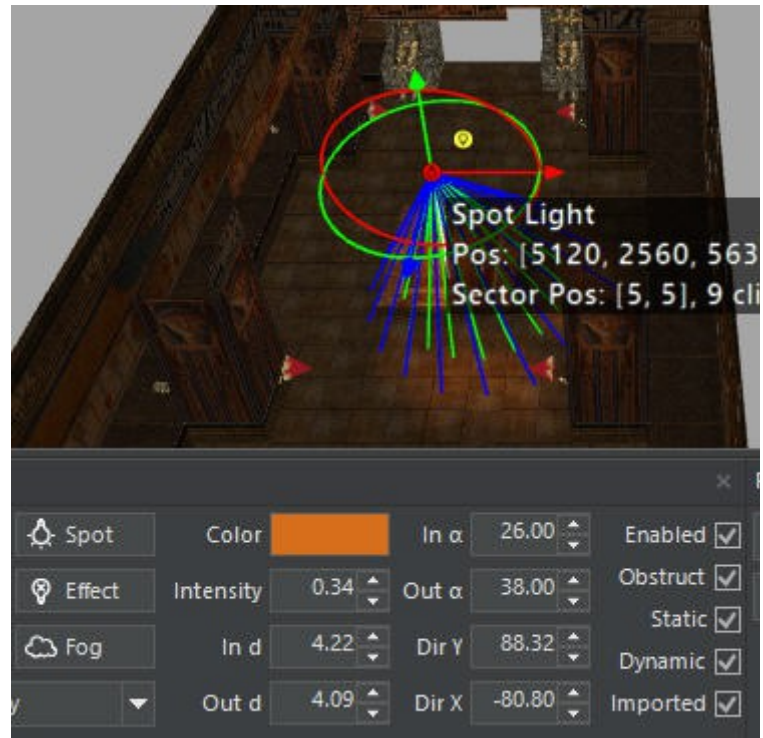
Then select the Lighting View to edit and see the Light effect in the room.

TOMB EDITOR MANUAL

To adjust the Light object values select the box in the Lighting Panel and edit the value.

The Light object rotation can be set to exact degrees.

The effect of the light in the room is displayed as values in the Lighting Panel are edited.



The most important part of the whole Tomb Raider experience is the lighting. Without careful lighting there is no atmosphere.

There are no exact rules for lighting rooms and every game has different lighting. The textures, the time of day, the location of the story and other factors affect the lighting. First build the room and texture it. There should be no lighting applied during the building and texturing stage. Use a room starting ambience of 128,128,128.

TOMB EDITOR MANUAL

ADDING LIGHTING

The first thing to do is set the room ambience down to 32,32,32.

For an outside room put a **sun bulb** in and adjust the X axis to 20 so it lights a part of the floor. The Y axis is turned until the best effect is found and decrease the intensity to about 0.25.

ADDING FLAMES

Use flame emitters and wall torch flame emitter2 for lighting effect.

ADDING LIGHT BULBS

Use light bulbs colored red or yellow with the radiance diameter in the range 2 to 5 and the intensity softened to give a natural glow.

WATER

Adjust the water room to 0, 0, 32 for a bluish water.

Adjust the water room to 0, 32, 0 for greenish water.

Adjust the water room to 32, 0, 0 for red water (poison water for example).

A simple bulb on the surface and turned the colour of the water will enhance the effect.

SHAFTS OF LIGHT

Open the roof and let some light in from the sky, sunlight or moonlight.

This can be very dramatic, especially in darkish levels like caves or jungles.

A bulb placed on the ceiling or wall where the light object shines down and one on the floor to simulate light hitting the ground can produce some good effects.

TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION



TOMB EDITOR

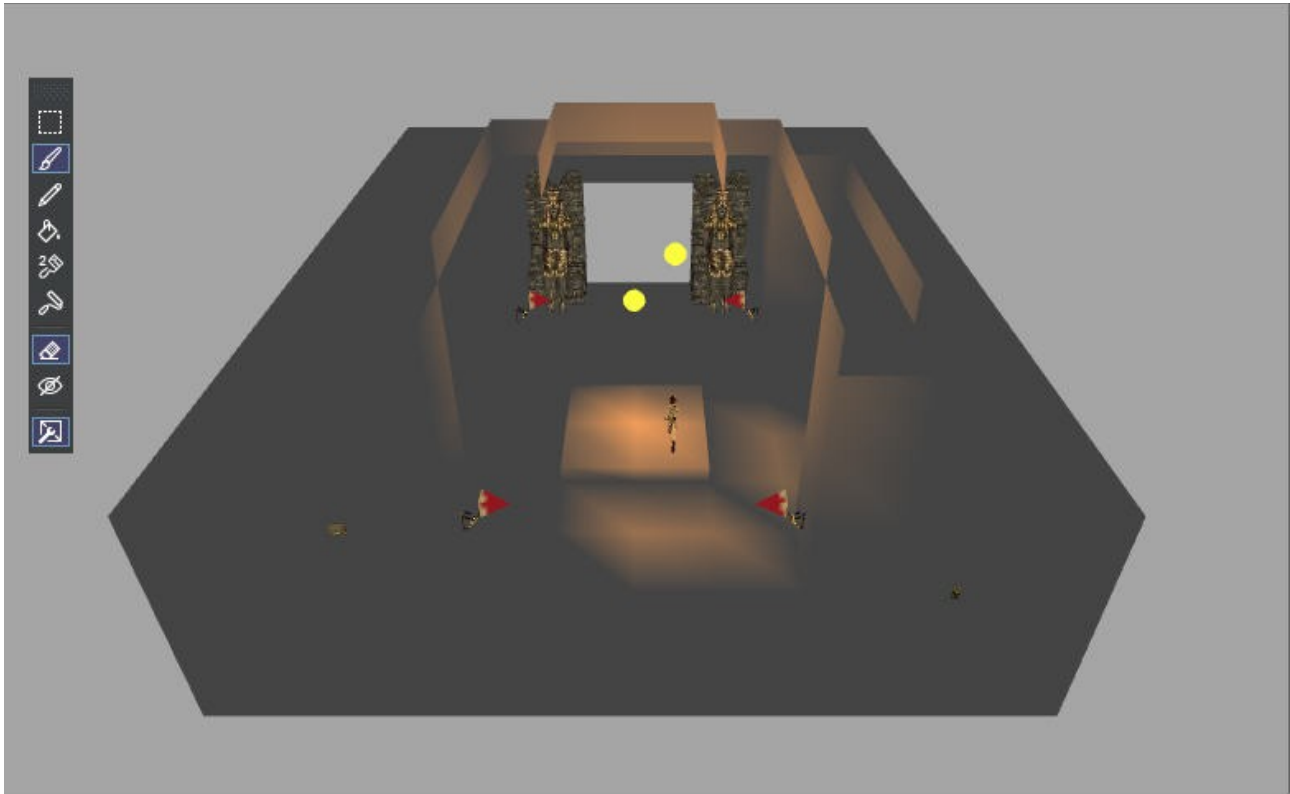
**LIGHTING VIEW WINDOW
DRAW UNTEXTURED**

TOMB EDITOR MANUAL



LIGHTING VIEW DRAW UNTEXTURED **HOTKEY:**

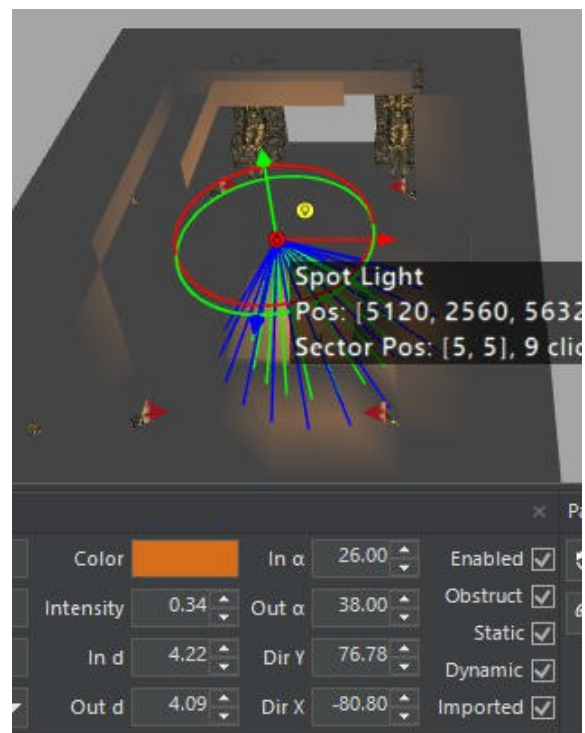
Displays a 3D untextured view of the room with lighting effects in the Editor window. The example shown is room 0 from the tut1 project.



The image to the right shows the light effect in the untextured view of the room.

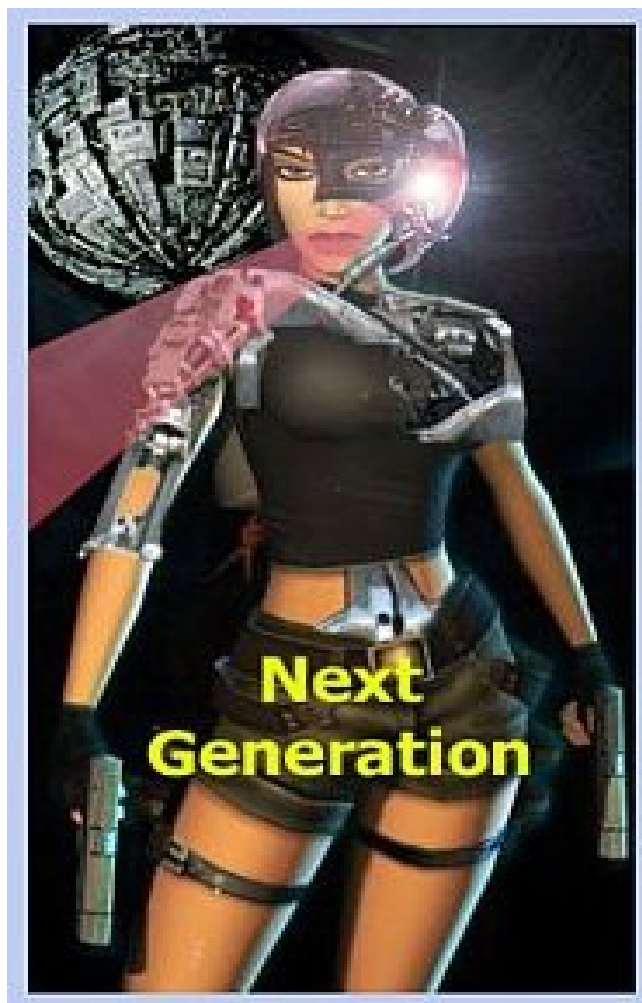
Also see the Lighting View.

The effect of the light in the room is displayed as values in the Lighting Panel are edited.



TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION



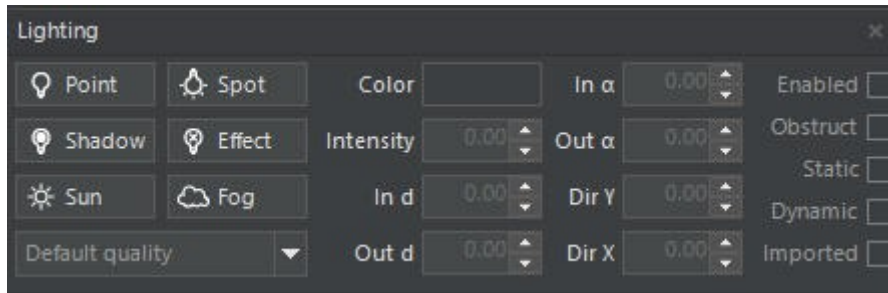
TOMB EDITOR

LIGHTING PANEL WINDOW

TOMB EDITOR MANUAL

LIGHTING

Lighting Window



Default quality ?

Color Assign a color or Set the RGB (Red, Green, Blue) values (0 to 255) for color effects.

Intensity Intensity of the light.

In d (hot spot) Inner radius or distance.
Out d (fall off) Outer radius or distance.

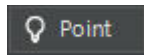
In alpha Inner cone angle.
Out alpha Outer cone angle.

Dir Y Direction of the light in the Y Axis (horizontal rotation).
Dir X Direction of the light in the X Axis (vertical rotation).

Enabled The light is enabled.
Obstruct Determines if the effect of the light is obstructed by room geometry.
Static Use the light for room geometry lighting.
Dynamic Use the light to affect moveables in the game.
Imported Use the light to affect imported objects in the game.

TOMB EDITOR MANUAL

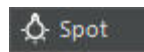
LIGHT PLACEMENT BUTTONS



Point Light

Places a point light in the room.

Color	Assign a color or Set the RGB (Red, Green, Blue) values (0 to 255) for color effects.
Intensity	Intensity of the light.
In d (hot spot)	Inner radius or distance.
Out d (fall off)	Outer radius or distance.
Enabled	Set
Obstruct	Set
Static	Set
Dynamic	Set
Imported	Set

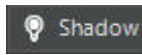


Spot Light

Places a spot light in the room.

Color	Assign a color or Set the RGB (Red, Green, Blue) values (0 to 255) for color effects.
Intensity	Intensity of the light.
In d (hot spot)	Inner radius or distance.
Out d (fall off)	Outer radius or distance.
In alpha	Inner cone angle.
Out alpha	Outer cone angle.
Dir Y	Direction of the light in the Y Axis (horizontal rotation).
Dir X	Direction of the light in the X Axis (vertical rotation).
Enabled	Set
Obstruct	Set
Static	Set
Dynamic	Set
Imported	Set

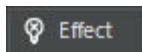
TOMB EDITOR MANUAL



Shadow

Places a shadow in the room.

Color	Assign a color or Set the RGB (Red, Green, Blue) values (0 to 255) for color effects.
Intensity	Intensity of the light.
In d (hot spot)	Inner radius or distance.
Out d (fall off)	Outer radius or distance.
Enabled	Set
Obstruct	Set
Static	Set
Dynamic	Set
Imported	Set



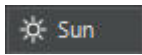
Effect Light

Places an effect light in the room.

Only affects square where it is placed.

Color	Assign a color or Set the RGB (Red, Green, Blue) values (0 to 255) for color effects.
Intensity	Intensity of the light.
In d (hot spot)	Inner radius or distance.
Out d (fall off)	Outer radius or distance.
Enabled	Set

TOMB EDITOR MANUAL



Sun

Places a sun in the room.

Only one sun per room enabling some good lighting effects, including casting shadows.

Color

Assign a color or Set the RGB (Red, Green, Blue) values (0 to 255) for color effects.

Dir Y

Direction of the light in the Y Axis (horizontal rotation).

Dir X

Direction of the light in the X Axis (vertical rotation).

Enabled

Set

Obstruct

Set

Static

Set

Dynamic

Set

Imported

Set



Fog Bulb

Places a fog bulb in the room.

Used to create volumetric fog.

Often used in conjunction with flip effects.

Only works with Volumetric FX turned on in the Setup menu.

Color

Assign a color or Set the RGB (Red, Green, Blue) values (0 to 255) for color effects.

Intensity

Intensity of the light.

In d (hot spot)

Inner radius or distance.

Out d (fall off)

Outer radius or distance.

Enabled

Set

TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION



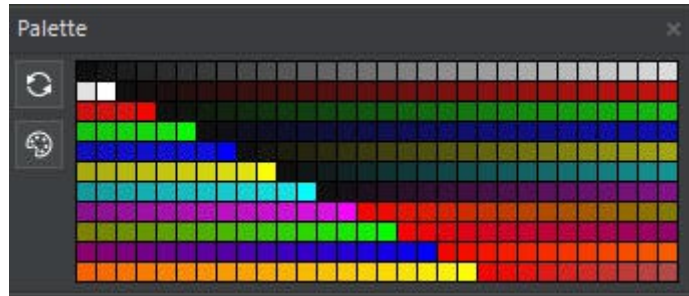
TOMB EDITOR

COLOR PALETTE WINDOW

TOMB EDITOR MANUAL

PALETTE

Palette Window



Provides colors used for transparency.

Also a quick way to assign color to a light by selecting the light then clicking a color square. The light will assume the RGB values of the square.



Reset the color Palette to the defaults.



Sample the palette from a texture.

TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION

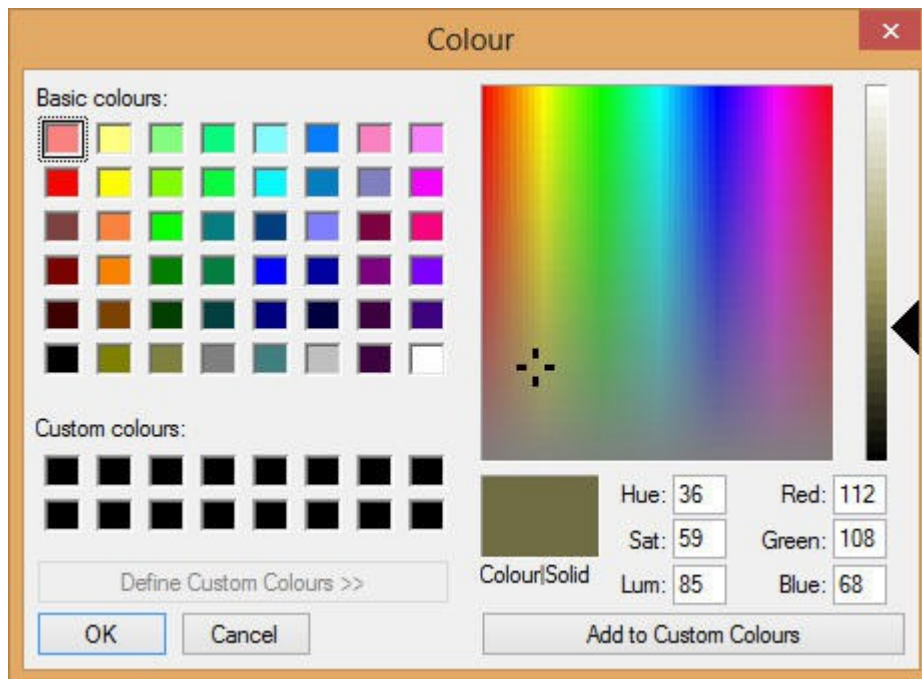


TOMB EDITOR

COLOR SELECTOR WINDOW

TOMB EDITOR MANUAL

COLOR



This is the standard color selector used in painting software.
Provides colors used for transparency and lights.

Select the light then click the color box to display this menu.
Set a color and the light will assume the RGB values of the selected color.

Select the Room ambient color box to display this menu.
Set a color and the room will assume the RGB values of the selected color.

The Original Editor Default Ambient Light is: **Red = 128, Blue = 128, Green = 128.**
This is good for the building stage.

For the final lighting stage: Set the room ambience initially down to 32, 32, 32.
Then add Lights, flames, wall torches etc. to obtain a good effect. See a tutorial.

TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION



TOMB EDITOR

TEXTURE PANEL WINDOW

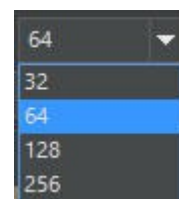
TOMB EDITOR MANUAL

TEXTURE PANEL

Texture Panel Window



Double Sided Button

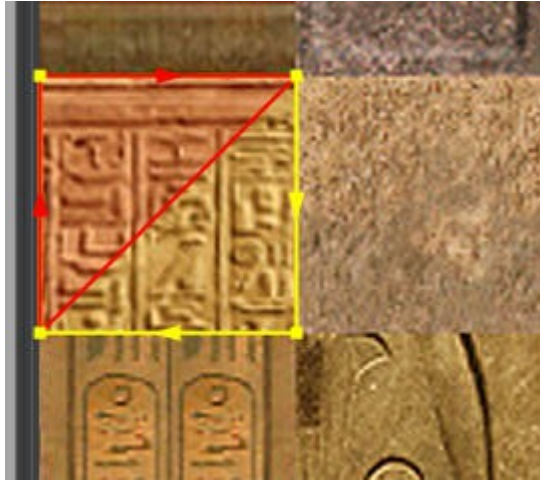


Tile Map Size

It is possible to have different tile sizes in the same level.
Select the Tile Map Size to select and then select a texture tile to apply.

TOMB EDITOR MANUAL

Selecting a normal texture tile as set by the Tile mapping size (64, 128 pixels etc.)



It is possible to move the tile selection points to have a quadrilateral shape that is not a square. Useful if you require a mix of tiles to be textured on a sector square.

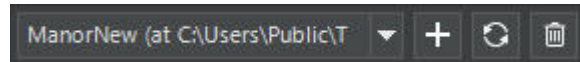


The **Double Sided Button (SHIFT + 2)** sets the texture tile to display from both sides. This function toggles on/off by clicking on the icon button.

This function is required for water, cobwebs etc. where Lara can be located in either of the adjoining portal rooms.

It is easier to apply this function by doing **SHIFT + 2** to ensure the effect is applied.

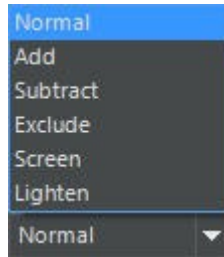
TOMB EDITOR MANUAL



Texture File Loaded

Add Replace Delete
Texture.

TEXTURE MODES



Normal:	Solid Tile
Add:	Transparent tile (water, cobweb etc.)
Subtract:	..
Exclude:	..
Screen:	..
Lighten:	..

The Normal sets a solid tile to be put in the 3D Texture view.

The Add sets a transparent tile to be put in the 3D Texture view. (water, cobweb etc.)

The Subtract sets a ? tile to be put in the 3D Texture View.

The Exclude sets a ? tile to be put in the 3D Texture View.

The Screen sets a ? tile to be put in the 3D Texture View.

The Lighten sets a ? tile to be put in the 3D Texture View.

Rotate Texture



Mirror Texture

The rotate texture changes the **active triangular section** for the active tile.

The Mirror texture flips the active triangular section for the active tile.

The active triangle section is red.



TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION

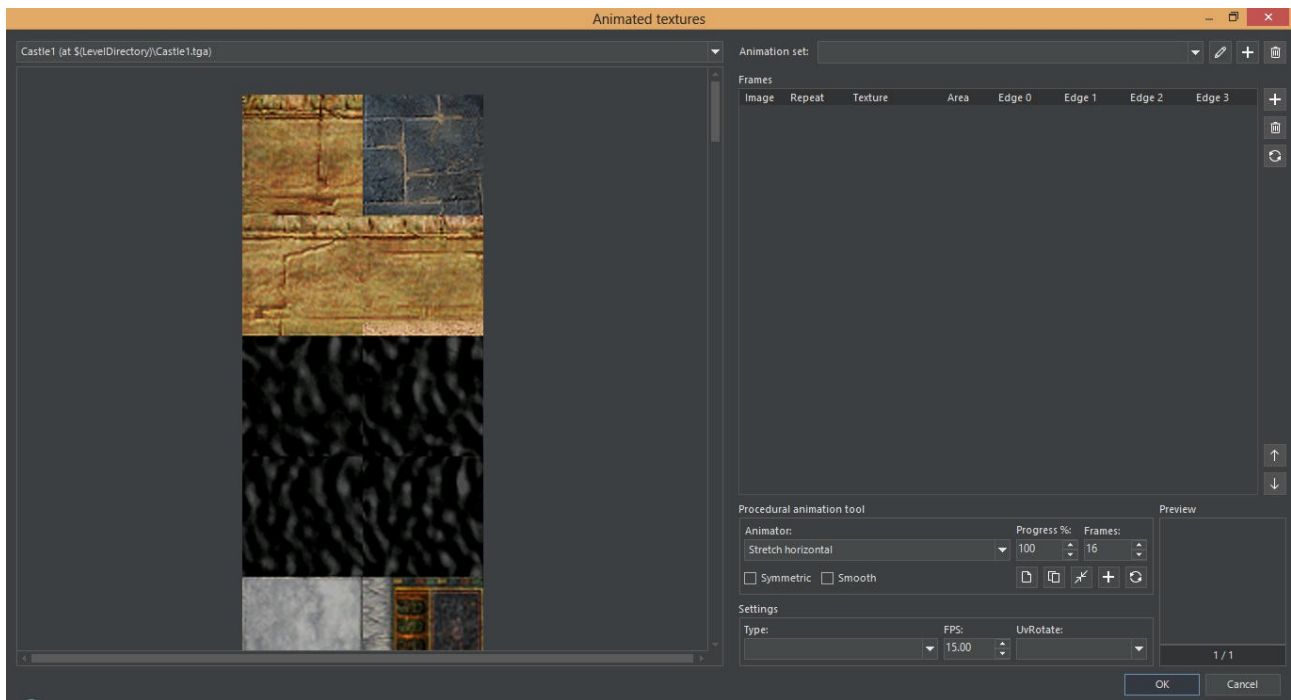


TOMB EDITOR

ANIMATED TEXTURES WINDOW

TOMB EDITOR MANUAL

ANIMATED TEXTURES



Animation Set

Animation Name

Rename



Add Delete



Select **Pencil** to edit the name of the Animation set if required.

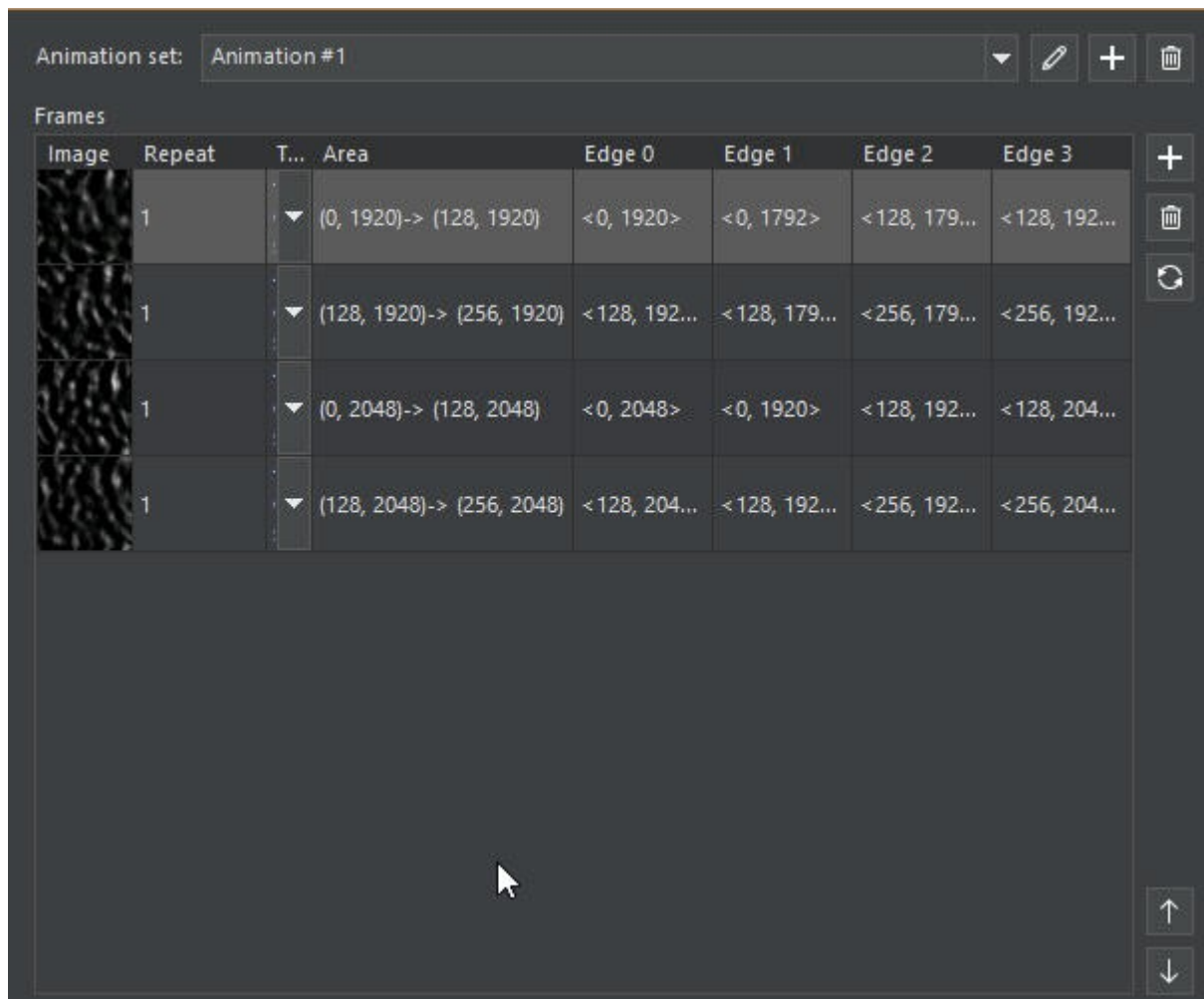


Select **+** to start a new Animation set.



Select **Bin** to delete an Animation set.

TOMB EDITOR MANUAL



Select + to Add a frame to the Animation set.



Select Bin to delete the selected Frame from the Animation set.



Select Rotate to replace the selected frame with the selected texture tile.



Select Frame Up

Select a frame upwards in list.



Select Frame Down

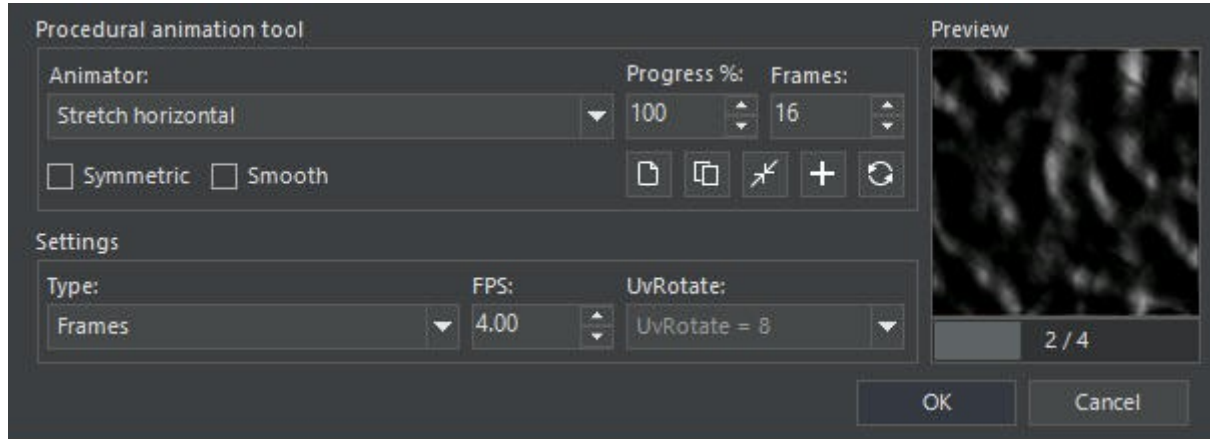
Select a frame downwards in list.

Edit the Repeat value for the Frames Animation to slow the animation down. That is higher values display the frame for longer.

TOMB EDITOR MANUAL

Procedural animation tool

The Preview window displays the expected animation.



Animator : [Stretch horizontal](#)
[Stretch vertical](#)
[Scale](#)
[Skew horizontal left diagonal](#)
[Skew horizontal right diagonal](#)
[Skew vertical left diagonal](#)
[Skew vertical right diagonal](#)
[Spin](#)
[Pan horizontal](#)
[Pan vertical](#)
[Shake](#)

Progress % : Effect progress or strength value.
Frames : Amount of resulting animation frames.
Symmetric : Make animation Symmetric.
Smooth : Ease in ease out smooth animation.



Generate a new Animation.



Generate and make a copy of the current Animation.



Generate and merge into the current Animation.



Generate and add frames after the current sequence frame.



Generate and replace the current Animation.

TOMB EDITOR MANUAL

Settings

Type :	Frames	Frame sequence
	UV Rotate	Scrolling (Single Texture)
	P Frames	Images sequence to select by flip effect.

FPS: The frames per second for the Animation.

UV Rotate : The value for the number of pixel lines to rotate every frame.
Scrolling texture for the waterfall.
The default value 8 is used in TR4.
Negative values reverse the scroll direction.

TOMB EDITOR MANUAL

BASIC WATER TEXTURES **Frames**

These are the simplest to setup.

This is used for water, lava, hot mud etc.

To do this start a new animating range consisting of a number of textures.

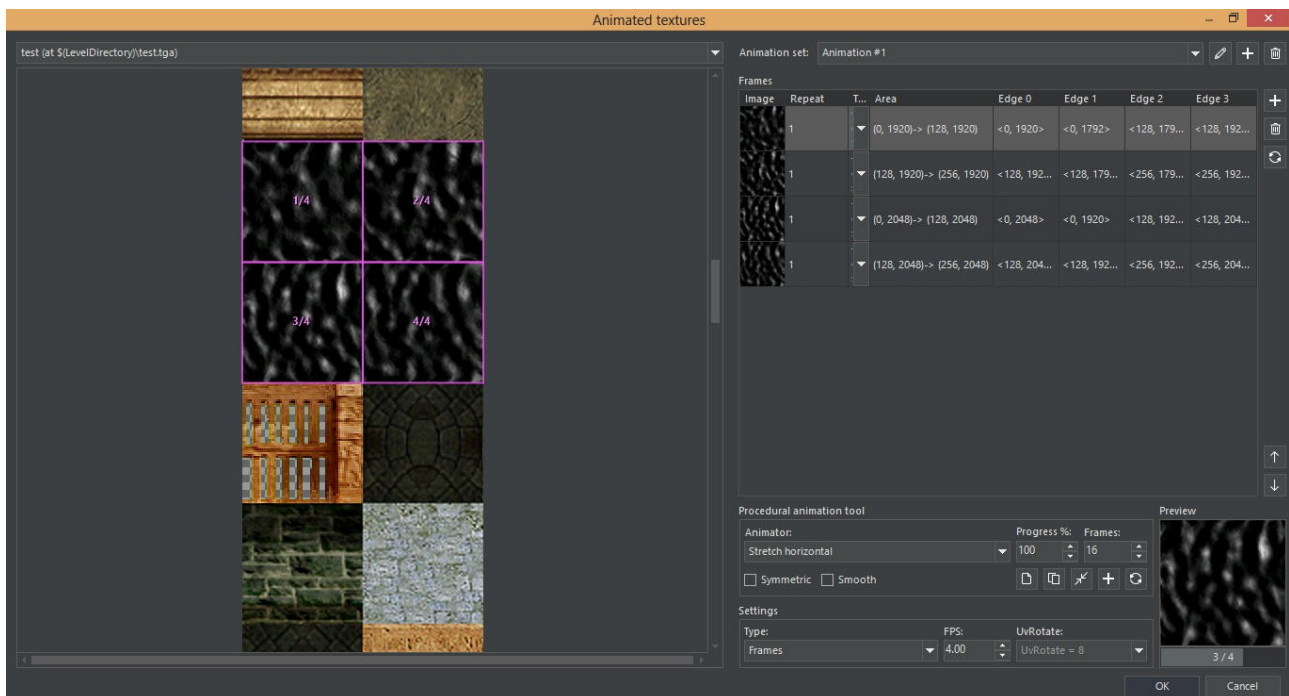
In the Settings set the Type to **Frames**.

Select the required textures by clicking.

Click the Add frame button.

The textures should be in a sequence in the project texture file.

In the Settings select a frames per second value.



TOMB EDITOR MANUAL

SCROLLING TEXTURES **UV Rotate**

These are the waterfall textures used in the Angkor Wat level of TR4 and also the falling sand and Lava textures used in TR4.

To do this start a new animating range consisting of one texture.

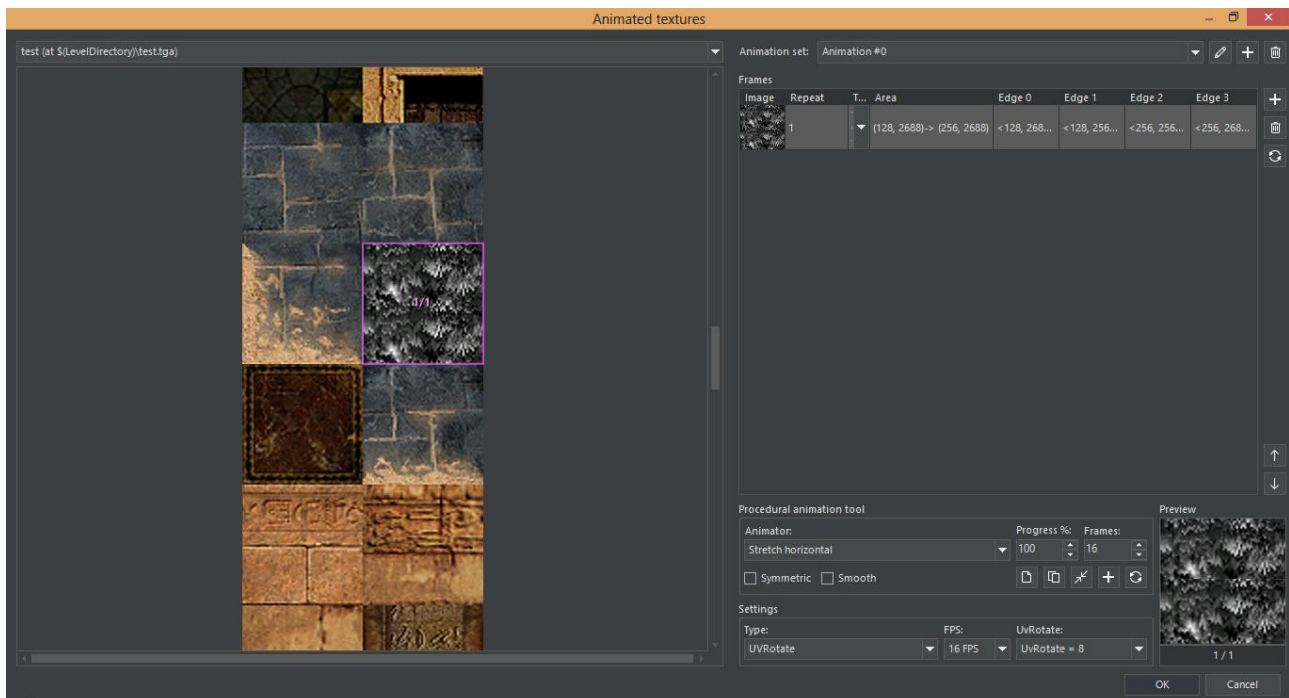
In the Settings set the Type to **UV Rotate**.

Select the required texture by clicking.

Click the Add frame button.

In the Settings select a UV Rotate value.

In the Settings select a frames per second value.



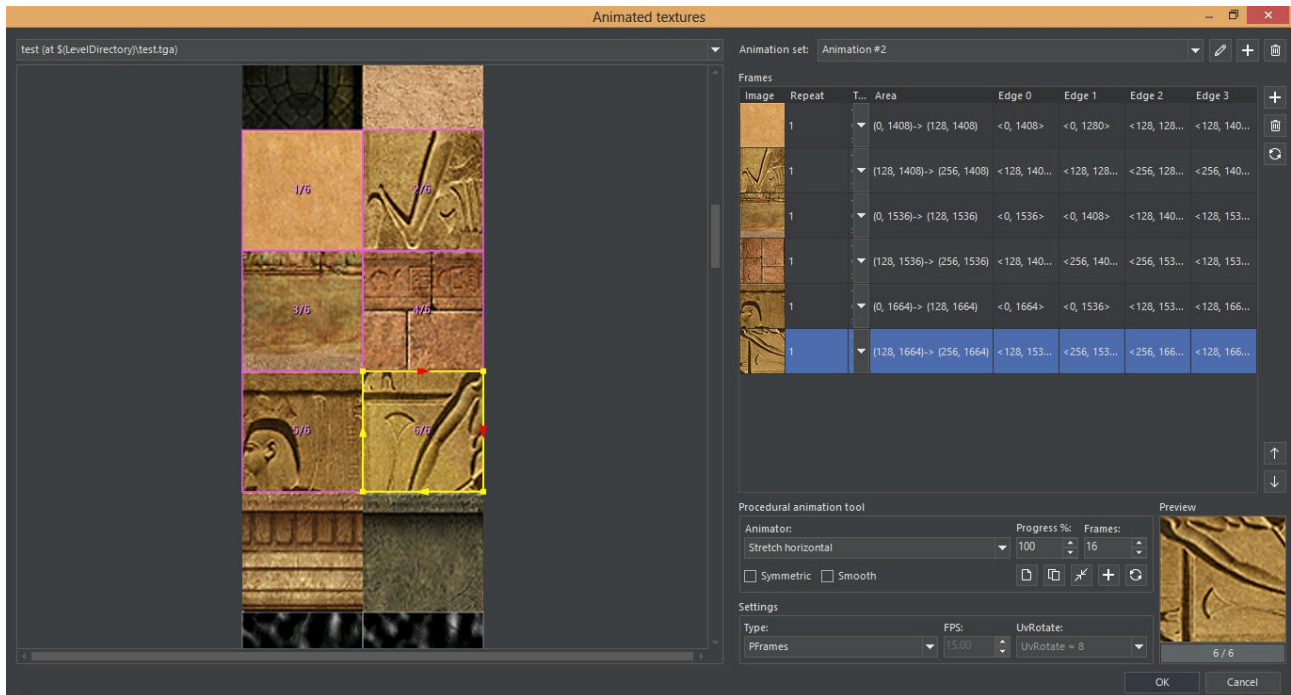
TOMB EDITOR MANUAL

PICTURE FRAMES

P Frames

That is picture frames. This allows you to change the texturing of a room without using **flip maps**. For example you could change the ground cover from grass to snow by using a **flip effect**.

Use the flip effect **F58** for the first P-Frames set and **F59** for the second P-Frames set.



To do this start a new animating range consisting of 2 or more textures.

In the Settings set the Type **P-Frames**.

Select the required texture by clicking and click the Add frame button.

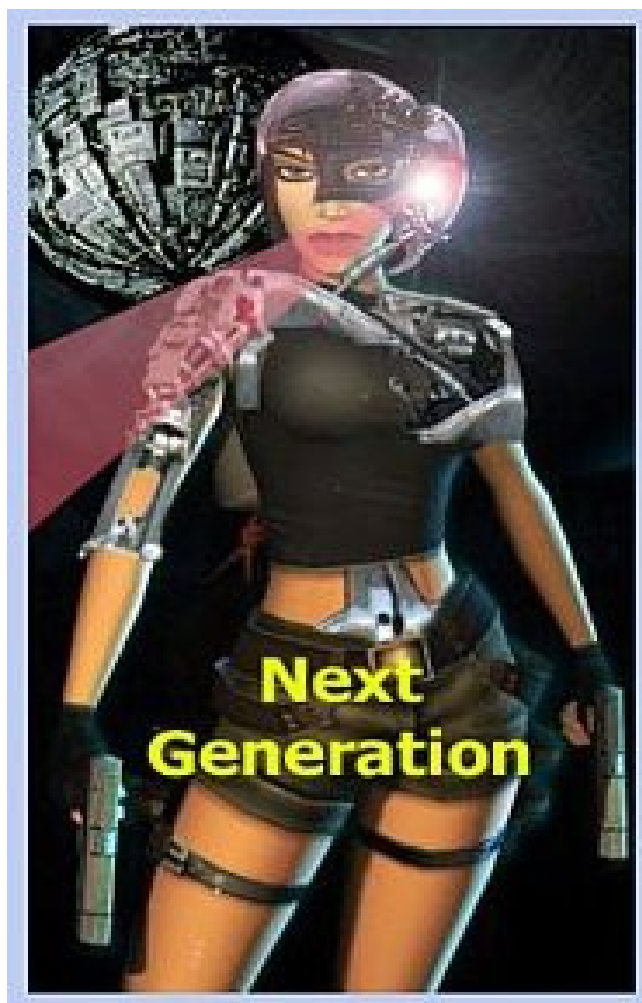
The textures should be in a sequence in the project texture file.

Apply a trigger to reference the texture. The **[E]** Extra parameter is replaced by the texture referenced by the **(&)** Timer parameter.



TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION

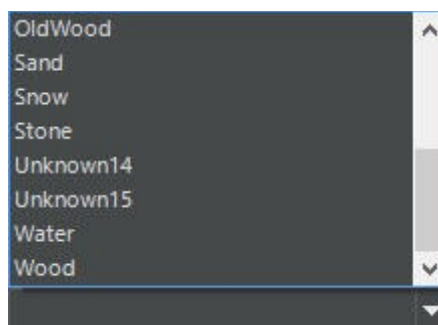
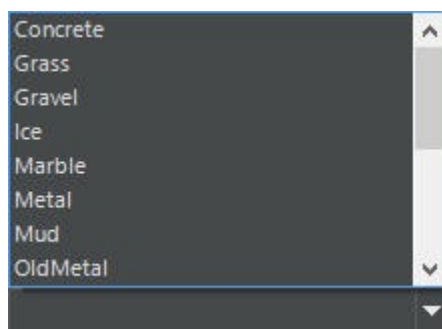
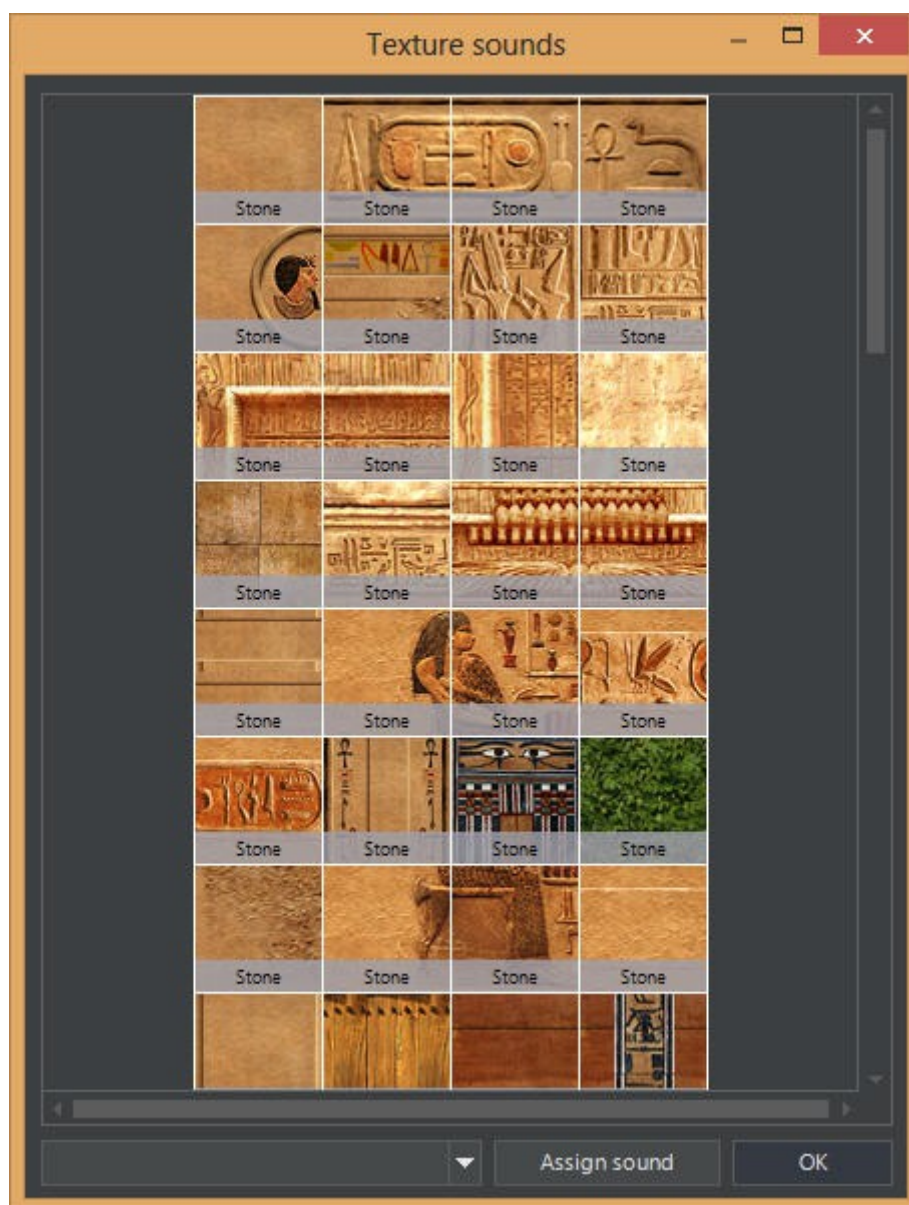


TOMB EDITOR

TEXTURE SOUNDS WINDOW

TOMB EDITOR MANUAL

TEXTURE SOUNDS



Adds a sound when Lara walks on a texture tile.

TOMB EDITOR MANUAL

To add footstep sounds for Lara to a texture tile do the following:

Select a texture tile.

Select a surface type from the list.

Select **Assign Sound** to set the sound to the texture.

Select **OK** to leave the window and return to the **Tomb Editor main interface**.

The available surface types and footstep sounds for Lara are as follows:

SURFACE	Ref.	TR4 SOUND NAME	TR4 SOUND FILES
Concrete	0	LARA_FEET	foot01 foot02 foot03 foot04
Grass	291	FOOTSTEPS_SAND_&_GRASS	fs_snd1 fs_snd2
Gravel	290	FOOTSTEPS_GRAVEL	fs_grv1 fs_grv2
Ice	* 289	*	fs_ice1 fs_ice2
Marble	293	FOOTSTEPS_MARBLE	fs_mb1 fs_mb2 fs_mb3 fs_mb4
Metal	294	FOOTSTEPS_METAL	fs_met1 fs_met2
Mud	288	FOOTSTEPS_MUD	fs_mud1 fs_mud2
Old Metal	294	FOOTSTEPS_METAL	fs_met1 fs_met2
Old Wood	292	FOOTSTEPS_WOOD	fs_wd1 fs_wd2
Sand	291	FOOTSTEPS_SAND_&_GRASS	fs_snd1 fs_snd2
Snow	* 293	*	fs_sn1 fs_sn2 fs_sn3
Stone	0	LARA_FEET	foot01 foot02 foot03 foot04
Unknown14	288	FOOTSTEPS_MUD	fs_mud1 fs_mud2
Unknown15	288	FOOTSTEPS_MUD	fs_mud1 fs_mud2
Water	0	LARA_FEET	foot01 foot02 foot03 foot04
Wood	292	FOOTSTEPS_WOOD	fs_wd1 fs_wd2

Hearing Ice & Snow Sound Samples In-Game (see * Ref. 289, 293)

The ice and snow sound samples are in the **TR4 sounds** samples folder but they are not listed in the **soundsTR4.xml** file.

They are:

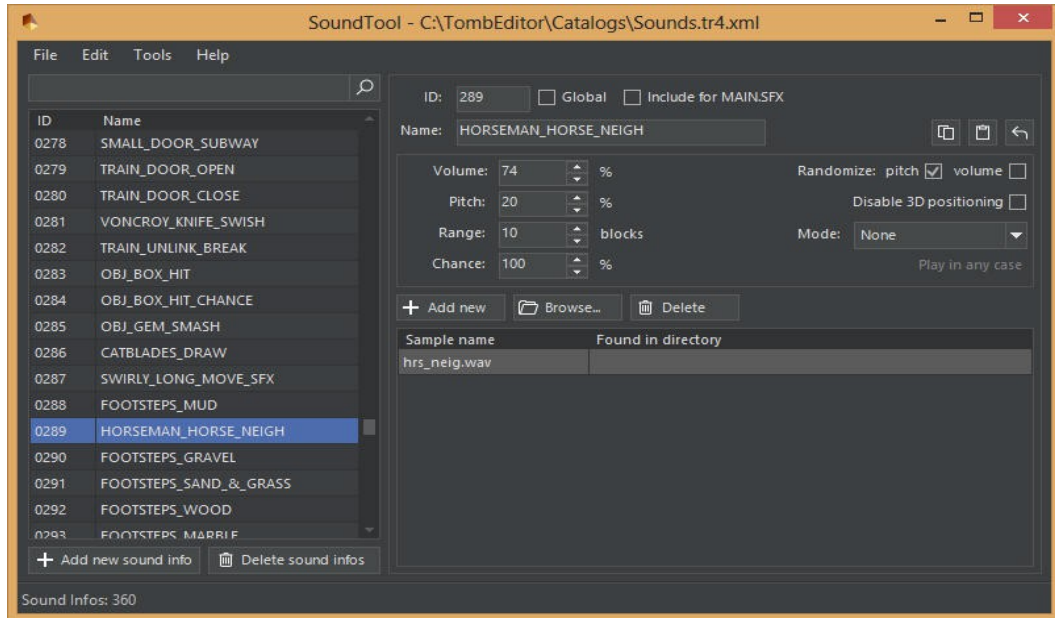
Ice	fs_ice1	fs_ice2
Snow	fs_sn1	fs_sn2 fs_sn3

TOMB EDITOR MANUAL

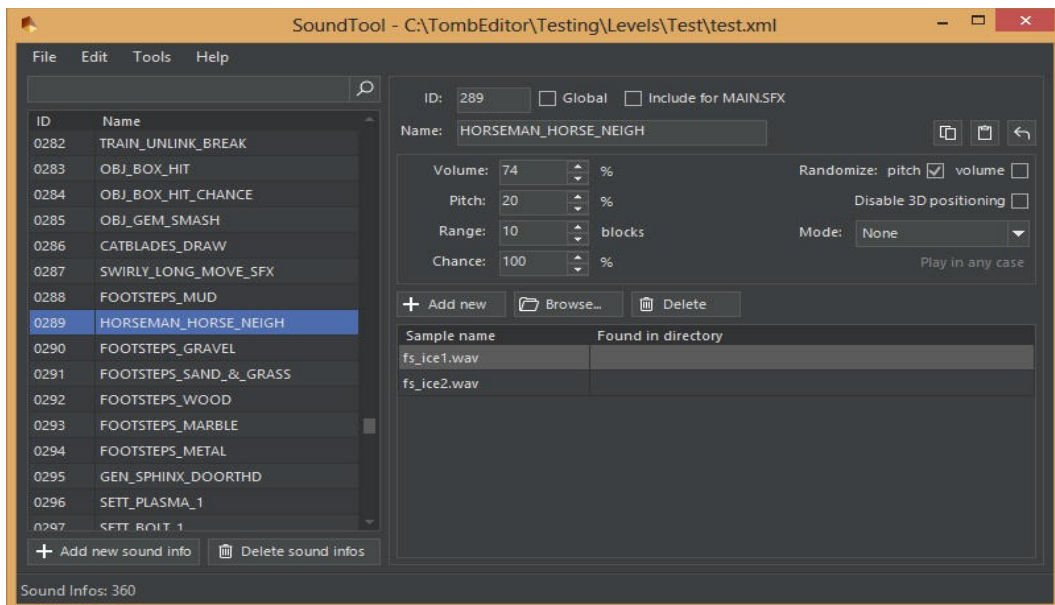
ICE FOOTSTEPS

The easiest way is to rename the following:

HORSEMAN_HORSE_NEIGH samples with the **FOOTSTEPS_ICE** sample names.



SOUND ID 289 HORSEMAN_HORSE_NEIGH



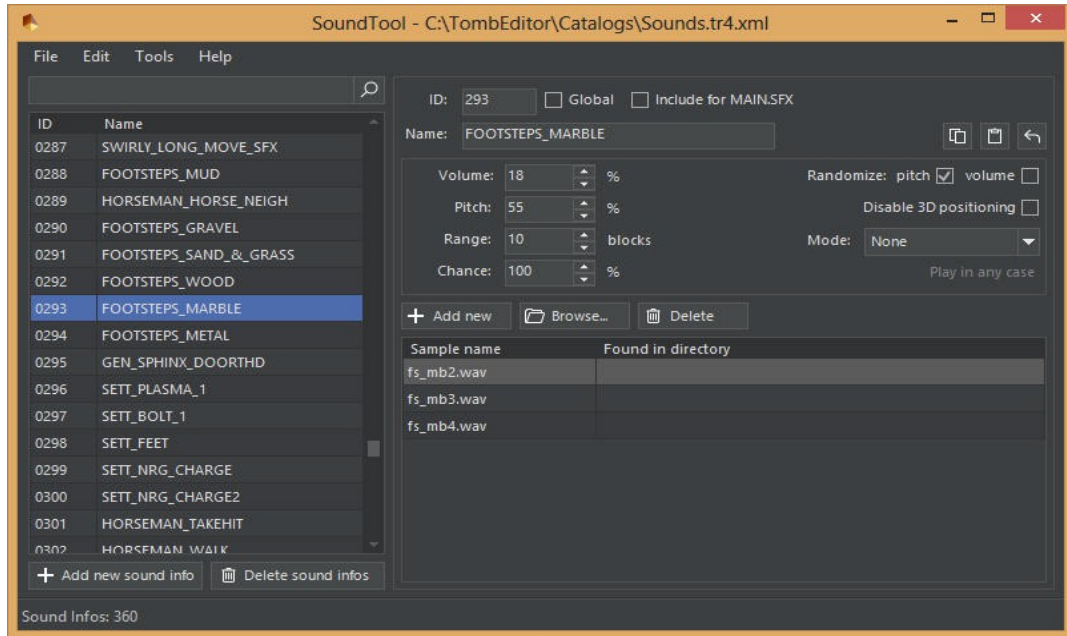
SOUND ID 289 HORSEMAN_HORSE_NEIGH FOR FOOTSTEPS_ICE

TOMB EDITOR MANUAL

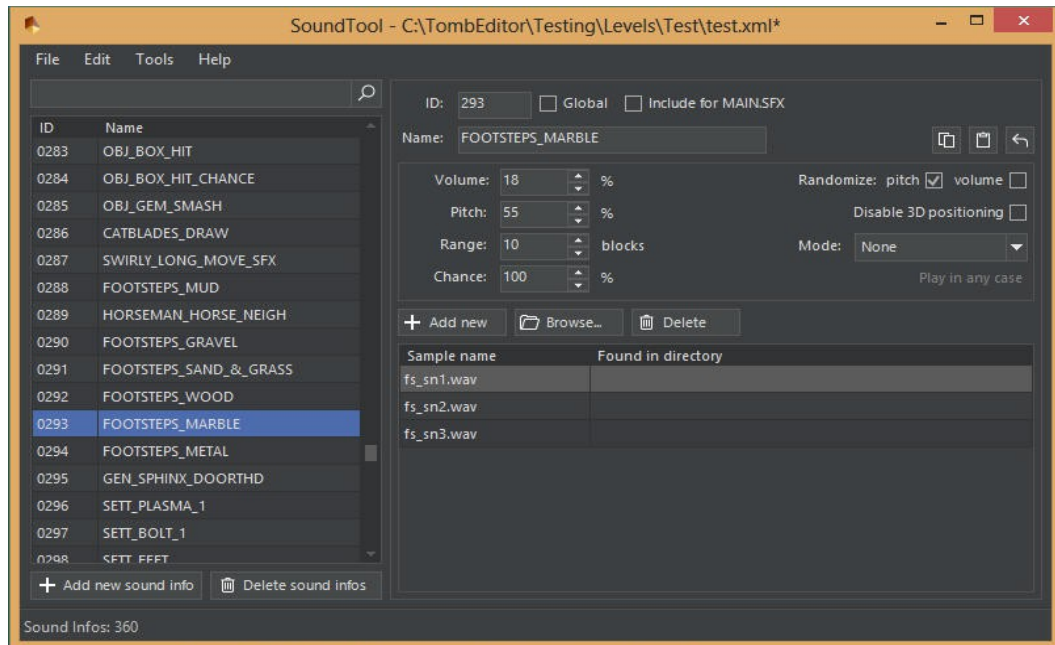
SNOW FOOTSTEPS

The easiest way is to rename the following:

FOOTSTEPS_MARBLE samples names with the **FOOTSTEPS_SNOW** sample names.



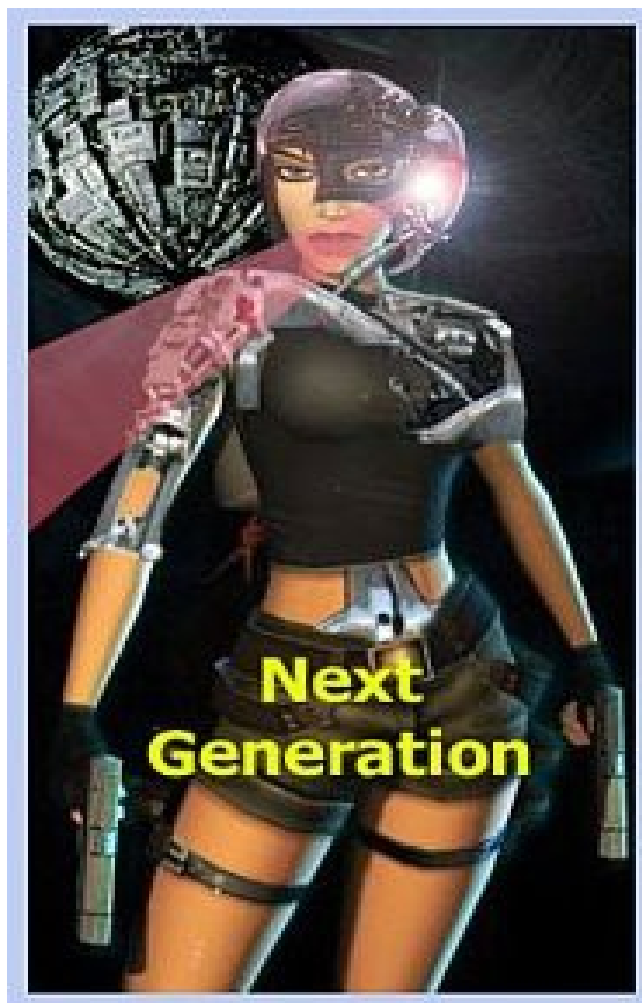
SOUND ID 293 FOOTSTEPS_MARBLE



SOUND ID 293 FOOTSTEPS_MARBLE FOR FOOTSTEPS_SNOW

TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION

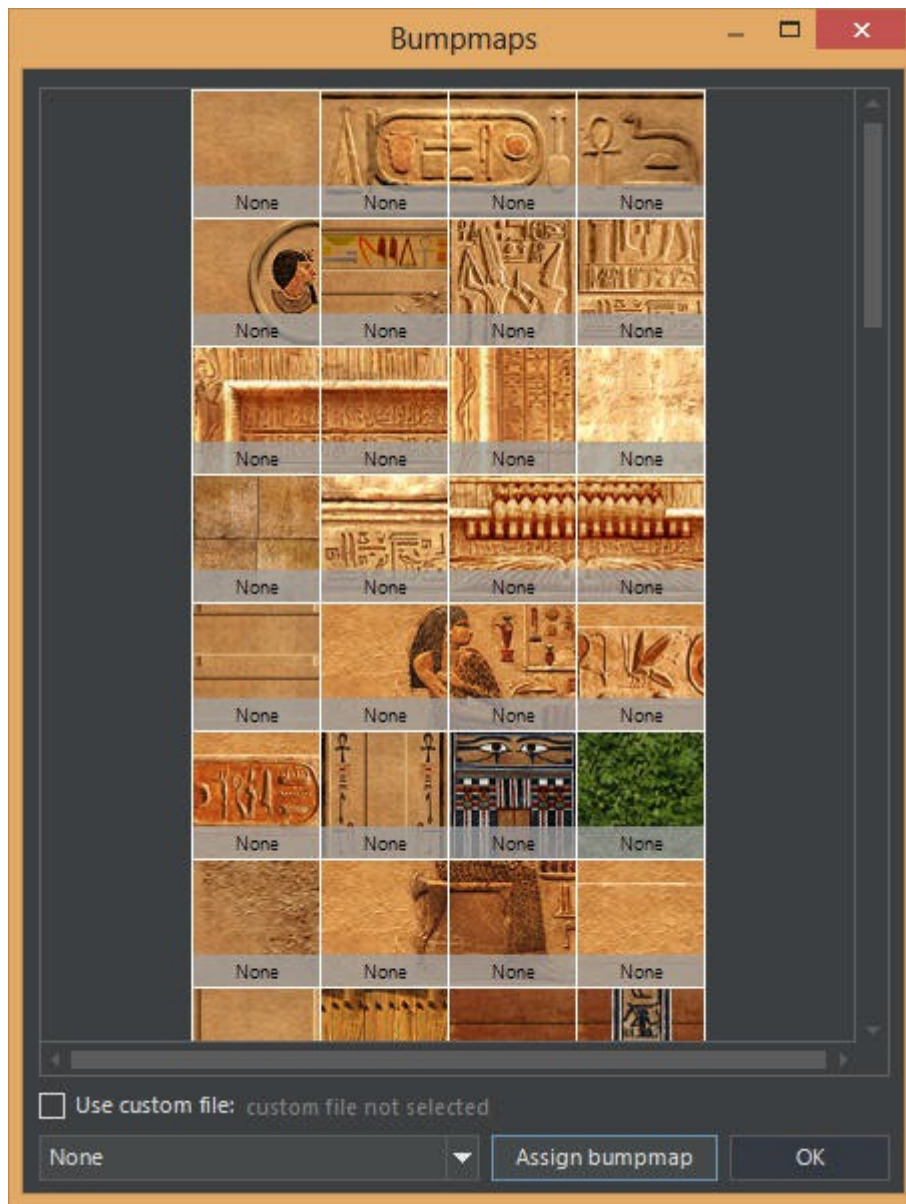


TOMB EDITOR

TEXTURE BUMP MAPS WINDOW

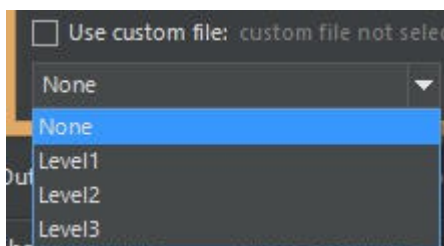
TOMB EDITOR MANUAL

BUMP MAPS



A bump map assigns a thickness effect to a texture tile.

TOMB EDITOR MANUAL



Level to use:

None, Level1, Level2, Level3.

To add a Bump map effect to a texture tile do the following:

Select a texture tile.

Select a Level to use from the list.

Select **Assign Bump map** to set the effect to the texture tile.

Select **OK** to leave the window and return to the **Tomb Editor main interface**.

TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION

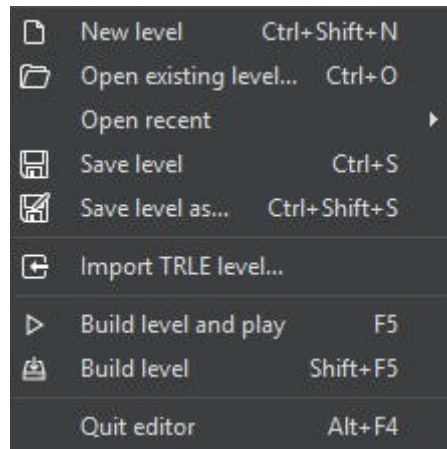


TOMB EDITOR

**MAIN INTERFACE
PULL DOWN FILE MENU**

TOMB EDITOR MANUAL

FILE MENU



NEW LEVEL

HOTKEY: CTRL + SHIFT + N

This resets the Editor so a new project can be started.



OPEN EXISTING LEVEL

HOTKEY: CTRL + O

Opens an existing project so you can continue editing it.

OPEN RECENT

This shows a window with a list of last edited project files.

Project files will be sorted in chronological order but there is also an alphanumeric sorting facility which allows a sort alphabetically.

This feature makes locating previous saved projects a very simple task.



SAVE LEVEL

HOTKEY: CTRL + S

Saves a project level.

Save multiple copies and always before a big operation.

If a problem develops within your project, it is often easier to return to an earlier version than trying to find and fix the problem.

ALWAYS MAKE BACKUP COPIES DURING PROJECT DEVELOPMENT.



SAVE LEVEL AS

HOTKEY: CTRL + SHIFT + S

Saves a project level with a different name.



IMPORT TRLE LEVEL

Imports an original format project level from the **ORIGINAL LEVEL EDITOR** or the **NGLE**.

TOMB EDITOR MANUAL



BUILD LEVEL AND PLAY

HOTKEY: F5

Saves a project, builds it, minimises **Tomb Editor** and then plays the level.
Creates a updated TR4 file.

Minimises the **Tomb Editor** program.

Starts the **tomb4.exe** to play the level. (**Game** .exe set in **Level Settings**)

This can save a lot of time if you are constantly moving in and out of the game during testing.



BUILD LEVEL

HOTKEY: SHIFT + F5

Builds a level.
Creates a updated TR4 file.



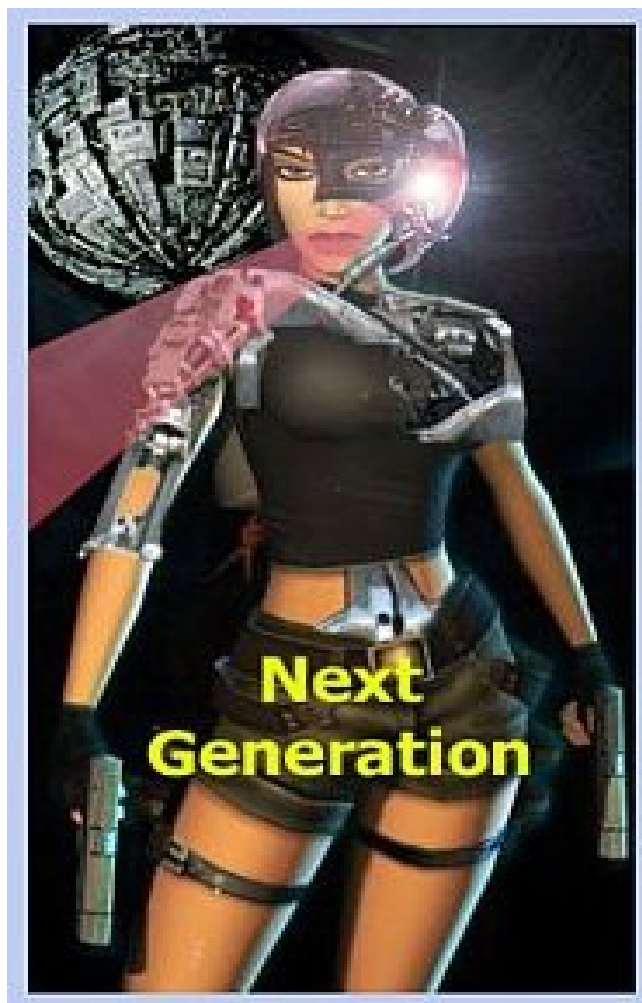
QUIT EDITOR

HOTKEY: ALT + F4

Exit out of the **Tomb Editor**.

TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION

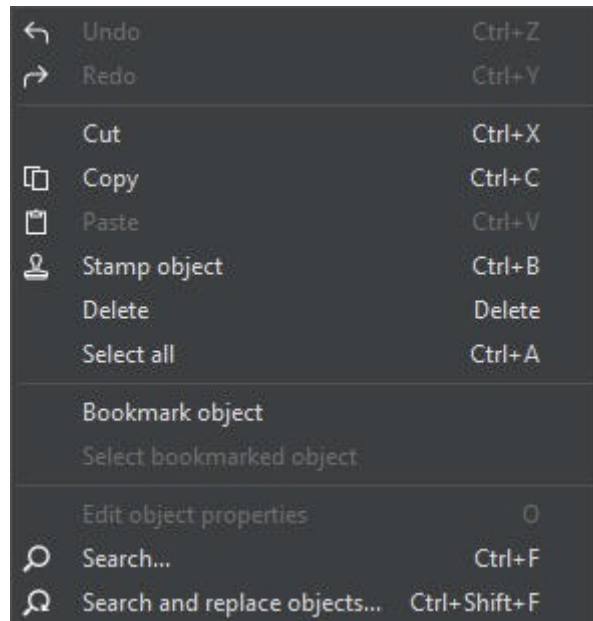


TOMB EDITOR

**MAIN INTERFACE
PULL DOWN EDIT MENU**

TOMB EDITOR MANUAL

EDIT MENU



UNDO

HOTKEY: CTRL + Z

Works with all the “Feature” functions.

Mainly used for actual modelling mistakes such as raising and lowering blocks, putting a wrong texture down, etc.



REDO

HOTKEY: CTRL + Y

Can be used with anything you can “Undo”



CUT

HOTKEY: CTRL + X

Copies (does not actually ‘cut’) areas of the model. Not for lights or objects.



COPY

HOTKEY: CTRL + C

Copies areas of the model.



PASTE

HOTKEY: CTRL + V

Pastes copied areas of the model.

You can use this to paste copied bits of the model from one room to another.



STAMP OBJECT

HOTKEY: CTRL + B

Select a square in the 3D Window and copy object from the clipboard.



DELETE

HOTKEY: DELETE KEY

Deletes an object from the room.

SELECT ALL

HOTKEY: CTRL + A

Selects all objects in a room.

TOMB EDITOR MANUAL

BOOKMARK OBJECT

Creates a book mark object.

HOTKEY:

SELECT BOOKMARK OBJECT

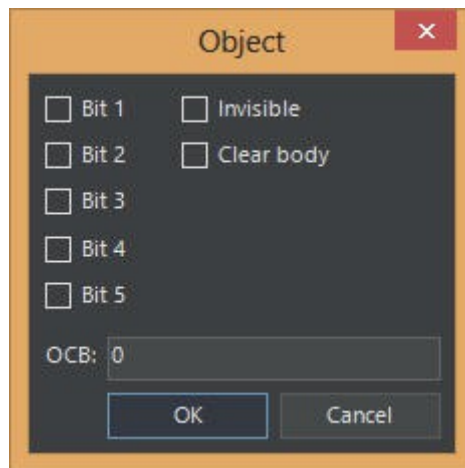
Selects a book mark object.

HOTKEY:

EDIT OBJECT PROPERTIES

HOTKEY: O

In the 3D View Editor window select the Object and press the **O** key to display the Object Window. See **Object Code Bits** document for full information.



Object Code Buttons:	Bit 1 sets Flag: 2	10000 – 00
	Bit 2 sets Flag: 4	01000 – 00
	Bit 3 sets Flag: 8	00100 – 00
	Bit 4 sets Flag: 16	00010 – 00
	Bit 5 sets Flag: 32	00001 – 00
	Invisible sets Flag: 1	00000 – 01
	Clear Body sets Flag: 128	00000 – 10

OCB : Input the OCB value to change or set the object characteristic.
Press the enter key to store the input.

OK Confirms all OCB Properties and leave the window.

CANCEL Cancels Properties and leave the menu.

Set all of the Object Code Bits to activate an object from the level start.
So it is not necessary to trigger it. For example torch flames.

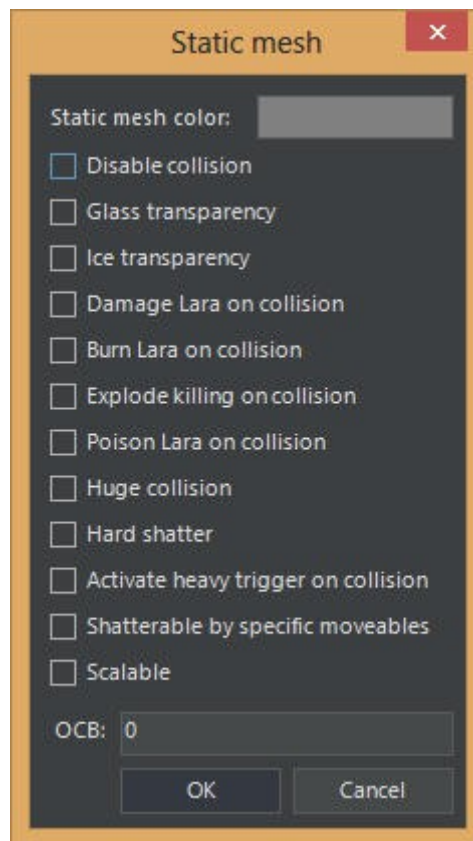
Set a combination of Object Code Bits to enable multiple switches
to open a door etc. See suitable tutorials on the TR Forum website.

Clear Body Sets the object as translucent.

Invisible Sets the object as invisible until it is triggered.

TOMB EDITOR MANUAL

OBJECT OCB STATIC



Static Mesh Color:	Set the color for the Static Mesh.
Disable Collision:	Disables the Object collision.
Glass Transparency:	Sets the object as transparent.
Damage Lara on Collision:	Causes damage to Lara.
Burn Lara on Collision:	Causes Lara to burst into flames.
Explode killing on Collision:	Object explodes killing Lara.
Poison on Collision:	Object poisons Lara.
Huge Collision:	Huge collision.
Hard Shatter:	Hard Shatter.
Heavy Trigger on Collision:	Activate heavy trigger on collision.
Shatter by moveables:	Shatter by specific moveables.
Scalable:	Scalable object.

Select boxes as required.

OCB : Input the OCB value to change or set the object characteristic.
Press the enter key to store the input.

OK Confirms all OCB Properties and leave the window.

CANCEL Cancels Properties and leave the menu.

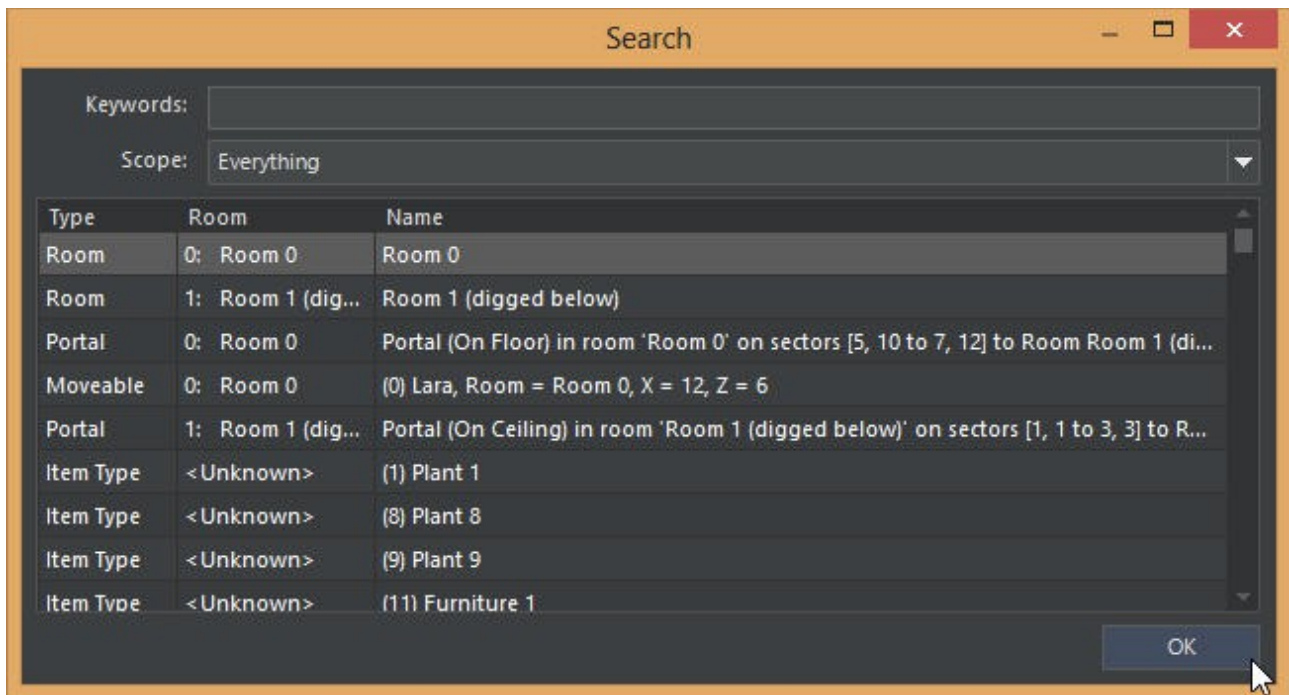
TOMB EDITOR MANUAL



SEARCH

HOTKEY: CTRL + F

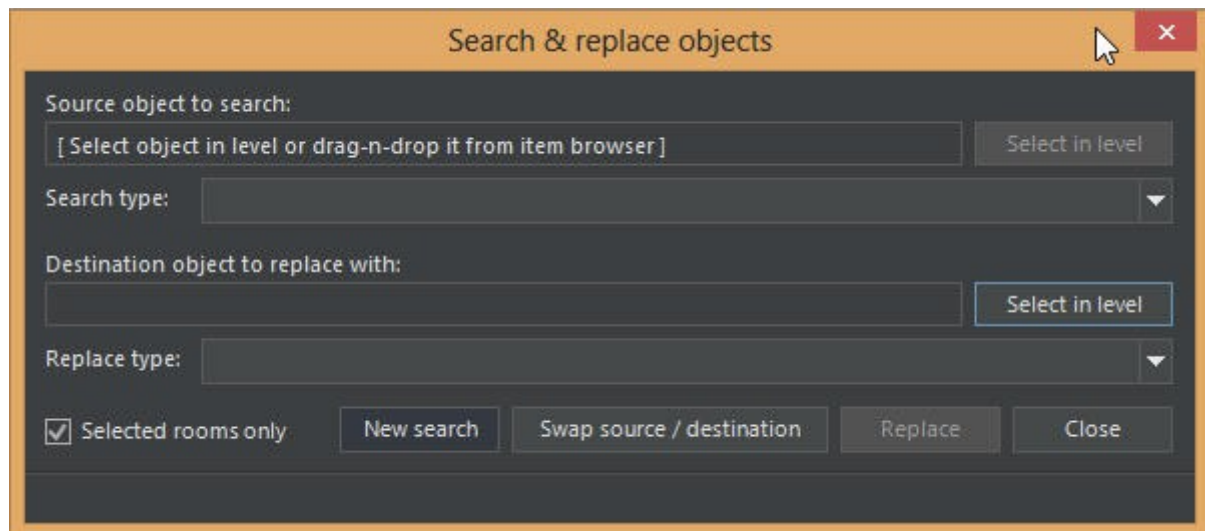
Used to quickly find objects and rooms etc. in the project.



SEARCH AND REPLACE OBJECTS

HOTKEY: CTRL + SHIFT + F

Used to quickly find and replace objects etc. in the project.



TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION

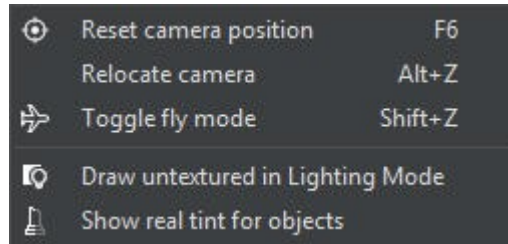


TOMB EDITOR

**MAIN INTERFACE
PULL DOWN VIEW MENU**

TOMB EDITOR MANUAL

VIEW MENU



RESET CAMERA POSITION

HOTKEY: F6

Good for recovery as it re-centers the room.

RELOCATE CAMERA

HOTKEY: ALT + Z

Sets the zoom position in the room.

The same action as the original Editor.

ALT + Z key (cursor changes to +) and **mouse left button click** in the room, then press **ESC key** to reset the cursor to normal.

The room will rotate and zoom to this point.



TOGGLE FLYBY MODE

HOTKEY: SHIFT + Z

Toggles the flyby mode.

Pans and rolls the 3D View Editor window view of the rooms.



DRAW UNTEXTURED IN LIGHTING MODE

HOTKEY:

Draws untextured objects in the lighting mode.



SHOWS THE REAL TINT FOR OBJECTS

HOTKEY:

Shows the real tint for objects.

TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION

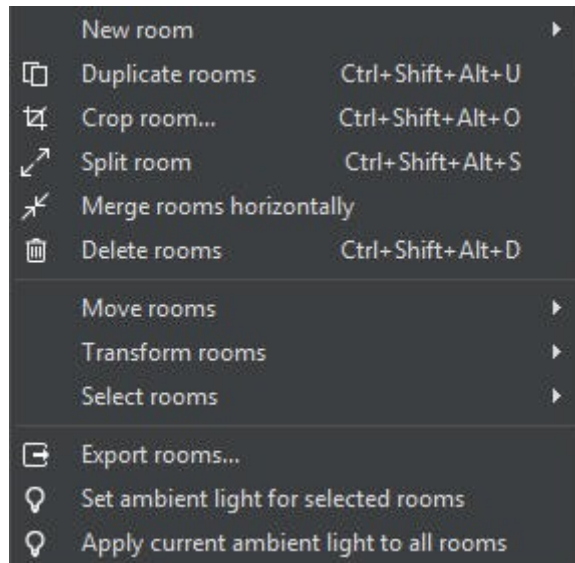


TOMB EDITOR

**MAIN INTERFACE
PULL DOWN ROOMS MENU**

TOMB EDITOR MANUAL

ROOMS MENU



New Room



NEW ROOM UP **HOTKEY:** CTRL + SHIFT + U
Makes a new room above the current active room.

NEW ROOM DOWN **HOTKEY:** CTRL + SHIFT + D
Makes a new room below the current active room.

NEW ROOM LEFT **HOTKEY:**
Makes a new room to the left of the current active room. (West)

NEW ROOM RIGHT **HOTKEY:**
Makes a new room to the right of the current active room. (East)

NEW ROOM FRONT **HOTKEY:**
Makes a new room in front of the current active room. (South)

NEW ROOM BACK **HOTKEY:**
Makes a new room behind the current active room. (North)

TOMB EDITOR MANUAL



DUPLICATE ROOMS

HOTKEY: CTRL + SHIFT + ALT + U

Makes a duplicate room.



CROP ROOM

HOTKEY: CTRL + SHIFT + ALT + O

Set new size for the room with the mouse and then select crop.



SPLIT ROOM

HOTKEY: CTRL + SHIFT + ALT + S

Used when you have created a maze of corridors within one room (using the wall feature).

Split all of the areas around the room so that NO rooms overlap.



MERGE ROOMS HORIZONTALLY

HOTKEY:

Merge Rooms horizontally.



DELETE ROOMS

HOTKEY: CTRL + SHIFT + ALT + D

Deletes a room.

Make sure this is what you want as you can not undo the delete function !

TOMB EDITOR MANUAL

MOVE ROOMS :

Move room up	Alt+PageUp
Move room up (4 clicks)	
Move room down	Alt+PageDown
Move room down (4 clicks)	
Move room left	Alt+Left
Move room right	Alt+Right
Move room forward	Alt+Up
Move room back	Alt+Down

MOVE ROOM UP

HOTKEY: ALT + PAGEUP

Moves a room up.

MOVE ROOM UP (4 clicks)

HOTKEY:

Moves a room up 4 clicks.

MOVE ROOM DOWN

HOTKEY: ALT + PAGEDOWN

Makes a new room below current active room.

MOVE ROOM DOWN (4 clicks) **HOTKEY:**

Moves a room down 4 clicks.

MOVE ROOM LEFT

HOTKEY: ALT + LEFT

Moves a room left. (West)

MOVE ROOM RIGHT

HOTKEY: ALT + RIGHT

Moves a room right. (East)

MOVE ROOM FORWARD

HOTKEY: ALT + UP

Moves a room forwards. (North)

MOVE ROOM BACKWARD

HOTKEY: ALT + DOWN

Moves a room backwards. (South)

TOMB EDITOR MANUAL

TRANSFORM ROOMS:

Rotate rooms clockwise	Ctrl+F1
Rotate rooms counterclockwise	Ctrl+F2
Mirror rooms on X axis	Ctrl+F3
Mirror rooms on Z axis	Ctrl+F4

ROTATE ROOMS CLOCKWISE **HOTKEY:** **CTRL + F1**

Highlight a room to rotate in 90 degree increments.

ROTATE ROOMS ANTICLOCKWISE **HOTKEY:** **CTRL + F2**

Highlight a room to rotate in 90 degree increments.

MIRROR ROOMS ON X Axis **HOTKEY:** **CTRL + F3**

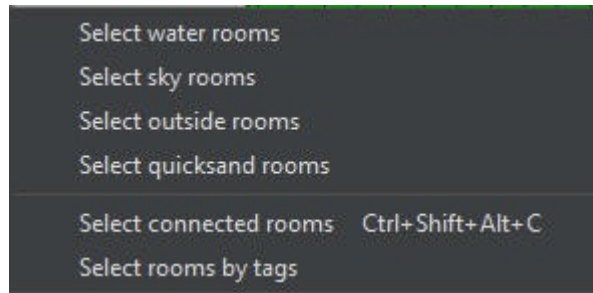
Highlight a room and use this function to flip the room horizontally.

MIRROR ROOMS ON Z Axis **HOTKEY:** **CTRL + F4**

Highlight a room and use this function to flip the room vertically.

TOMB EDITOR MANUAL

SELECT ROOMS:



SELECT WATER ROOMS

Selects water rooms.

HOTKEY:

SELECT SKY ROOMS

Selects sky rooms.

HOTKEY:

SELECT OUTSIDE ROOMS

Selects outside rooms.

HOTKEY:

SELECT QUICKSAND ROOMS

Selects quicksand rooms.

HOTKEY:

SELECT ROOMS BY TAGS

Selects rooms by tags.

HOTKEY:



EXPORT ROOMS

Export rooms.

HOTKEY:



SET AMBIENT LIGHT SELECTED ROOMS

Applies the current ambient light to selected rooms.

HOTKEY:



SET CURRENT AMBIENT LIGHT ALL ROOMS

Applies the current ambient light to all of the rooms.

HOTKEY:

The initial default lighting:

Original Editor
NGLE

Red = 128, Blue = 128, Green = 128.
Red = 128, Blue = 128, Green = 128.

TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION

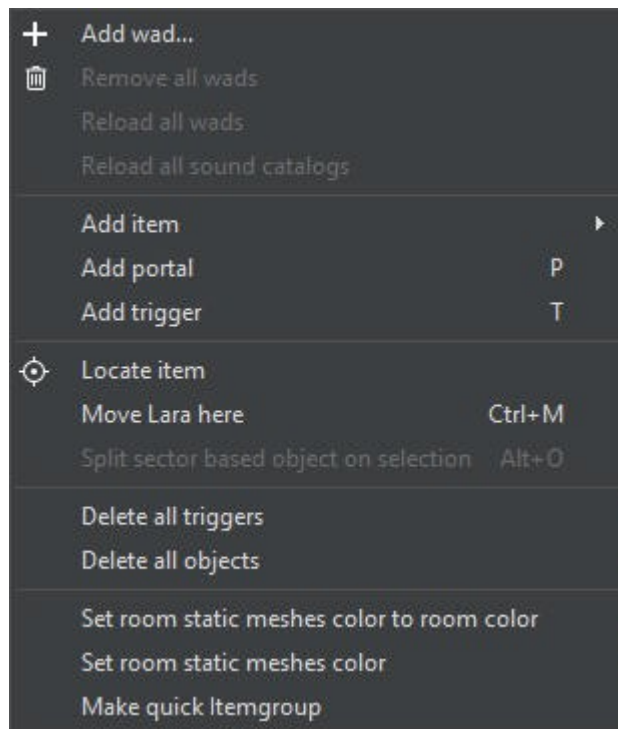


TOMB EDITOR

**MAIN INTERFACE
PULL DOWN ITEMS MENU**

TOMB EDITOR MANUAL

ITEMS MENU



ADD WAD

HOTKEY:

Adds a Wad file to the project.



REMOVE ALL WADS

HOTKEY:

Removes all Wad files from the project.

RELOAD ALL WADS

HOTKEY:

Reloads all Wad files for the project.

RELOAD ALL SOUNDS CATALOGUE

HOTKEY:

Reloads all Sounds catalogue files for the project.

TOMB EDITOR MANUAL

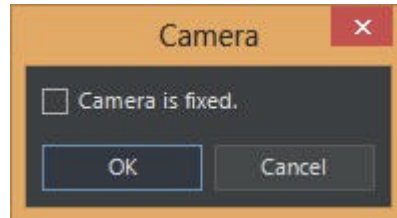


ADD CAMERA

HOTKEY: ALT + C

Adds a camera. This is initially a **Basic Camera**.

Select the Camera. Press the **O** key to display the Camera Window.



Set the Fixed Camera box if required:

A **Basic Camera** tracks Lara's movements or gives a special view of places and/or enemies.

This camera view can be broken out of using the **LOOK** key.

A **Fixed Camera** does everything the Basic Camera does but the view cannot be broken until Lara steps off the trigger for the camera.

USING CAMERA TARGETS

In order to point the camera at a specific area and not at Lara a camera target is used, it works with either the Basic or Fixed camera.

TOMB EDITOR MANUAL



ADD FLYBY CAMERA

HOTKEY: ALT + M

A series of cameras placed to create a “flyby” or “fly through” effect.

Set the parameters for the Flyby camera using the Object Properties menu. “O”.



ADD SINK

HOTKEY: ALT + K

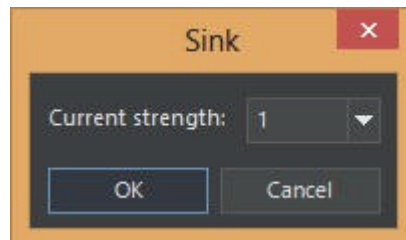
For use in water rooms to create currents.

Sinks are used in water rooms exclusively to create currents to either pull Lara to a different spot or prevent access to areas not intended for her to go.

Good in flip maps to open or close access to Lara in areas underwater.

Sink strengths can be set using the Object Properties menu. “O” menu.

Sink strengths are 1 to 31.



It is important not to put a trigger for a sink on the same square as the sink or Lara will get stuck.

The trick is to have another sink which will pick Lara up as she moves from a previous sink.

See a Sink Tutorial for more information.

TOMB EDITOR MANUAL



ADD SOUND SOURCE

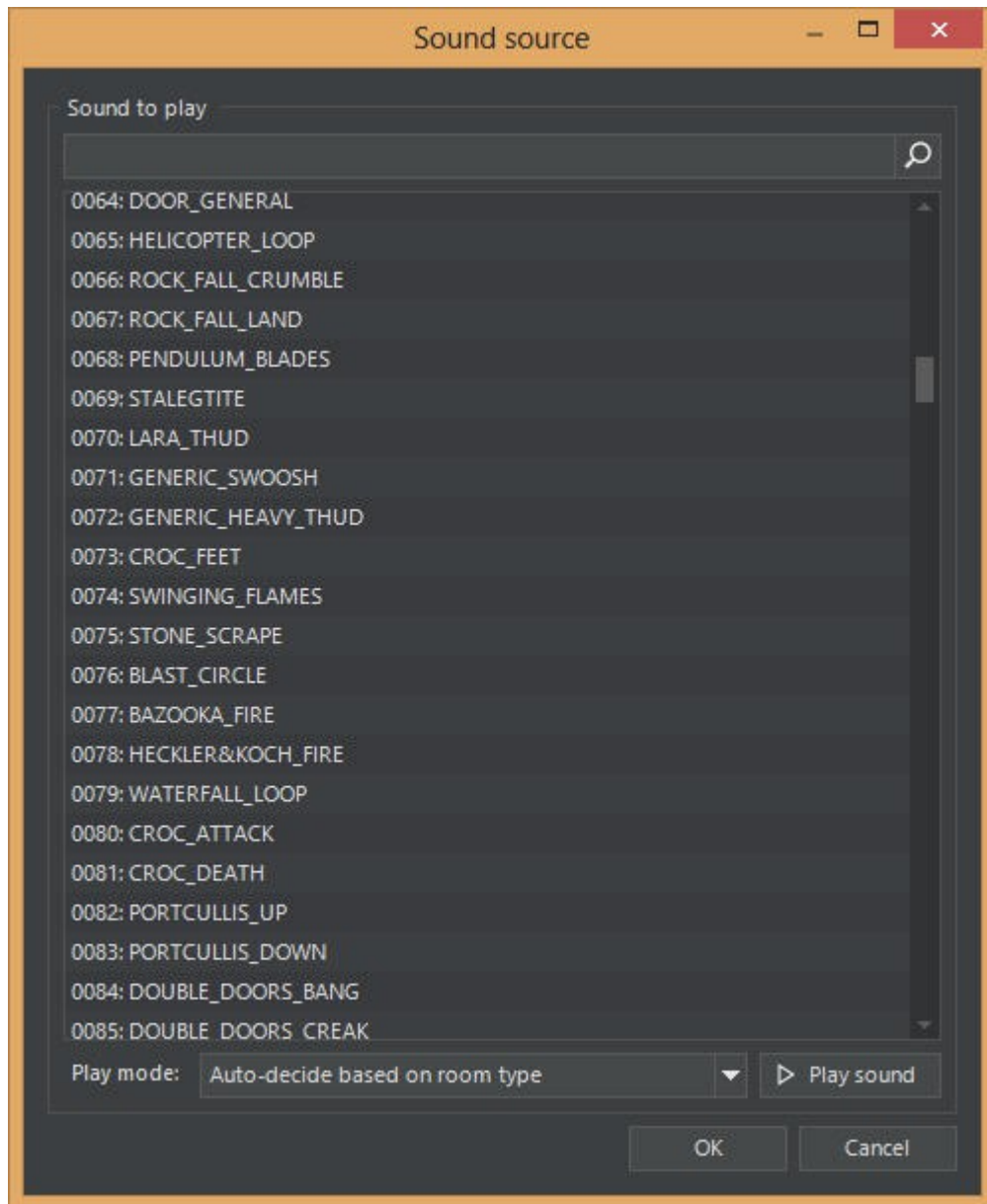
HOTKEY: ALT + X

Very rarely used for anything except water noises.

Used mainly for water surface sounds.

Generally works on the proximity to Lara and so is not triggered.

Press the **O** key to display the Sound Source Menu and select a sound to attach.



TOMB EDITOR MANUAL



ADD IMPORTED GEOMETRY **HOTKEY:** ALT + L

Adds imported geometry.



ADD GHOST BLOCK **HOTKEY:**

Adds a Ghost block. This modifies the collision of the floor and ceiling.
Used to enable Lara to stand on top of a static object.



ADD PORTAL **HOTKEY:** P

Creates either a vertical or horizontal portal between rooms.

ADD TRIGGER **HOTKEY:** T

Used to set triggers that activate objects events, sounds, flip effects, flip maps, the end of a level, etc.



LOCATE ITEM **HOTKEY:**

Locates an Item in the project.
Select the item to search for in the Item Browser Window.
Then select the search icon.

MOVE LARA HERE **HOTKEY:** CTRL + M

This moves Lara from any position in the map and places her on the selected square.

SPLIT SECTOR BASED OBJECT ON SELECTION **HOTKEY:** ALT + O

Splits a Sector Based Object.

DELETE ALL TRIGGERS **HOTKEY:**

Deletes all triggers.

DELETE ALL OBJECTS **HOTKEY:**

Deletes all objects.

SET ROOM STATIC MESHES TO ROOM COLOR **HOTKEY:**

Sets the room static meshes to a room color.

SET ROOM STATIC MESHES COLOR **HOTKEY:**

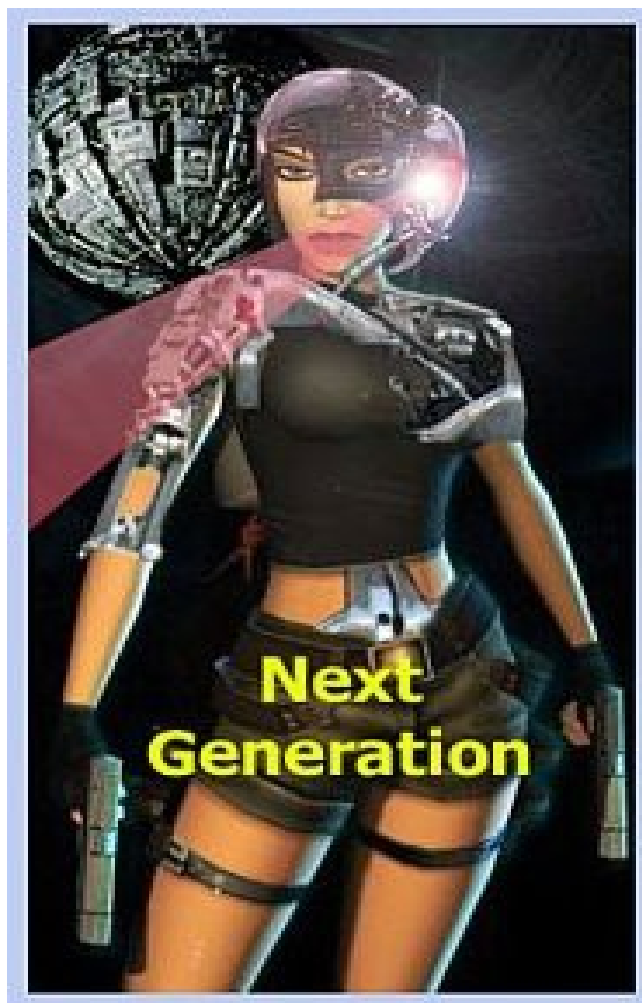
Sets the room static meshes color.

MAKE QUICK ITEM GROUP **HOTKEY:**

Makes a quick Item Group.

TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION

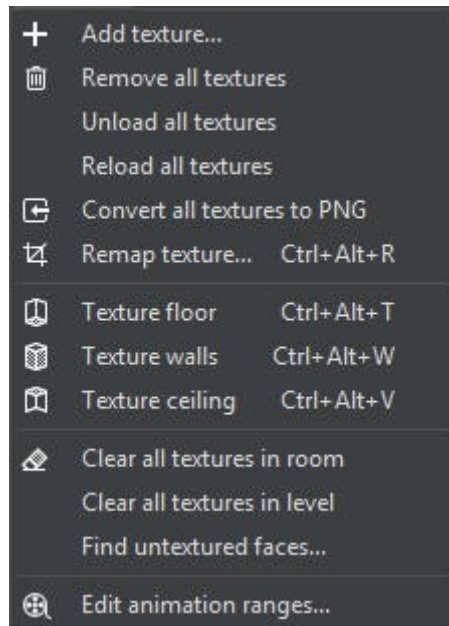


TOMB EDITOR

**MAIN INTERFACE
PULL DOWN TEXTURES MENU**

TOMB EDITOR MANUAL

TEXTURES MENU



ADD TEXTURE

HOTKEY:

Adds a texture file to the project.



REMOVE ALL TEXTURES

HOTKEY:

Removes all textures from the project structure.

UNLOAD ALL TEXTURES

HOTKEY:

Unloads all texture files from the project.

RELOAD ALL TEXTURES

HOTKEY:

Reloads all texture files for the project.



CONVERT ALL TEXTURES TO PNG

HOTKEY:

Converts all texture files from TGA to PNG format.

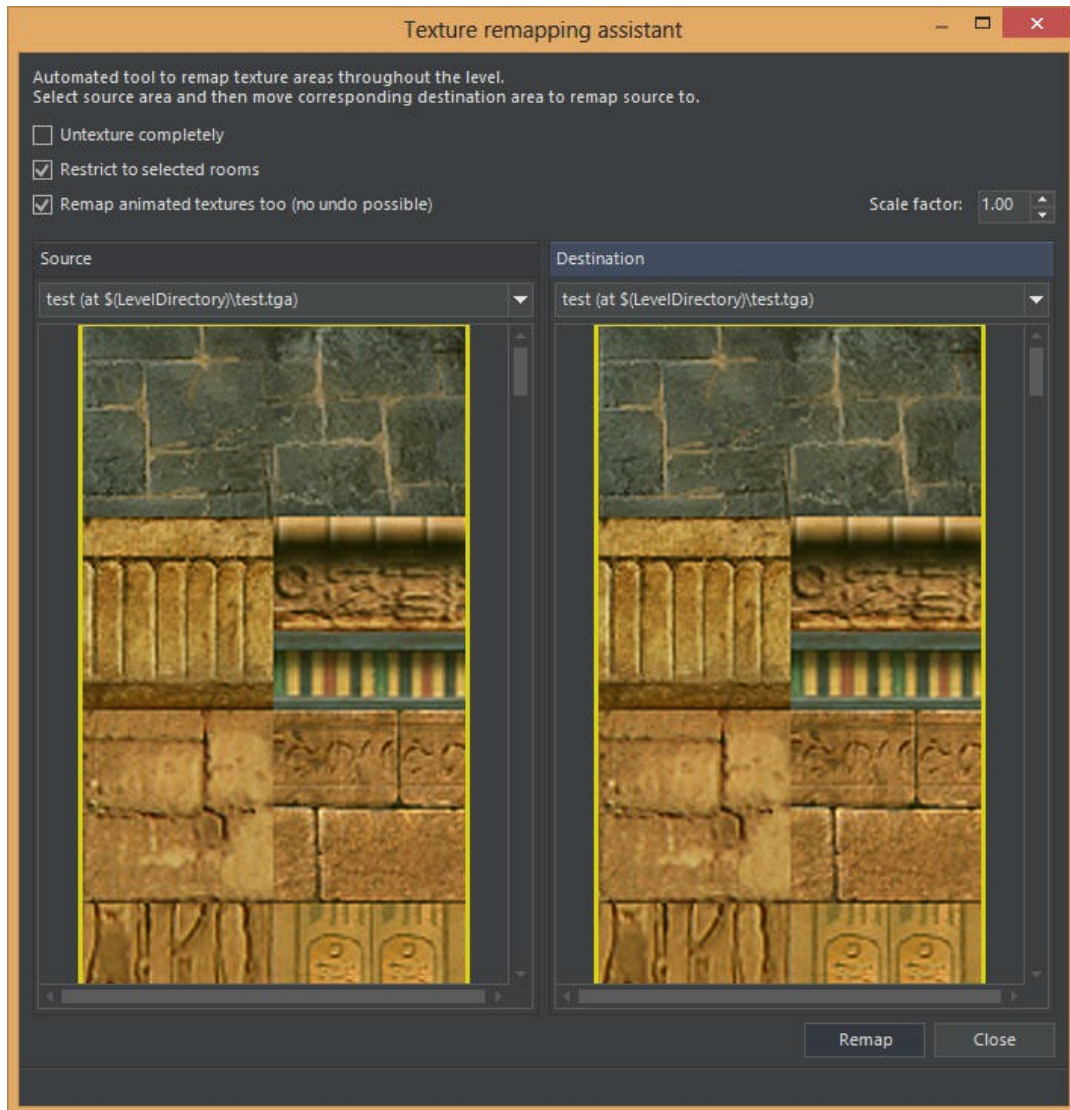
TOMB EDITOR MANUAL



REMAP TEXTURES

HOTKEY: CTRL + ALT + R

Remaps textures. This opens the Texture remapping assistant window.



TOMB EDITOR MANUAL



TEXTURE FLOOR

HOTKEY: CTRL + ALT + T

Places the active texture in the Texture Window over the entire floor of the active room.



TEXTURE WALLS

HOTKEY: CTRL + ALT + W

Places the active texture in the Texture Window over the walls of the active room.



TEXTURE CEILING

HOTKEY: CTRL + ALT + V

Places the active texture in the Texture Window over the entire ceiling of the active room.



CLEAR ALL TEXTURES IN ROOM

HOTKEY:

Wipes the current room clear of textures.

CLEAR ALL TEXTURES IN LEVEL

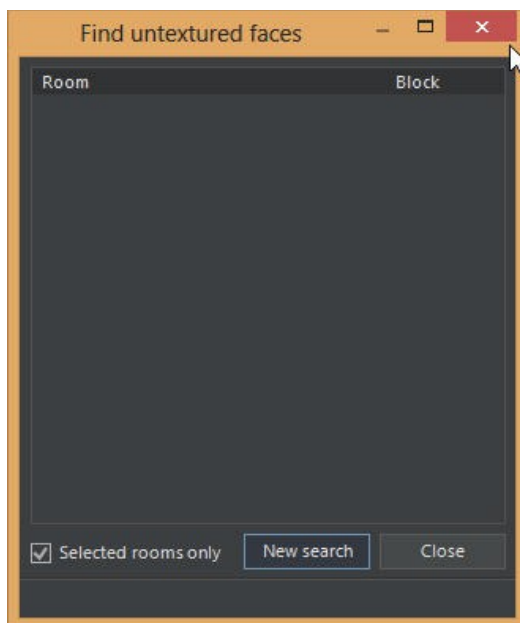
HOTKEY:

Wipes all textures in the level.

FIND UNTEXTURED FACES IN LEVEL

HOTKEY:

Finds untextured faces in the level.



EDIT ANIMATION RANGES

HOTKEY:

Edit Animation Ranges. This opens the Animated Textures window.

TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION



TOMB EDITOR

**MAIN INTERFACE
PULL DOWN TRANSFORM MENU**

TOMB EDITOR MANUAL

TRANSFORM MENU

Smooth random floor up	Ctrl+Alt+A
Smooth random floor down	Ctrl+Alt+B
Smooth random ceiling up	Ctrl+Alt+C
Smooth random ceiling down	Ctrl+Alt+D
Sharp random floor up	Ctrl+Alt+E
Sharp random floor down	Ctrl+Alt+F
Sharp random ceiling up	Ctrl+Alt+G
Sharp random ceiling down	Ctrl+Alt+H
Average floor	Ctrl+Alt+I
Average ceiling	Ctrl+Alt+J
Flatten floor	
Flatten ceiling	
Reset all geometry	
Grid walls in 3	Ctrl+3
Grid walls in 5	Ctrl+5
Grid walls in 3 (squares)	
Grid walls in 5 (squares)	

SMOOTH RANDOM FLOOR UP **HOTKEY:** CTRL + ALT + A

Creates random floor upwards. Used in conjunction with SMOOTH.

Care is needed around the edges of a room and if you have connected rooms a lot of touching up is required.

SMOOTH RANDOM FLOOR DOWN **HOTKEY:** CTRL + ALT + B

Creates random floor downwards. Used in conjunction with SMOOTH.

Care is needed around the edges of a room and if you have connected rooms a lot of touching up is required.

SMOOTH RANDOM CEILING UP **HOTKEY:** CTRL + ALT + C

Creates random ceiling upwards. Used in conjunction with SMOOTH.

Care is needed around the edges of a room and if you have connected rooms a lot of touching up is required.

SMOOTH RANDOM CEILING DOWN **HOTKEY:** CTRL + ALT + D

Creates random ceiling downwards. Used in conjunction with SMOOTH.

Care is needed around the edges of a room and if you have connected rooms a lot of touching up is required.

TOMB EDITOR MANUAL

SHARP RANDOM FLOOR UP

HOTKEY: CTRL + ALT + E

Creates random floor upwards.

Care is needed around the edges of a room and if you have connected rooms a lot of touching up is required.

SHARP RANDOM FLOOR DOWN

HOTKEY: CTRL + ALT + F

Creates random floor downwards.

Care is needed around the edges of a room and if you have connected rooms a lot of touching up is required.

SHARP RANDOM CEILING UP

HOTKEY: CTRL + ALT + G

Creates random ceiling upwards.

Care is needed around the edges of a room and if you have connected rooms a lot of touching up is required.

SHARP RANDOM CEILING DOWN

HOTKEY: CTRL + ALT + H

Creates random ceiling downwards.

Care is needed around the edges of a room and if you have connected rooms a lot of touching up is required.

AVERAGE FLOOR

HOTKEY: CTRL + ALT + I

Will completely level the floor. It will raise the “elevation” of the floor depending on how rough the surface was before averaging.

AVERAGE CEILING

HOTKEY: CTRL + ALT + J

Will completely level the ceiling. It will lower the “elevation” of the ceiling depending on how rough the surface was before averaging.

FLATTEN FLOOR

HOTKEY:

If you have created a random surface, this will flatten off the tops and sides of your floor geometry.

FLATTEN CEILING

HOTKEY:

If you have created a random surface, this will flatten off the tops and sides of your ceiling geometry.

GRID WALL IN 3

HOTKEY: CTRL + 3

Select wall panels using the **mouse left button** and drag.

Apply the function to divide the selected wall into 3 sectors high.

GRID WALL IN 5

HOTKEY: CTRL + 5

Select wall panels using the **mouse left button** and drag.

Apply the function to divide the selected wall into 5 sectors high.

TOMB EDITOR MANUAL

GRID WALL IN 3 (squares) HOTKEY:

Select wall panels using the **mouse left button** and drag.

Apply the function to divide the selected wall into 3 sectors high.

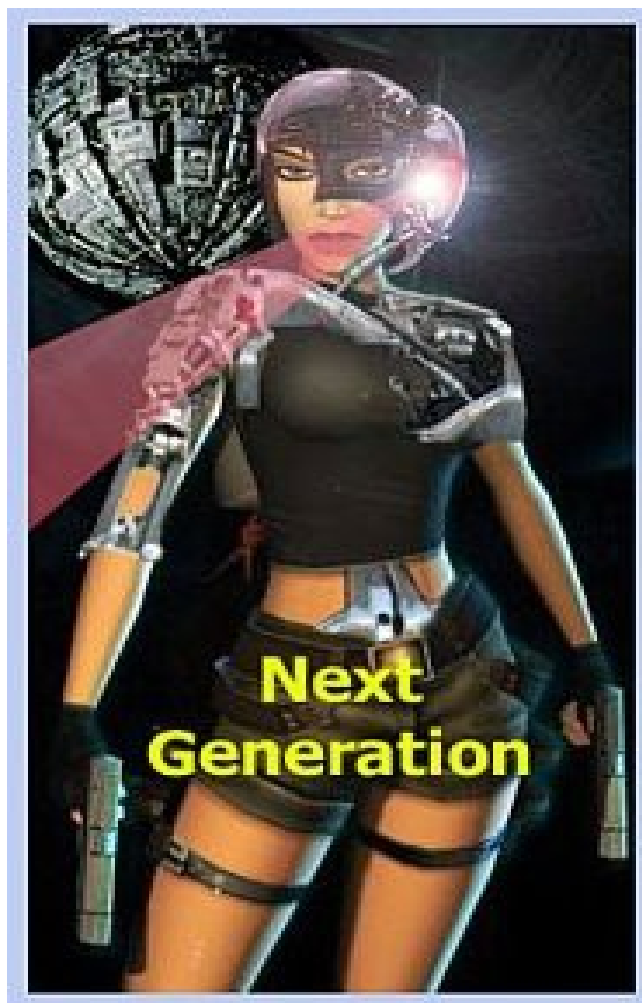
GRID WALL IN 5 (squares) HOTKEY:

Select wall panels using the **mouse left button** and drag.

Apply the function to divide the selected wall into 5 sectors high.

TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION

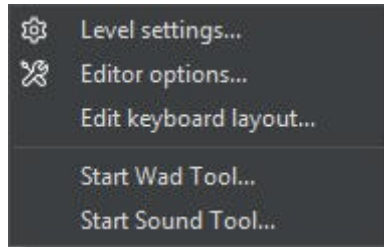


TOMB EDITOR

**MAIN INTERFACE
PULL DOWN TOOLS MENU**

TOMB EDITOR MANUAL

TOOLS MENU



LEVEL SETTINGS

HOTKEY:

Select Level Settings and then select a sub-menu:

Level Settings:

Game
Texture Files
Object Files
Imported Geometry
Static Meshes
Sky & Font
Sound Infos
Sound Sample Paths
Misc
Path Placeholders



EDITOR OPTIONS

HOTKEY:

Select Editor Options and then select a sub-menu:

Editor Options:

General
User Interface
3D Window
Gizmo
Item Preview
2D Window
Texture Map

EDIT KEYBOARD LAYOUT

HOTKEY:

Edits the Keyboard Layout for the **HOTKEYS**.

START WAD TOOL

HOTKEY:

Start the **Wad Tool** Editor.
Load wad and wad2 files.
Edit and save wad2 files.
Create and edit object animations.

START SOUND TOOL

HOTKEY:

Start the **Sound Tool** Editor.
Load a **Sound.txt** file and create a **Sound.xml** file.

TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION



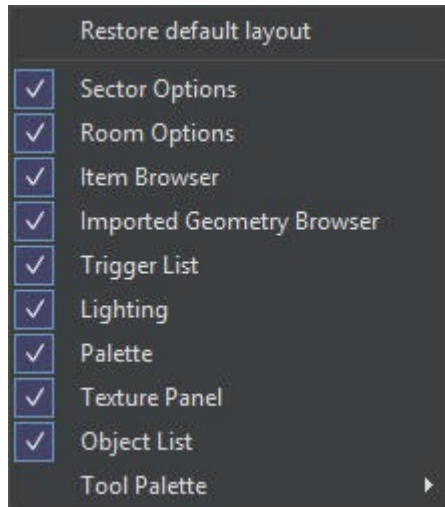
TOMB EDITOR

**MAIN INTERFACE
PULL DOWN WINDOW MENU**

TOMB EDITOR MANUAL

WINDOW MENU

Set Windows to display
on the screen.



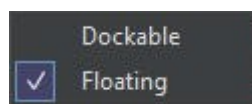
RESTORE DEFAULT LAYOUT

HOTKEY:

Restores the Default Layout for the **Tomb Editor**.

Display Window:	Sector Options	Default Layout
	Room Options	Default Layout
	Item Browser	Default Layout
	Imported Geometry Browser	
	Trigger List	
	Lighting	Default Layout
	Palette	Default Layout
	Texture Panel	Default Layout
	Object List	

Tool Palette :



Select Dockable or Floating Tool Palette.

Sector Options
Room Options
Item Browser

See **SECTOR OPTIONS** for full text.
See **ROOM OPTIONS** for full text.
See **ITEM BROWSER** for full text.

Imported Geometry Browser

See **IMPORTED GEOMETRY BROWSER**
for full text.

Trigger List
Lighting
Palette
Texture Panel
Object List

See **TRIGGER LIST WINDOW** for full text.
See **LIGHTING** for full text.
See **PALETTE** for full text.
See **TEXTURE PANEL** for full text.
See **OBJECTS IN ROOM** for full text.

TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION

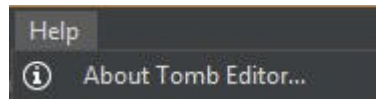


TOMB EDITOR

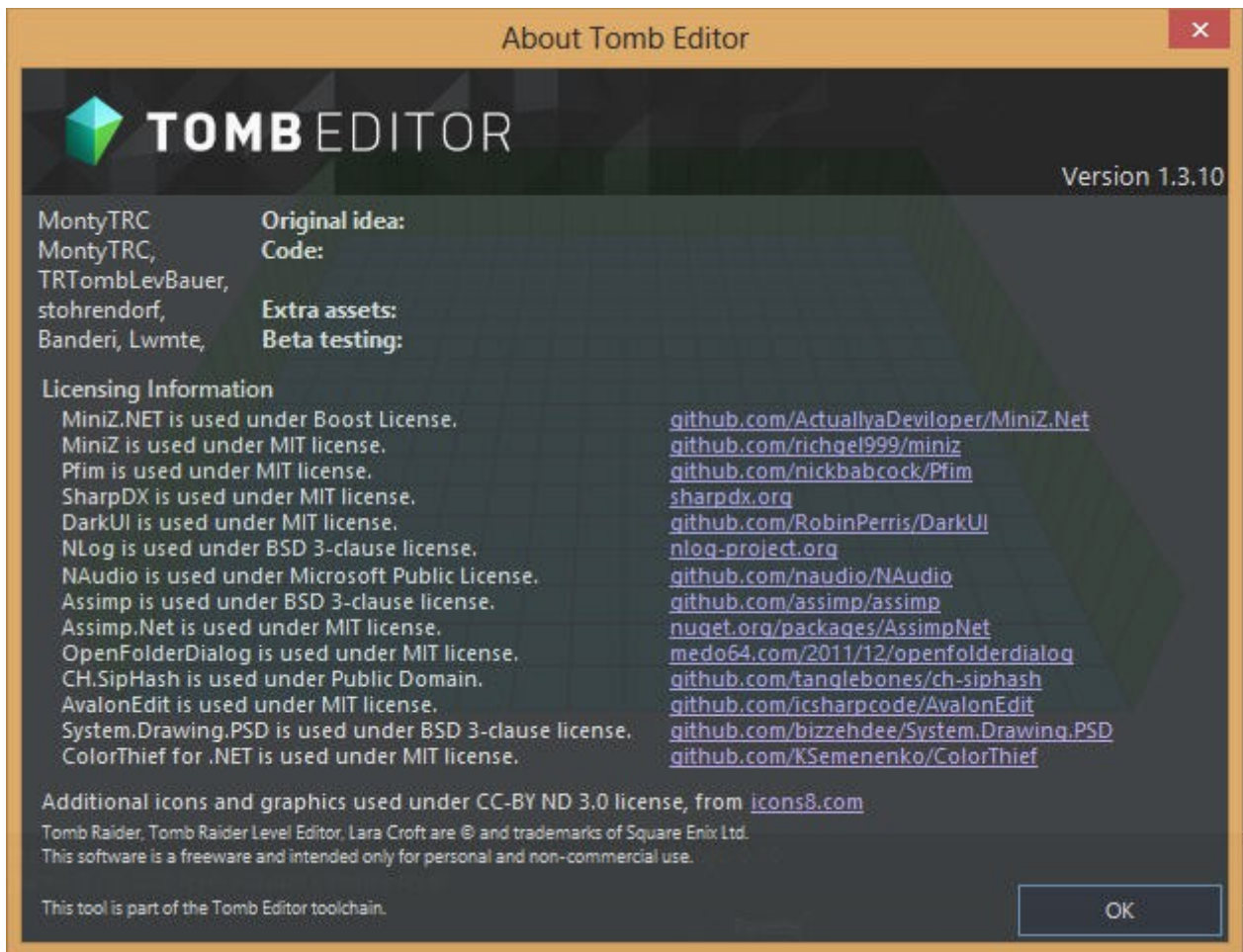
**MAIN INTERFACE
PULL DOWN HELP MENU**

TOMB EDITOR MANUAL

HELP MENU

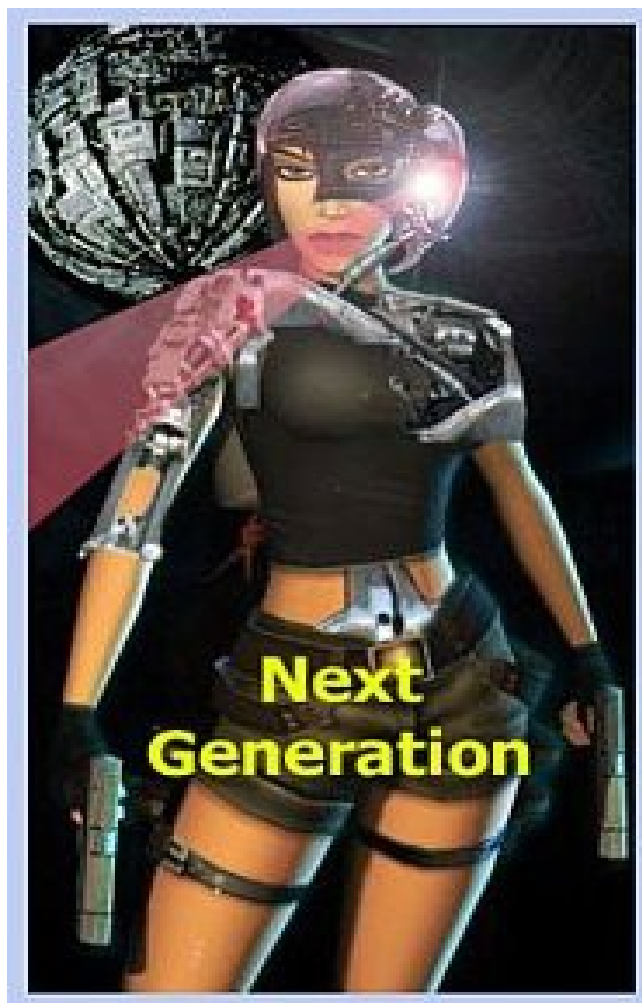


ABOUT TOMB EDITOR



TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION

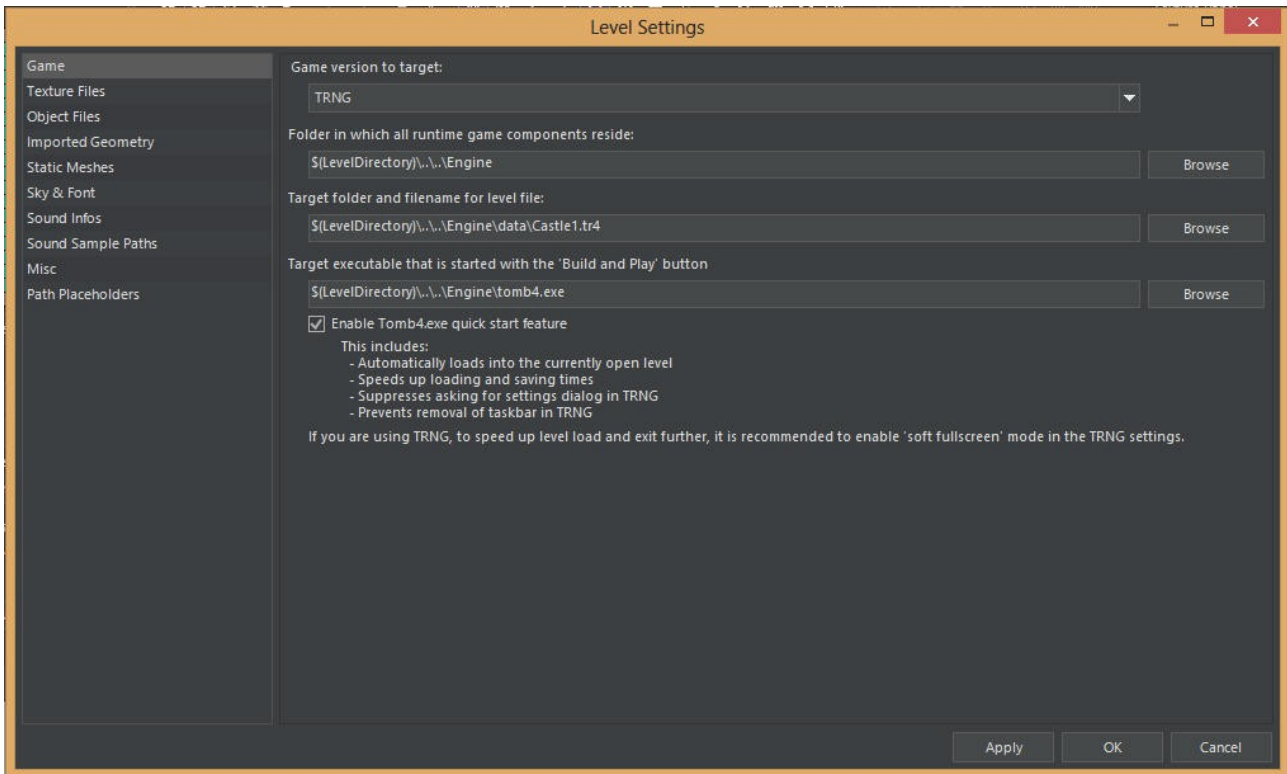


TOMB EDITOR

TOOLS MENU LEVEL SETTINGS

TOMB EDITOR MANUAL

TOOLS MENU LEVEL SETTINGS GAME



Game version to Target: **TR1**
 TR2
 TR3
 TR4
 TRNG

Select **TRNG** so all **NG triggers and functions** will be available for use.

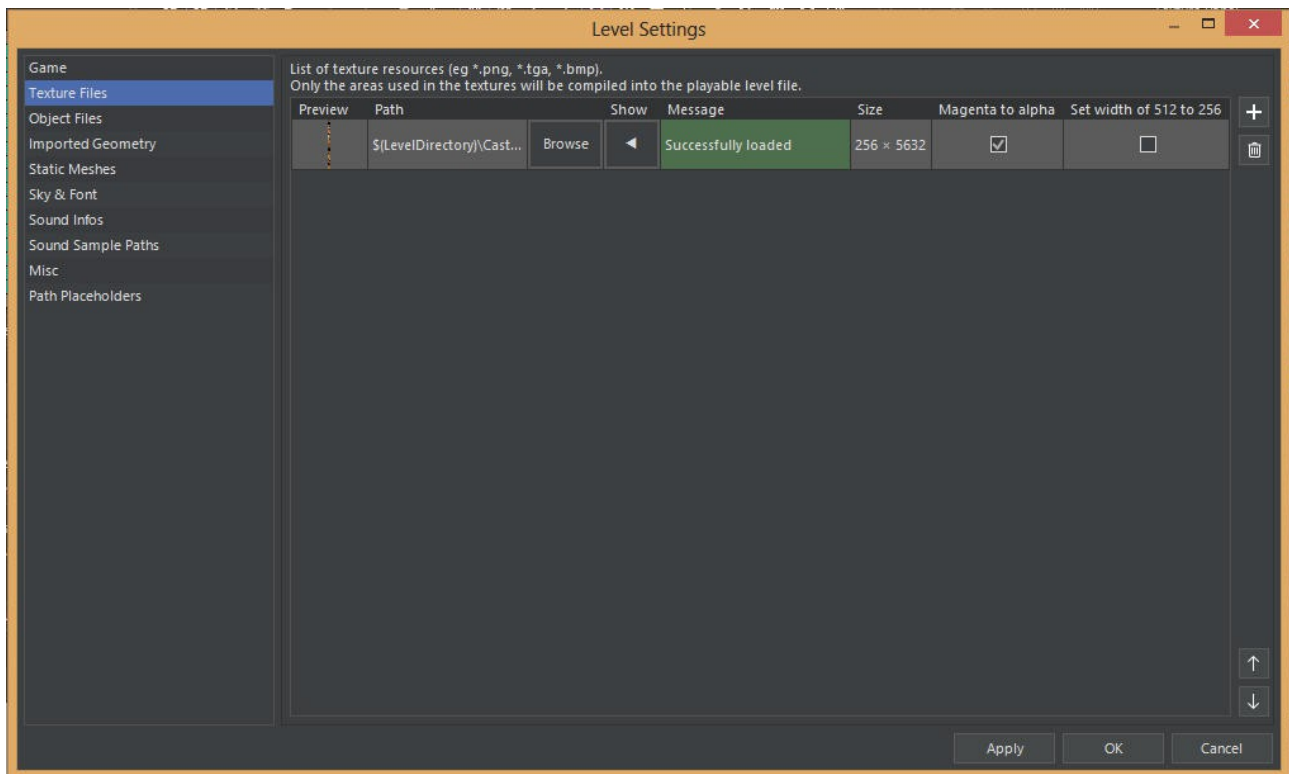
Folder in which all runtime game components reside:
Select **BROWSE** and select the Root folder for the **Tomb Editor**.

Target folder and filename for level file:
Select **BROWSE** and select the folder **.....\Engine\Data** folder for the project.

Target executable that is started with the build and play button (F5) :
Select **BROWSE** and select the folder **.....\Engine\tomb4.exe** for the project.

TOMB EDITOR MANUAL

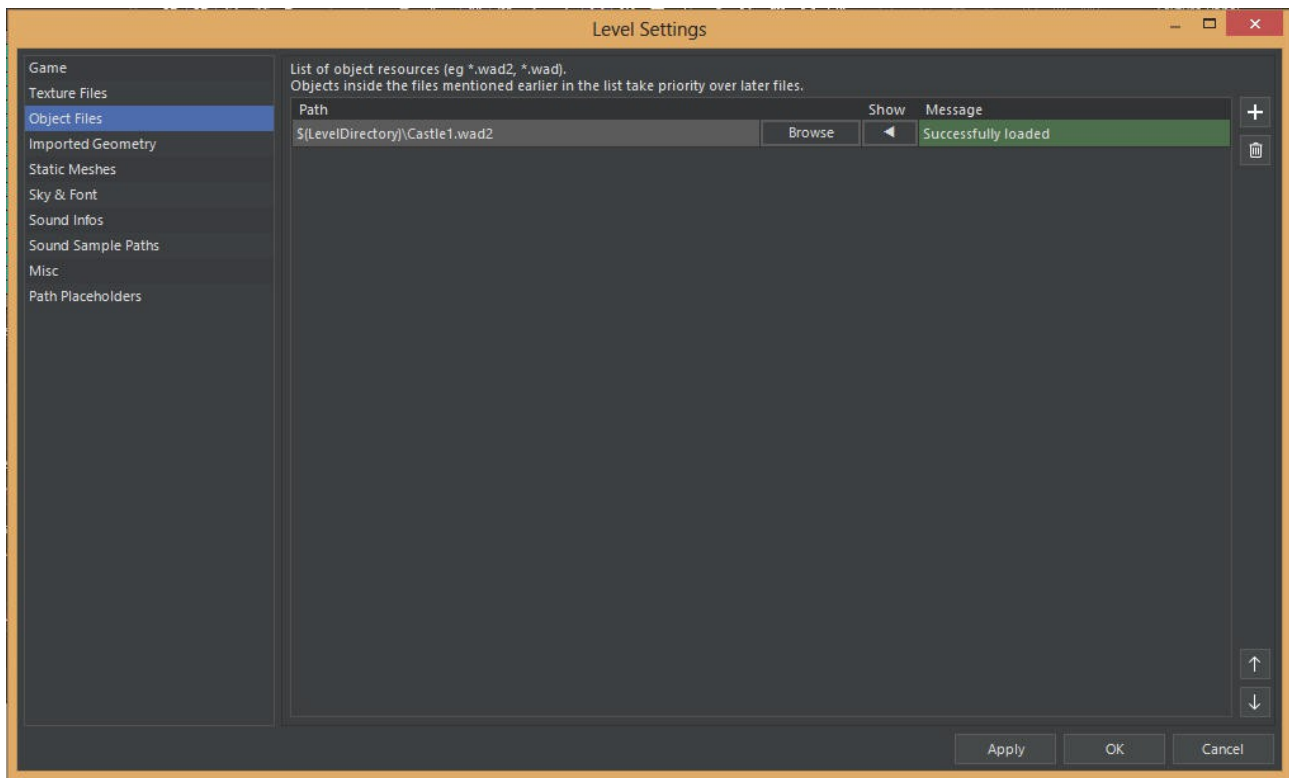
TOOLS MENU LEVEL SETTINGS TEXTURE FILES



This is the texture file(s) that is attached to the project.
This is selected initially from the Texture window in the **Tomb Editor**.

TOMB EDITOR MANUAL

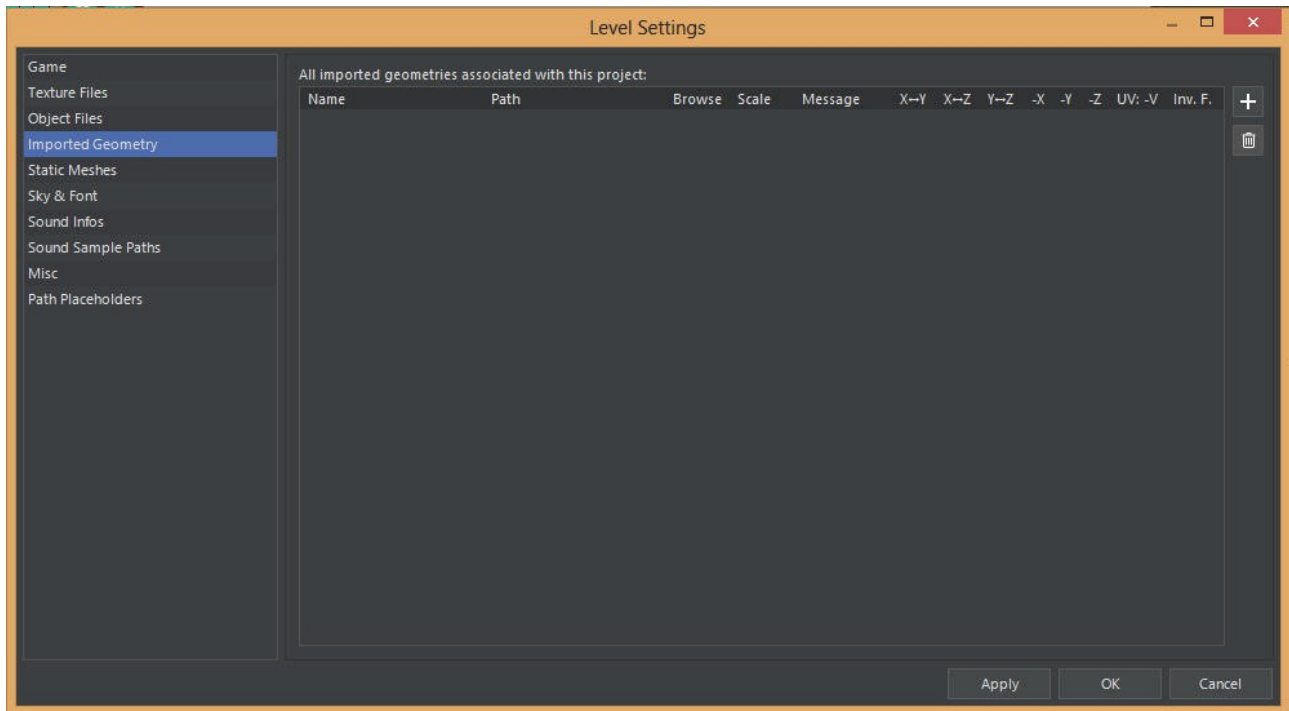
TOOLS MENU LEVEL SETTINGS OBJECT FILES



This is the object wad file(s) that is attached to the project.
This is selected initially from the Items window in the **Tomb Editor**.

TOMB EDITOR MANUAL

TOOLS MENU LEVEL SETTINGS IMPORTED GEOMETRY



This is the list of imported geometry located in the Level folder for the project.



WINDOW IMPORTED GEOMETRY FEATURE

Tomb Editor allows for importing of 3D objects stored in various popular 3D software formats directly into the rooms of levels. In the main menu go to **Items > Add imported geometry**.

Select the **Add Geometry** icon. The cursor will change into a cross.

Click on a sector in the room to place a placeholder mesh for the imported geometry object.

Double click the placeholder to open up the Imported Geometry Settings window.

Press the **+ button** to load your object file and press **Assign** to assign the loaded object to the currently selected placeholder and press **OK** to confirm.

You can load multiple objects in the Imported Geometry Settings window but only one can be assigned to a current placeholder. Your imported geometry object assignment will be saved with the Prj2 file, but the object file must be kept at the same location in order to load correctly later.

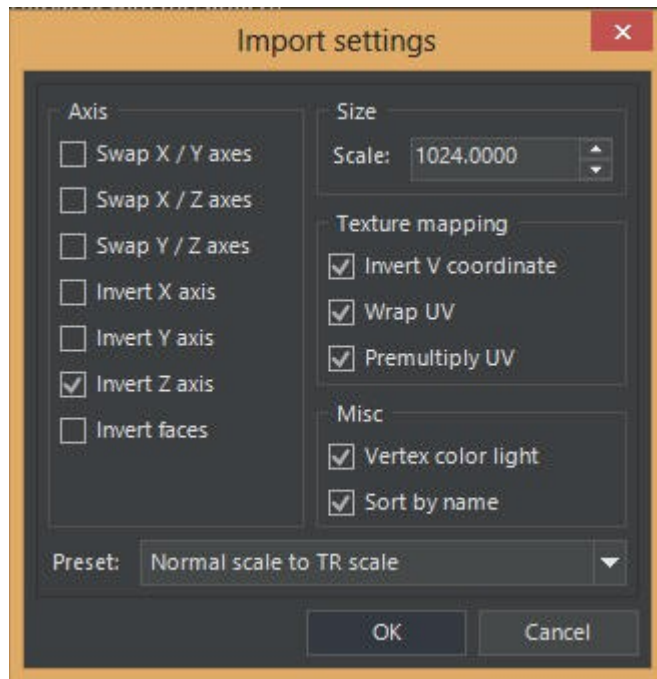
TOMB EDITOR MANUAL

SUPPORTED 3D FORMATS:

Metasequoia	(*mqo)
Autodesk	(*fbx)
Collada	(*dae)
glTF Cgltf,	(*glb)
Blender 3D	(*blend)
3ds Max C.3ds,	(*ase)
Wavefront Object	(*obj)
Industry Foundation Classes (IFC / Step),	(*ifc)
XGL	(*xgl, *.zgl)
Stanford Polygon Library	(*ply)
AutoCAD DXF	(*dxf)
LightWave	(*lwo)
LightWave Scene	(*Mws)
Modo	(*Mxo)
Stereolithography	(*stl)
DirectX X	(*x)
AC3D	(*ac)
Milkshape 3D	(*ms3d)
TrueSpace	(*cob, ".sen)
OpenGEX	(*ogex)
X3D	(*x3d)
3MF	(*3mf)
Biovision BVH	(*bvh)
CharacterStudio Motion	(*csm)
Ogre XML	(*xml)
Irrlicht Mesh	(*irmesh)
Irrlicht Scene	(*irr)
Quake I	(*mdl)
Quake II	(*md2)
Quake III Mesh	(*md3)
Quake III Map/BSP	("pk3)
Return to Castle Wolfenstein	(*mdc)
Doom 3	(*md5)
Valve Model	(*smd, *.vta)
Open Game Engine Exchange	(*ogex)
Unreal	(*3d)
BlitzBasic 3D	(*b3d)
Quick3D	(*q3d, *.q3s)
Neutral File Format	(*nff)
Object File Format	(*off)
PovRAY Raw	(*raw)
Terragen Terrain	(*ter)
3D GameStudio(3DGS)	(*mdl)
3D GameStudio(3DGS) Terrain	(*hmp)
Izware Nendo	(*ndo)

TOMB EDITOR MANUAL

3D MODEL IMPORT EXPORT SETTINGS



Axis

Set as required to: swap axes, invert axis, invert faces.
This depends upon the format of the 3D object being loaded.

Size

This sets the scale factor for loading.
This depends upon the format of the 3D object being loaded.

Texture Mapping

Set as required. This depends upon the format of the 3D object being loaded.

Misc

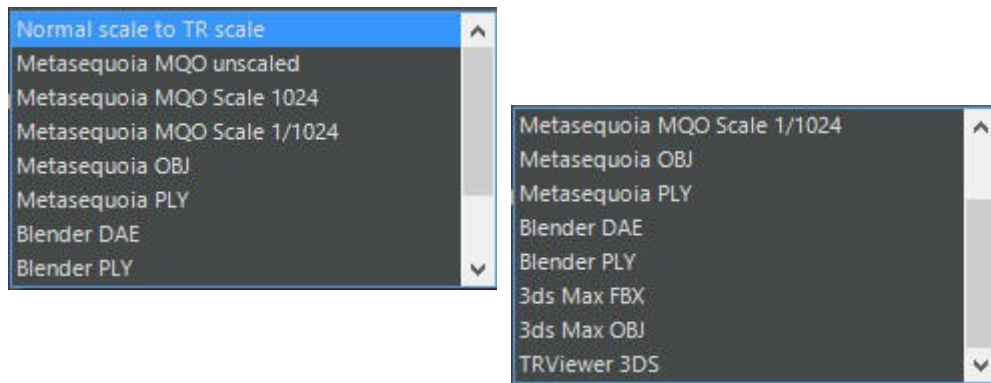
Set as required.

TOMB EDITOR MANUAL

PRESETS:

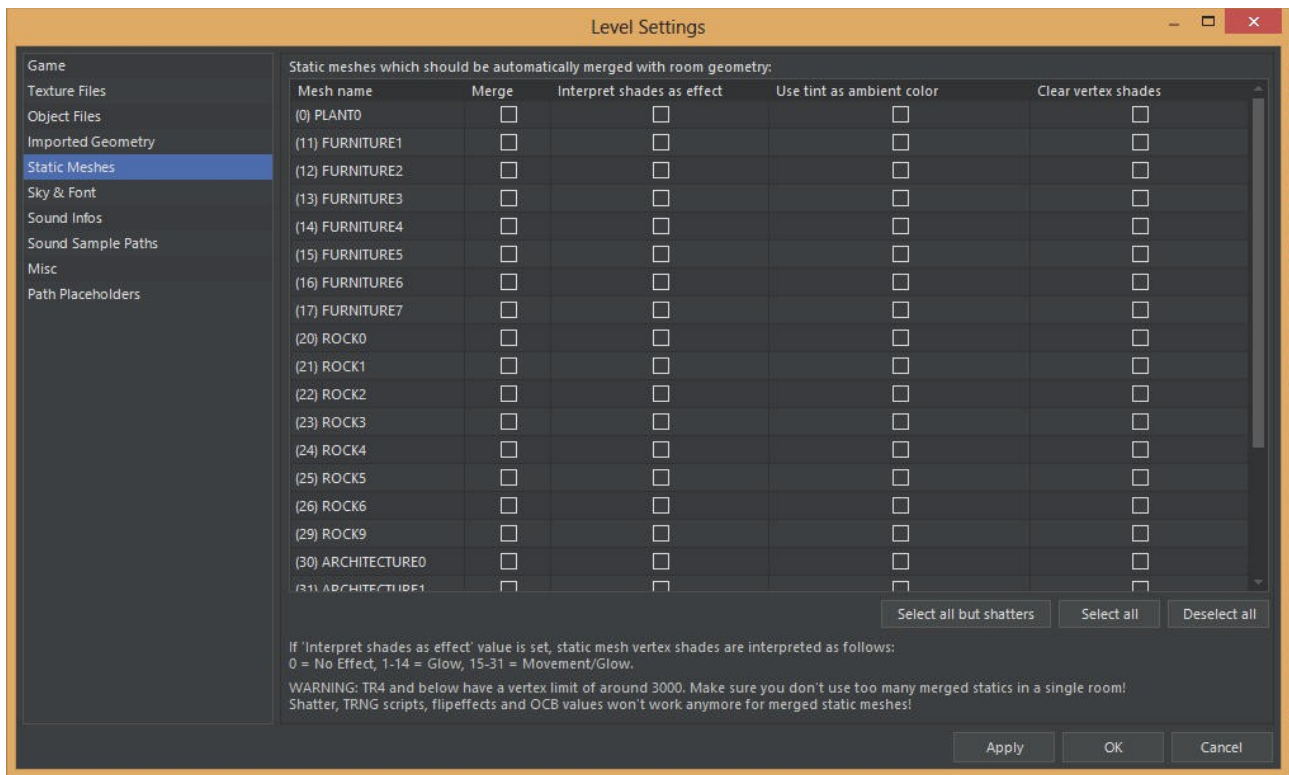
Select a preset as required.

This depends upon the format of the 3D object being loaded.



TOMB EDITOR MANUAL

TOOLS MENU LEVEL SETTINGS STATIC MESHES

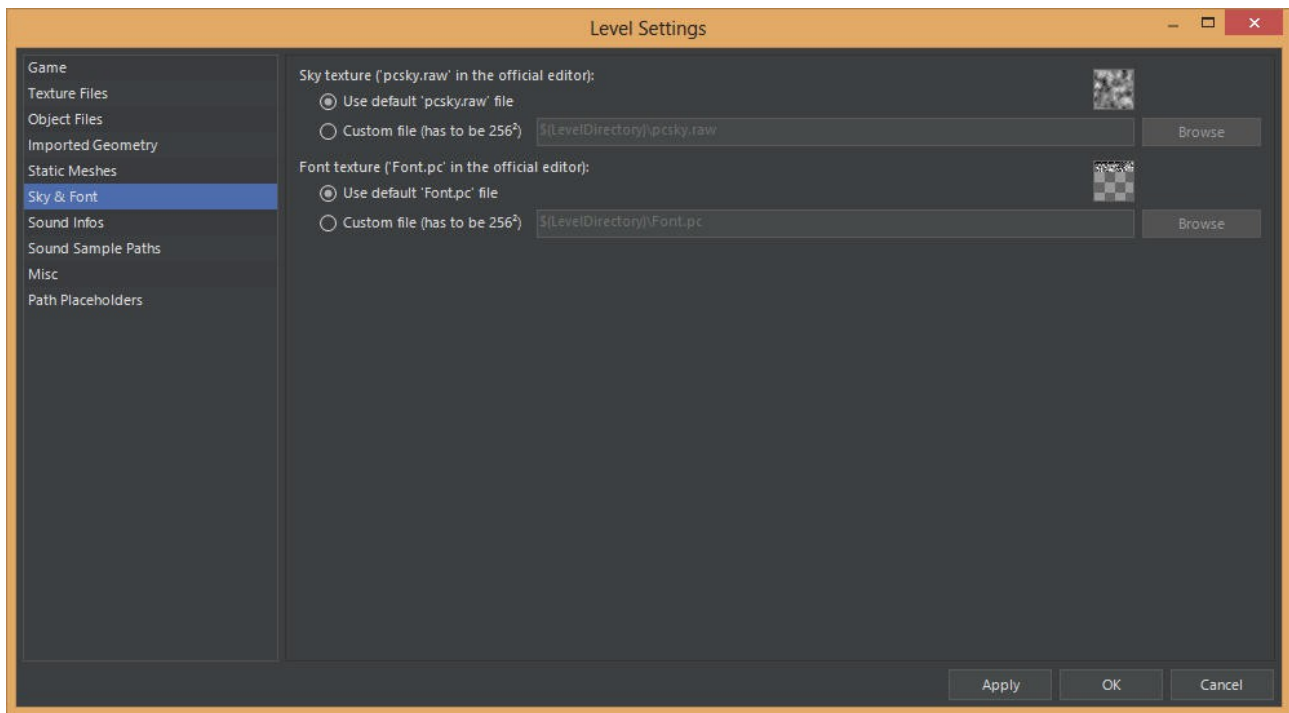


This is the list of Static Meshes in the wad2 for the project.
Select as required to merge the static mesh with the room geometry.

Warning: **TR4** and earlier versions have a vertex limit of around 3000.
Make sure you do not use too many merged statics in a room.
Shatter, TRNG Scripts, flip effects and OCB values do not work
with merged static meshes.

TOMB EDITOR MANUAL

TOOLS MENU LEVEL SETTINGS SKY & FONT



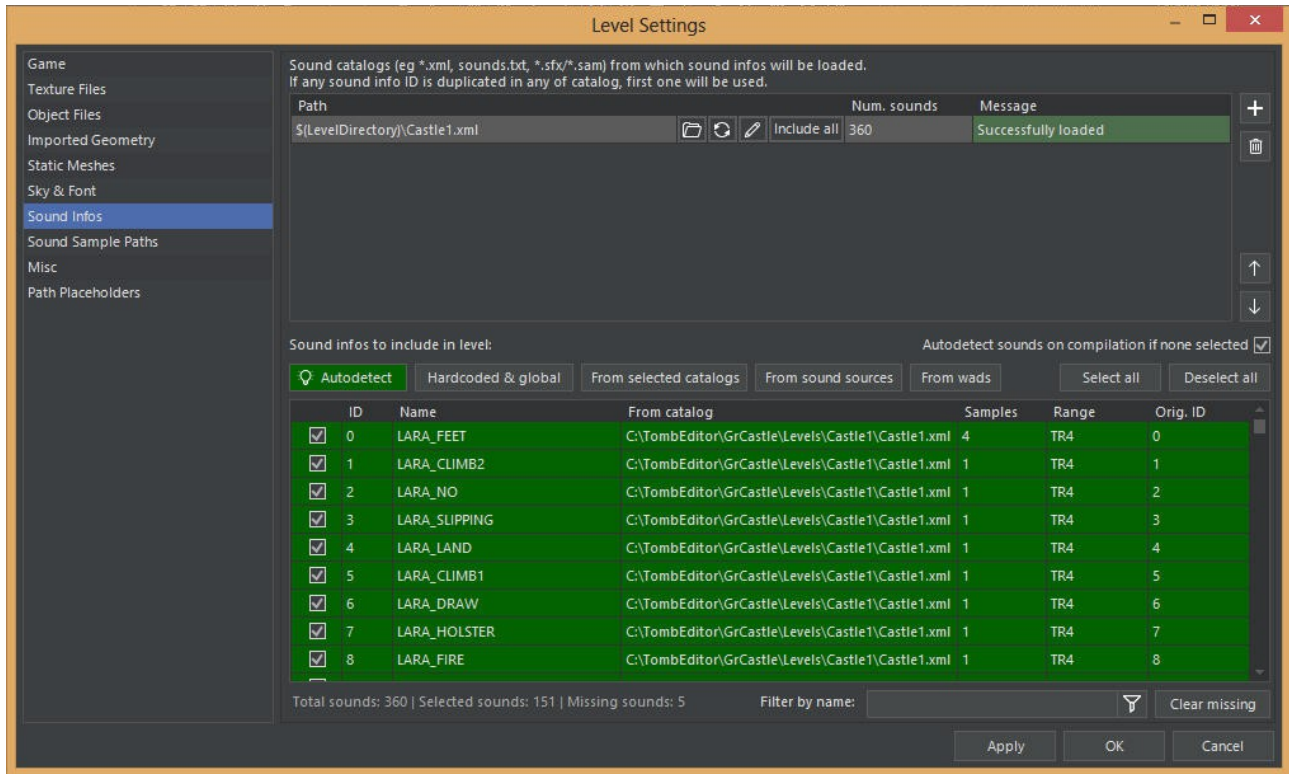
This is the Sky and Font used for the project Level.

Use the default setting or select a custom file.

TOMB EDITOR MANUAL

TOOLS MENU LEVEL SETTINGS SOUND INFOS

The sound info path set to the [level_name.xml](#) file in the project level folder.

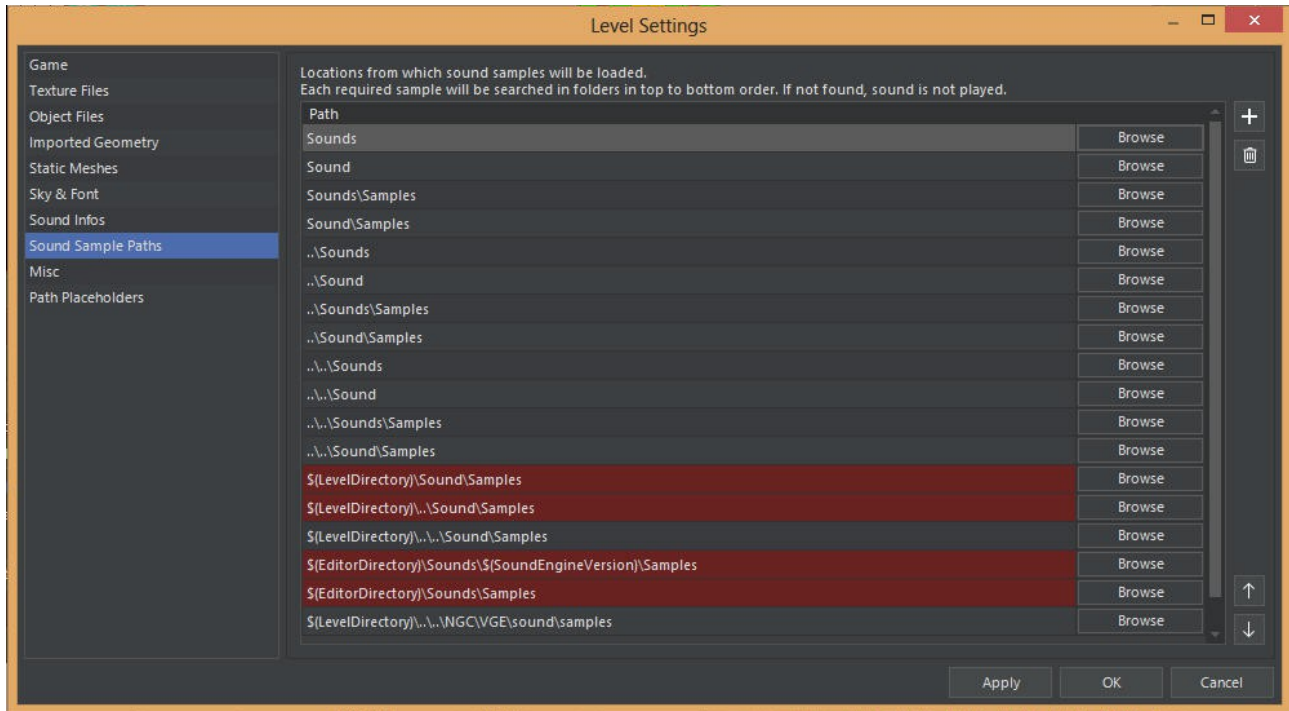


This window has the location of the sound .xml file(s) used for the level.
This window displays the list of sounds that can be compiled with the level.

TOMB EDITOR MANUAL

TOOLS MENU LEVEL SETTINGS SOUND SAMPLE PATHS

The default paths are as follows:

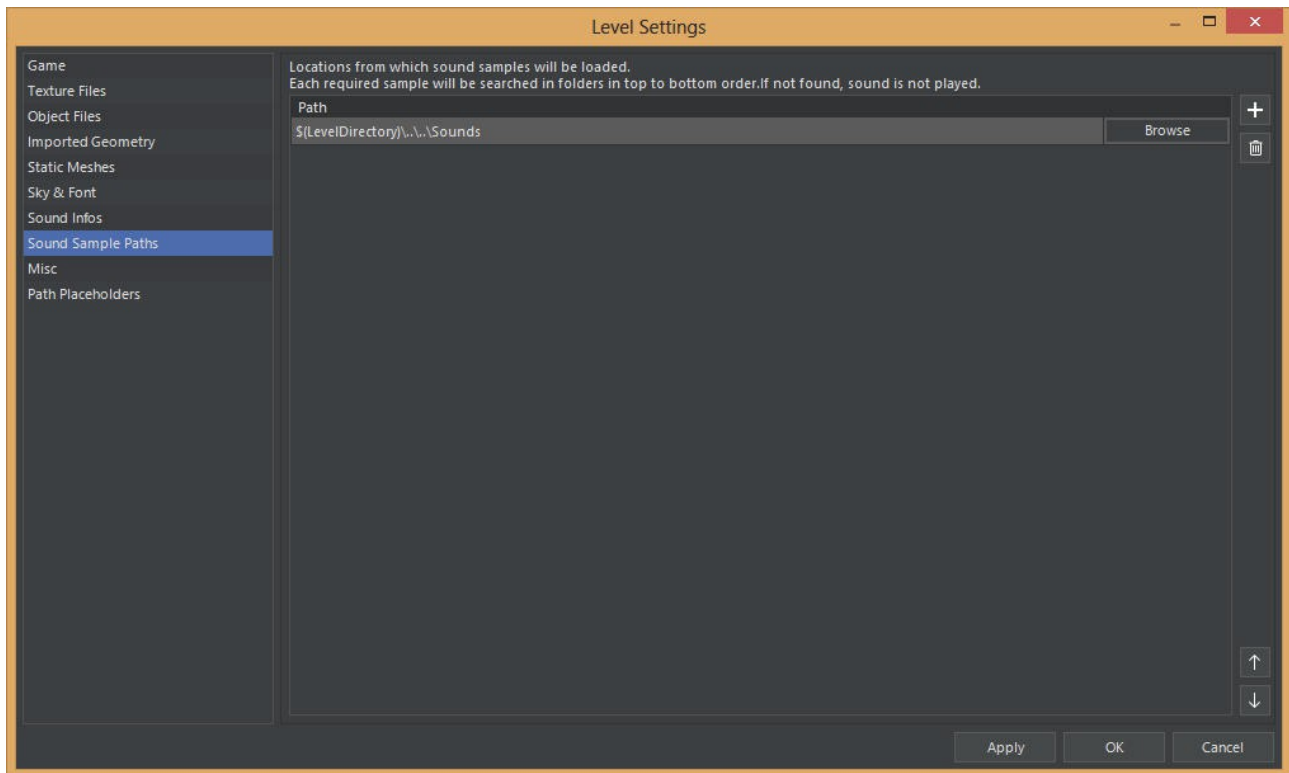


Delete unwanted sound paths.

Select **BROWSE** and set the sound path to the Sounds folder for the project.:

TOMB EDITOR MANUAL

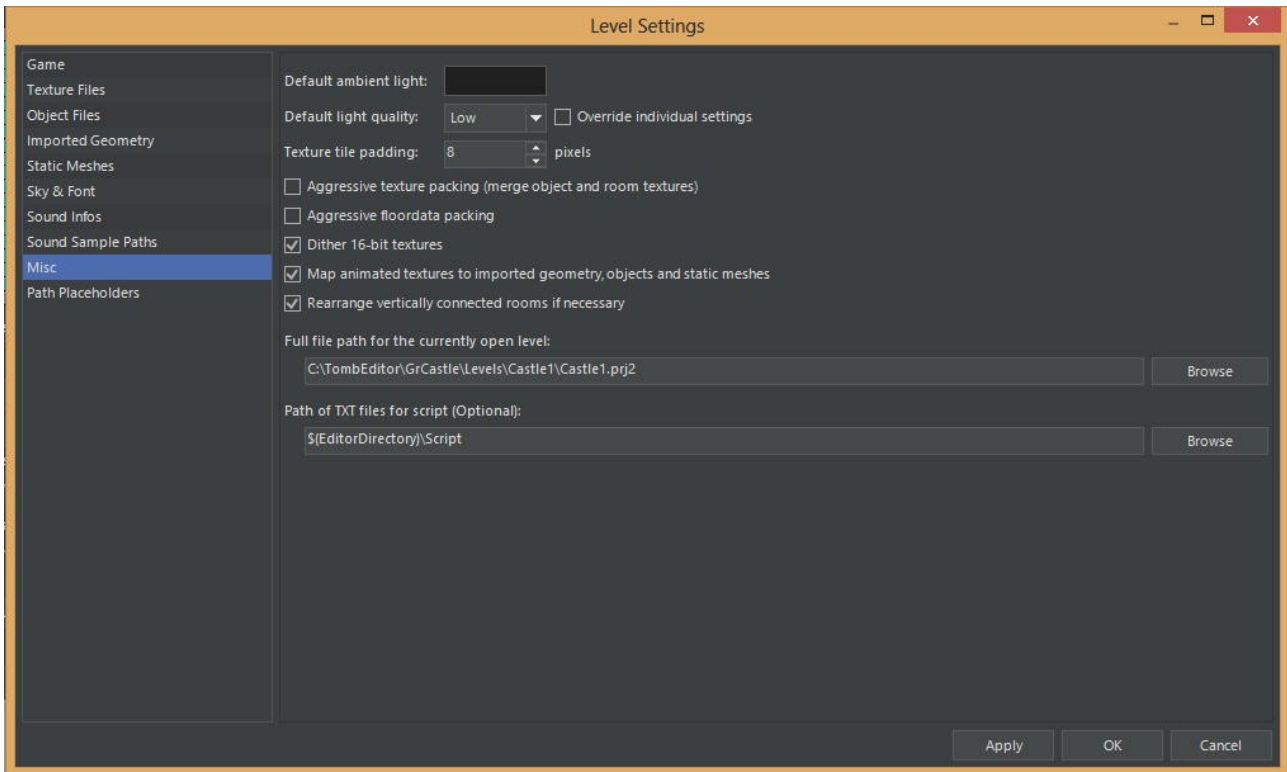
For this example:\GrCastle\Sounds



This window lists the path to the sound files that are used for the project level. These sound files are compiled into the Level if they have been selected in the Sound Infos window.

TOMB EDITOR MANUAL

TOOLS MENU LEVEL SETTINGS MISCELLANEOUS



Set the Default Ambient Light to: **Red = 128, Blue = 128, Green = 128.**

This is the values used in the **Original Level Editor.**

This is ideal for the building process so you can see what is happening.
The last process in building is to set the lighting for the rooms.

Set the following values, boxes and paths as required.

Default light quality.

Low
Medium
High

Override individual settings.

Set box if required.

Texture tile padding.

Default = 8 pixels.

Aggressive texture packing (merge object and room textures).

Set box if required.

Aggressive floor data packing.

Set box if required.

TOMB EDITOR MANUAL

Other 16 bit textures.

Set box if required.

Map animated textures to imported geometry objects and static meshes.

Set box if required.

Rearrange vertically connected rooms if necessary.

Set box if required.

Full file path for the currently open level.

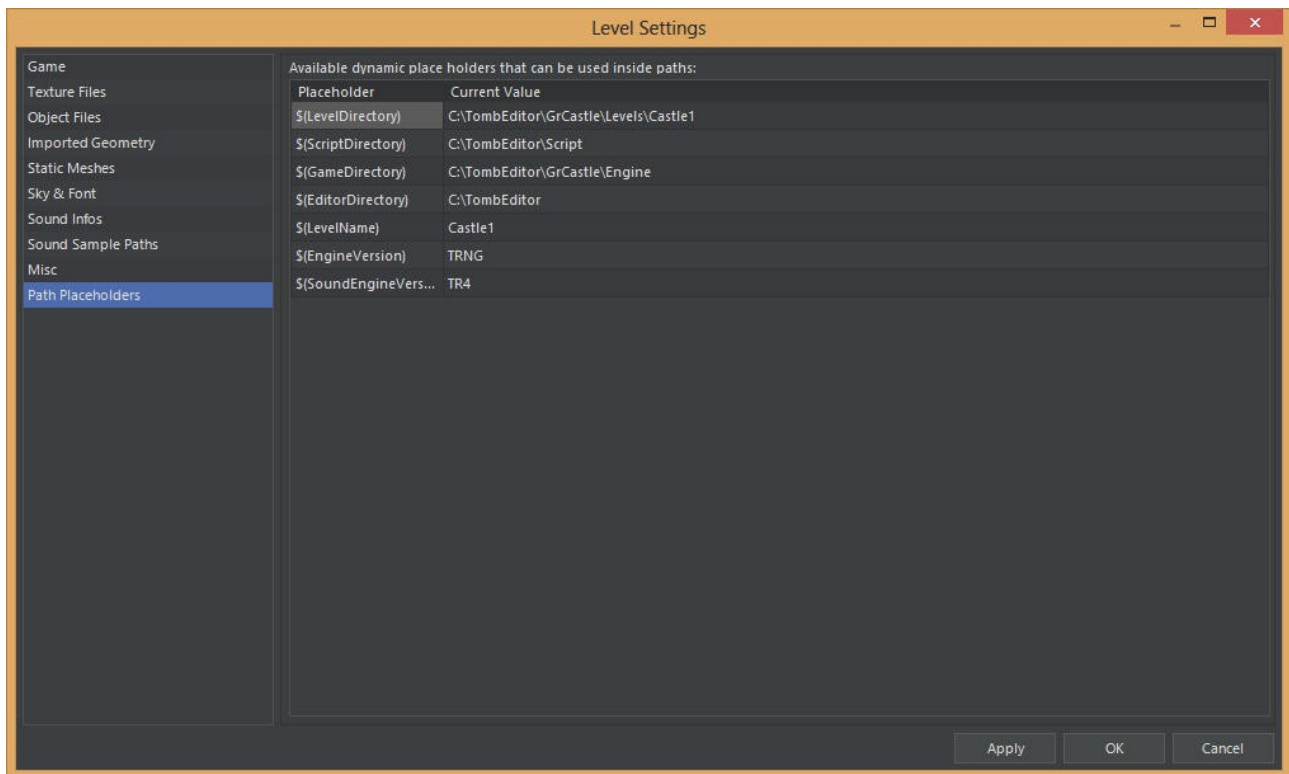
C:\Tomb Editor\project folder\Levels\Level name\name.prj2

Path of text files for script (Optional).

C:\Tomb Editor\project folder\Script

TOMB EDITOR MANUAL

TOOLS MENU LEVEL SETTINGS PATH PLACEHOLDERS



This window lists the paths for the place holder files.

Level Directory.

C:\Tomb Editor\project folder\Levels\Level name

Script directory.

C:\Tomb Editor\project folder\Script

Game Directory.

C:\Tomb Editor\project folder\Engine

Editor Directory.

C:\Tomb Editor

Level Name.

Level name

Engine Version.

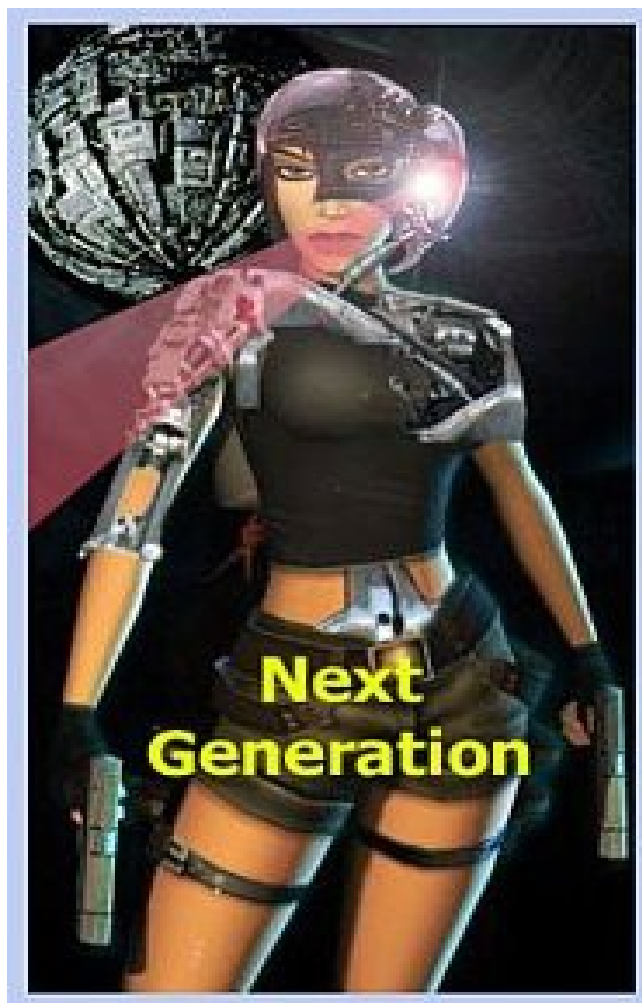
TRNG

Sound Engine Version.

TR4

TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION

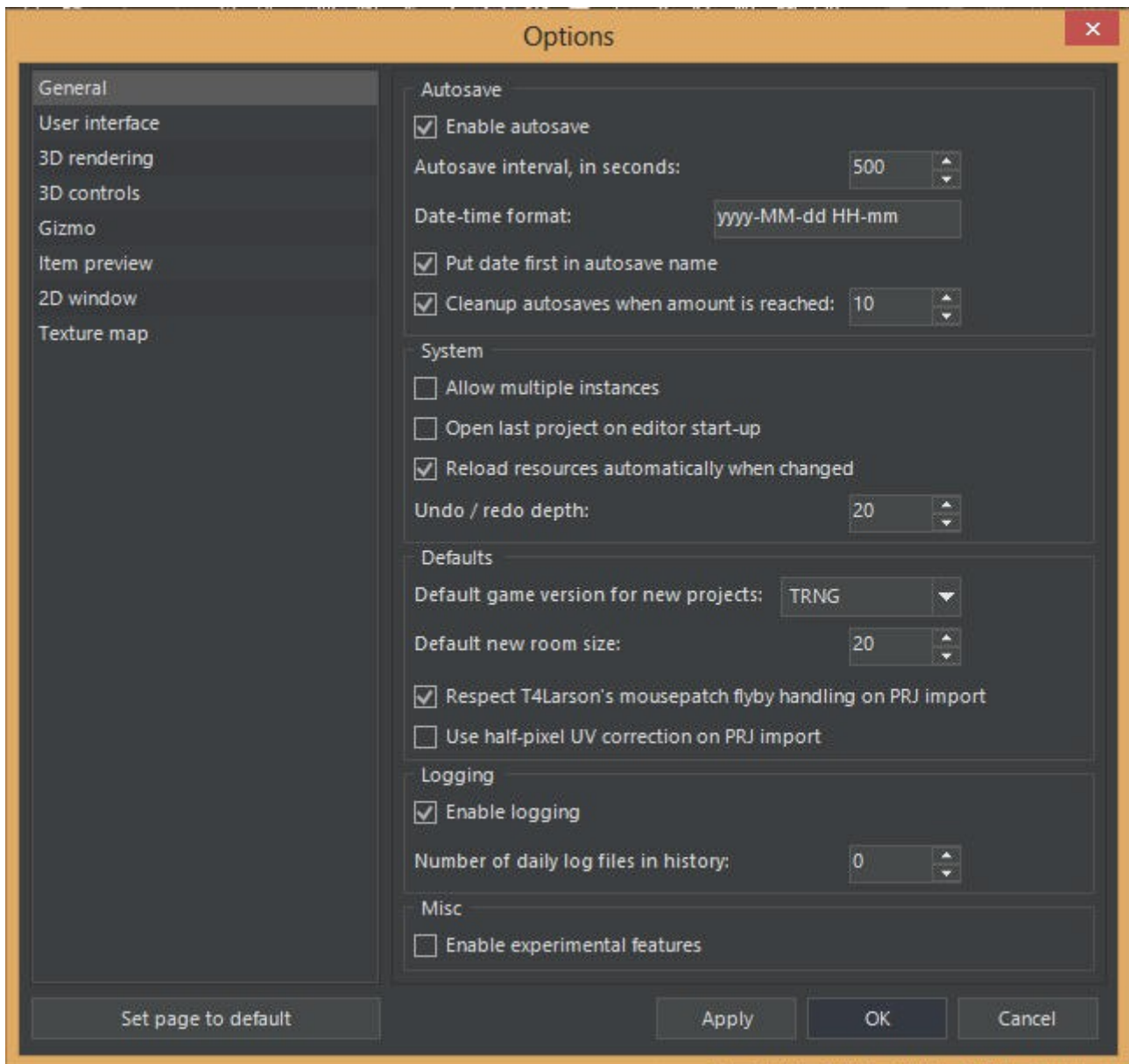


TOMB EDITOR

TOOLS MENU EDITOR OPTIONS

TOMB EDITOR MANUAL

TOOLS MENU EDITOR OPTIONS GENERAL



Set page to default

Set the General defaults.

Apply

Apply the changes.

OK

CANCEL

TOMB EDITOR MANUAL

AUTOSAVE: **Set the Autosave fields to your requirements.**

Enable Autosave

Select box if required.

Autosave interval in seconds

Default = 500

Date Time format

Default = yyyy-MM-dd-hh-mm (year month day hour minute).

Put date first in Autosave name

Select box if required.

Clean up Autosave when limit is reached

Default = 10.

SYSTEM: **Set the System fields to your requirements.**

Allow multiple instances.

Select box if required.

Open last project on Editor startup.

Select box if required.

Reload resources automatically when changed.

Select box if required.

Undo / Redo depth.

Default = 20.

DEFAULTS: **Set the Defaults fields to your requirements.**

Default Game version for new project.

Default = TRNG.

Default new room size.

Default = 20.

Respect T4Larson's mouse patch flyby handling on prj import.

Select box if required.

Use half pixel UV correction on prj import.

Select box if required.

TOMB EDITOR MANUAL

LOGGING: **Set the Logging fields to your requirements.**

Enable logging.

Select box if required.

Number of daily log files in history.

Default = 0.

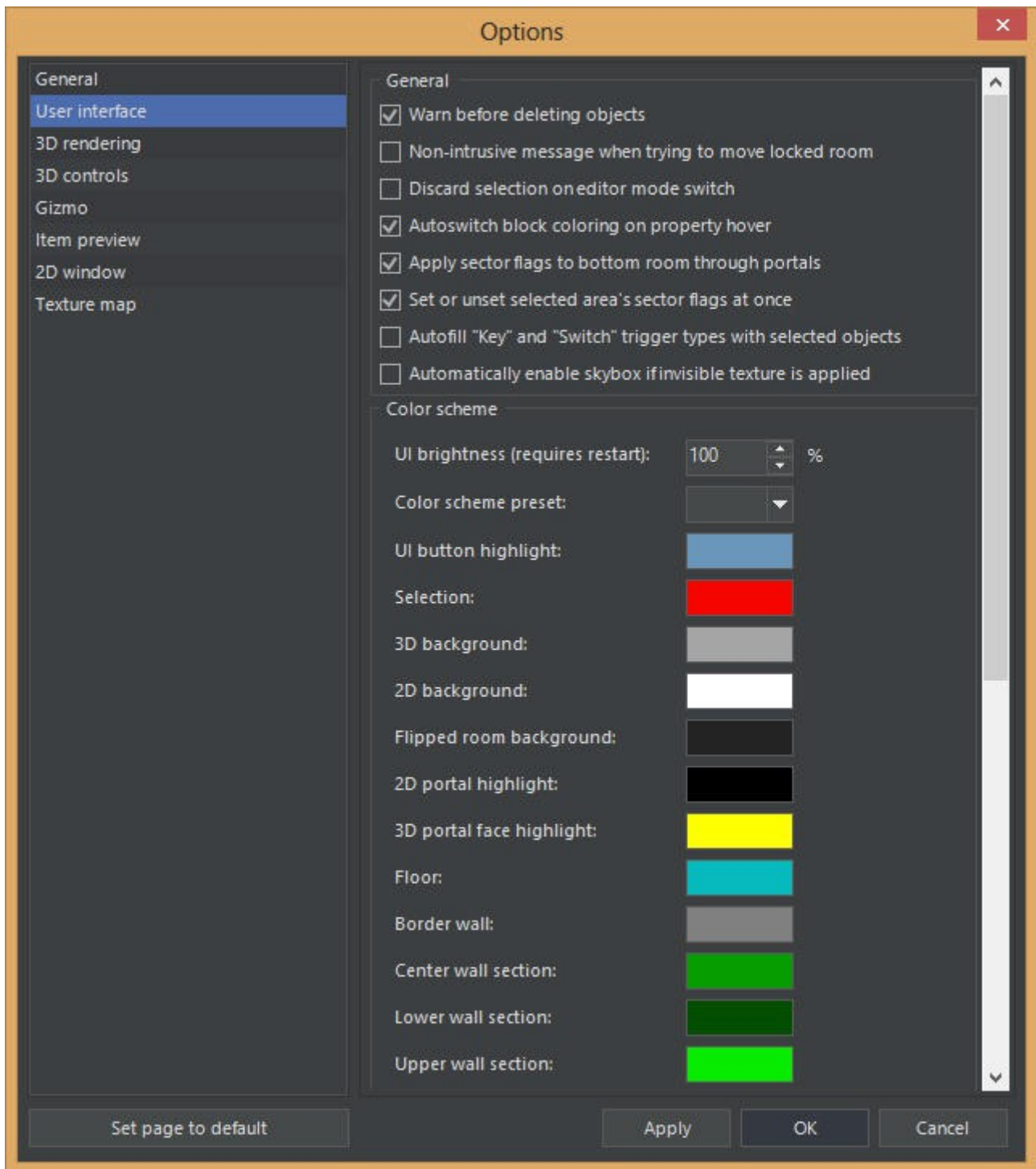
MISC: **Set the Miscellaneous fields to your requirements.**

Enable experimental features.

Select box if required.

TOMB EDITOR MANUAL

TOOLS MENU EDITOR OPTIONS USER INTERFACE



Set page to default
Set the General defaults.

Apply
Apply the changes.

TOMB EDITOR MANUAL

GENERAL: **Set the General fields to your requirements.**

Warn before deleting objects.

Select box if required.

Non intrusive message when trying to move locked room.

Select box if required.

Discard selection on Editor mode switch.

Select box if required.

Autoswitch block coloring on property hover.

Select box if required.

Apply sector flags to bottom room through portals.

Select box if required.

Set or Unset selected area's sector flags at once.

Select box if required.

Auto fill Key and Switch trigger types with selected objects.

Select box if required.

Automatically enable Sky box if invisible texture is applied.

Select box if required.

COLOR SCHEME: **Set the Color Scheme to your requirements.
(or leave it as it is if you are happy with it.)**

UI brightness (requires restart)

Default = 100 %.

Color scheme preset.

UI button high light.

Selection.

3D background.

2D background.

Flipped room background.

2D portal high light.

3D portal face high light.

Floor.

Border wall.

Center wall sections.

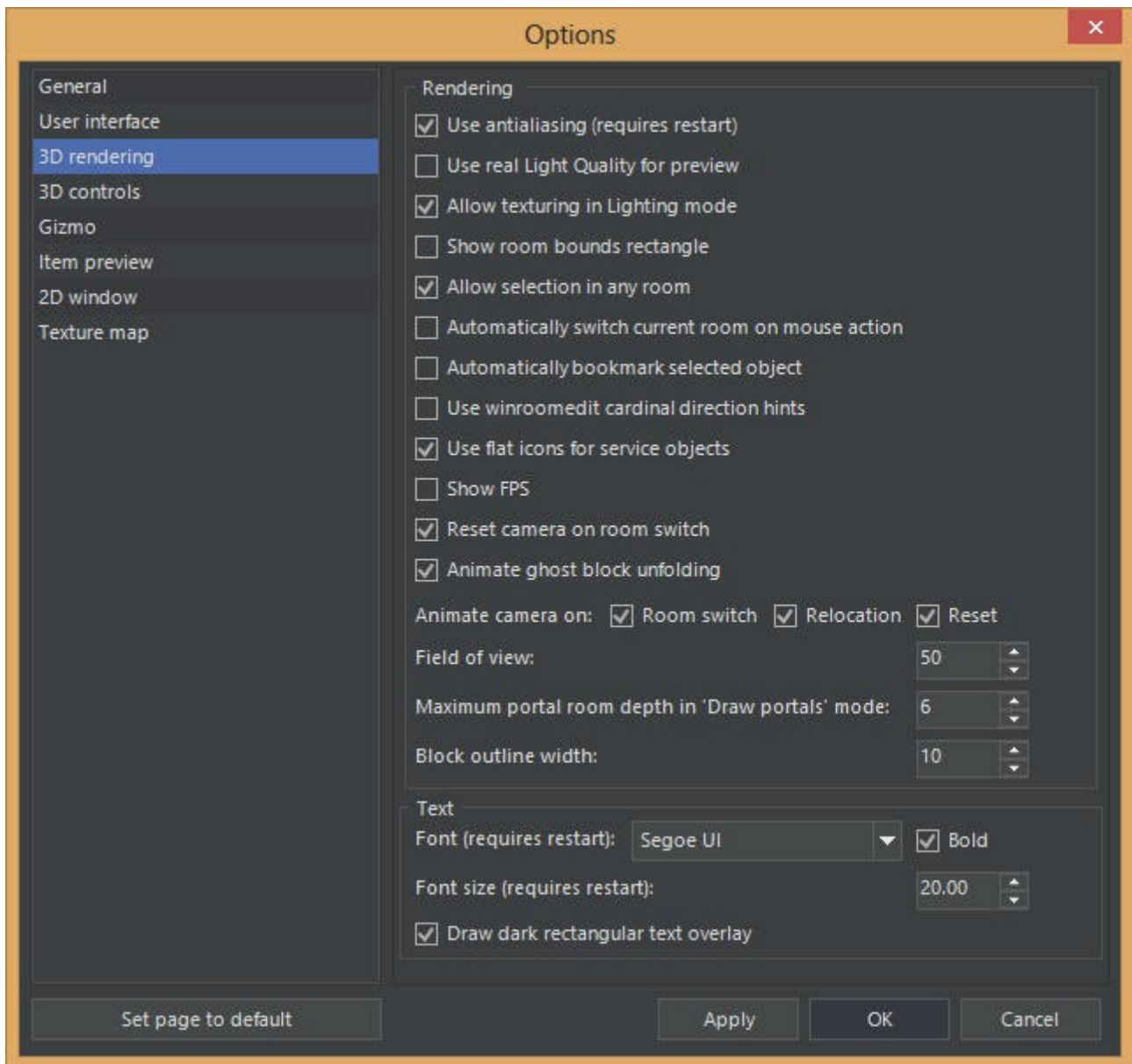
Lower wall sections.

Upper wall sections.

Select and set the color if required.

TOMB EDITOR MANUAL

TOOLS MENU EDITOR OPTIONS 3D RENDERING WINDOW



Set page to default
Set the General defaults.

Apply
Apply the changes.

OK

CANCEL

TOMB EDITOR MANUAL

RENDERING: **Set the Rendering fields to your requirements.**

Use antialiasing (requires restart).

Select box if required.

Use real light Quality for preview.

Select box if required.

Allow texturing in lighting mode.

Select box if required.

Show room bounds rectangle.

Select box if required.

Allow selection in any room.

Select box if required.

Automatically switch current room on mouse action.

Select box if required.

Automatically book mark selected object.

Select box if required.

Use win room edit cardinal direction hints.

Select box if required.

Use flat icons for service objects.

Select box if required.

Show FPS. (frames per second)

Select box if required.

Reset camera on room switch.

Select box if required.

Animate ghost block unfolding.

Select box if required.

Animate camera on: Room switch Relocation Reset

Select boxes if required.

Field of view.

Default = 50.

Maximum portal room depth in Draw portals mode.

Default = 6.

Block outline width.

Default = 10.

TOMB EDITOR MANUAL

TEXT: **Set the Text fields to your requirements.**

Font (requires restart).

Default = Segoe UI.

Select different font if required.

Bold.

Select box if required.

Font size (requires restart).

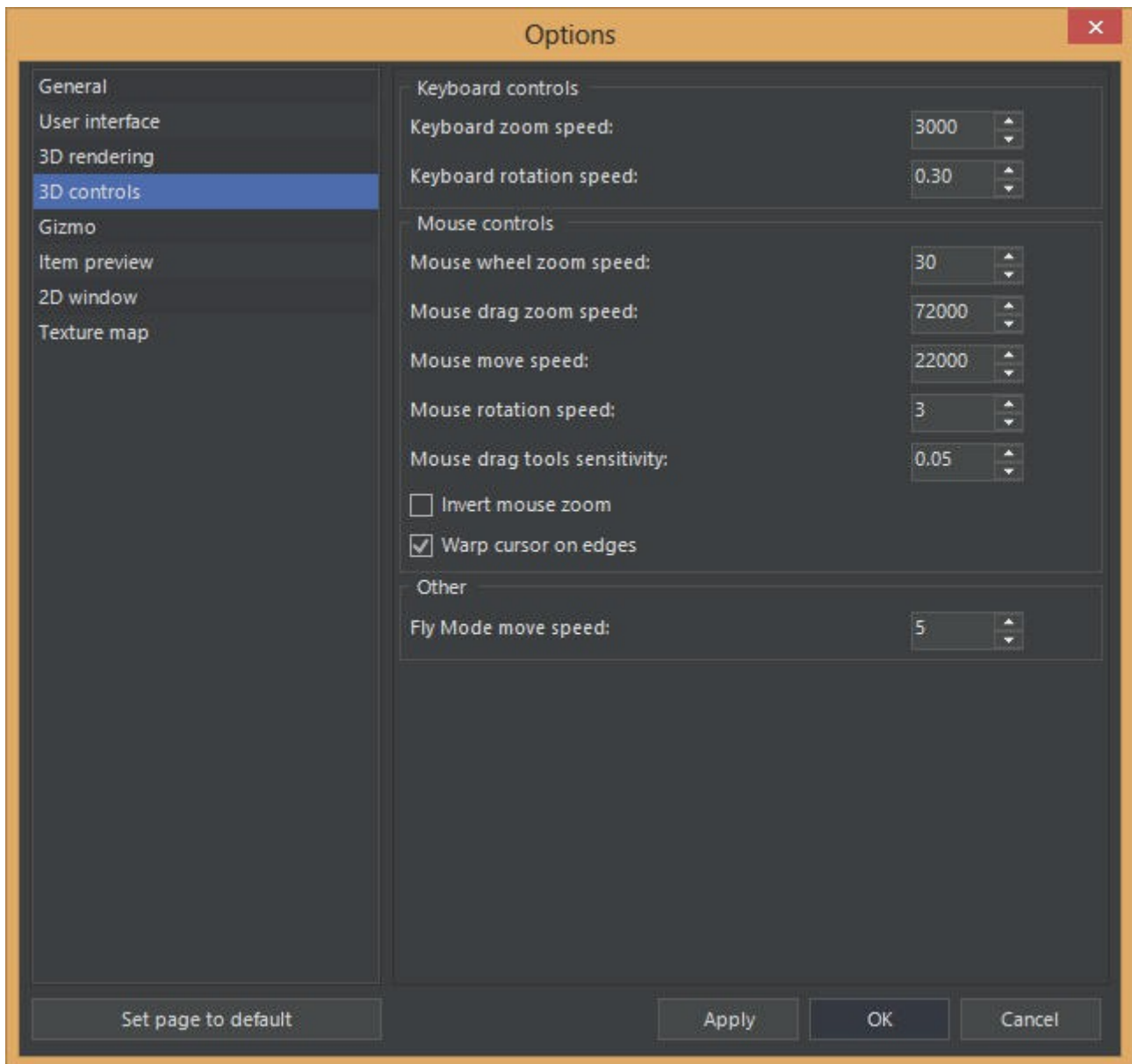
Default = 20.

Draw dark rectangle text overlay.

Select box if required.

TOMB EDITOR MANUAL

TOOLS MENU EDITOR OPTIONS 3D CONTROLS WINDOW



Set page to default

Set the General defaults.

Apply

Apply the changes.

OK

CANCEL

TOMB EDITOR MANUAL

KEYBOARD CONTROLS: [Set the Keyboard Controls fields to your requirements.](#)

Keyboard zoom speed.

Default = 3000.

Keyboard rotation speed.

Default = 0.3.

MOUSE CONTROLS: [Set the Mouse Controls fields to your requirements.](#)

Mouse wheel zoom speed.

Default = 30.

Mouse drag zoom speed.

Default = 72000.

Mouse move speed.

Default = 22000.

Mouse rotation speed.

Default = 3.

Mouse drag tools sensitivity.

Default = 0.05.

Invert mouse zoom.

Select box if required.

Wrap cursor on edges.

Select box if required.

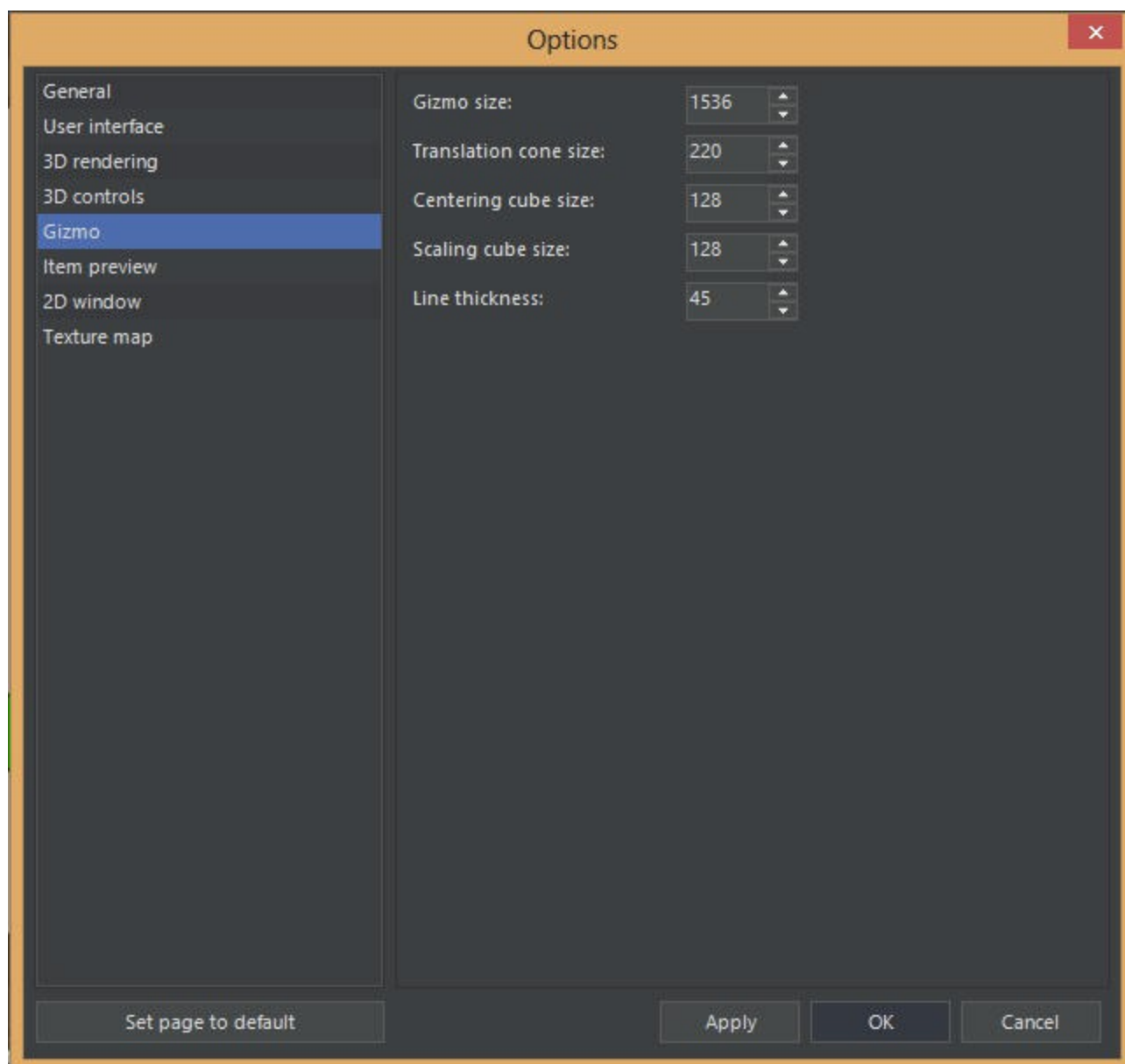
OTHER CONTROLS: [Set the Other Controls fields to your requirements.](#)

Fly mode move speed.

Default = 5.

TOMB EDITOR MANUAL

TOOLS MENU EDITOR OPTIONS GIZMO



Set page to default

Set the General defaults.

Apply

Apply the changes.

OK

CANCEL

TOMB EDITOR MANUAL

GIZMO: **Set the Gizmo fields to your requirements.**

Gizmo size.

Default = 1536.

Translation cone size.

Default = 220.

Centering cube size.

Default = 128.

Scaling cube size.

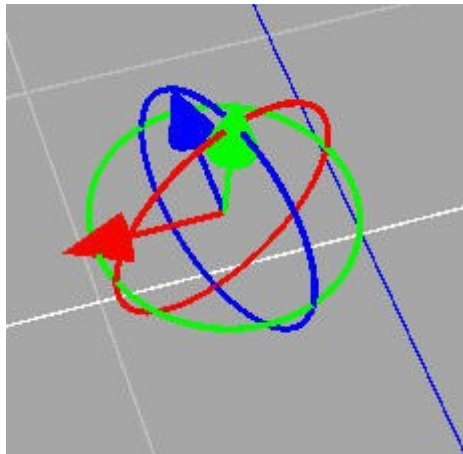
Default = 128.

Line thickness.

Default = 45.

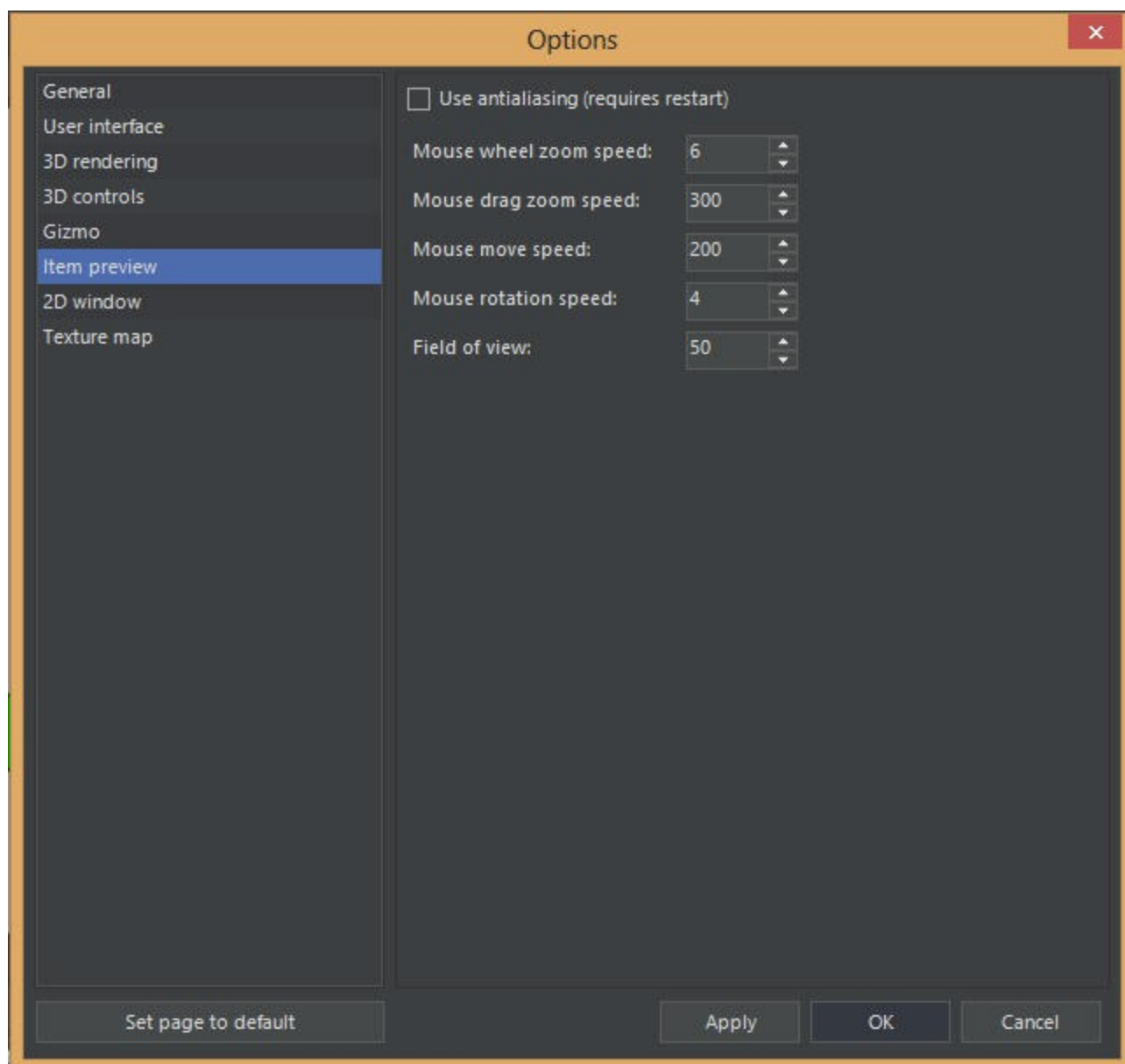
Note: The **GIZMO** is the three coloured arrow lines and rings that surround the selected object. It is used to move and rotate the object.

This object is called the **GIZMO**.



TOMB EDITOR MANUAL

TOOLS MENU EDITOR OPTIONS ITEM PREVIEW



Set page to default

Set the General defaults.

Apply

Apply the changes.

OK

CANCEL

TOMB EDITOR MANUAL

ITEM PREVIEW: **Set the Item Preview fields to your requirements.**

Use antialiasing (requires restart).

Select box if required.

Mouse wheel zoom speed.

Default = 6.

Mouse drag zoom speed.

Default = 300.

Mouse move speed.

Default = 200.

Mouse rotation speed.

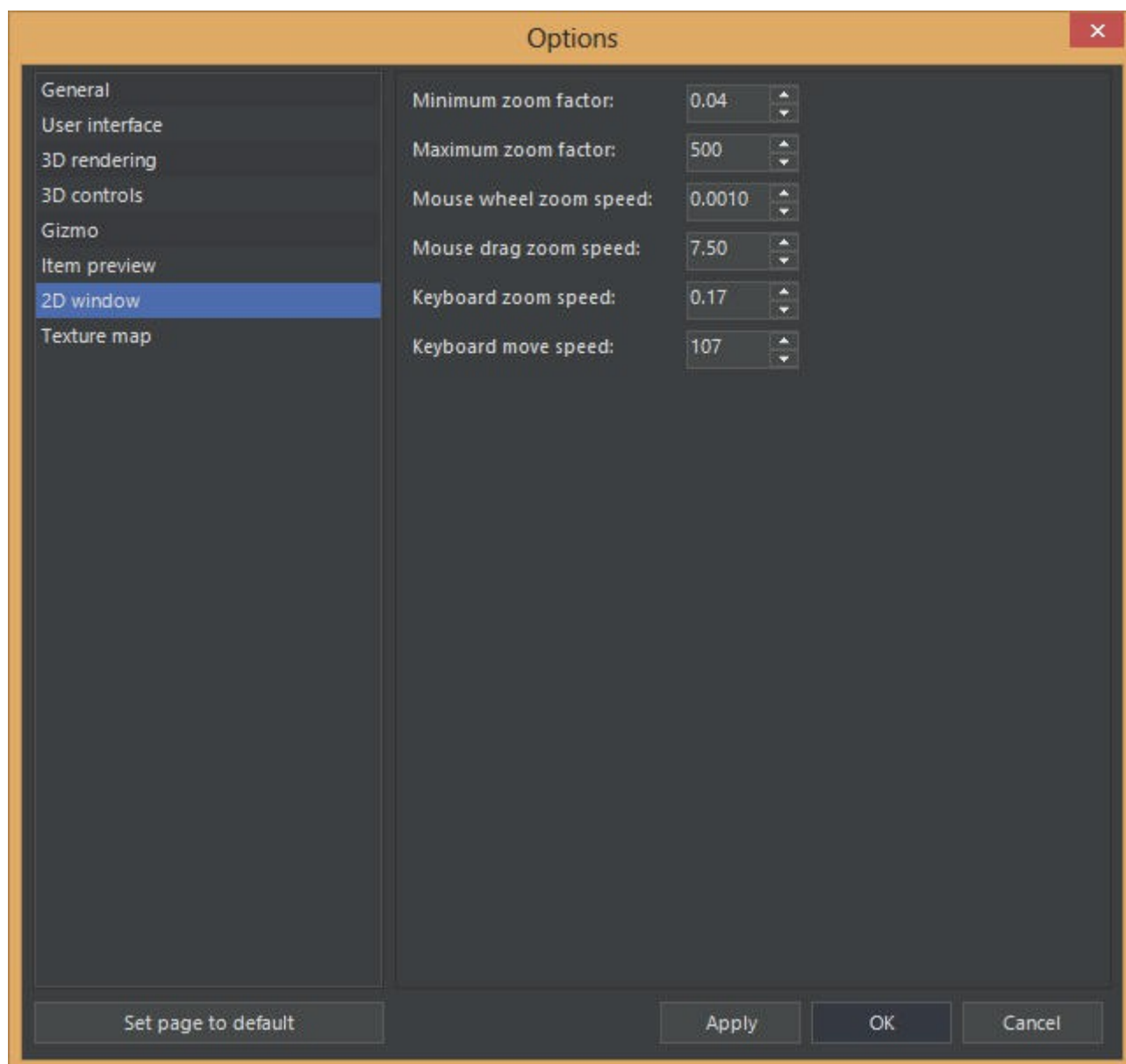
Default = 4.

Field of view.

Default = 50.

TOMB EDITOR MANUAL

TOOLS MENU EDITOR OPTIONS 2D WINDOW



Set page to default
Set the General defaults.

Apply
Apply the changes.

OK

CANCEL

TOMB EDITOR MANUAL

2D WINDOW: **Set the 2D window fields to your requirements.**

Minimum zoom factor.

Default = 0.04.

Maximum zoom factor.

Default = 500.

Mouse wheel zoom speed.

Default = 0.0010.

Mouse drag zoom speed.

Default = 7.50.

Keyboard zoom speed.

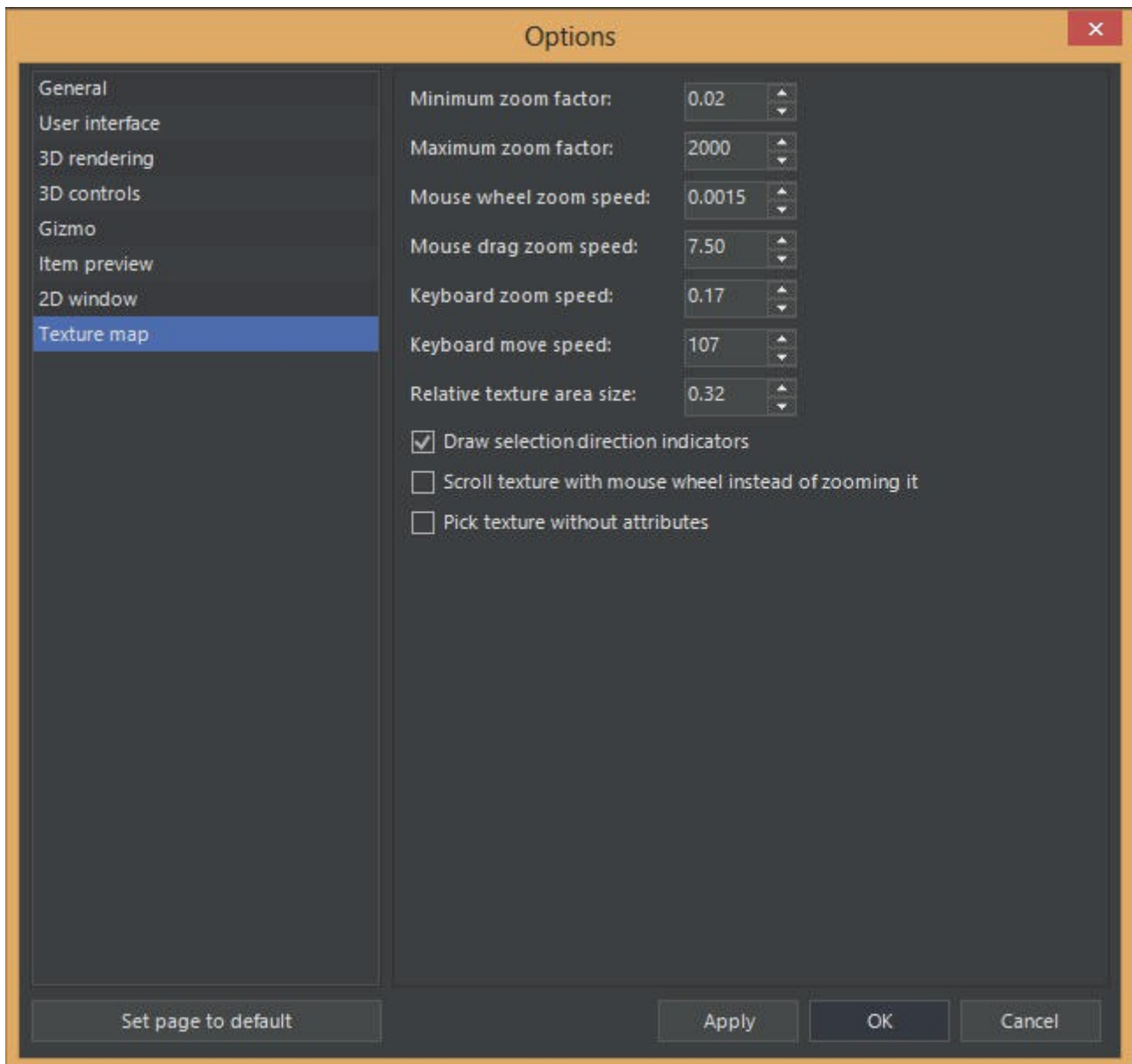
Default = 0.17.

Keyboard move speed.

Default = 107.

TOMB EDITOR MANUAL

TOOLS MENU EDITOR OPTIONS TEXTURE MAP



Set page to default
Set the General defaults.

Apply
Apply the changes.

OK

CANCEL

TOMB EDITOR MANUAL

TEXTURE MAP: **Set the Texture Map fields to your requirements.**

Minimum zoom factor.

Default = 0.02.

Maximum zoom factor.

Default = 2000.

Mouse wheel zoom speed.

Default = 0.0015.

Mouse drag zoom speed.

Default = 7.50.

Keyboard zoom speed.

Default = 0.17.

Keyboard move speed.

Default = 107.

Relative texture area size.

Default = 0.32.

Draw selection direction indicators.

Select box if required.

Scroll texture with mouse wheel instead of zooming it.

Select box if required.

Pick texture without attributes.

Select box if required.

TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION



TOMB EDITOR

HOT KEYS

TOMB EDITOR MANUAL

HOTKEYS

CANCEL ANY ACTION

ESCAPE

SWITCH TO 2D MAP

F1

SWITCH TO GEOMETRY MODE

F2

SWITCH TO FACE EDIT MODE

F3

SWITCH TO LIGHTING MODE

F4

REDO

CTRL + Y

UNDO

CTRL + Z

SWITCH TO TOOL 1

.....

SWITCH TO TOOL 2

.....

SWITCH TO TOOL 3

.....

SWITCH TO TOOL 4

.....

SWITCH TO TOOL 5

.....

SWITCH TO TOOL 6

.....

SWITCH TO TOOL 7

.....

SWITCH TO TOOL 8

.....

SWITCH TO TOOL 9

.....

SWITCH TO TOOL 10

.....

SWITCH TO TOOL 11

.....

SWITCH TO TOOL 12

.....

SWITCH TO TOOL 13

.....

SWITCH TO TOOL 14

.....

QUIT EDITOR

ALT + F4

NEW LEVEL

CTRL + SHIFT + N

OPEN EXISTING LEVEL

CTRL + O

SAVE LEVEL

CTRL + S

SAVE LEVEL AS..

CTRL + SHIFT + S

IMPORT TRLE LEVEL

.....

BUILD LEVEL

SHIFT + F5

BUILD LEVEL AND PLAY

F5

CUT

CTRL + X

COPY

CTRL + C

PASTE

CTRL + V

DELETE

DELETE

SELECT ALL

CTRL + A

SEARCH

CTRL + F

SEARCH AND REPLACE

CTRL + SHIFT + F

TOMB EDITOR MANUAL

HOTKEYS

MOVE ROOM LEFT	ALT + LEFT ARROW
MOVE ROOM RIGHT	ALT + RIGHT ARROW
MOVE ROOM FORWARD	ALT + UP ARROW
MOVE ROOM BACK	ALT + DOWN ARROW
MOVE ROOM UP	ALT + PAGE UP
MOVE ROOM DOWN	ALT + PAGE DOWN
DELETE ROOMS	CTRL + SHIFT + ALT + D
DUPLICATE ROOMS	CTRL + SHIFT + ALT + U
SELECT CONNECTED ROOMS	CTRL + SHIFT + ALT + C
ROTATE ROOMS CLOCKWISE	CTRL + F1
ROTATE ROOMS ANTICLOCKWISE	CTRL + F2
MIRROR ROOMS ON X AXIS	CTRL + F3
MIRROR ROOMS ON Z AXIS	CTRL + F4
LOCK ROOM POSITION	.....
SPLIT ROOM	CTRL + SHIFT + ALT + S
CROP ROOM	CTRL + SHIFT + ALT + O
NEW ROOM UP	CTRL + SHIFT + U
NEW ROOM DOWN	CTRL + SHIFT + D
NEW ROOM LEFT	.....
NEW ROOM RIGHT	.....
NEW ROOM FRONT	.....
NEW ROOM BACK	.....
MERGE ROOMS HORIZONTALLY	.....
EXPORT ROOMS	.....
IMPORT ROOMS	.....
APPLY AMBIENT LIGHT TO ALL ROOMS	.....
SET AMBIENT LIGHT TO SELECTED ROOMS	.....
TOGGLE FLIP MAP	.....
EDIT ROOM NAME	.....
SET TO OUTSIDE	.....
SET SKYBOX	.....
DISABLE GLOBAL LENSFLARE	.....
EXCLUDE FROM PATH FINDING	.....

TOMB EDITOR MANUAL

HOTKEYS

SET ROOM TO COLD (TRNG ONLY)	.....
SET ROOM TO DAMAGE (TRNG ONLY)	.....
ADD PORTAL	P
RAISE FLOOR OR ITEM 1 CLICK	Q
RAISE FLOOR OR ITEM 4 CLICKS	SHIFT + Q
LOWER FLOOR OR ITEM 1 CLICK	A
LOWER FLOOR OR ITEM 4 CLICKS	SHIFT + A
RAISE CEILING 1 CLICK	W
RAISE CEILING 4 CLICKS	SHIFT + W
LOWER CEILING 1 CLICK	S
LOWER CEILING 4 CLICKS	SHIFT + S
RAISE FLOOR SUBDIVISION 1 CLICK	E
RAISE FLOOR SUBDIVISION 4 CLICKS	SHIFT + E
LOWER FLOOR SUBDIVISION 1 CLICK	D
LOWER FLOOR SUBDIVISION 4 CLICKS	SHIFT + D
RAISE CEILING SUBDIVISION 1 CLICK	R
RAISE CEILING SUBDIVISION 4 CLICKS	SHIFT + R
LOWER CEILING SUBDIVISION 1 CLICK	F
LOWER CEILING SUBDIVISION 4 CLICKS	SHIFT + F

TOMB EDITOR MANUAL

HOTKEYS

SMOOTHLY RAISE FLOOR 1 CLICK	ALT + Q
SMOOTHLY RAISE FLOOR 4 CLICKS	SHIFT + ALT + Q
SMOOTHLY LOWER FLOOR 1 CLICK	ALT + A
SMOOTHLY LOWER FLOOR 4 CLICKS	SHIFT + ALT + A
SMOOTHLY RAISE CEILING 1 CLICK	ALT + W
SMOOTHLY RAISE CEILING 4 CLICKS	SHIFT + ALT + W
SMOOTHLY LOWER CEILING 1 CLICK	ALT + S
SMOOTHLY LOWER CEILING 4 CLICKS	SHIFT + ALT + S
SMOOTHLY RAISE FLOOR SUBDIVISION 1 CLICK	ALT + E
SMOOTHLY RAISE FLOOR SUBDIVISION 4 CLICKS	SHIFT + ALT + E
SMOOTHLY LOWER FLOOR SUBDIVISION 1 CLICK	ALT + D
SMOOTHLY LOWER FLOOR SUBDIVISION 4 CLICKS	SHIFT + ALT + D
SMOOTHLY RAISE CEILING SUBDIVISION 1 CLICK	ALT + R
SMOOTHLY RAISE CEILING SUBDIVISION 4 CLICKS	SHIFT + ALT + R
SMOOTHLY LOWER CEILING SUBDIVISION 1 CLICK	ALT + F
SMOOTHLY LOWER CEILING SUBDIVISION 4 CLICKS	SHIFT + ALT + F
RAISE FLOOR DIAGONAL 1 CLICK	Y
RAISE FLOOR DIAGONAL 4 CLICKS	SHIFT + Y
LOWER FLOOR DIAGONAL 1 CLICK	H
LOWER FLOOR DIAGONAL 4 CLICKS	SHIFT + H
RAISE CEILING DIAGONAL 1 CLICK	U
RAISE CEILING DIAGONAL 4 CLICKS	SHIFT + U
LOWER CEILING DIAGONAL 1 CLICK	J
LOWER CEILING DIAGONAL 4 CLICKS	SHIFT + J

TOMB EDITOR MANUAL

HOTKEYS

SMOOTH RANDOM FLOOR UP
SMOOTH RANDOM FLOOR DOWN

CTRL + ALT + A
CTRL + ALT + B

SMOOTH RANDOM CEILING UP
SMOOTH RANDOM CEILING DOWN

CTRL + ALT + C
CTRL + ALT + D

SHARP RANDOM FLOOR UP
SHARP RANDOM FLOOR DOWN

CTRL + ALT + E
CTRL + ALT + F

SHARP RANDOM CEILING UP
SHARP RANDOM CEILING DOWN

CTRL + ALT + G
CTRL + ALT + H

AVERAGE FLOOR
AVERAGE CEILING

CTRL + ALT + I
CTRL + ALT + J

GRID WALL IN 3
GRID WALL IN 5

CTRL + 3
CTRL + 5

TOMB EDITOR MANUAL

HOTKEYS

FLATTEN FLOOR	.....
FLATTEN CEILING	.....
SET FLOOR	.....
SET CEILING	.....
SET WALL	.....
SET BOX SECTOR PROPERTY	.....
SET DEATH SECTOR PROPERTY	.....
SET MONKEY SWING SECTOR PROPERTY	.....
CLIMB ON NORTH SECTOR SIDE	.....
CLIMB ON EAST SECTOR SIDE	.....
CLIMB ON SOUTH SECTOR SIDE	.....
CLIMB ON WEST SECTOR SIDE	.....
SET NON WALKABLE FLOOR	.....
SET OR ROTATE DIAGONAL FLOOR STEP	.....
SET OR ROTATE DIAGONAL CEILING STEP	.....
SET OR ROTATE DIAGONAL WALL	.....
SET BEETLE CHECKPOINT	.....
DELAY TRIGGER UNTIL TRIGGER TRIGGERER	.....
FORCE SOLID FLOOR	.....

TOMB EDITOR MANUAL

HOTKEYS

ADD TRIGGER	T
ADD TRIGGER WITH BOOKMARK OBJECT	SHIFT + T
EDIT OBJECT PROPERTIES	O
ROTATE OBJECT LEFT	SHIFT + LEFT ARROW
ROTATE OBJECT RIGHT	SHIFT + RIGHT ARROW
ROTATE OBJECT UP	SHIFT + UP ARROW
ROTATE OBJECT DOWN	SHIFT + DOWN ARROW
MOVE OBJECT LEFT 4 CLICKS	CTRL + LEFT ARROW
MOVE OBJECT RIGHT 4 CLICKS	CTRL + RIGHT ARROW
MOVE OBJECT FORWARD 4 CLICKS	CTRL + UP ARROW
MOVE OBJECT BACK 4 CLICKS	CTRL + DOWN ARROW
MOVE OBJECT UP	CTRL + PAGE UP
MOVE OBJECT DOWN	CTRL + PAGE DOWN
ROTATE OBJECT 5 DEGREES	CTRL + R
ROTATE OBJECT 45 DEGREES	CTRL + SHIFT + R
MOVE OBJECT TO CURRENT ROOM	.....
STAMP OBJECT	CTRL + B
BOOK MARK OBJECT	.....
SELECT BOOK MARK OBJECT	.....
ADD WAD	.....
REMOVE ALL WADS	.....
RELOAD ALL WADS	.....
RELOAD ALL SOUND CATALOGUES	.....

TOMB EDITOR MANUAL

HOTKEYS

ADD CAMERA	ALT + C
ADD FLYBY CAMERA	ALT + M
ADD SINK	ALT + K
ADD SOUND SOURCE	ALT + X
ADD IMPORTED GEOMETRY	ALT + I
ADD ITEM	.....
LOCATE ITEM	.....
MOVE LARA HERE	CTRL + M
ASSIGN AND COPY THE NG ID TO CLIPBOARD	.....
SPLIT SECTOR BASED OBJECT	ALT + O
SET BLENDING MODE	SHIFT + 1
SET DOUBLE SIDED ATTRIBUTE	SHIFT + 2
SET INVISIBILITY ATTRIBUTE	SHIFT + 3
ROTATE SELECTED TEXTURE	=
ROTATE SELECTED TEXTURE	-
ROTATE SELECTED TEXTURE	;
ROTATE SELECTED TEXTURE	\
MIRROR SELECTED TEXTURE	SHIFT + =
MIRROR SELECTED TEXTURE	SHIFT + -
MIRROR SELECTED TEXTURE	SHIFT + ;
MIRROR SELECTED TEXTURE	SHIFT + \
ADD TEXTURE	.....
REMOVE ALL TEXTURES	.....
UNLOAD ALL TEXTURES	.....
RELOAD ALL TEXTURES	.....
CONVERT ALL TEXTURES TO PNG	.....
REMAP TEXTURE	CTRL + ALT + R
TEXTURE FLOOR	CTRL + ALT + T
TEXTURE CEILING	CTRL + ALT + V
TEXTURE WALLS	CTRL + ALT + W
CLEAR ALL TEXTURES IN ROOM	.....
CLEAR ALL TEXTURES IN LEVEL	.....

TOMB EDITOR MANUAL

HOTKEYS

EDIT ANIMATION RANGES	.....
TOGGLE NO OPACITY	.....
TEXTURED AND SOLID OPACITY 1	.....
TEXTURED AND TRANSFERABLE OPACITY 2	.....
ADD POINT LIGHT	.....
ADD SHADOW	.....
ADD SUN LIGHT	.....
ADD DIRECTIONAL (SPOT) LIGHT	.....
ADD EFFECT LIGHT	.....
ADD FOG BULB	.....
RESET CAMERA POSITION TO DEFAULT	F6
RELOCATE CAMERA	ALT + Z
DRAW PORTALS	.....
DRAW HORIZON	.....
DRAW ROOM NAMES	.....
DRAW ILLEGAL SLOPES	.....
DRAW MOVABLES	.....
DRAW STATICS	.....
DRAW IMPORTED GEOMETRY	.....
DRAW OTHER OBJECTS	.....
DRAW SIDE DIRECTIONS	.....
DRAW EXTRA BLENDING MODES	.....
DISABLE GEOMETRY PICKING	.....
DRAW ALL ROOMS	.....
DRAW CARDINAL DIRECTIONS	.....
LEVEL SETTINGS	.....
EDITOR OPTIONS	.....
START WAD TOOL	.....
EDIT KEYBOARD LAYOUT	.....

TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION

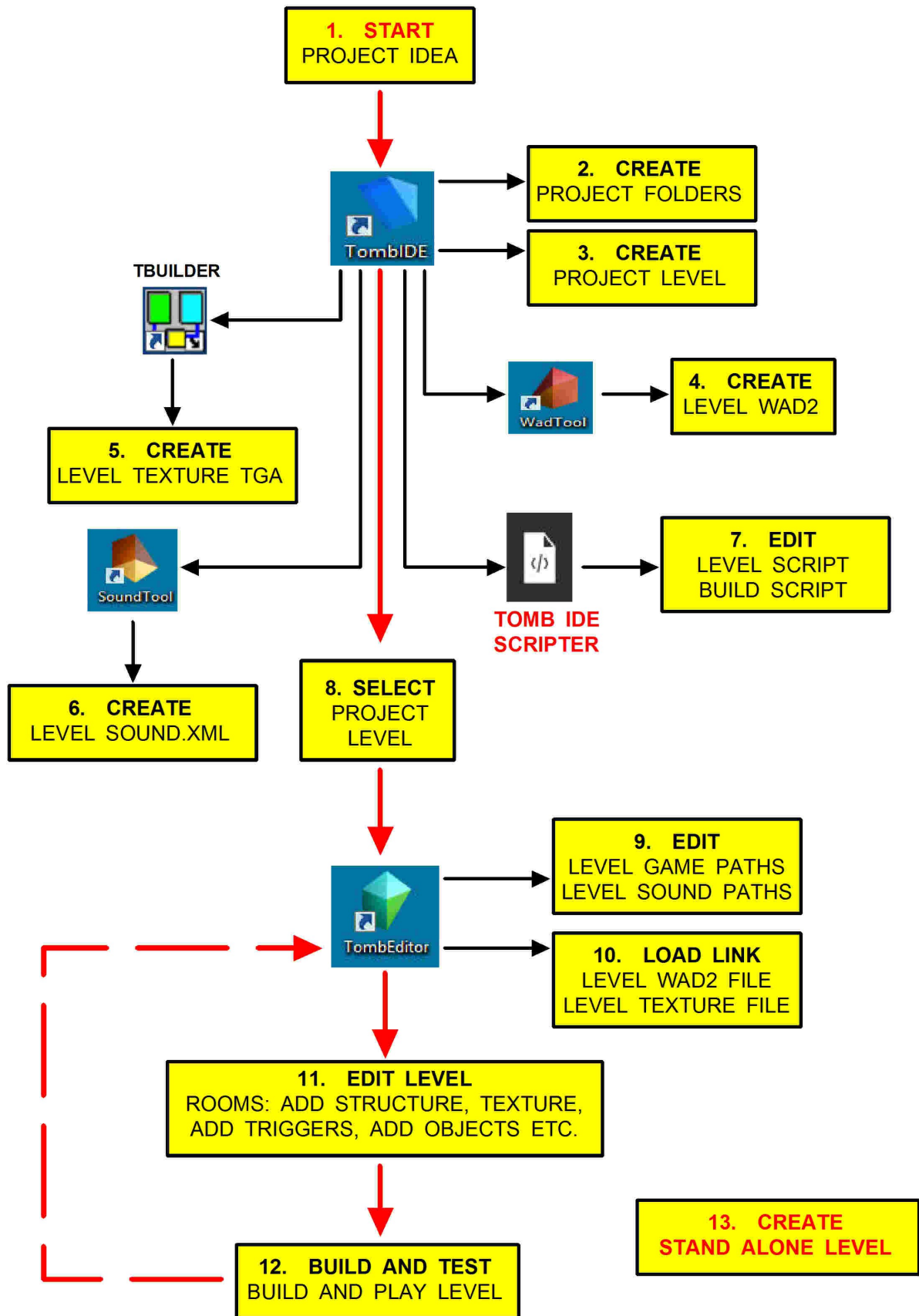


TOMB EDITOR

STARTING A NEW PROJECT

TOMB EDITOR MANUAL

NEW PROJECT FLOWCHART



TOMB EDITOR MANUAL

STARTING A NEW PROJECT

READ THE [TOMB IDE MANUAL](#) ESPECIALLY THE SECTION ON CREATING A NEW PROJECT.

If you have read and understood the [Creating a New Project](#) in the [Tomb IDE Manual](#) you should now have a project started in the [Tomb Editor](#) with a [wad2](#) file, a [Texture file](#), and the TR4 sounds working.

STARTING A NEW ROOM



Select the [2D View Editor](#).

[Tomb Editor](#) starts with a default Room 0 at location 0,0,0 and a floor to ceiling height 12.

This is the location where all new rooms for the project are created.

This is not the best location to keep the room when building the level, so move it to a free area in the [2D View](#) using [mouse left click hold](#) and drag.



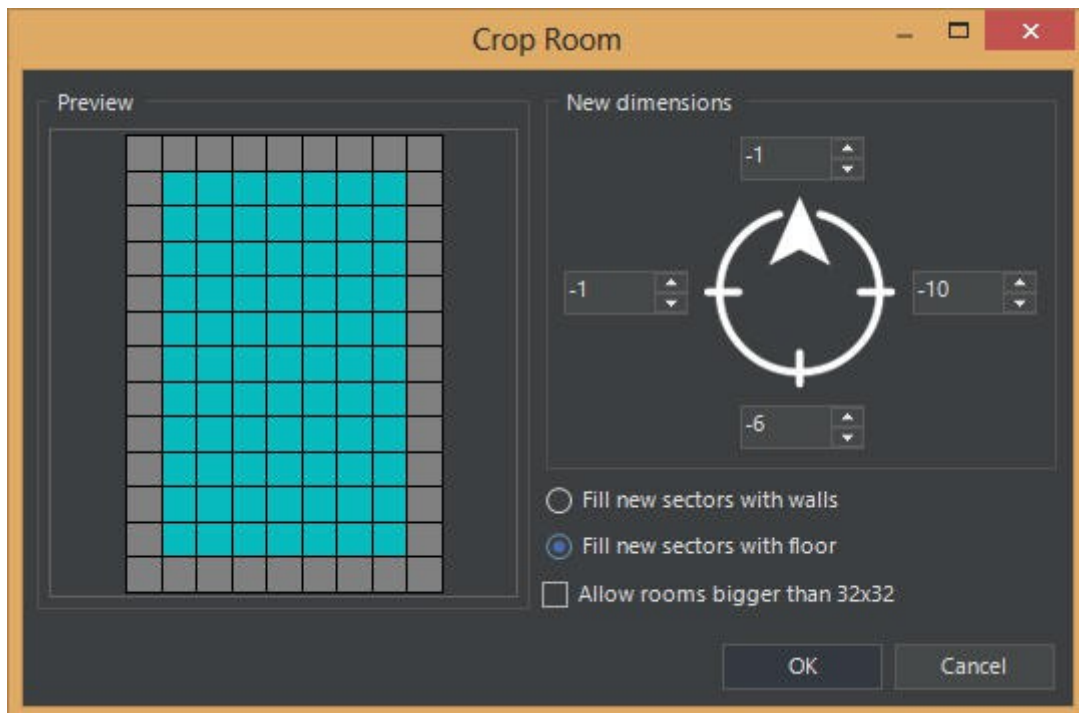
Select the [3D View Editor](#).

Select the walls and grid them into 3 sectors.

To change the floor size of the room:

In the Sector Options window use the mouse to drag the required floor area for the room. Select the Crop icon to display the Crop Room Window.

Select OK to set the crop room area.



TOMB EDITOR MANUAL

The room has been set to a new size. It is still 12 clicks high. To reduce the ceiling height drag out all of the room squares (blue) in the Sector Options window. Now use the **W or S keys** to increase, reduce the ceiling height. Now you have a room that is the correct size for your project. To adjust the vertical height of the room use the **Room Up, Room Down** icons in the Room Options window.

To add another room to the project select the New Room icon in the Room Options window. Or you can select the Rooms list in the Room Options window and select the next empty room. Then select the **2D View Editor**. Repeat the procedure to set the room size etc.

Initially create structure by raising and lowering squares in the **3D View Editor** by using the keyboard keys and the 3D View Tools.
Add texture to the room in the Texture View.

Do not forget to put **Lara** in the room in the **3D View Editor window**.

Note: **ONLY ONE LARA IN THE LEVEL.**

CONNECTING ROOMS TOGETHER

Add more rooms and connect them using the Portal function.

PORTALS

Ensure that the two rooms touch each other (horizontally or vertically) so that a portal is possible.

HORIZONTAL CONNECTIONS (openings between two walls).

Two methods can be used to create horizontal portals:

Method 1: Use a small connecting room the width of the portal opening.

Method 2: Avoid wafer thin walls by raising walls next to the connecting portal.

If the rooms are different floor to ceiling distances make the portal from the room with the smaller height. The portal is from the floor to the ceiling of the room. Select the wall sections for the portal. Then select the Portal icon in the Sector Options window.

VERTICAL CONNECTIONS (portals between ceilings or floors).

This works the same way except instead of creating a wall around the portal, raise the floor at least one click or create a ledge by raising one row of squares around it. Select the floor area for the portal in the higher elevation room. Then select the Portal icon in the Sector Options window.

TOMB EDITOR MANUAL

TIPS FOR MAKING VERTICAL CONNECTIONS

The basic rule for connecting one room on top of another is:

“The highest point of the lower room can not be higher than the lowest point of the upper room.” Below is a side view example of this basic rule.

You want to connect the lower room “A” with the upper room “B” to make room “C”.



If you try connecting rooms using the above method, you will get the error message: “Cannot connect rooms”.

Instead, raise the blocks on the right side of room “A” so they become as high as the highest part of room “B”. Then room “B” will connect to room “A”.

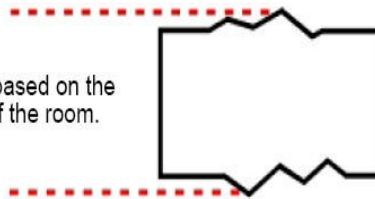
Or you can temporarily lower the highest point of room “A”, make the connection, then raise the part you lowered.

BE CAREFUL OF RANDOM FLOOR DOWN/RANDOM CEILING UP

When using the Random Floor Down and the Random Ceiling Up features, take care to note the new Floor and Ceiling elevations for the room. If you could see a profile of your model, it would help! Even one single corner of one square lowered beneath the original floor or one ceiling square slightly raised will change the elevation read out. This can cause problems when connecting rooms.

If you get the “cannot connect rooms” message, be suspicious, check your elevations!

The elevation of a room is based on the highest and lowest points of the room.

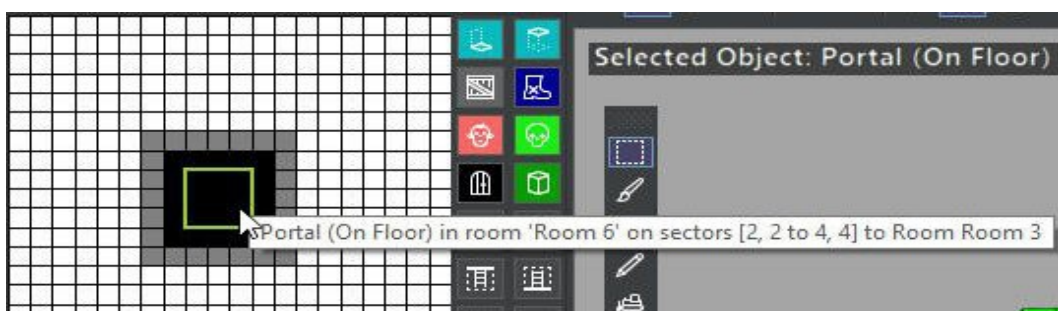


TOMB EDITOR MANUAL

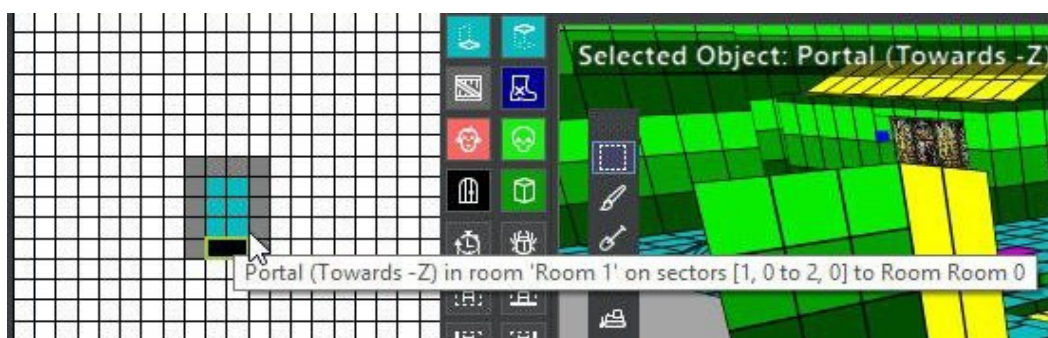
DELETING A PORTAL

To delete a Portal select it using the **mouse right click** in the **Room Sector Options View**. Then press the **DELETE** key.

VERTICAL PORTAL



HORIZONTAL PORTAL



TOMB EDITOR MANUAL

CREATING CLIMBING WALLS

To set a **climbing wall** select the square in the **3D View Editor** window.

Or the square in the **Sector Options Window**.

Click on the climbing wall icon in the **Sector Options Window**.

A climbable wall is indicated by white as shown in the **3D View Editor** window and a white bar on the square in the **Sector Options** Window.

To **Delete** a **climbing wall** select the square in the **3D View Editor** window.

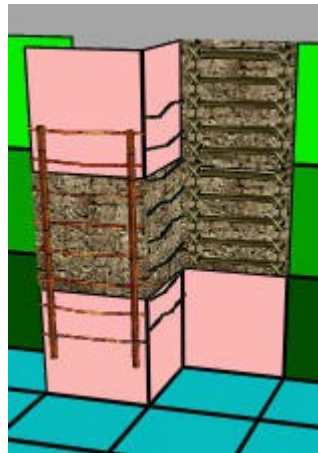
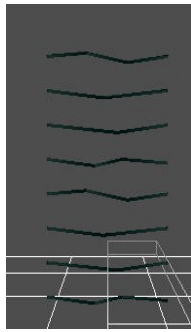
Or the square in the **Sector Options Window**.

Click on the climbing wall icon in the **Sector Options Window**.

To indicate to the player that the wall is climbable texture it with a suitable tile.

In more recent built levels, texture the wall as normal and then place a suitable ladder object.

LADDER OBJECTS



TOMB EDITOR MANUAL

TRIGGERS

Triggers cause events to happen and ultimately have everything to do with how much fun your level is to play. Triggers activate when Lara moves onto a square that has been designated as a trigger. Any trigger placed under Lara at her starting position will activate as the level begins. Triggers appear as purple squares and make the square(s) as well as the vertical space above, an active zone. This way, Lara can not jump to avoid a trigger, unless it is designated as a “Pad trigger”.

TRIGGER TYPES

Generally, straight forward triggers are used, hence the default setting of “trigger”.

There are some basic things to keep in mind when setting triggers:

SPECIAL TRIGGERS such as **PAD, SWITCH, KEY, ANTI TRIGGER** and **ANTI PAD** can not be stacked. No more than one of these types per square. One of these triggers overrides all other triggers. Triggers with an **ANTI TRIGGER** on the same square are considered to be **ANTI TRIGGERS**.

Any trigger with a timer set can not be placed on the same block as another trigger with a different timer.

If any of the trigger fields are set to anything other than the default “TRIGGER”, they too can not be overlapped.

For example if you set a trigger to **HEAVY** all triggers on that block are also set to **HEAVY** even though their fields are still set as normal.

USING TRIGGER CODE BITS

The series of numbered bit box buttons default to all five buttons in the on position.

Trigger code bits can be used to set up multiple triggers for one event. This means Lara will have to perform more than one action to get a response. For instance, a door could have two separate triggers, one that feeds bits 1 & 2 and the other supplying 3, 4 & 5. So only when both triggers are active will the door open. All code bits must be fed by the multiple triggers for one event. So if you have 3 triggers for one event one trigger would be set to 1, the next to 2, and the last to 3, 4 and 5.

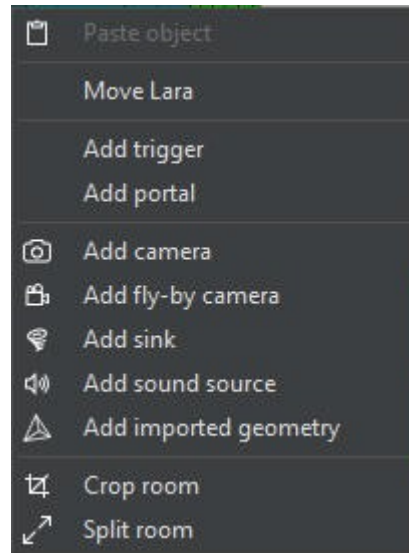
TOMB EDITOR MANUAL

TO ADD A TRIGGER

Select a square in the **3D View Editor window** **Left Mouse button click**, then:

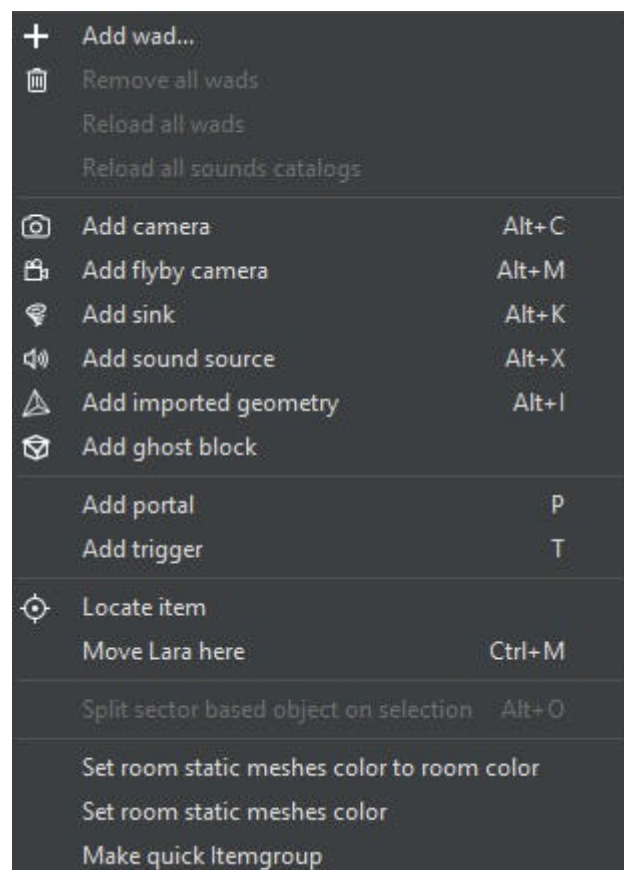
Right Mouse button click to display menu

Select **Add trigger** to display Trigger Editor menu.



OR

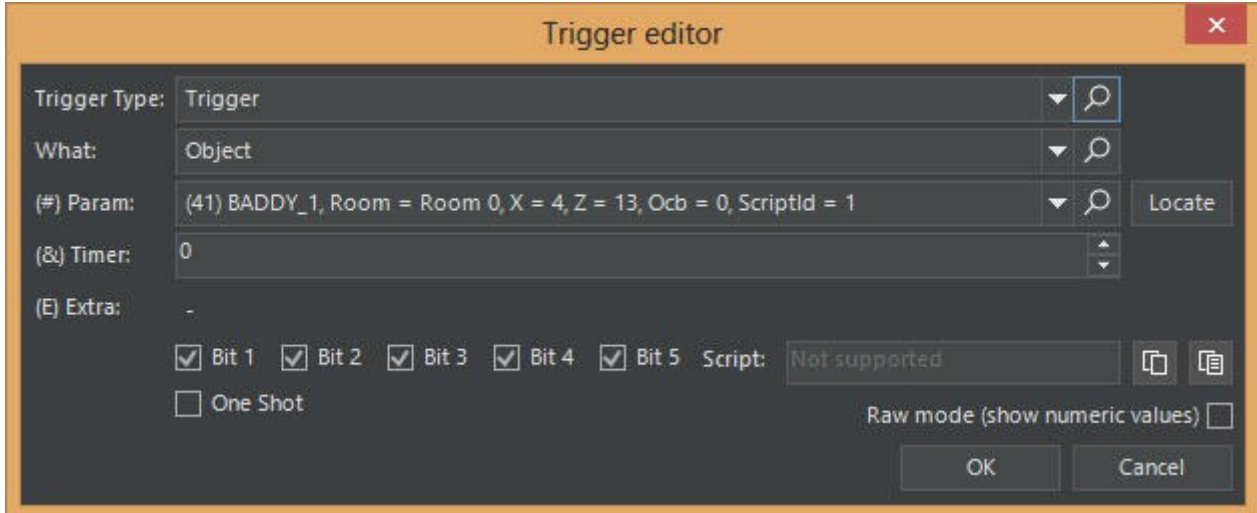
Select Pull down Items Menu and select Add trigger to display the Trigger Editor menu.



TOMB EDITOR MANUAL

OR Select a square in the **3D View Editor window** and press the **T key** to display the Trigger Editor menu.

TRIGGER OBJECT

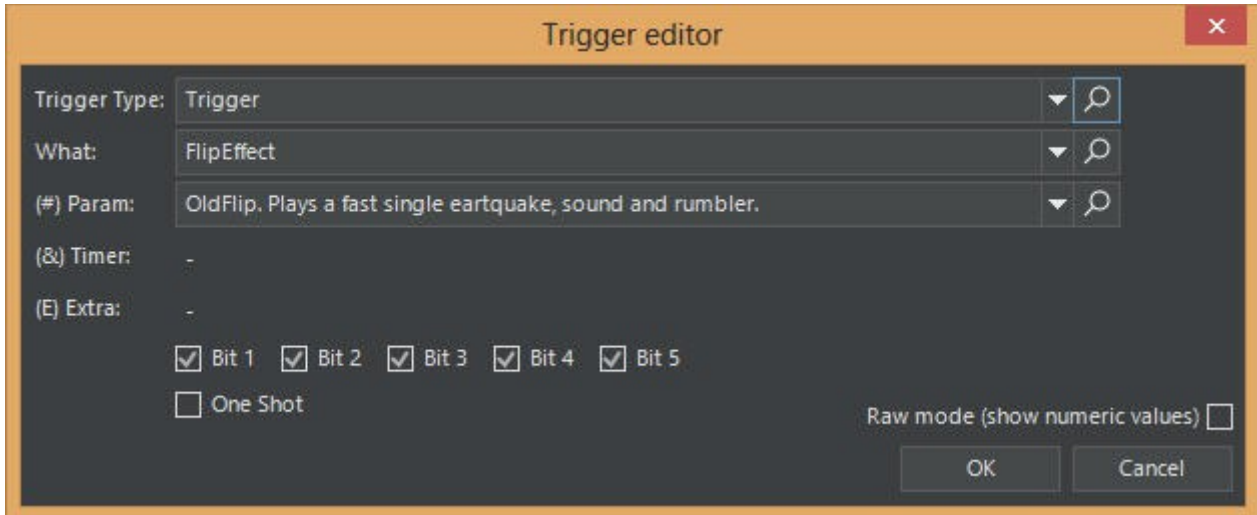


The screenshot shows the 'Trigger editor' window with the following settings:

- Trigger Type: Trigger
- What: Object
- (#) Param: (41) BADDY_1, Room = Room 0, X = 4, Z = 13, Ocb = 0, ScriptId = 1
- (&) Timer: 0
- (E) Extra: -
- Bit 1, Bit 2, Bit 3, Bit 4, Bit 5: All checked
- Script: Not supported
- One Shot: unchecked
- Raw mode (show numeric values): unchecked
- Buttons: OK, Cancel

Example: Baddy 1

TRIGGER FLIP EFFECT



The screenshot shows the 'Trigger editor' window with the following settings:

- Trigger Type: Trigger
- What: FlipEffect
- (#) Param: OldFlip. Plays a fast single earthquake, sound and rumbler.
- (&) Timer: -
- (E) Extra: -
- Bit 1, Bit 2, Bit 3, Bit 4, Bit 5: All checked
- One Shot: unchecked
- Raw mode (show numeric values): unchecked
- Buttons: OK, Cancel

Example: Old flip Play a fast single earthquake sound and rumble.

With the Trigger window open select the fields to specify the inputs for the trigger. Click **OK** to set the trigger.

More than one object can be triggered on a square. To do this select the object in the **3D View Editor** window. Then select the square in the **3D View Editor** window. Apply the trigger to the square in the **3D View Editor** window.

For example: a trigger for a door, a trigger for another door, a trigger for a flame emitter.

TOMB EDITOR MANUAL

Trigger Type:	The type of trigger. TRIGGER is the default setting.
What :	What to trigger. OBJECT is the default setting.
(#) Param:	The target Object in the project.
(&) Timer:	A time interval can be assigned to the triggering of events or to the duration of an event. A negative integer will assign an interval of time PRECEDING an event. For cameras, a number in this box limits the camera view to the specified time.
(E) Extra:	Additional information required for the trigger action.
BIT BOXES 1 To 5	These default to the required settings with a few exceptions.
ONE SHOT BOX	This box button does what it says. Click on it if you want the event to occur only once.
RAW MODE SHOW NUMERIC VALUES	This box button does what it says. It shows the numeric values for the trigger action.
OK	Accepts the trigger input.
CANCEL	Cancels the trigger input.

USING TRIGGER CODE BITS – the series of numbered bit boxes above the ‘one shot’ box default to all five boxes in the on position. The settings were originally given to allow you to play a CD track multiple times, but trigger code bits can also be used to set up multiple triggers for one event. This meant Lara will have to perform more than one action to get a response.

For instance, a door could have two separate triggers, one that feeds bits 1 & 2 and the other supplying bits 3, 4 & 5. So that only when both triggers are active will the door open. All code bits must be fed by the multiple triggers for one event.
So if you have 3 triggers for one event, one trigger would be set to bit 1, the next to bit 2, and the last to bits 3, 4 and 5.

Using code bits for multiple items can be difficult to set up but very useful!

Check the Catacombs, room 147 for a good use of trigger code bits.
Five sets of shatter bones have been placed around several rooms with each trigger set to one of the five code bits for each number. Each set of shatter bones has a heavy trigger set for the Raising Block, which will not activate until all five sets of bones are shot.

TOMB EDITOR MANUAL

Trigger Type :

ANTIPAD	Turns off whatever was activated by the pad trigger.
ANTITRIGGER	Turns off whatever was activated by a corresponding trigger. It cannot be used on timed doors.
COMBAT	
CONDITION NG	Condition type used in Next Generation .
DUMMY	Used with Bridges. Must have this setting to prevent Lara from falling through the “floor”.
HEAVY	Trigger type not activated by Lara. Activated by an enemy or guide or by an object that comes into contact with the triggered square. For example a Pushable Block, Rolling Ball, a Creature etc.
HEAVY ANTITRIGGER	Deactivates the heavy trigger.
HEAVY SWITCH	A switch designated to be activated by something or someone other than Lara.
KEY	Used to activate a key.
MONKEY	Only activated when Lara is on monkey bars above a trigger.
PAD	A pad trigger must be walked or stood upon to activate. In other words, Lara can jump over a square with a pad trigger and it will not be activated. There is no vertical activation zone such as with a normal trigger.
PICKUP	The action of picking up an object (e.g. medipak) becomes a trigger for an event. For example starting a Rolling Ball, opening a door, trigger a Creature etc.
SWITCH	Used to activate a switch.
TRIGGER	THE DEFAULT SETTING. Triggers, Objects and events. Creates an active zone vertically above the trigger.

TOMB EDITOR MANUAL

What :

ACTION NG	Sets an action trigger. Used to effect Moveables. (Next Generation trigger)
CAMERA	Sets a Camera.
FINISH LEVEL	When triggering a square for the end of the level, you must include a number in the (&) Timer box.
FLIP EFFECT	Flip effect is a way of triggering things without having a specific controller. They are “one offs” - e.g. Shaking the screen or playing a sound effect. Flip Effects 1 to 46 are Original Flips. Flip Effects 47 and above are NG flips.
FLIPMAP	Used to trigger a flip map. Flip map numbering starts from 1. Must type the flip map number in the (#) Parameter box.
FLIPOFF	Turns flip map off. Must type the flip map number in the (#) Parameter box.
FLIPON	Turns flip map on. Must type the flip map number in the (#) Parameter box.
FLYBY CAMERA	Only used when creating the title screen. (Flyby Sequence 1, Flyby Sequence 2, etc.) See the Tomb Raider Forum tutorial on Title Flyby.
FMV NG	Sets an FMV movie. (Next Generation trigger) See the SCRIPT NEW COMMANDS.
OBJECT	THIS IS THE DEFAULT SETTING.
PLAY AUDIO	This will activate an audio track (located in the audio folder). The track number must be included in the (#) Parameter box. (Original CD)
SECRET	This plays the “secret” sound. Make sure you click on the “one shot” button.
SINK	Sets a Sink trigger.
TARGET	Used with the camera. It tells the camera to look at the dummy target, not Lara. If a camera is not used Lara looks at the dummy target location.
TIMER FIELD NG	Used with a timer.

TOMB EDITOR MANUAL

SWITCHES

You will find many switches in levels that open and shut doors, trapdoors etc.
A switch consists of a switch object, and there are different types of switches.

The setup is easy.

Place a switch in the **3D View** in the room.

Select the switch square and then press the **T key** to open the trigger window.

Select **Switch** for the trigger type.

Click **OK** to set the trigger.

Select a door (trapdoor, flame emitter etc.) in the 3D View Editor window.

Select the Switch square and then press the **T key** to open the trigger window.

Click **OK** to set the trigger for the door (trapdoor, flame emitter etc.).

Add additional objects for the switch to trigger as required.

See OBJECT CODE BITS document for additional information on different switch animation setups for Lara.

For additional information on switch setups read a tutorial.

KEYS

You will find many keys in levels that open doors, trapdoors etc.

A key consists of a key item and a key hole.

The setup is easy.

Place the key item in the level for Lara to find.

Place a key hole in the **3D View** in the room.

Select the key hole square and then press the **T key** to open the trigger window.

Select **Key** for the trigger type.

Click **OK** to set the trigger.

Select a door (trapdoor, flame emitter etc.) in the 3D View Editor window.

Select the Key hole square and then press the **T key** to open the trigger window.

Click **OK** to set the trigger for the door (trapdoor, flame emitter etc.).

Add additional objects for the key to trigger as required.

The key is required to be declared in the script and language file.

TOMB EDITOR MANUAL

PUZZLES

There are many puzzles in levels that open doors, trapdoors etc.

A puzzle consists of a puzzle item, a puzzle hole and a puzzle done object.

The puzzle done object is in the wad but not placed in the level.

A puzzle item is a special shaped key.

The puzzle item can consist of two parts (Combo_1, Combo_2)..

The setup is easy.

Place the puzzle item in the level for Lara to find.

If you want to place the two parts of the puzzle item in the 3D Editor View for Lara to find, the puzzle item is in the wad but not placed in the level.

Place a puzzle hole in the **3D View Editor window** in the room.

Select the puzzle hole square and then press the **T key** to open the trigger window.

Select **Key** for the trigger type.

Click **OK** to set the trigger.

Select a door (trapdoor, flame emitter etc.) in the **3D View Editor** window.

Select the Puzzle hole square and then press the **T key** to open the trigger window.

Click **OK** to set the trigger for the door (trapdoor, flame emitter etc.).

Add additional objects for the puzzle to trigger as required.

The puzzle item(s) are required to be declared in the script and language file.

For additional information on puzzles setups read a tutorial.

TOMB EDITOR MANUAL

HIDING PICK-UPS BENEATH A SHATTER OBJECT:

Place the pickup you want Lara to find when she shoots the shatter object (vase) and press **O key** to display the object menu. Click on the invisible box and click **OK**. This will make the object invisible until the vase shatters above it.
Place a shatter object close by.

Set a trigger for the shatter object on the same square as the pick up.
Set the trigger type to **Heavy**. Move the shatter object onto the pick up square.
When the shatter object (vase) shatters, it will trigger the pick-up to become visible.

HIDING A PICK-UP ON AN ENEMY:

Place a pick-up, for example some six shooter ammo on the same square as the Baddy.

If the pick-up is placed on the same square as a Baddy, it will be left as a pick-up for Lara after he dies. No need to use the invisible setting on the pick-up.
When placed with a Baddy it is automatically invisible until the Baddy dies.

You can give a Baddy a key or a puzzle item to drop, but make sure that he dies in a room where the pickup will always be dropped in a reachable place.

Make sure that there are no big drops etc., or the game can not proceed further if the key, puzzle item is lost when the Baddy dies.

TOMB EDITOR MANUAL

TRIGGER TRIGGERER

You may have read about the **trigger triggerer** while reading the **Original Editor Manual** Interface Section or you may have seen it while browsing through the object menu.

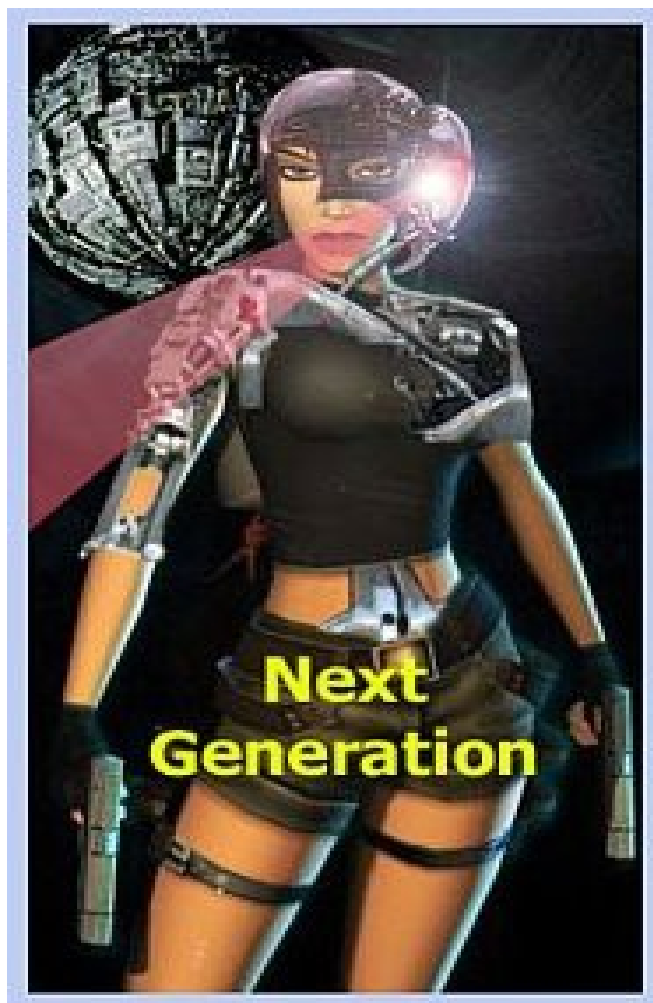
The **trigger triggerer** is a **null mesh** dummy item that is placed on the map. You highlight the square where you placed it and press the **set trigger triggerer** button. This will border the square with a dark blue line, only visible in the Plan View grid. Now put a trigger for it on a switch or anywhere you want the **trigger triggerer** to become activated. Triggers placed on the square with this **null mesh** will not become active until the **trigger triggerer null mesh** is triggered.

This way you can place triggers for enemies, traps, whatever under the **trigger triggerer** and Lara can walk over the “frozen” triggers without activating them until you want her to. This is convenient when Lara has ventured into a room at the end of a hallway and you want her to trigger baddies on her way back out....

You will find good examples throughout the TR4 levels, locate the **null mesh**, then use “Object to Trigger” to locate the trigger. Check room 76 in “Tomb of Seth”. Notice there are two rooms with the number 76, one containing the **trigger triggerer null mesh** and the other with the trigger for the **trigger triggerer**.

TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION



TOMB EDITOR
CREATING LIQUID POOLS

TOMB EDITOR MANUAL

CREATING A WATER POOL

Create a lower room and connect it to the upper room with a portal.
Set the lower room to Water in the **Room Options** window.

Set the **Main Window** to Texture mode



Set the display portals icon.



In the **Sector Options** Window **Right Mouse click** inside the Black Portal area.
The Portal is now highlighted.

In the **Textures Panel**.
Select a Water texture.

Set **TRANSPARENT** and **DOUBLE SIDED**:

Select the mode from **NORMAL** to **ADD**.
Select the Double Sided button in the bottom left corner of the **Textures Panel**.
(**SHIFT** key and **2** key)

Select Opacity2



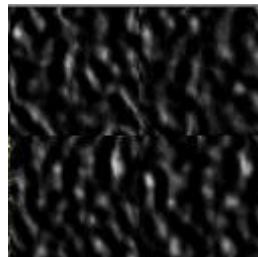
With a water texture selected in the **Texture Panel**, **mouse left click** on a Portal square in the **Main Window**.

Select different Water textures and apply to the Portal squares to complete the water surface.

This is done to avoid a wallpaper effect.

To have ripples on the water surface create an Animation frame range for the water textures.
This is done using the Animations button in the Texture Panel Window.

WATER TEXTURE EXAMPLE:



TOMB EDITOR MANUAL

CREATING A POISON WATER CHEMICAL POOL

Lara can swim in the poison water for a short while before she dies.

Create a lower room and connect it to the upper room with a portal.
Set the lower room to Water in the **Room Options** window.

Set the **Main Window** to Texture mode



Set the display portals icon.



In the **Sector Options** Window **Right Mouse click** inside the Black Portal area.
The Portal is now highlighted.

In the **Textures Panel**.

Select a Poisoned Water texture. (Water texture).

Set **TRANSPARENT** and **DOUBLE SIDED**:

Select the mode from **NORMAL** to **ADD**.

Select the Double Sided button in the bottom left corner of the **Textures Panel**.
(**SHIFT key** and **2 key**)

Select Opacity2



With a Poisoned Water texture selected in the **Texture Panel**, **mouse left click**
on a Portal square in the **Main Window**.

Select different Poisoned Water textures and apply to the Portal squares to complete the
Poisoned Water surface.

This is done to avoid a wallpaper effect.

To have ripples on the Poisoned Water surface create an Animation frame range for
the Poisoned Water textures.

This is done using the Animations button in the Texture Panel Window.

Set Death square sectors on the floor.



Set the lighting in the poison water room to a suitable Death colour **RED**, **GREEN**.

TOMB EDITOR MANUAL

CREATING A QUICKSAND POOL

**Lara can walk in the quicksand but she cannot swim.
If it is too deep she will drown.**

Create a lower room and connect it to the upper room with a portal.
Set the lower room to Quicksand in the **Room Options** window.

Set the **Main Window** to Texture mode

Set the display portals icon.



In the **Sector Options** Window **Right Mouse click** inside the Black Portal area.
The Portal is now highlighted.

In the **Textures Panel** select a Quicksand texture.

You cannot see through Quicksand so only set DOUBLE SIDED:

Select the Double Sided button in the bottom left corner of the **Textures Panel**.
(**SHIFT key** and **2 key**)

Select Opacity2

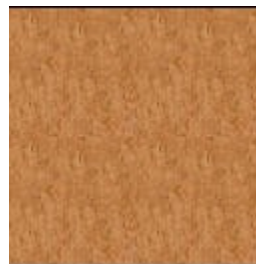


With a Quicksand texture selected in the **Texture Panel**,
mouse left click on a Portal square in the **Main Window**.

Select different Quicksand textures and apply to the Portal squares to complete the Quicksand surface.

This is done to avoid a wallpaper effect.

QUICKSAND TEXTURE EXAMPLE:



TOMB EDITOR MANUAL

CREATING A SWAMP WATER POOL

**Lara can walk in the swamp water but she cannot swim.
If it is too deep she will drown.**

Create a lower room and connect it to the upper room with a portal.
Set the lower room to Quicksand in the **Room Options** window.

Set the **Main Window** to Texture mode

Set the display portals icon.



In the **Sector Options** Window **Right Mouse click** inside the Black Portal area.
The Portal is now highlighted.

In the **Textures Panel** select a Swamp Water texture.

You cannot see through Swamp water so only set DOUBLE SIDED:

Select the Double Sided button in the bottom left corner of the **Textures Panel**.
(**SHIFT key** and **2 key**)

Select Opacity2



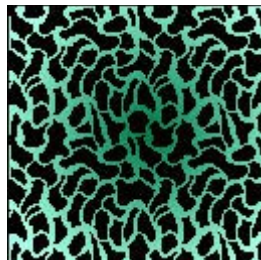
With a Swamp Water Grass texture selected in the **Texture Panel**,
mouse left click on a Portal square in the **Main Window**.

Select different Swamp Water Grass textures and apply to the Portal squares to
complete the Swamp Water surface.

This is done to avoid a wallpaper effect.

Repeat to cover the portal area.

SWAMP WATER TEXTURE EXAMPLE:



TOMB EDITOR MANUAL

CREATING A HOT MUD POOL

If Lara goes in she will burn and die.

Create a lower room and connect it to the upper room with a portal.
Set the lower room to Water in the **Room Options** window.

Set the **Main Window** to Texture mode



Set the display portals icon.



In the **Sector Options** Window **Right Mouse click** inside the Black Portal area.
The Portal is now highlighted.

In the **Textures Panel** select a Hot Mud texture.

You cannot see through Hot Mud so only set DOUBLE SIDED:

Select the Double Sided button in the bottom left corner of the **Textures Panel**.
(**SHIFT** key and **2** key)

Select Opacity2



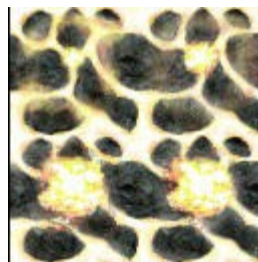
With a Hot Mud texture selected in the **Texture Panel**, **mouse left click**
on a Portal square in the **Main Window**.

Select different Hot Mud textures and apply to the Portal squares to complete the surface.
This is done to avoid a wallpaper effect.

To have ripples on the surface create an Animation frame range for the textures.
This is done using the Animations button in the Texture Panel Window.

Place Flame triggers on the floor so Lara will burst into flames if she goes in.
You can add flame emitters, smoke, steam emitters for extra effect.

HOT MUD TEXTURE EXAMPLE:



TOMB EDITOR MANUAL

CREATING A HOT LAVA POOL

If Lara goes in she will burn and die.

Create a lower room and connect it to the upper room with a portal.
Set the lower room to Water in the **Room Options** window.

Set the **Main Window** to Texture mode



Set the display portals icon.



In the **Sector Options** Window **Right Mouse click** inside the Black Portal area.
The Portal is now highlighted.

In the **Textures Panel** select a Hot Lava texture.

You cannot see through Hot Lava so only set DOUBLE SIDED:

Select the Double Sided button in the bottom left corner of the **Textures Panel**.
(**SHIFT** key and **2** key)

Select Opacity2



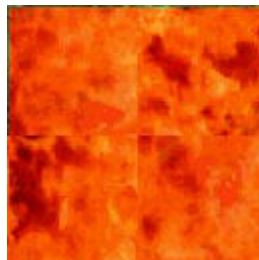
With a Hot Lava texture selected in the **Texture Panel**, **mouse left click**
on a Portal square in the **Main Window**.

Select different Hot Lava textures and apply to the Portal squares to complete the surface.
This is done to avoid a wallpaper effect.

To have ripples on the surface create an Animation frame range for the textures.
This is done using the Animations button in the Texture Panel Window.

Place Flame triggers on the floor so Lara will burst into flames if she goes in.
You can add flame emitters, smoke, steam emitters for extra effect.

LAVA TEXTURE EXAMPLE:



TOMB EDITOR MANUAL

CREATING MIST ON THE LIQUID SURFACE

Create a 1 click deep room between the water room and the normal room.

Make the room effect a mist type room.

Set the lighting in the mist room for the required effect.

Additional effects can be achieved by adding flame emitters, white smoke emitters, black smoke emitters and steam emitters as required.

TOMB EDITOR MANUAL

CREATING A WATER FALL

Create a horizontal connected room with a portal.

Set the **Main Window** to Texture mode



Set the display portals icon.



In the **Sector Options** Window **Right Mouse click** inside the Black Portal area.
The Portal is now highlighted.

In the **Textures Panel**.
Select the water fall texture.

Set **TRANSPARENT** and **DOUBLE SIDED**:

Select the mode from **NORMAL** to **ADD**.
Select the Double Sided button in the bottom left corner of the **Textures Panel**.
(**SHIFT** key and **2** key)

Select Opacity2



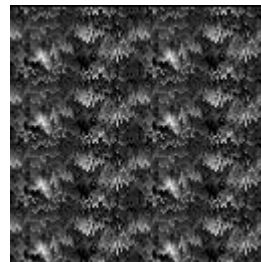
With the waterfall texture selected in the **Texture Panel**,
left Mouse Click on Portal squares in the **Main Window**.

The waterfall uses an Animation with a UV rotate for the waterfall texture.
This is done using the **Animations button** in the **Texture Panel Window**.

If the water fall does not animate then texture a floor square in an unseen position.
This should initialise the vertical water fall animation and make it work.

You should add waterfall sound(s) near the waterfall for effect.

WATERFALL TEXTURE EXAMPLE:



TOMB EDITOR MANUAL

JERKING LARA THROUGH WATERFALLS

This is an old TRLE trick well known to some of you.

In this situation Lara falls/jumps into a river with a stream. The stream moves her towards the waterfall where she falls through the air into the lower part of the river below her.

The trick is easy: Place the Sink bulb for the stream OUTSIDE in the air.

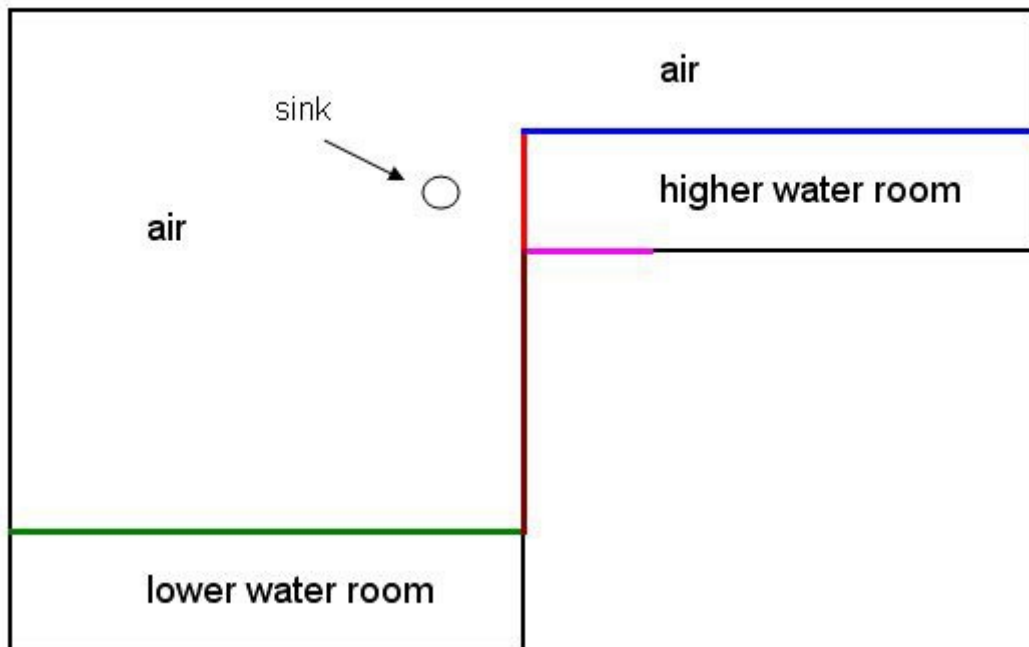
Have a room which is 'the higher part of the river'. It has a water surface.

One of the room walls is not solid but a Opacity2 surface with transparent/double sided textures on it. The texture tiles here are parts of an animated range of a waterfall.

On the other side there is an air room.

Place a Sink bulb in the air room near to the traversable surface.

Place the trigger for the Sink on the floor of the higher water room.



Blue: Opacity2 transparent/double sided animated water surface texture, for water which is streaming horizontally.

Red: Opacity2 transparent/double sided animated texture, for water which is falling down. The traversable part of the waterfall.

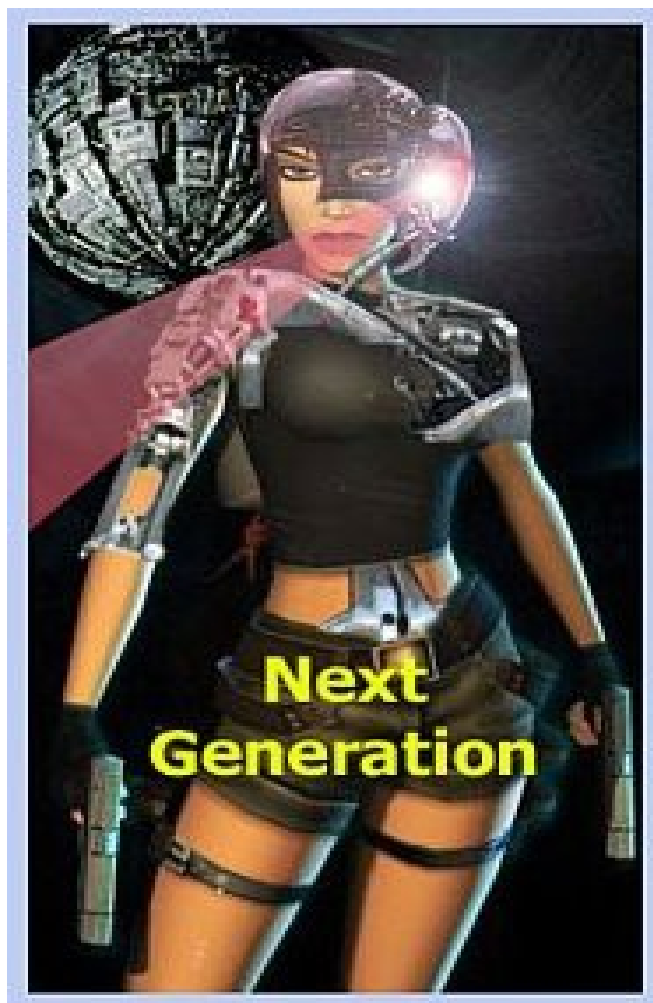
Magenta: Trigger for the sink.

Brown: Animated texture for water falling down on a rock or wall. The non-traversable part of the waterfall.

Green: Opacity2 transparent/double sided animated water surface texture for calm water.

TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION



TOMB EDITOR
PORTALS AND WINDOWS

TOMB EDITOR MANUAL

PORTALS WITH: COBWEBS, HANGING FOLIAGE, CURTAINS.

You learned successfully to create water using Toggle Opacity 2.
This allowed the placement of textures on an opening, yet Lara could still pass through.
The cobweb effects are created the same way as water.
Check room 36 in Tomb of Seth to decode some of these spooky passages.

Set the **Main Window** to Texture mode

Set the display portals icon.



In the **Sector Options** Window **Right Mouse click** inside the Black Portal area.
The Portal is now highlighted.

In the **Textures Panel**.
Select a Cobweb (Curtain) texture.

Set **TRANSPARENT** and **DOUBLE SIDED**:

Select the mode from **NORMAL** to **ADD**.
Select the Double Sided button in the bottom left corner of the **Textures Panel**.
(**SHIFT key** and **2 key**)

Select Opacity2



With a Cobweb (Curtain) texture selected in the **Texture Panel**,
mouse left click on a Portal square in the **Main Window**.

You can also apply static objects (Hanging foliage, a curtain etc.) to the portal square
for extra effect.

TOMB EDITOR MANUAL

VERTICAL WINDOWS

Portal Window

Set the **Main Window** to Texture mode

Set the display portals icon.



In the **Sector Options** Window **Right Mouse click** inside the Black Portal area.
The Portal is now highlighted.

In the **Textures Panel**.

Select a Window texture. This texture will have transparent sections to it.

The transparent texture is magenta in Tomb Raider. (Red=255, Green=0, Blue=255)

Set **DOUBLE SIDED**:

Select the Double Sided button in the bottom left corner of the **Textures Panel**.
(**SHIFT** key and **2** key)

Select Opacity1



With a Window texture selected in the **Texture Panel**,
mouse left click on a Portal square in the **Main Window**.

WINDOW OBJECT ON PORTAL SQUARE

Place a widow object on the square next to the portal. Ensure it has collision so Lara can not pass through it.

You can use a suitable metal bar door for a window. A trigger is not required as you are not using it as a door.

If you want Lara to look through and then pass through then use a shatter window object.

WINDOW OBJECT IN WALL STRUCTURE

Create suitable walls in the room. Place widow objects or metal bar doors in the walls. This will be the build for a church or castle. Lara can go from the outside of the window around through a door to the inside of the window.

TOMB EDITOR MANUAL

HORIZONTAL WINDOWS

PORTAL WINDOW

Set the **Main Window** to Texture mode

Set the display portals icon.



In the **Sector Options** Window **Right Mouse click** inside the Black Portal area.
The Portal is now highlighted.

In the **Textures Panel**.

Select a Window texture. This texture will have transparent sections to it.

The transparent texture is magenta in Tomb Raider. (Red=255, Green=0, Blue=255)

Set **DOUBLE SIDED**:

Select the Double Sided button in the bottom left corner of the **Textures Panel**.
(**SHIFT key** and **2 key**)

Select Opacity1



Apply the window texture to the portal squares.

BRIDGE OBJECTS IN ROOM

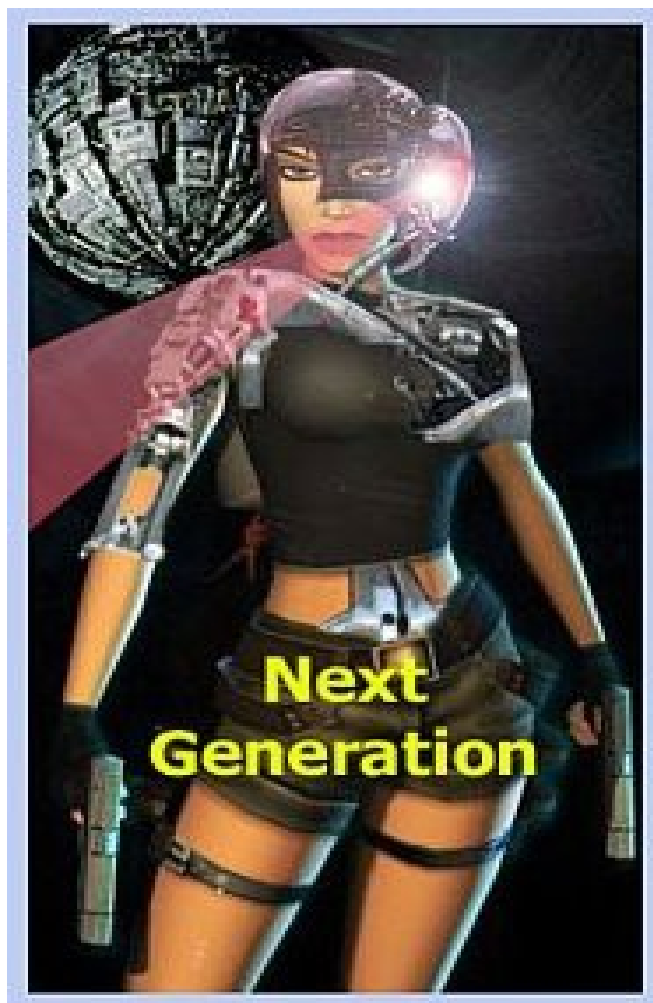
You can use bridge objects (flat and slopped) to create a glass roof in a room.

You may have to edit the textures of the bridge object to create a transparent section.

Apply dummy triggers to stop Lara falling through.

TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION



TOMB EDITOR
CAMERAS AND FLYBYS

TOMB EDITOR MANUAL

CAMERAS AND FLYBYS

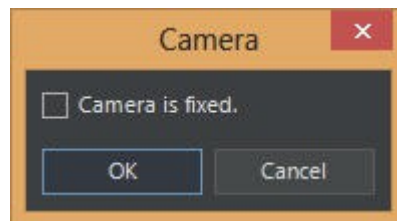
Camera views are essential to good level design. They can be used as ‘rewards’ for specific actions, to preview, or partially reveal events yet to come and/or give clues about the ‘story’ being told, to show ‘action’ from a different perspective, to help guide the way, to build suspense and add drama, to lend a cinematic air.

CAMERAS

This is initially a **Basic Camera**.

Select the Camera. Press the **O** key to display the Camera Window.

Select the Camera is fixed box to change it.



A **Basic Camera** tracks Lara’s movements or gives a special view of places and/or enemies. This camera view can be broken out of using the **LOOK** key.

By selecting a sequence of squares for the trigger, the camera will hold its position while Lara continues to walk/run on the triggered squares. You may type a number next to the Timer in the “Set Trigger Type” window to set the amount of time the camera stays fixed on Lara. She can break out of the camera view by:

- Drawing her weapons,
- Using the “look around” key,
- Stepping off the trigger square(s).

Basic Cameras will not activate when Lara has a drawn weapon. Bear this in mind when placing cameras. For example, if you trigger the camera in situations where Lara is sure not to have weapons in hand (finishing a climb, picking up items, etc.) you can be certain players will enjoy the effort you took setting up your camera

A **Fixed Camera** does everything the Basic Camera does but the view cannot be broken until Lara steps off the trigger for the camera. That is a fixed camera behaves like a basic camera with only a few exceptions:

The view cannot be broken until Lara steps off the trigger for the camera.

The camera will activate even if Lara has her guns drawn.

USING CAMERA TARGETS

In order to point the camera at a specific area and not at Lara a camera target is used, it works with either the Basic or Fixed camera.

Place a camera and a target in the level. Place a camera trigger and a target trigger in the level for Lara to activate.

TOMB EDITOR MANUAL

A FLYBY CAMERA SEQUENCE

You can have a lot of fun using this camera, but do not overdo it.

Set the parameters for the Flyby in the first camera of the sequence in the [3D View Editor](#) using the Object Properties window. “O”.

FLYBY CAMERA OCB WINDOW

Parameter	Value	Option
Sequence:	0	<input type="checkbox"/> Make a cut to flyby from Lara camera position
Number:	2	<input type="checkbox"/> Track entity position
Timer:	0	<input type="checkbox"/> Infinite loop
Speed:	1	<input type="checkbox"/> Create tracking camera
FOV:	80	<input type="checkbox"/> Focus on Lara's last head position
Roll:	0.00	<input type="checkbox"/> Focus on Lara's head
Rotation X:	0.00	<input type="checkbox"/> Snap back to Lara at the end of sequence
Rotation Y:	90.00	<input type="checkbox"/> Cut cam: jump to a specified camera in the same sequence
		<input type="checkbox"/> Freeze camera
		<input type="checkbox"/> Disable exit from sequence with "Look At" key
		<input type="checkbox"/> Cinematic mode
		<input type="checkbox"/> Override cinematic mode and let Lara move
		<input type="checkbox"/> Unused
		<input type="checkbox"/> Unused
		<input type="checkbox"/> Activate heavy trigger
		<input type="checkbox"/> Unused

OK Cancel

TOMB EDITOR MANUAL

	Range	Initial default
Sequence Number:	0 to 255	0
Camera Number:	0 to 255	0
Timer:	0 to	0
Speed:	0 to 100	1
FOV (field of view) :	0 to 360	80
Roll (degrees):	0 to 360	0
Rotation X (degrees):	0 to 360	0
Rotation Y (degrees):	0 to 360	0

Note: The number of sequences and cameras in a sequence has been greatly increased in the **Tomb Editor**. Sequences 0 to 255, and cameras 0 to 255 in a sequence.

The limit in the **Original Editor** and **NGLE** was Sequences 0 to 7, and cameras 0 to 31 in a sequence.

Sequence

The Flyby camera sequence number (0 to 255).
For a Custom Title Flyby use sequence number 1.

Number

The Flyby camera number in the sequence (0 to 255).

Timer

The time for waiting a flyby camera (timer = 300 x seconds).
The cut camera to jump to in the same sequence.

Speed

The higher the number, the faster the speed. Sounds obvious, but it is not as simple as it sounds. The game engine uses the distance between the cameras to interpret the speed (in a linear fashion).

FOV

Field of view. A higher number causes the field of view to increase, like widening the angle of the lens.

Roll

Enter the number in the roll field (degrees) and the camera will roll (bank) by that amount.

Rotation X

Enter the number in the rotation X field (degrees) and the camera will rotate.

Rotation Y

Enter the number in the rotation Y field (degrees) and the camera will rotate.

TOMB EDITOR MANUAL

FLYBY PARAMETERS.

Make a cut to flyby from Lara camera position.

Changes from the Lara follow camera to the flyby camera when the flyby is triggered.

Track entity position.

Infinite loop.

Makes the flyby continue in a continuous loop.

It is used for the title flyby.

Create tracking camera.

Focus the flyby cameras on Lara's follow camera position.

Focus on Lara's last head position.

The Flyby cameras stay focused on Lara's last head position before the flyby was triggered.

Focus on Lara's head.

The Flyby cameras stay focused on the current location of Lara's head.

Snap back to Lara at end of sequence.

Changes back to the Lara follow camera when the flyby is finished.

Cut cam: Jump to a specified camera in the same sequence.

Jumps to a specified camera in the same sequence.

The cut camera to jump to is held in the Timer field.

Freeze camera.

Causes the flyby camera to wait for a period.

The time is held in the Timer field. The value for waiting = 300 x seconds.

Disable exit from sequence with 'Look at' key.

Stops the Look at key causing the flyby sequence to exit control back to Lara.

Cinematic mode.

Stops Lara from moving while the flyby sequence is active.

Override Cinematic mode and let Lara move.

Allows Lara to move while the flyby sequence is active.

Unused.

Unused.

TOMB EDITOR MANUAL

Activate heavy trigger.

The flyby camera can trigger a heavy trigger.

Simply open the OCB on the camera required to trigger the heavy trigger and click on the activate heavy trigger box.

Place a heavy trigger under this camera to trigger, say, a door opening.

A whole sequence of events can be triggered this way.

Unused.

TOMB EDITOR MANUAL

FLYBY SETUP

Select the flyby camera and place it in the scene in the **3D View Editor**. You will notice a 'cone' in front of the camera showing which direction it is pointing. You can change the direction of view of the camera.

Select the flyby camera and press 'O' to display the **Flyby Camera window**.

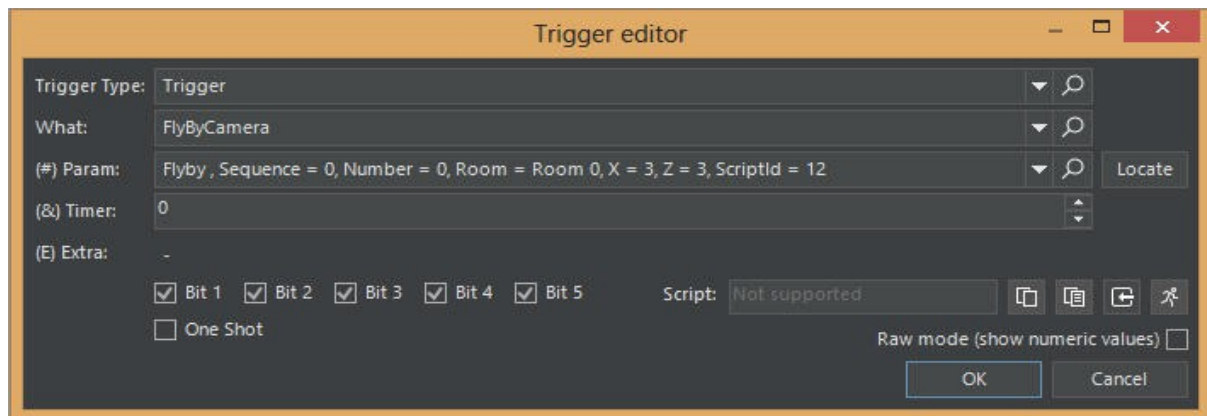
Set the parameters for the fly by.

All of the **flyby parameters** are only required for the **FIRST** flyby camera in the sequence.

All flyby cameras require a **sequence number** and a **camera number**.

To start the flyby, simply: trigger, Flyby Camera, first flyby camera in the sequence.

Also select One Shot.



CREATING A LEVEL FLYBY SEQUENCE

Create the flyby as a normal once through flyby.

Add flyby cameras in the rooms and set the sequence number and a camera number for all of the cameras in the sequence. Up to 256 cameras can be used for a sequence (that is 0 to 255). Up to 256 sequences can be used (that is 0 to 255), more than you will ever require. Use the Cut Cams method to jump to different areas of the level.

To start the flyby, simply: trigger, Flyby Camera, first flyby camera in the sequence.

Also select One Shot.

TOMB EDITOR MANUAL

FLYBY PARAMETERS FOR A LEVEL FLYBY.

Flyby sequence number.

Flyby camera number.

Make a cut to flyby from Lara camera position.

Snap back to Lara at end of sequence.

Disable exit from sequence with 'Look at' key.

Cinematic mode.

Cut cam: Jump to a specified camera in the same sequence (as required).

Activate heavy trigger (as required).

TOMB EDITOR MANUAL

CREATING A CUSTOM TITLE LEVEL FLYBY SEQUENCE

Initially set up a normal level that will eventually become the custom title.

Create the title flyby as a normal once through flyby.

Add flyby cameras in the rooms and set the sequence number and a camera number for all of the cameras in the sequence. Up to 256 cameras can be used for the sequence (that is 0 to 255). Use sequence 1 for the title flyby and use the Cut Cams method to jump to different areas of the level.

When you are satisfied that the flyby is good then edit the first flyby camera in sequence 1 to give it a continuous loop.

To start the flyby, simply place a trigger under Lara:
trigger, Flyby Camera, first flyby camera in the sequence.
Also select One Shot.

Save the level. Build the level.

In the **Tomb Editor Scripter** edit the script in the title section to use the custom title.

FLYBY PARAMETERS FOR A CUSTOM TITLE CONTINUOUS FLYBY.

Flyby sequence number.

Flyby camera number.

Make a cut to flyby from Lara camera position.

Infinite loop.

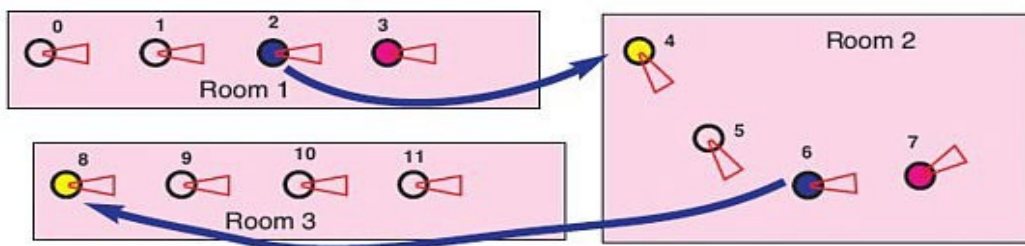
Cut cam: Jump to a specified camera in the same sequence (as required).

Activate heavy trigger (as required).

CUT CAMS

This is a feature in the **Tomb Editor**. Using 'dummy' cameras this technique works every time. A cut cam jumps to another camera in the sequence.

This can be done many times in one sequence and you can cut between rooms.



Note: For a custom title level use the camera flyby sequence 1.

TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION



TOMB EDITOR

FLIP MAPS

TOMB EDITOR MANUAL

FLIP MAPS

Flip maps are a great way to create puzzles. They are easy to produce but can be confusing at first. They are great for floods, earthquakes, changing water currents, making doors disappear, turning lights on or off, and so on. Flipped rooms are basically copies of an existing room that can be triggered to turn on and off. Generally the triggers for Flip Maps are set up out of sight of the actual Flip Map room because you do not want to see the map flip from one state to the other. Here are the steps to make a flip map room:

Ensure the room to flip is fully textured and all connections (doors) are created.

When you are happy click on the Flip Map button in the Room Options Window and select a number (start at 1). More than one room can be set to the Flip Map.

Select the Flip Map icon.



The background of the Tomb Editor window turns black.
This is an indication that you are now working in the flipped room.

Make changes to the room.

Examples of changes are:

- Change from a dry to a water room.
- Re-texture any part of or all of the room.
- Change the room geometry.
- Change the lighting.
- Toggle the opacity of connected doors.

To return to the normal room select the Flip Map icon.



All that is required now is to set a trigger for the Flip Map.
Set the 'What' to **Flip Map** in the trigger window and put the number of the **Flip Map** in the **Param** window. When triggered the room(s) will immediately change to the flipped room(s).

GENERAL RULES AND WARNINGS.

Avoid flipping very large areas or areas containing many objects.

Avoid triggering baddies in flipped rooms, they behave very unpredictably.

To trigger something from the flipped room set up the triggers in the flipped room.
They will only trigger from the flipped room.

TOMB EDITOR MANUAL

EXAMPLES OF THE USE OF FLIP MAPS

The most obvious use is to change a dry room to a water room. Remember the clever puzzles in the TR1 level 'The Cistern'.

Trigger an 'earthquake'. When returning to the room the geometry changes and you can access different areas, get to doors you could not reach before.

Use a switch in a darkened room to turn on the lights using a Flip Map.

Use 'death' squares in the flipped room (water changes to acid for example).

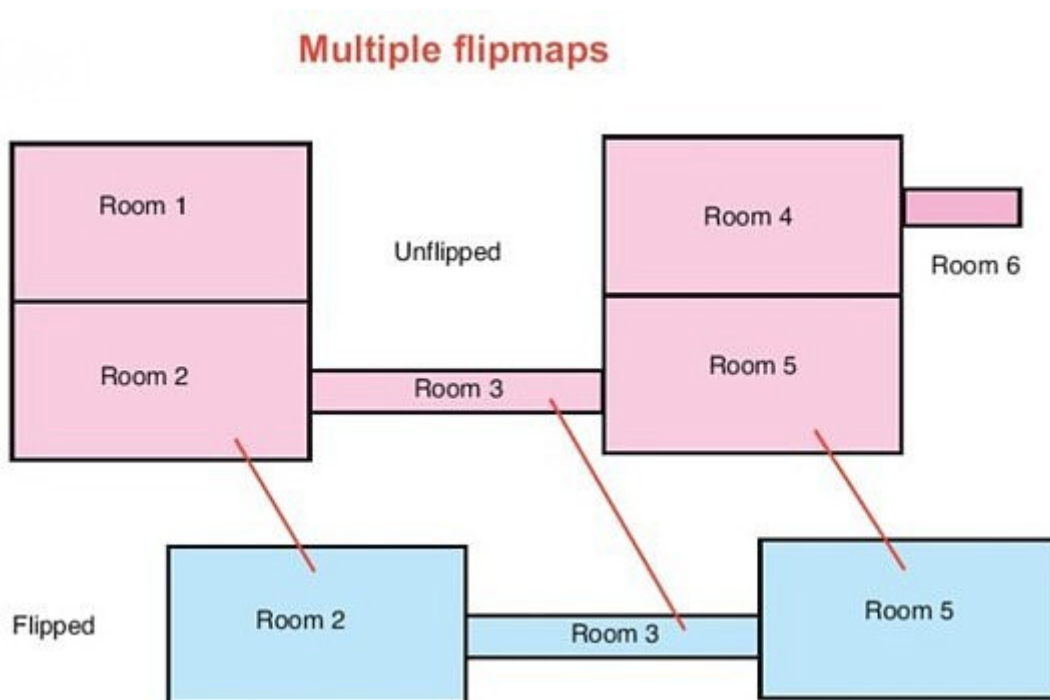
Blow a hole in a wall, changing the opacity and textures of a 'door'.

FLIP ON FLIP OFF

Use the Flip On and Flip Off operators to alternate the flipped room to normal and back again. Trigger the Flip Map first as described earlier.

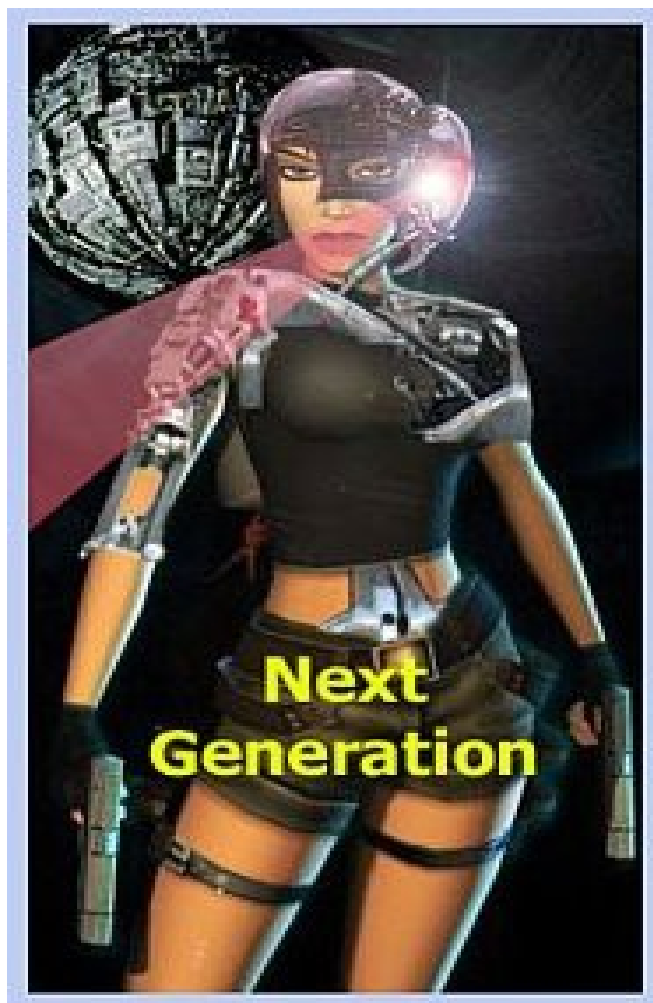
MULTIPLE FLIP MAP ROOMS.

Trigger a Flip Map to change multiple rooms. The diagram below shows how this is done. That is Room 2, 3 and 5 have the same Flip Map number.



TOMB EDITOR MANUAL

TOMB RAIDER NEXT GENERATION



TOMB EDITOR
CHOOSING A LARA WAD

TOMB EDITOR MANUAL

CHOOSING A LARA WAD (LEVEL) FOR THE PROJECT

For a beginner it is easier to select a TR4 wad (Level) as the script is available. Lara will have all of the standard animations (Animation 0 to Animation 444).

If you want Lara to be able to do new actions then you will need to use a Lara from a Next Generation Level, or Back to Basics wads.

However there are differences in these wads (levels). Animations 445 and above are not standardised.

If you require Lara to walk a tightrope, use swing bars and have additional new moves then choose a Next Generation Level.

If you have started a project using a TR4 Lara and want to have additional animations do the following:

Using the Wad Tool,

- Load the project wad in the Destination window.
- Load a Next Generation level in the Source window.

Select the Lara object in the Source window and copy it to the Destination window.

Save the Destination wad.

Lara will still look the same but she will have all of the additional animations. To change Lara's appearance it is necessary to also copy all of the objects associated with Lara from the Source to the Destination window.

For a new project where you require Lara to walk a tightrope, use swing bars and have additional new moves choose a Next Generation Level.

You will need to input script to define the puzzles, keys, pickups etc. in the wad.

Some new moves will require a script command.

Jump up past a wall gap,
Ladder to Monkey bars,
Water to ladder, etc.

TOMB EDITOR MANUAL

