

YAGL

1.0.0

Generated by Doxygen 1.8.3.1

Wed Apr 10 2013 17:10:29



# Contents

<b>1</b>	<b>Yet Another Game Library</b>	<b>1</b>
<b>2</b>	<b>Module Index</b>	<b>3</b>
2.1	Modules . . . . .	3
<b>3</b>	<b>Module Documentation</b>	<b>5</b>
3.1	System basics . . . . .	5
3.1.1	Detailed Description . . . . .	5
3.1.2	Function Documentation . . . . .	6
3.1.2.1	System_Init . . . . .	6
3.1.2.2	System_DebugOut . . . . .	6
3.1.2.3	System_SetDebugCallback . . . . .	6
3.1.2.4	System_GetVideoModesCount . . . . .	6
3.1.2.5	System_GetVideoMode . . . . .	6
3.1.2.6	System_GetDesktopMode . . . . .	7
3.1.2.7	System_GetStats . . . . .	7
3.1.2.8	System_GetVersion . . . . .	7
3.2	Window . . . . .	8
3.2.1	Detailed Description . . . . .	8
3.2.2	Function Documentation . . . . .	8
3.2.2.1	Window_Create . . . . .	8
3.2.2.2	Window_CreateEx . . . . .	9
3.2.2.3	Window_Close . . . . .	9
3.2.2.4	Window_IsOpened . . . . .	9
3.2.2.5	Window_Center . . . . .	9
3.2.2.6	Window_SetPos . . . . .	9
3.2.2.7	Window_SetSize . . . . .	10
3.2.2.8	Window_GetSize . . . . .	10
3.2.2.9	Window_SetTitle . . . . .	10
3.2.2.10	Window_SetVisible . . . . .	10
3.2.2.11	Window_IsVisible . . . . .	10
3.2.2.12	Window_IsActive . . . . .	10

3.2.2.13	<a href="#">Window_IsAccelerated</a>	11
3.2.2.14	<a href="#">Window_Capture</a>	11
3.2.2.15	<a href="#">Window_SetCursor</a>	11
3.2.2.16	<a href="#">Window_SetCloseCallback</a>	11
3.2.2.17	<a href="#">Window_SetSizeCallback</a>	11
3.2.2.18	<a href="#">Window_SetRefreshCallback</a>	11
3.3	<a href="#">Rendering</a>	12
3.3.1	<a href="#">Detailed Description</a>	12
3.4	<a href="#">View</a>	13
3.4.1	<a href="#">Detailed Description</a>	13
3.5	<a href="#">Events</a>	14
3.5.1	<a href="#">Detailed Description</a>	14
3.6	<a href="#">Misc</a>	15
3.6.1	<a href="#">Detailed Description</a>	15
3.7	<a href="#">Textures</a>	16
3.7.1	<a href="#">Detailed Description</a>	16
3.8	<a href="#">Texture map</a>	17
3.8.1	<a href="#">Detailed Description</a>	17
3.9	<a href="#">Textured Quad</a>	18
3.9.1	<a href="#">Detailed Description</a>	18
3.10	<a href="#">Sprite</a>	19
3.10.1	<a href="#">Detailed Description</a>	19
3.11	<a href="#">Sprite set</a>	20
3.11.1	<a href="#">Detailed Description</a>	20
3.12	<a href="#">Animations</a>	21
3.12.1	<a href="#">Detailed Description</a>	22
3.12.2	<a href="#">Function Documentation</a>	22
3.12.2.1	<a href="#">Animation_Create</a>	22
3.12.2.2	<a href="#">Animation_IsAnimation</a>	22
3.12.2.3	<a href="#">Animation_AddFrameEx</a>	22
3.12.2.4	<a href="#">Animation_AddFrame</a>	23
3.12.2.5	<a href="#">Animation_FrameSetBlank</a>	23
3.12.2.6	<a href="#">Animation_FrameCount</a>	23
3.12.2.7	<a href="#">Animation_FrameMax</a>	23
3.12.2.8	<a href="#">Animation_Empty</a>	23
3.12.2.9	<a href="#">Animation_Destroy</a>	24
3.12.2.10	<a href="#">Animation_FrameSetDuration</a>	24
3.12.2.11	<a href="#">Animation_FrameSetTexture</a>	24
3.12.2.12	<a href="#">Animation_FrameSetColor</a>	24
3.12.2.13	<a href="#">Animation_FrameSetColorEx</a>	25

3.12.2.14 Animation_FrameSetBlendMode . . . . .	25
3.12.2.15 Animation_FrameSetSize . . . . .	25
3.12.2.16 Animation_FrameGetDuration . . . . .	25
3.12.2.17 Animation_FrameGetTexture . . . . .	25
3.12.2.18 Animation_FrameGetColor . . . . .	26
3.12.2.19 Animation_FrameGetColorEx . . . . .	26
3.12.2.20 Animation_FrameGetBlendMode . . . . .	26
3.12.2.21 Animation_FrameGetSize . . . . .	26
3.13 Collisions . . . . .	27
3.13.1 Detailed Description . . . . .	27
3.14 Particles effects . . . . .	28
3.14.1 Detailed Description . . . . .	28
3.15 Shaders . . . . .	29
3.15.1 Detailed Description . . . . .	29
3.16 Primitives drawing . . . . .	30
3.16.1 Detailed Description . . . . .	30
3.17 Geometry . . . . .	31
3.17.1 Detailed Description . . . . .	31
3.18 Bitmap fonts . . . . .	32
3.18.1 Detailed Description . . . . .	32
3.19 Bitmap text . . . . .	33
3.19.1 Detailed Description . . . . .	33
3.20 Constants & Enumerations . . . . .	34
3.20.1 Detailed Description . . . . .	34
3.21 Enumerations . . . . .	35
3.21.1 Detailed Description . . . . .	35
3.21.2 Enumeration Type Documentation . . . . .	35
3.21.2.1 eDEBUG . . . . .	35
3.21.2.2 eVERSION . . . . .	35
3.21.2.3 eCAPTURE_TYPE . . . . .	36
3.21.2.4 eMOUSE_POS_MODE . . . . .	36
3.21.2.5 eBLEND_MODE . . . . .	36
3.21.2.6 eCENTER . . . . .	36
3.21.2.7 eSHAPE . . . . .	37
3.21.2.8 eALIGN . . . . .	37
3.21.2.9 eSHADER_TYPE . . . . .	37
3.22 Keyboard & Mouse . . . . .	38
3.22.1 Detailed Description . . . . .	39
3.22.2 Macro Definition Documentation . . . . .	39
3.22.2.1 YAGL_KEY_UNKNOWN . . . . .	39

3.22.2.2	YAGL_KEY_SPACE	39
3.22.2.3	YAGL_KEY_SPECIAL	39
3.22.2.4	YAGL_KEY_ESC	39
3.22.2.5	YAGL_KEY_F1	39
3.22.2.6	YAGL_KEY_F2	39
3.22.2.7	YAGL_KEY_F3	39
3.22.2.8	YAGL_KEY_F4	40
3.22.2.9	YAGL_KEY_F5	40
3.22.2.10	YAGL_KEY_F6	40
3.22.2.11	YAGL_KEY_F7	40
3.22.2.12	YAGL_KEY_F8	40
3.22.2.13	YAGL_KEY_F9	40
3.22.2.14	YAGL_KEY_F10	40
3.22.2.15	YAGL_KEY_F11	40
3.22.2.16	YAGL_KEY_F12	40
3.22.2.17	YAGL_KEY_F13	40
3.22.2.18	YAGL_KEY_F14	40
3.22.2.19	YAGL_KEY_F15	40
3.22.2.20	YAGL_KEY_F16	40
3.22.2.21	YAGL_KEY_F17	40
3.22.2.22	YAGL_KEY_F18	40
3.22.2.23	YAGL_KEY_F19	40
3.22.2.24	YAGL_KEY_F20	40
3.22.2.25	YAGL_KEY_F21	40
3.22.2.26	YAGL_KEY_F22	40
3.22.2.27	YAGL_KEY_F23	40
3.22.2.28	YAGL_KEY_F24	40
3.22.2.29	YAGL_KEY_F25	40
3.22.2.30	YAGL_KEY_UP	40
3.22.2.31	YAGL_KEY_DOWN	40
3.22.2.32	YAGL_KEY_LEFT	40
3.22.2.33	YAGL_KEY_RIGHT	40
3.22.2.34	YAGL_KEY_LSHIFT	40
3.22.2.35	YAGL_KEY_RSHIFT	40
3.22.2.36	YAGL_KEY_LCTRL	41
3.22.2.37	YAGL_KEY_RCTRL	41
3.22.2.38	YAGL_KEY_LALT	41
3.22.2.39	YAGL_KEY_RALT	41
3.22.2.40	YAGL_KEY_TAB	41
3.22.2.41	YAGL_KEY_ENTER	41

3.22.2.42 YAGL_KEY_BACKSPACE . . . . .	41
3.22.2.43 YAGL_KEY_INSERT . . . . .	41
3.22.2.44 YAGL_KEY_DEL . . . . .	41
3.22.2.45 YAGL_KEY_PAGEUP . . . . .	41
3.22.2.46 YAGL_KEY_PAGEDOWN . . . . .	41
3.22.2.47 YAGL_KEY_HOME . . . . .	41
3.22.2.48 YAGL_KEY_END . . . . .	41
3.22.2.49 YAGL_KEY_KP_0 . . . . .	41
3.22.2.50 YAGL_KEY_KP_1 . . . . .	41
3.22.2.51 YAGL_KEY_KP_2 . . . . .	41
3.22.2.52 YAGL_KEY_KP_3 . . . . .	41
3.22.2.53 YAGL_KEY_KP_4 . . . . .	41
3.22.2.54 YAGL_KEY_KP_5 . . . . .	41
3.22.2.55 YAGL_KEY_KP_6 . . . . .	41
3.22.2.56 YAGL_KEY_KP_7 . . . . .	41
3.22.2.57 YAGL_KEY_KP_8 . . . . .	41
3.22.2.58 YAGL_KEY_KP_9 . . . . .	41
3.22.2.59 YAGL_KEY_KP_DIVIDE . . . . .	41
3.22.2.60 YAGL_KEY_KP_MULTIPLY . . . . .	41
3.22.2.61 YAGL_KEY_KP_SUBTRACT . . . . .	41
3.22.2.62 YAGL_KEY_KP_ADD . . . . .	41
3.22.2.63 YAGL_KEY_KP_DECIMAL . . . . .	41
3.22.2.64 YAGL_KEY_KP_EQUAL . . . . .	42
3.22.2.65 YAGL_KEY_KP_ENTER . . . . .	42
3.22.2.66 YAGL_KEY_KP_NUM_LOCK . . . . .	42
3.22.2.67 YAGL_KEY_CAPS_LOCK . . . . .	42
3.22.2.68 YAGL_KEY_SCROLL_LOCK . . . . .	42
3.22.2.69 YAGL_KEY_PAUSE . . . . .	42
3.22.2.70 YAGL_KEY_LSUPER . . . . .	42
3.22.2.71 YAGL_KEY_RSUPER . . . . .	42
3.22.2.72 YAGL_KEY_MENU . . . . .	42
3.22.2.73 YAGL_KEY_LAST . . . . .	42
3.22.2.74 YAGL_MOUSE_BUTTON_1 . . . . .	42
3.22.2.75 YAGL_MOUSE_BUTTON_2 . . . . .	42
3.22.2.76 YAGL_MOUSE_BUTTON_3 . . . . .	42
3.22.2.77 YAGL_MOUSE_BUTTON_4 . . . . .	42
3.22.2.78 YAGL_MOUSE_BUTTON_5 . . . . .	42
3.22.2.79 YAGL_MOUSE_BUTTON_6 . . . . .	42
3.22.2.80 YAGL_MOUSE_BUTTON_7 . . . . .	42
3.22.2.81 YAGL_MOUSE_BUTTON_8 . . . . .	42

3.22.2.82	YAGL_MOUSE_BUTTON_LAST	42
3.22.2.83	YAGL_MOUSE_BUTTON_LEFT	42
3.22.2.84	YAGL_MOUSE_BUTTON_RIGHT	42
3.22.2.85	YAGL_MOUSE_BUTTON_MIDDLE	42
3.23	Colors	43
3.23.1	Detailed Description	44
3.23.2	Macro Definition Documentation	44
3.23.2.1	YAGL_RGBA	44
3.23.2.2	YAGL_COLOR_BLACK	44
3.23.2.3	YAGL_COLOR_MAROON	44
3.23.2.4	YAGL_COLOR_GREEN	44
3.23.2.5	YAGL_COLOR_OLIVE	44
3.23.2.6	YAGL_COLOR_NAVY	44
3.23.2.7	YAGL_COLOR_PURPLE	44
3.23.2.8	YAGL_COLOR_TEAL	44
3.23.2.9	YAGL_COLOR_SILVER	44
3.23.2.10	YAGL_COLOR_GRAY	44
3.23.2.11	YAGL_COLOR_RED	44
3.23.2.12	YAGL_COLOR_LIME	44
3.23.2.13	YAGL_COLOR_YELLOW	44
3.23.2.14	YAGL_COLOR_BLUE	44
3.23.2.15	YAGL_COLOR_FUSCHIA	44
3.23.2.16	YAGL_COLOR_MAGENTA	44
3.23.2.17	YAGL_COLOR_AQUA	44
3.23.2.18	YAGL_COLOR_CYAN	44
3.23.2.19	YAGL_COLOR_WHITE	44
3.23.2.20	YAGL_COLOR_BLACK_A128	44
3.23.2.21	YAGL_COLOR_MAROON_A128	44
3.23.2.22	YAGL_COLOR_GREEN_A128	45
3.23.2.23	YAGL_COLOR_OLIVE_A128	45
3.23.2.24	YAGL_COLOR_NAVY_A128	45
3.23.2.25	YAGL_COLOR_PURPLE_A128	45
3.23.2.26	YAGL_COLOR_TEAL_A128	45
3.23.2.27	YAGL_COLOR_SILVER_A128	45
3.23.2.28	YAGL_COLOR_GRAY_A128	45
3.23.2.29	YAGL_COLOR_RED_A128	45
3.23.2.30	YAGL_COLOR_LIME_A128	45
3.23.2.31	YAGL_COLOR_YELLOW_A128	45
3.23.2.32	YAGL_COLOR_BLUE_A128	45
3.23.2.33	YAGL_COLOR_FUSCHIA_A128	45



3.23.2.34	YAGL_COLOR_MAGENTA_A128 . . . . .	45
3.23.2.35	YAGL_COLOR_AQUA_A128 . . . . .	45
3.23.2.36	YAGL_COLOR_CYAN_A128 . . . . .	45
3.23.2.37	YAGL_COLOR_WHITE_A128 . . . . .	45
3.24	OpenGL Texture Parameters . . . . .	46
3.24.1	Detailed Description . . . . .	46
3.24.2	Macro Definition Documentation . . . . .	46
3.24.2.1	YAGL_TEXTURE_MIN_FILTER . . . . .	46
3.24.2.2	YAGL_TEXTURE_MAG_FILTER . . . . .	46
3.24.2.3	YAGL_TEXTURE_WRAP_S . . . . .	46
3.24.2.4	YAGL_TEXTURE_WRAP_T . . . . .	46
3.24.2.5	YAGL_GL_NEAREST . . . . .	46
3.24.2.6	YAGL_GL_LINEAR . . . . .	46
3.24.2.7	YAGL_GL_NEAREST_MIPMAP_NEAREST . . . . .	46
3.24.2.8	YAGL_GL_LINEAR_MIPMAP_NEAREST . . . . .	46
3.24.2.9	YAGL_GL_NEAREST_MIPMAP_LINEAR . . . . .	46
3.24.2.10	YAGL_GL_LINEAR_MIPMAP_LINEAR . . . . .	46
3.24.2.11	YAGL_GL_CLAMP . . . . .	46
3.24.2.12	YAGL_GL_REPEAT . . . . .	46
3.25	Callbacks . . . . .	47
3.25.1	Detailed Description . . . . .	47
3.25.2	Typedef Documentation . . . . .	47
3.25.2.1	YAGLDebugProc . . . . .	47
3.25.2.2	YAGLWinCloseProc . . . . .	47
3.25.2.3	YAGLWinSizeProc . . . . .	47
3.25.2.4	YAGLMousePosProc . . . . .	47
3.25.2.5	YAGLMouseButtonProc . . . . .	48
3.26	Particle emitter accessors . . . . .	49
3.26.1	Detailed Description . . . . .	49
3.27	Bitmap text accessors . . . . .	50
3.27.1	Detailed Description . . . . .	50
3.28	Sprite accessors . . . . .	51
3.28.1	Detailed Description . . . . .	51
3.29	Textured Quad accessors . . . . .	52
3.29.1	Detailed Description . . . . .	52



## Chapter 1

# Yet Another Game Library

This the main API documentation for YAGL - Yet Another Game Library



## Chapter 2

# Module Index

### 2.1 Modules

Here is a list of all modules:

System basics . . . . .	5
Window . . . . .	8
Rendering . . . . .	12
View . . . . .	13
Events . . . . .	14
Misc . . . . .	15
Textures . . . . .	16
Texture map . . . . .	17
Textured Quad . . . . .	18
Textured Quad accessors . . . . .	52
Sprite . . . . .	19
Sprite accessors . . . . .	51
Sprite set . . . . .	20
Animations . . . . .	21
Collisions . . . . .	27
Particles effects . . . . .	28
Particle emitter accessors . . . . .	49
Shaders . . . . .	29
Primitives drawing . . . . .	30
Geometry . . . . .	31
Bitmap fonts . . . . .	32
Bitmap text . . . . .	33
Bitmap text accessors . . . . .	50
Constants & Enumerations . . . . .	34
Keyboard & Mouse . . . . .	38
Colors . . . . .	43
OpenGL Texture Parameters . . . . .	46
Enumerations . . . . .	35
Callbacks . . . . .	47



## Chapter 3

# Module Documentation

### 3.1 System basics

Basic system operations.

#### Functions

- int YAGL\_API [System\\_Init](#) (eDEBUG debug\_mode)  
*Initiate the engine.*
- void YAGL\_API [System\\_DebugOut](#) (const char \*data, int err\_lvl)  
*Output data to the debug output.*
- void YAGL\_API [System\\_SetDebugCallback](#) (YAGLDebugProc debug\_proc)  
*Set a function to be called when debug info is outputed.*
- void YAGL\_API [System\\_Terminate](#) ()  
*Free all ressources and terminate the engine.*
- int YAGL\_API [System\\_GetVideoModesCount](#) ()  
*Return the number of supported video modes.*
- void YAGL\_API [System\\_GetVideoMode](#) (int mode, int \*width, int \*height, int \*red\_bits, int \*green\_bits, int \*blue\_bits)  
*Get a supported video mode.*
- void YAGL\_API [System\\_GetDesktopMode](#) (int \*width, int \*height, int \*red\_bits, int \*green\_bits, int \*blue\_bits)  
*Get current desktop video mode.*
- void YAGL\_API [System\\_GetStats](#) (int \*num\_textures, int \*num\_texture\_maps, int \*num\_quads, int \*num\_sprites, int \*num\_sprite\_sets, int \*num\_animations, int \*num\_particle\_emitters, int \*num\_shaders, int \*num\_bmp\_fonts, int \*num\_bmp\_texts)  
*Get some stats about the running engine.*
- void YAGL\_API [System\\_GetVersion](#) (eVERSION flag, int \*major, int \*minor, int \*revision)  
*Get various version numbers.*

#### 3.1.1 Detailed Description

Basic system operations.

### 3.1.2 Function Documentation

#### 3.1.2.1 `int YAGL_API System_Init ( eDEBUG debug_mode )`

Initiate the engine.

Must be called before any other YAGL function.

##### Parameters

<i>debug_mode[in]</i>	See <a href="#">eDEBUG</a>
-----------------------	----------------------------

##### Returns

1 on succes, 0 otherwise

#### 3.1.2.2 `void YAGL_API System.DebugOut ( const char * data, int err_lvl )`

Output data to the debug output.

##### Parameters

<i>data[in]</i>	NULL-terminated string to output
<i>err_lvl[in]</i>	0 No error, 1 Error, 2 Fatal error (program will exit)

#### 3.1.2.3 `void YAGL_API System.SetDebugCallback ( YAGLDebugProc debug_proc )`

Set a function to be called when debug info is outputed.

##### Parameters

<i>debug_proc[in]</i>	See <a href="#">YAGLDebugProc</a>
-----------------------	-----------------------------------

#### 3.1.2.4 `int YAGL_API System.GetVideoModesCount ( )`

Return the number of supported video modes.

##### Returns

Number of supported video modes

#### 3.1.2.5 `void YAGL_API System.GetVideoMode ( int mode, int * width, int * height, int * red_bits, int * green_bits, int * blue_bits )`

Get a supported video mode.

##### Parameters

<i>mode[in]</i>	Video mode to get ([1, <a href="#">System_GetVideoModesCount()</a> ])
<i>width[out]</i>	
<i>height[out]</i>	
<i>red_bits[out]</i>	
<i>green_bits[out]</i>	
<i>blue_bits[out]</i>	



3.1.2.6 void YAGL\_API System.GetDesktopMode ( int \* *width*, int \* *height*, int \* *red\_bits*, int \* *green\_bits*, int \* *blue\_bits* )

Get current desktop video mode.

Parameters

<i>width</i> [out]	
<i>height</i> [out]	
<i>red_bits</i> [out]	
<i>green_bits</i> [out]	
<i>blue_bits</i> [out]	

3.1.2.7 void YAGL\_API System.GetStats ( int \* *num\_textures*, int \* *num\_texture\_maps*, int \* *num\_quads*, int \* *num\_sprites*, int \* *num\_sprite\_sets*, int \* *num\_animations*, int \* *num\_particle\_emitters*, int \* *num\_shaders*, int \* *num\_bmp\_fonts*, int \* *num\_bmp\_texts* )

Get some stats about the running engine.

Parameters

<i>num_textures</i> [out]	
<i>num_texture_maps</i> [out]	
<i>num_quads</i> [out]	
<i>num_sprites</i> [out]	
<i>num_sprite_sets</i> [out]	
<i>num_animations</i> [out]	
<i>num_particle_emitters</i> [out]	
<i>num_shaders</i> [out]	
<i>num_bmp_fonts</i> [out]	
<i>num_bmp_texts</i> [out]	

3.1.2.8 void YAGL\_API System.GetVersion ( eVERSION *flag*, int \* *major*, int \* *minor*, int \* *revision* )

Get various version numbers.

Parameters

<i>flag</i> [in]	See <a href="#">eVERSION</a>
<i>major</i> [out]	Major version number
<i>minor</i> [out]	Minor version number
<i>revision</i> [out]	Revision number

## 3.2 Window

Window handling.

### Functions

- int YAGL\_API [Window\\_Create](#) (const int width, const int height, const int red\_bits, const int green\_bits, const int blue\_bits, const int fullscreen, const char title[], int resizable, const int multisample)  
*Create a render context, window or fullscreen.*
- int YAGL\_API [Window\\_CreateEx](#) (int video\_mode\_id, const char title[], int multisample)  
*Open fullscreen render window according to a video mode.*
- void YAGL\_API [Window\\_Close](#) ()  
*Close window.*
- int YAGL\_API [Window\\_IsOpened](#) ()  
*Check if a rendering window is opened.*
- void YAGL\_API [Window\\_Center](#) ()  
*Center the rendering window on the desktop.*
- void YAGL\_API [Window\\_SetPos](#) (const int x, const int y)  
*Set the position of the upper-left corner of the rendering window.*
- void YAGL\_API [Window\\_SetSize](#) (const int w, const int h)  
*Set window size, or fullscreen display resolution.*
- void YAGL\_API [Window\\_GetSize](#) (int \*w, int \*h)  
*Get window size, or fullscreen display resolution.*
- void YAGL\_API [Window\\_SetTitle](#) (const char title[])  
*Set window title.*
- void YAGL\_API [Window\\_SetVisible](#) (const int flag)
- int YAGL\_API [Window\\_IsVisible](#) ()
- int YAGL\_API [Window\\_IsActive](#) ()
- int YAGL\_API [Window\\_IsAccelerated](#) ()
- void YAGL\_API [Window\\_Capture](#) (const char filepath[], [eCAPTURE\\_TYPE](#) type, int x, int y, int w, int h)  
*Take a screenshot of the rendering window (or a part of it) to a file.*
- void YAGL\_API [Window\\_SetCursor](#) (const int status)  
*Display/hide the mouse cursor.*
- void YAGL\_API [Window\\_SetCloseCallback](#) ([YAGLWinCloseProc](#) proc)
- void YAGL\_API [Window\\_SetSizeCallback](#) ([YAGLWinSizeProc](#) proc)
- void YAGL\_API [Window\\_SetRefreshCallback](#) ([YAGLWinRefreshProc](#) proc)

### 3.2.1 Detailed Description

Window handling.

### 3.2.2 Function Documentation

- 3.2.2.1 int YAGL\_API [Window\\_Create](#) ( const int *width*, const int *height*, const int *red\_bits*, const int *green\_bits*, const int *blue\_bits*, const int *fullscreen*, const char *title*[], int *resizable*, const int *multisample* )

Create a render context, window or fullscreen.

## Parameters

<i>width[in]</i>	
<i>height[in]</i>	
<i>red_bits[in]</i>	
<i>green_bits[in]</i>	
<i>blue_bits[in]</i>	
<i>fullscreen[in]</i>	
<i>title[in]</i>	
<i>resizable[in]</i>	
<i>multisample[in]</i>	

## Returns

1 on succes, 0 otherwise

### 3.2.2.2 int YAGL\_API Window\_CreateEx ( int *video\_mode\_id*, const char *title*[], int *multisample* )

Open fullscreen render window according to a video mode.

## Parameters

<i>video_mode_id[in]</i>	Video mode ID
<i>title[in]</i>	Window title
<i>multisample[in]</i>	Multisample

## Returns

1 on succes, 0 otherwise

### 3.2.2.3 void YAGL\_API Window\_Close ( )

Close window.

### 3.2.2.4 int YAGL\_API Window\_IsOpened ( )

Check if a rendering window is opened.

## Returns

1 if it's opened, 0 otherwise

### 3.2.2.5 void YAGL\_API Window\_Center ( )

Center the rendering window on the desktop.

No effect on fullscreen window

### 3.2.2.6 void YAGL\_API Window\_SetPos ( const int *x*, const int *y* )

Set the position of the upper-left corner of the rendering window.

(0,0) is the upper-left corner of the desktop

## Parameters

<i>x[in]</i>	X-position
<i>y[in]</i>	Y-position

**3.2.2.7 void YAGL\_API Window\_SetSize ( const int *w*, const int *h* )**

Set window size, or fullscreen display resolution.

## Parameters

<i>w[in]</i>	Width
<i>h[in]</i>	Height

**3.2.2.8 void YAGL\_API Window\_GetSize ( int \* *w*, int \* *h* )**

Get window size, or fullscreen display resolution.

## Parameters

<i>w[out]</i>	Width
<i>h[out]</i>	Height

**3.2.2.9 void YAGL\_API Window\_SetTitle ( const char *title*[] )**

Set window title.

## Parameters

<i>title[in]</i>	NULL-terminated string
------------------	------------------------

**3.2.2.10 void YAGL\_API Window\_SetVisible ( const int *flag* )**

## Parameters

<i>\return</i>	
----------------	--

**3.2.2.11 int YAGL\_API Window\_IsVisible ( )**

## Parameters

<i>\param</i>	
---------------	--

## Returns

**3.2.2.12 int YAGL\_API Window\_IsActive ( )**

## Parameters

<i>\param</i>	
---------------	--

Returns

3.2.2.13 `int YAGL_API Window_IsAccelerated ( )`

Parameters

<code>\param</code>	
---------------------	--

Returns

3.2.2.14 `void YAGL_API Window_Capture ( const char filepath[], eCAPTURE\_TYPE type, int x, int y, int w, int h )`

Take a screenshot of the rendering window (or a part of it) to a file.

Parameters

<code><i>filepath</i>[in]</code>	NULL-terminated string representing a filepath
<code><i>type</i>[in]</code>	Capture file format (see <a href="#">eCAPTURE_TYPE</a> )
<code><i>x</i>[in]</code>	
<code><i>y</i>[in]</code>	
<code><i>w</i>[in]</code>	
<code><i>h</i>[in]</code>	

3.2.2.15 `void YAGL_API Window_SetCursor ( const int status )`

Display/hide the mouse cursor.

Parameters

<code>\return</code>	
----------------------	--

3.2.2.16 `void YAGL_API Window_SetCloseCallback ( YAGLWinCloseProc proc )`

Parameters

<code>\return</code>	
----------------------	--

3.2.2.17 `void YAGL_API Window_SetSizeCallback ( YAGLWinSizeProc proc )`

Parameters

<code>\return</code>	
----------------------	--

3.2.2.18 `void YAGL_API Window_SetRefreshCallback ( YAGLWinRefreshProc proc )`

Parameters

<code>\return</code>	
----------------------	--

## 3.3 Rendering

### 3.3.1 Detailed Description

## **3.4 View**

### **3.4.1 Detailed Description**

## 3.5 Events

### 3.5.1 Detailed Description



## **3.6 Misc**

### **3.6.1 Detailed Description**

## 3.7 Textures

### 3.7.1 Detailed Description

## 3.8 Texture map

### 3.8.1 Detailed Description

## 3.9 Textured Quad

### Modules

- [Textured Quad accessors](#)

*Functions for accessing Textured Quads data.*

### 3.9.1 Detailed Description

## 3.10 Sprite

### Modules

- [Sprite accessors](#)

*Functions for accessing Sprite data.*

### 3.10.1 Detailed Description

## 3.11 Sprite set

### 3.11.1 Detailed Description

## 3.12 Animations

Animations handling.

### Functions

- Animation \*YAGL\_API [Animation\\_Create](#) (unsigned int frames\_count)  
*Create an Animation object.*
- int YAGL\_API [Animation\\_IsAnimation](#) (Animation \*anim)  
*Check if the pointer is an Animation object.*
- int YAGL\_API [Animation\\_AddFrameEx](#) (Animation \*anim, float duration, Texture \*tex, int rect\_x, int rect\_y, int rect\_w, int rect\_h, YAGL\_Color color, [eBLEND\\_MODE](#) blend\_mode, int change\_size, float size\_x, float size\_y)  
*Add a frame to an Animation object.*
- int YAGL\_API [Animation\\_AddFrame](#) (Animation \*anim, float duration)  
*Add an empty frame.*
- void YAGL\_API [Animation\\_FrameSetBlank](#) (Animation \*anim, unsigned int frame\_id)  
*Set a Frame as blank.*
- int YAGL\_API [Animation\\_FrameCount](#) (Animation \*anim)  
*Get frames count.*
- int YAGL\_API [Animation\\_FrameMax](#) (Animation \*anim)  
*Get max frames.*
- void YAGL\_API [Animation\\_Empty](#) (Animation \*anim)  
*Delete all animation's frames.*
- int YAGL\_API [Animation\\_Destroy](#) (Animation \*anim)  
*Destroy animation.*
- void YAGL\_API [Animation\\_FrameSetDuration](#) (Animation \*anim, unsigned int frame\_id, float duration)  
*Set the duration of a frame.*
- void YAGL\_API [Animation\\_FrameSetTexture](#) (Animation \*anim, unsigned int frame\_id, Texture \*tex, int rect\_x, int rect\_y, int rect\_w, int rect\_h)  
*Set the texture and texture rectangle of a frame.*
- void YAGL\_API [Animation\\_FrameSetColor](#) (Animation \*anim, unsigned int frame\_id, unsigned char red, unsigned char green, unsigned char blue, unsigned char alpha)  
*Set frame color.*
- void YAGL\_API [Animation\\_FrameSetColorEx](#) (Animation \*anim, unsigned int frame\_id, YAGL\_Color color)  
*Set frame color.*
- void YAGL\_API [Animation\\_FrameSetBlendMode](#) (Animation \*anim, unsigned int frame\_id, [eBLEND\\_MODE](#) blend\_mode)  
*Set frame blend mode.*
- void YAGL\_API [Animation\\_FrameSetSize](#) (Animation \*anim, unsigned int frame\_id, int change\_size, float size\_x, float size\_y)
- float YAGL\_API [Animation\\_FrameGetDuration](#) (Animation \*anim, unsigned int frame\_id)
- Texture \*YAGL\_API [Animation\\_FrameGetTexture](#) (Animation \*anim, unsigned int frame\_id, int \*rect\_x, int \*rect\_y, int \*rect\_w, int \*rect\_h)
- void YAGL\_API [Animation\\_FrameGetColor](#) (Animation \*anim, unsigned int frame\_id, unsigned char \*red, unsigned char \*green, unsigned char \*blue, unsigned char \*alpha)
- YAGL\_Color YAGL\_API [Animation\\_FrameGetColorEx](#) (Animation \*anim, unsigned int frame\_id)
- int YAGL\_API [Animation\\_FrameGetBlendMode](#) (Animation \*anim, unsigned int frame\_id)
- int YAGL\_API [Animation\\_FrameGetSize](#) (Animation \*anim, unsigned int frame\_id, float \*size\_x, float \*size\_y)

### 3.12.1 Detailed Description

Animations handling. Animation consists of multiple frames, each one with parameters like: duration, texture, texture rectangle, color...

An Animation is to be assigned to a Sprite, and then played.

### 3.12.2 Function Documentation

#### 3.12.2.1 Animation\* YAGL\_API Animation\_Create ( unsigned int *frames\_count* )

Create an Animation object.

##### Parameters

<i>frames_count[in]</i>	Maximum frames
-------------------------	----------------

##### Returns

Animation pointer

#### 3.12.2.2 int YAGL\_API Animation\_IsAnimation ( Animation \* *anim* )

Check if the pointer is an Animation object.

##### Parameters

<i>anim[in]</i>	Any pointer
-----------------	-------------

##### Returns

1 if it's an Animation, 0 otherwise

#### 3.12.2.3 int YAGL\_API Animation\_AddFrameEx ( Animation \* *anim*, float *duration*, Texture \* *tex*, int *rect\_x*, int *rect\_y*, int *rect\_w*, int *rect\_h*, YAGL\_Color *color*, eBLEND\_MODE *blend\_mode*, int *change\_size*, float *size\_x*, float *size\_y* )

Add a frame to an Animation object.

##### Parameters

<i>anim[in]</i>	Animation object
<i>duration[in]</i>	Frame duration (in seconds)
<i>tex[in]</i>	Texture object
<i>rect_x[in]</i>	Texture rectangle upper-left corner x-coord
<i>rect_y[in]</i>	Texture rectangle upper-left corner y-coord
<i>rect_w[in]</i>	Texture rectangle width
<i>rect_h[in]</i>	Texture rectangle height
<i>color[in]</i>	Frame color
<i>change_size[in]</i>	Tell if the frame should change the size of the Sprite
<i>size_x[in]</i>	New size (width)
<i>size_y[in]</i>	New size (height)



## Returns

New frame id, or -1 if error (anim isn't an Animation, anim is full)

3.12.2.4 int YAGL\_API Animation\_AddFrame ( Animation \* *anim*, float *duration* )

Add an empty frame.

## Parameters

<i>anim</i> [in]	Animation object
<i>duration</i> [in]	Frame duration (in seconds)

## Returns

New frame id, or -1 if error (anim isn't an Animation, anim is full)

3.12.2.5 void YAGL\_API Animation\_FrameSetBlank ( Animation \* *anim*, unsigned int *frame\_id* )

Set a Frame as blank.

## Parameters

<i>anim</i> [in]	Animation object
<i>frame_id</i> [in]	Frame ID to set blank

3.12.2.6 int YAGL\_API Animation\_FrameCount ( Animation \* *anim* )

Get frames count.

## Parameters

<i>anim</i> [in]	Animation object
------------------	------------------

## Returns

Frames count, or -1 if error (anim isn't an Animation)

3.12.2.7 int YAGL\_API Animation\_FrameMax ( Animation \* *anim* )

Get max frames.

## Parameters

<i>anim</i> [in]	Animation object
------------------	------------------

## Returns

Max frames count, or -1 if error (anim isn't an Animation)

3.12.2.8 void YAGL\_API Animation\_Empty ( Animation \* *anim* )

Delete all animation's frames.

## Parameters

<i>anim[in]</i>	Animation object
-----------------	------------------

3.12.2.9 int YAGL\_API Animation\_Destroy ( Animation \* *anim* )

Destroy animation.

## Parameters

<i>anim[in]</i>	Animation object
-----------------	------------------

## Returns

1, or 0 on error

3.12.2.10 void YAGL\_API Animation\_FrameSetDuration ( Animation \* *anim*, unsigned int *frame\_id*, float *duration* )

Set the duration of a frame.

## Parameters

<i>anim[in]</i>	Animation object
<i>frame_id[in]</i>	Frame ID
<i>duration[in]</i>	New duration (in seconds)

3.12.2.11 void YAGL\_API Animation\_FrameSetTexture ( Animation \* *anim*, unsigned int *frame\_id*, Texture \* *tex*, int *rect\_x*, int *rect\_y*, int *rect\_w*, int *rect\_h* )

Set the texture and texture rectangle of a frame.

## Parameters

<i>anim[in]</i>	Animation object
<i>frame_id[in]</i>	Frame ID
<i>tex[in]</i>	Texture object
<i>rect_x,rect_y[in]</i>	Upper-left corner of the texture rectangle
<i>rect_w,rect_h[in]</i>	Size (width and height) of the texture rectangle

3.12.2.12 void YAGL\_API Animation\_FrameSetColor ( Animation \* *anim*, unsigned int *frame\_id*, unsigned char *red*, unsigned char *green*, unsigned char *blue*, unsigned char *alpha* )

Set frame color.

## Parameters

<i>anim[in]</i>	Animation object
<i>frame_id[in]</i>	Frame ID
<i>red,green,blue,alpha[in]</i>	New color (RGBA)

3.12.2.13 void YAGL\_API Animation.FrameSetColorEx ( Animation \* *anim*, unsigned int *frame\_id*, YAGL\_Color *color* )

Set frame color.

Parameters

<i>anim</i> [in]	Animation object
<i>frame_id</i> [in]	Frame ID
<i>color</i> [in]	Color (0xRRGGBBAA)

3.12.2.14 void YAGL\_API Animation.FrameSetBlendMode ( Animation \* *anim*, unsigned int *frame\_id*, eBLEND\_MODE *blend\_mode* )

Set frame blend mode.

Parameters

<i>anim</i> [in]	Animation object
<i>frame_id</i> [in]	Frame ID
<i>blend_mode</i> [in]	See eBLEND_MODE

3.12.2.15 void YAGL\_API Animation.FrameSetSize ( Animation \* *anim*, unsigned int *frame\_id*, int *change\_size*, float *size\_x*, float *size\_y* )

Parameters

<i>anim</i> [in]	Animation object
<i>frame_id</i> [in]	Frame ID
<i>change_size</i> [in]	
<i>size_x, size_y</i> [in]	

3.12.2.16 float YAGL\_API Animation.FrameGetDuration ( Animation \* *anim*, unsigned int *frame\_id* )

Parameters

<i>param</i>	
--------------	--

Returns

3.12.2.17 Texture\* YAGL\_API Animation.FrameGetTexture ( Animation \* *anim*, unsigned int *frame\_id*, int \* *rect\_x*, int \* *rect\_y*, int \* *rect\_w*, int \* *rect\_h* )

Parameters

<i>param</i>	
--------------	--

Returns

3.12.2.18 void YAGL\_API Animation.FrameGetColor ( Animation \* *anim*, unsigned int *frame\_id*, unsigned char \* *red*, unsigned char \* *green*, unsigned char \* *blue*, unsigned char \* *alpha* )

Parameters

<code>\param</code>	
---------------------	--

Returns

3.12.2.19 YAGL\_Color YAGL\_API Animation.FrameGetColorEx ( Animation \* *anim*, unsigned int *frame\_id* )

Parameters

<code>\param</code>	
---------------------	--

Returns

3.12.2.20 int YAGL\_API Animation.FrameGetBlendMode ( Animation \* *anim*, unsigned int *frame\_id* )

Parameters

<code>\param</code>	
---------------------	--

Returns

3.12.2.21 int YAGL\_API Animation.FrameGetSize ( Animation \* *anim*, unsigned int *frame\_id*, float \* *size\_x*, float \* *size\_y* )

Parameters

<code>\param</code>	
---------------------	--

Returns

## **3.13 Collisions**

### **3.13.1 Detailed Description**

## 3.14 Particles effects

### Modules

- [Particle emitter accessors](#)

*Functions for accessing Particle emitters data.*

### 3.14.1 Detailed Description

## 3.15 Shaders

### 3.15.1 Detailed Description

## 3.16 Primitives drawing

### 3.16.1 Detailed Description



## 3.17 Geometry

### 3.17.1 Detailed Description

## 3.18 Bitmap fonts

### 3.18.1 Detailed Description

## 3.19 Bitmap text

### Modules

- [Bitmap text accessors](#)

*Functions for accessing Bitmap text data.*

### 3.19.1 Detailed Description

## 3.20 Constants & Enumerations

### Modules

- [Keyboard & Mouse](#)
- [Colors](#)
- [OpenGL Texture Parameters](#)
- [Enumerations](#)

### 3.20.1 Detailed Description

## 3.21 Enumerations

### Enumerations

- enum **eDEBUG** { **DEBUG\_OFF** = 0, **DEBUG\_ON\_STD**, **DEBUG\_ON\_FILE** }  
*Select debug informations output mode.*
- enum **eVERSION** { **VERSION\_YAGL** = 0, **VERSION\_Glfw**, **VERSION\_OGL** }  
*Passed to [System\\_GetVersion\(\)](#)*
- enum **eCAPTURE\_TYPE** { **CAPTURE\_TGA** = 0, **CAPTURE\_BMP**, **CAPTURE\_DDS** }  
*Passed to [Window\\_Capture\(\)](#)*
- enum **eMOUSE\_POS\_MODE** { **MOUSE\_POS\_WIN\_RELATIVE** = 0, **MOUSE\_POS\_WORLD\_RELATIVE** }  
*Passed to [Events\\_SetMousePosMode\(\)](#)*
- enum **eTEXTURE\_CHANNELS**  
*Specify how a texture is loaded (see [Texture\\_Create\(\)](#), [Texture\\_CreateFromMem\(\)](#), [Texture\\_Load\(\)](#), [Texture\\_LoadFromMem\(\)](#))*
- enum **eBLEND\_MODE** {  
  **BLEND\_NO\_CHANGE** = -1, **BLEND\_BLACK** = 0, **BLEND\_SOLID**, **BLEND\_TRANS**,  
  **BLEND\_ALPHA**, **BLEND\_BLENDED**, **BLEND\_GLOW** }  
*Select blending/bliting mode.*
- enum **eCENTER** {  
  **CENTER\_CENTER** = 0, **CENTER\_ULEFT**, **CENTER\_URIGHT**, **CENTER\_BLEFT**,  
  **CENTER\_BRIGHT**, **CENTER\_CLEFT**, **CENTER\_CRIGHT**, **CENTER\_CUP**,  
  **CENTER\_CBOTTOM** }  
*Set the center of a Quad/Sprite.*
- enum **eSHAPE** { **SHAPE\_NONE** = 0, **SHAPE\_POINT**, **SHAPE\_CIRCLE**, **SHAPE\_RECT** }  
*Passed to [Sprite\\_SetShape\(\)](#)*
- enum **eALIGN** { **ALIGN\_LEFT**, **ALIGN\_CENTER**, **ALIGN\_RIGHT** }  
*Used to set text alignment for [BmpFont\\_Print\(\)](#), [BmpFont\\_PrintLines\(\)](#) and [BmpText\\_SetAlign\(\)](#)*
- enum **eSHADER\_TYPE** { **SHADER\_VERTEX**, **SHADER\_FRAGMENT** }  
*Passed to [Shader\\_AddSource\(\)](#)*

### 3.21.1 Detailed Description

### 3.21.2 Enumeration Type Documentation

#### 3.21.2.1 enum eDEBUG

Select debug informations output mode.

Passed to [System\\_Init\(\)](#)

Enumerator

**DEBUG\_OFF** No debug output  
**DEBUG\_ON\_STD** Output to standard output (stdout)  
**DEBUG\_ON\_FILE** Output to a file

#### 3.21.2.2 enum eVERSION

Passed to [System\\_GetVersion\(\)](#)

Enumerator

**VERSION\_YAGL** Engine version

**VERSION\_GLFW** GLFW version

**VERSION\_OGL** OpenGL version

### 3.21.2.3 enum eCAPTURE\_TYPE

Passed to [Window\\_Capture\(\)](#)

Enumerator

**CAPTURE\_TGA** Screen capture in TGA format

**CAPTURE\_BMP** Screen capture in BMP format

**CAPTURE\_DDS** Screen capture in DDS format

### 3.21.2.4 enum eMOUSE\_POS\_MODE

Passed to [Events\\_SetMousePosMode\(\)](#)

This function determines how the mouse position is returned by [Event\\_MouseGetPos\(\)](#), and how it is passed to [YAGLMousePosProc](#)

**MOUSE\_POS\_WORLD\_RELATIVE** is the default

Enumerator

**MOUSE\_POS\_WIN\_RELATIVE** Relative to the client area of the window

**MOUSE\_POS\_WORLD\_RELATIVE** Relative to the displayed world (takes care of view modifications)

### 3.21.2.5 enum eBLEND\_MODE

Select blending/bliting mode.

Enumerator

**BLEND\_NO\_CHANGE** No change

**BLEND\_BLACK** Black color blit

**BLEND\_SOLID** Solid blit

**BLEND\_TRANS** Transparent blit

**BLEND\_ALPHA** Alpha Transparent blit

**BLEND\_BLENDED** Alpha blended blit

**BLEND\_GLOW** Additive blended blit

### 3.21.2.6 enum eCENTER

Set the center of a Quad/Sprite.

Enumerator

**CENTER\_CENTER** Centered

**CENTER\_ULEFT** Upper-left corner

**CENTER\_URIGHT** Upper-right corner

**CENTER\_BLEFT** Bottom-left corner

***CENTER\_BRIGHT*** Bottom-right corner  
***CENTER\_CLEFT*** Center left  
***CENTER\_CRIGHT*** Center right  
***CENTER\_CUP*** Center up  
***CENTER\_CBOTTOM*** Center bottom

#### 3.21.2.7 enum eSHAPE

Passed to Sprite\_SetShape()

Enumerator

***SHAPE\_NONE*** No shape, no collision  
***SHAPE\_POINT*** A point  
***SHAPE\_CIRCLE*** A circle  
***SHAPE\_RECT*** A rectangle (AABB)

#### 3.21.2.8 enum eALIGN

Used to set text alignment for BmpFont\_Print(), BmpFont\_PrintLines() and BmpText\_SetAlign()

Enumerator

***ALIGN\_LEFT*** Left aligned (default)  
***ALIGN\_CENTER*** Centered  
***ALIGN\_RIGHT*** Right aligned

#### 3.21.2.9 enum eSHADER\_TYPE

Passed to Shader\_AddSource()

Enumerator

***SHADER\_VERTEX*** Vertex shader  
***SHADER\_FRAGMENT*** Fragment/Pixel shader

## 3.22 Keyboard & Mouse

### Macros

- `#define YAGL_KEY_UNKNOWN -1`
- `#define YAGL_KEY_SPACE 32`
- `#define YAGL_KEY_SPECIAL 256`
- `#define YAGL_KEY_ESC (YAGL_KEY_SPECIAL+1)`
- `#define YAGL_KEY_F1 (YAGL_KEY_SPECIAL+2)`
- `#define YAGL_KEY_F2 (YAGL_KEY_SPECIAL+3)`
- `#define YAGL_KEY_F3 (YAGL_KEY_SPECIAL+4)`
- `#define YAGL_KEY_F4 (YAGL_KEY_SPECIAL+5)`
- `#define YAGL_KEY_F5 (YAGL_KEY_SPECIAL+6)`
- `#define YAGL_KEY_F6 (YAGL_KEY_SPECIAL+7)`
- `#define YAGL_KEY_F7 (YAGL_KEY_SPECIAL+8)`
- `#define YAGL_KEY_F8 (YAGL_KEY_SPECIAL+9)`
- `#define YAGL_KEY_F9 (YAGL_KEY_SPECIAL+10)`
- `#define YAGL_KEY_F10 (YAGL_KEY_SPECIAL+11)`
- `#define YAGL_KEY_F11 (YAGL_KEY_SPECIAL+12)`
- `#define YAGL_KEY_F12 (YAGL_KEY_SPECIAL+13)`
- `#define YAGL_KEY_F13 (YAGL_KEY_SPECIAL+14)`
- `#define YAGL_KEY_F14 (YAGL_KEY_SPECIAL+15)`
- `#define YAGL_KEY_F15 (YAGL_KEY_SPECIAL+16)`
- `#define YAGL_KEY_F16 (YAGL_KEY_SPECIAL+17)`
- `#define YAGL_KEY_F17 (YAGL_KEY_SPECIAL+18)`
- `#define YAGL_KEY_F18 (YAGL_KEY_SPECIAL+19)`
- `#define YAGL_KEY_F19 (YAGL_KEY_SPECIAL+20)`
- `#define YAGL_KEY_F20 (YAGL_KEY_SPECIAL+21)`
- `#define YAGL_KEY_F21 (YAGL_KEY_SPECIAL+22)`
- `#define YAGL_KEY_F22 (YAGL_KEY_SPECIAL+23)`
- `#define YAGL_KEY_F23 (YAGL_KEY_SPECIAL+24)`
- `#define YAGL_KEY_F24 (YAGL_KEY_SPECIAL+25)`
- `#define YAGL_KEY_F25 (YAGL_KEY_SPECIAL+26)`
- `#define YAGL_KEY_UP (YAGL_KEY_SPECIAL+27)`
- `#define YAGL_KEY_DOWN (YAGL_KEY_SPECIAL+28)`
- `#define YAGL_KEY_LEFT (YAGL_KEY_SPECIAL+29)`
- `#define YAGL_KEY_RIGHT (YAGL_KEY_SPECIAL+30)`
- `#define YAGL_KEY_LSHIFT (YAGL_KEY_SPECIAL+31)`
- `#define YAGL_KEY_RSHIFT (YAGL_KEY_SPECIAL+32)`
- `#define YAGL_KEY_LCTRL (YAGL_KEY_SPECIAL+33)`
- `#define YAGL_KEY_RCTRL (YAGL_KEY_SPECIAL+34)`
- `#define YAGL_KEY_LALT (YAGL_KEY_SPECIAL+35)`
- `#define YAGL_KEY_RALT (YAGL_KEY_SPECIAL+36)`
- `#define YAGL_KEY_TAB (YAGL_KEY_SPECIAL+37)`
- `#define YAGL_KEY_ENTER (YAGL_KEY_SPECIAL+38)`
- `#define YAGL_KEY_BACKSPACE (YAGL_KEY_SPECIAL+39)`
- `#define YAGL_KEY_INSERT (YAGL_KEY_SPECIAL+40)`
- `#define YAGL_KEY_DEL (YAGL_KEY_SPECIAL+41)`
- `#define YAGL_KEY_PAGEUP (YAGL_KEY_SPECIAL+42)`
- `#define YAGL_KEY_PAGEDOWN (YAGL_KEY_SPECIAL+43)`
- `#define YAGL_KEY_HOME (YAGL_KEY_SPECIAL+44)`
- `#define YAGL_KEY_END (YAGL_KEY_SPECIAL+45)`
- `#define YAGL_KEY_KP_0 (YAGL_KEY_SPECIAL+46)`
- `#define YAGL_KEY_KP_1 (YAGL_KEY_SPECIAL+47)`



- `#define YAGL_KEY_KP_2 (YAGL_KEY_SPECIAL+48)`
- `#define YAGL_KEY_KP_3 (YAGL_KEY_SPECIAL+49)`
- `#define YAGL_KEY_KP_4 (YAGL_KEY_SPECIAL+50)`
- `#define YAGL_KEY_KP_5 (YAGL_KEY_SPECIAL+51)`
- `#define YAGL_KEY_KP_6 (YAGL_KEY_SPECIAL+52)`
- `#define YAGL_KEY_KP_7 (YAGL_KEY_SPECIAL+53)`
- `#define YAGL_KEY_KP_8 (YAGL_KEY_SPECIAL+54)`
- `#define YAGL_KEY_KP_9 (YAGL_KEY_SPECIAL+55)`
- `#define YAGL_KEY_KP_DIVIDE (YAGL_KEY_SPECIAL+56)`
- `#define YAGL_KEY_KP_MULTIPLY (YAGL_KEY_SPECIAL+57)`
- `#define YAGL_KEY_KP_SUBTRACT (YAGL_KEY_SPECIAL+58)`
- `#define YAGL_KEY_KP_ADD (YAGL_KEY_SPECIAL+59)`
- `#define YAGL_KEY_KP_DECIMAL (YAGL_KEY_SPECIAL+60)`
- `#define YAGL_KEY_KP_EQUAL (YAGL_KEY_SPECIAL+61)`
- `#define YAGL_KEY_KP_ENTER (YAGL_KEY_SPECIAL+62)`
- `#define YAGL_KEY_KP_NUM_LOCK (YAGL_KEY_SPECIAL+63)`
- `#define YAGL_KEY_CAPS_LOCK (YAGL_KEY_SPECIAL+64)`
- `#define YAGL_KEY_SCROLL_LOCK (YAGL_KEY_SPECIAL+65)`
- `#define YAGL_KEY_PAUSE (YAGL_KEY_SPECIAL+66)`
- `#define YAGL_KEY_LSUPER (YAGL_KEY_SPECIAL+67)`
- `#define YAGL_KEY_RSUPER (YAGL_KEY_SPECIAL+68)`
- `#define YAGL_KEY_MENU (YAGL_KEY_SPECIAL+69)`
- `#define YAGL_KEY_LAST YAGL_KEY_MENU`
- `#define YAGL_MOUSE_BUTTON_1 0`
- `#define YAGL_MOUSE_BUTTON_2 1`
- `#define YAGL_MOUSE_BUTTON_3 2`
- `#define YAGL_MOUSE_BUTTON_4 3`
- `#define YAGL_MOUSE_BUTTON_5 4`
- `#define YAGL_MOUSE_BUTTON_6 5`
- `#define YAGL_MOUSE_BUTTON_7 6`
- `#define YAGL_MOUSE_BUTTON_8 7`
- `#define YAGL_MOUSE_BUTTON_LAST YAGL_MOUSE_BUTTON_8`
- `#define YAGL_MOUSE_BUTTON_LEFT YAGL_MOUSE_BUTTON_1`
- `#define YAGL_MOUSE_BUTTON_RIGHT YAGL_MOUSE_BUTTON_2`
- `#define YAGL_MOUSE_BUTTON_MIDDLE YAGL_MOUSE_BUTTON_3`

### 3.22.1 Detailed Description

### 3.22.2 Macro Definition Documentation

3.22.2.1 `#define YAGL_KEY_UNKNOWN -1`

3.22.2.2 `#define YAGL_KEY_SPACE 32`

3.22.2.3 `#define YAGL_KEY_SPECIAL 256`

3.22.2.4 `#define YAGL_KEY_ESC (YAGL_KEY_SPECIAL+1)`

3.22.2.5 `#define YAGL_KEY_F1 (YAGL_KEY_SPECIAL+2)`

3.22.2.6 `#define YAGL_KEY_F2 (YAGL_KEY_SPECIAL+3)`

3.22.2.7 `#define YAGL_KEY_F3 (YAGL_KEY_SPECIAL+4)`

3.22.2.8 `#define YAGL_KEY_F4 (YAGL_KEY_SPECIAL+5)`

3.22.2.9 `#define YAGL_KEY_F5 (YAGL_KEY_SPECIAL+6)`

3.22.2.10 `#define YAGL_KEY_F6 (YAGL_KEY_SPECIAL+7)`

3.22.2.11 `#define YAGL_KEY_F7 (YAGL_KEY_SPECIAL+8)`

3.22.2.12 `#define YAGL_KEY_F8 (YAGL_KEY_SPECIAL+9)`

3.22.2.13 `#define YAGL_KEY_F9 (YAGL_KEY_SPECIAL+10)`

3.22.2.14 `#define YAGL_KEY_F10 (YAGL_KEY_SPECIAL+11)`

3.22.2.15 `#define YAGL_KEY_F11 (YAGL_KEY_SPECIAL+12)`

3.22.2.16 `#define YAGL_KEY_F12 (YAGL_KEY_SPECIAL+13)`

3.22.2.17 `#define YAGL_KEY_F13 (YAGL_KEY_SPECIAL+14)`

3.22.2.18 `#define YAGL_KEY_F14 (YAGL_KEY_SPECIAL+15)`

3.22.2.19 `#define YAGL_KEY_F15 (YAGL_KEY_SPECIAL+16)`

3.22.2.20 `#define YAGL_KEY_F16 (YAGL_KEY_SPECIAL+17)`

3.22.2.21 `#define YAGL_KEY_F17 (YAGL_KEY_SPECIAL+18)`

3.22.2.22 `#define YAGL_KEY_F18 (YAGL_KEY_SPECIAL+19)`

3.22.2.23 `#define YAGL_KEY_F19 (YAGL_KEY_SPECIAL+20)`

3.22.2.24 `#define YAGL_KEY_F20 (YAGL_KEY_SPECIAL+21)`

3.22.2.25 `#define YAGL_KEY_F21 (YAGL_KEY_SPECIAL+22)`

3.22.2.26 `#define YAGL_KEY_F22 (YAGL_KEY_SPECIAL+23)`

3.22.2.27 `#define YAGL_KEY_F23 (YAGL_KEY_SPECIAL+24)`

3.22.2.28 `#define YAGL_KEY_F24 (YAGL_KEY_SPECIAL+25)`

3.22.2.29 `#define YAGL_KEY_F25 (YAGL_KEY_SPECIAL+26)`

3.22.2.30 `#define YAGL_KEY_UP (YAGL_KEY_SPECIAL+27)`

3.22.2.31 `#define YAGL_KEY_DOWN (YAGL_KEY_SPECIAL+28)`

3.22.2.32 `#define YAGL_KEY_LEFT (YAGL_KEY_SPECIAL+29)`

3.22.2.33 `#define YAGL_KEY_RIGHT (YAGL_KEY_SPECIAL+30)`

3.22.2.34 `#define YAGL_KEY_LSHIFT (YAGL_KEY_SPECIAL+31)`

3.22.2.35 `#define YAGL_KEY_RSHIFT (YAGL_KEY_SPECIAL+32)`

3.22.2.36 #define YAGL\_KEY\_LCTRL (YAGL\_KEY\_SPECIAL+33)

3.22.2.37 #define YAGL\_KEY\_RCTRL (YAGL\_KEY\_SPECIAL+34)

3.22.2.38 #define YAGL\_KEY\_LALT (YAGL\_KEY\_SPECIAL+35)

3.22.2.39 #define YAGL\_KEY\_RALT (YAGL\_KEY\_SPECIAL+36)

3.22.2.40 #define YAGL\_KEY\_TAB (YAGL\_KEY\_SPECIAL+37)

3.22.2.41 #define YAGL\_KEY\_ENTER (YAGL\_KEY\_SPECIAL+38)

3.22.2.42 #define YAGL\_KEY\_BACKSPACE (YAGL\_KEY\_SPECIAL+39)

3.22.2.43 #define YAGL\_KEY\_INSERT (YAGL\_KEY\_SPECIAL+40)

3.22.2.44 #define YAGL\_KEY\_DEL (YAGL\_KEY\_SPECIAL+41)

3.22.2.45 #define YAGL\_KEY\_PAGEUP (YAGL\_KEY\_SPECIAL+42)

3.22.2.46 #define YAGL\_KEY\_PAGEDOWN (YAGL\_KEY\_SPECIAL+43)

3.22.2.47 #define YAGL\_KEY\_HOME (YAGL\_KEY\_SPECIAL+44)

3.22.2.48 #define YAGL\_KEY\_END (YAGL\_KEY\_SPECIAL+45)

3.22.2.49 #define YAGL\_KEY\_KP\_0 (YAGL\_KEY\_SPECIAL+46)

3.22.2.50 #define YAGL\_KEY\_KP\_1 (YAGL\_KEY\_SPECIAL+47)

3.22.2.51 #define YAGL\_KEY\_KP\_2 (YAGL\_KEY\_SPECIAL+48)

3.22.2.52 #define YAGL\_KEY\_KP\_3 (YAGL\_KEY\_SPECIAL+49)

3.22.2.53 #define YAGL\_KEY\_KP\_4 (YAGL\_KEY\_SPECIAL+50)

3.22.2.54 #define YAGL\_KEY\_KP\_5 (YAGL\_KEY\_SPECIAL+51)

3.22.2.55 #define YAGL\_KEY\_KP\_6 (YAGL\_KEY\_SPECIAL+52)

3.22.2.56 #define YAGL\_KEY\_KP\_7 (YAGL\_KEY\_SPECIAL+53)

3.22.2.57 #define YAGL\_KEY\_KP\_8 (YAGL\_KEY\_SPECIAL+54)

3.22.2.58 #define YAGL\_KEY\_KP\_9 (YAGL\_KEY\_SPECIAL+55)

3.22.2.59 #define YAGL\_KEY\_KP\_DIVIDE (YAGL\_KEY\_SPECIAL+56)

3.22.2.60 #define YAGL\_KEY\_KP\_MULTIPLY (YAGL\_KEY\_SPECIAL+57)

3.22.2.61 #define YAGL\_KEY\_KP\_SUBTRACT (YAGL\_KEY\_SPECIAL+58)

3.22.2.62 #define YAGL\_KEY\_KP\_ADD (YAGL\_KEY\_SPECIAL+59)

3.22.2.63 #define YAGL\_KEY\_KP\_DECIMAL (YAGL\_KEY\_SPECIAL+60)

```
3.22.2.64 #define YAGL_KEY_KP_EQUAL (YAGL_KEY_SPECIAL+61)
3.22.2.65 #define YAGL_KEY_KP_ENTER (YAGL_KEY_SPECIAL+62)
3.22.2.66 #define YAGL_KEY_KP_NUM_LOCK (YAGL_KEY_SPECIAL+63)
3.22.2.67 #define YAGL_KEY_CAPS_LOCK (YAGL_KEY_SPECIAL+64)
3.22.2.68 #define YAGL_KEY_SCROLL_LOCK (YAGL_KEY_SPECIAL+65)
3.22.2.69 #define YAGL_KEY_PAUSE (YAGL_KEY_SPECIAL+66)
3.22.2.70 #define YAGL_KEY_LSUPER (YAGL_KEY_SPECIAL+67)
3.22.2.71 #define YAGL_KEY_RSUPER (YAGL_KEY_SPECIAL+68)
3.22.2.72 #define YAGL_KEY_MENU (YAGL_KEY_SPECIAL+69)
3.22.2.73 #define YAGL_KEY_LAST YAGL_KEY_MENU
3.22.2.74 #define YAGL_MOUSE_BUTTON_1 0
3.22.2.75 #define YAGL_MOUSE_BUTTON_2 1
3.22.2.76 #define YAGL_MOUSE_BUTTON_3 2
3.22.2.77 #define YAGL_MOUSE_BUTTON_4 3
3.22.2.78 #define YAGL_MOUSE_BUTTON_5 4
3.22.2.79 #define YAGL_MOUSE_BUTTON_6 5
3.22.2.80 #define YAGL_MOUSE_BUTTON_7 6
3.22.2.81 #define YAGL_MOUSE_BUTTON_8 7
3.22.2.82 #define YAGL_MOUSE_BUTTON_LAST YAGL_MOUSE_BUTTON_8
3.22.2.83 #define YAGL_MOUSE_BUTTON_LEFT YAGL_MOUSE_BUTTON_1
3.22.2.84 #define YAGL_MOUSE_BUTTON_RIGHT YAGL_MOUSE_BUTTON_2
3.22.2.85 #define YAGL_MOUSE_BUTTON_MIDDLE YAGL_MOUSE_BUTTON_3
```

## 3.23 Colors

### Macros

- `#define YAGL_RGBA(r, g, b, a) ((a) << 24 | (b) << 16 | (g) << 8 | (r) )`  
*Convert RGBA color components ([0,255]) to a #YAGL\_Color.*
- `#define YAGL_RGBA_R(u) (((u) >> 0) & 0x000000FF)`  
*Extracts the Red component ([0,255]) from a YAGL\_Color.*
- `#define YAGL_RGBA_G(u) (((u) >> 8) & 0x000000FF)`  
*Extracts the Green component ([0,255]) from a YAGL\_Color.*
- `#define YAGL_RGBA_B(u) (((u) >> 16) & 0x000000FF)`  
*Extracts the Blue component ([0,255]) from a YAGL\_Color.*
- `#define YAGL_RGBA_A(u) (((u) >> 24) & 0x000000FF)`  
*Extracts the Alpha component ([0,255]) from a YAGL\_Color.*
- `#define YAGL_COLOR_BLACK 0xFF000000`
- `#define YAGL_COLOR_MAROON 0xFF000080`
- `#define YAGL_COLOR_GREEN 0xFF008000`
- `#define YAGL_COLOR_OLIVE 0xFF008080`
- `#define YAGL_COLOR_NAVY 0xFF800000`
- `#define YAGL_COLOR_PURPLE 0xFF800080`
- `#define YAGL_COLOR_TEAL 0xFF808000`
- `#define YAGL_COLOR_SILVER 0xFFCECECE`
- `#define YAGL_COLOR_GRAY 0xFF808080`
- `#define YAGL_COLOR_RED 0xFF0000FF`
- `#define YAGL_COLOR_LIME 0xFF00FF00`
- `#define YAGL_COLOR_YELLOW 0xFF00FFFF`
- `#define YAGL_COLOR_BLUE 0xFFFF0000`
- `#define YAGL_COLOR_FUSCHIA 0xFFFF00FF`
- `#define YAGL_COLOR_MAGENTA $YAGL_COLOR_FUSCHIA`
- `#define YAGL_COLOR_AQUA 0xFFFFFFF0`
- `#define YAGL_COLOR_CYAN $YAGL_COLOR_AQUA`
- `#define YAGL_COLOR_WHITE 0xFFFFFFFF`
- `#define YAGL_COLOR_BLACK_A128 0x80000000`
- `#define YAGL_COLOR_MAROON_A128 0x80000080`
- `#define YAGL_COLOR_GREEN_A128 0x80008000`
- `#define YAGL_COLOR_OLIVE_A128 0x80008080`
- `#define YAGL_COLOR_NAVY_A128 0x80800000`
- `#define YAGL_COLOR_PURPLE_A128 0x80800080`
- `#define YAGL_COLOR_TEAL_A128 0x80808000`
- `#define YAGL_COLOR_SILVER_A128 0x80CECECE`
- `#define YAGL_COLOR_GRAY_A128 0x80808080`
- `#define YAGL_COLOR_RED_A128 0x800000FF`
- `#define YAGL_COLOR_LIME_A128 0x8000FF00`
- `#define YAGL_COLOR_YELLOW_A128 0x8000FFFF`
- `#define YAGL_COLOR_BLUE_A128 0x80FF0000`
- `#define YAGL_COLOR_FUSCHIA_A128 0x80FF00FF`
- `#define YAGL_COLOR_MAGENTA_A128 $YAGL_COLOR_FUSCHIA_A128`
- `#define YAGL_COLOR_AQUA_A128 0x80FFFFF0`
- `#define YAGL_COLOR_CYAN_A128 $YAGL_COLOR_AQUA_A128`
- `#define YAGL_COLOR_WHITE_A128 0x80FFFFFF`

### 3.23.1 Detailed Description

### 3.23.2 Macro Definition Documentation

3.23.2.1 `#define YAGL_RGBA( r, g, b, a ) ((a) << 24 | (b) << 16 | (g) << 8 | (r) )`

Convert RGBA color components ([0,255]) to a #YAGL\_Color.

Parameters

<i>r</i>	Red
<i>g</i>	Green
<i>b</i>	Blue
<i>a</i>	Alpha

3.23.2.2 `#define YAGL_COLOR_BLACK 0xFF000000`

3.23.2.3 `#define YAGL_COLOR_MAROON 0xFF000080`

3.23.2.4 `#define YAGL_COLOR_GREEN 0xFF008000`

3.23.2.5 `#define YAGL_COLOR_OLIVE 0xFF008080`

3.23.2.6 `#define YAGL_COLOR_NAVY 0xFF800000`

3.23.2.7 `#define YAGL_COLOR_PURPLE 0xFF800080`

3.23.2.8 `#define YAGL_COLOR_TEAL 0xFF808000`

3.23.2.9 `#define YAGL_COLOR_SILVER 0xFFCECECE`

3.23.2.10 `#define YAGL_COLOR_GRAY 0xFF808080`

3.23.2.11 `#define YAGL_COLOR_RED 0xFF0000FF`

3.23.2.12 `#define YAGL_COLOR_LIME 0xFF00FF00`

3.23.2.13 `#define YAGL_COLOR_YELLOW 0xFF00FFFF`

3.23.2.14 `#define YAGL_COLOR_BLUE 0xFFFF0000`

3.23.2.15 `#define YAGL_COLOR_FUSCHIA 0xFFFF00FF`

3.23.2.16 `#define YAGL_COLOR_MAGENTA $YAGL_COLOR_FUSCHIA`

3.23.2.17 `#define YAGL_COLOR_AQUA 0xFFFFFFFF00`

3.23.2.18 `#define YAGL_COLOR_CYAN $YAGL_COLOR_AQUA`

3.23.2.19 `#define YAGL_COLOR_WHITE 0xFFFFFFFF`

3.23.2.20 `#define YAGL_COLOR_BLACK_A128 0x80000000`

3.23.2.21 `#define YAGL_COLOR_MAROON_A128 0x80000080`

3.23.2.22 `#define YAGL_COLOR_GREEN_A128 0x80008000`

3.23.2.23 `#define YAGL_COLOR_OLIVE_A128 0x80008080`

3.23.2.24 `#define YAGL_COLOR_NAVY_A128 0x80800000`

3.23.2.25 `#define YAGL_COLOR_PURPLE_A128 0x80800080`

3.23.2.26 `#define YAGL_COLOR_TEAL_A128 0x80808000`

3.23.2.27 `#define YAGL_COLOR_SILVER_A128 0x80CECECE`

3.23.2.28 `#define YAGL_COLOR_GRAY_A128 0x80808080`

3.23.2.29 `#define YAGL_COLOR_RED_A128 0x800000FF`

3.23.2.30 `#define YAGL_COLOR_LIME_A128 0x8000FF00`

3.23.2.31 `#define YAGL_COLOR_YELLOW_A128 0x8000FFFF`

3.23.2.32 `#define YAGL_COLOR_BLUE_A128 0x80FF0000`

3.23.2.33 `#define YAGL_COLOR_FUSCHIA_A128 0x80FF00FF`

3.23.2.34 `#define YAGL_COLOR_MAGENTA_A128 $YAGL_COLOR_FUSCHIA_A128`

3.23.2.35 `#define YAGL_COLOR_AQUA_A128 0x80FFFF00`

3.23.2.36 `#define YAGL_COLOR_CYAN_A128 $YAGL_COLOR_AQUA_A128`

3.23.2.37 `#define YAGL_COLOR_WHITE_A128 0x80FFFFFF`

## 3.24 OpenGL Texture Parameters

### Macros

- `#define YAGL_TEXTURE_MIN_FILTER 0x2801`
- `#define YAGL_TEXTURE_MAG_FILTER 0x2800`
- `#define YAGL_TEXTURE_WRAP_S 0x2802`
- `#define YAGL_TEXTURE_WRAP_T 0x2803`
- `#define YAGL_GL_NEAREST 0x2600`
- `#define YAGL_GL_LINEAR 0x2601`
- `#define YAGL_GL_NEAREST_MIPMAP_NEAREST 0x2700`
- `#define YAGL_GL_LINEAR_MIPMAP_NEAREST 0x2701`
- `#define YAGL_GL_NEAREST_MIPMAP_LINEAR 0x2702`
- `#define YAGL_GL_LINEAR_MIPMAP_LINEAR 0x2703`
- `#define YAGL_GL_CLAMP 0x2900`
- `#define YAGL_GL_REPEAT 0x2901`

### 3.24.1 Detailed Description

### 3.24.2 Macro Definition Documentation

3.24.2.1 `#define YAGL_TEXTURE_MIN_FILTER 0x2801`

3.24.2.2 `#define YAGL_TEXTURE_MAG_FILTER 0x2800`

3.24.2.3 `#define YAGL_TEXTURE_WRAP_S 0x2802`

3.24.2.4 `#define YAGL_TEXTURE_WRAP_T 0x2803`

3.24.2.5 `#define YAGL_GL_NEAREST 0x2600`

3.24.2.6 `#define YAGL_GL_LINEAR 0x2601`

3.24.2.7 `#define YAGL_GL_NEAREST_MIPMAP_NEAREST 0x2700`

3.24.2.8 `#define YAGL_GL_LINEAR_MIPMAP_NEAREST 0x2701`

3.24.2.9 `#define YAGL_GL_NEAREST_MIPMAP_LINEAR 0x2702`

3.24.2.10 `#define YAGL_GL_LINEAR_MIPMAP_LINEAR 0x2703`

3.24.2.11 `#define YAGL_GL_CLAMP 0x2900`

3.24.2.12 `#define YAGL_GL_REPEAT 0x2901`



## 3.25 Callbacks

### Typedefs

- typedef void(\* [YAGLDebugProc](#) )(char \*, int)  
*Called when debug data is outputted (see [System\\_SetDebugCallback\(\)](#))*
- typedef int(\* [YAGLWinCloseProc](#) )()  
*Called on window close attempt (see [Window\\_SetCloseCallback\(\)](#))*
- typedef void(\* [YAGLWinSizeProc](#) )(int, int)  
*Called on window resize (see [Window\\_SetResizeCallback\(\)](#))*
- typedef void(\* [YAGLWinRefreshProc](#) )()  
*Called when the window client area needs to be refreshed (see [Window\\_SetRefreshCallback\(\)](#))*
- typedef void(\* [YAGLMousePosProc](#) )(int, int)  
*Called when the mouse position changes (see [Events\\_SetMousePosCallback\(\)](#))*
- typedef void(\* [YAGLMouseButtonProc](#) )(int, int)  
*Called when a mouse button is pressed/released.*

### 3.25.1 Detailed Description

### 3.25.2 Typedef Documentation

#### 3.25.2.1 typedef void(\* YAGLDebugProc)(char \*, int)

Called when debug data is outputted (see [System\\_SetDebugCallback\(\)](#))

##### Parameters

<i>data[in]</i>	NULL-terminated string
<i>err_lvl[in]</i>	Error level (see <a href="#">System_DebugOut()</a> )

#### 3.25.2.2 typedef int(\* YAGLWinCloseProc)()

Called on window close attempt (see [Window\\_SetCloseCallback\(\)](#))

##### Returns

1 to close the window, 0 to cancel window closing

#### 3.25.2.3 typedef void(\* YAGLWinSizeProc)(int, int)

Called on window resize (see [Window\\_SetResizeCallback\(\)](#))

##### Parameters

<i>width[in]</i>	New window width
<i>height[in]</i>	New window height

#### 3.25.2.4 typedef void(\* YAGLMousePosProc)(int, int)

Called when the mouse position changes (see [Events\\_SetMousePosCallback\(\)](#))

The mouse position is reported according to [eMOUSE\\_POS\\_MODE](#) (see [Events\\_SetMousePosMode\(\)](#))

## Parameters

<i>x[in]</i>	X mouse pos
<i>y[in]</i>	Y mouse pos

3.25.2.5 `typedef void(* YAGLMouseButtonProc)(int, int)`

Called when a mouse button is pressed/released.

## Parameters

<i>\param</i>	
---------------	--

## **3.26 Particle emitter accessors**

Functions for accessing Particle emitters data.

### **3.26.1 Detailed Description**

Functions for accessing Particle emitters data.

## 3.27 Bitmap text accessors

Functions for accessing Bitmap text data.

### 3.27.1 Detailed Description

Functions for accessing Bitmap text data.

## **3.28 Sprite accessors**

Functions for accessing Sprite data.

### **3.28.1 Detailed Description**

Functions for accessing Sprite data.

## 3.29 Textured Quad accessors

Functions for accessing Textured Quads data.

### 3.29.1 Detailed Description

Functions for accessing Textured Quads data.

# Index

ALIGN\_CENTER  
Enumerations, [37](#)  
ALIGN\_LEFT  
Enumerations, [37](#)  
ALIGN\_RIGHT  
Enumerations, [37](#)  
Animation\_AddFrame  
Animations, [23](#)  
Animation\_AddFrameEx  
Animations, [22](#)  
Animation\_Create  
Animations, [22](#)  
Animation\_Destroy  
Animations, [24](#)  
Animation\_Empty  
Animations, [23](#)  
Animation\_FrameCount  
Animations, [23](#)  
Animation\_FrameGetBlendMode  
Animations, [26](#)  
Animation\_FrameGetColor  
Animations, [25](#)  
Animation\_FrameGetColorEx  
Animations, [26](#)  
Animation\_FrameGetDuration  
Animations, [25](#)  
Animation\_FrameGetSize  
Animations, [26](#)  
Animation\_FrameGetTexture  
Animations, [25](#)  
Animation\_FrameMax  
Animations, [23](#)  
Animation\_FrameSetBlank  
Animations, [23](#)  
Animation\_FrameSetBlendMode  
Animations, [25](#)  
Animation\_FrameSetColor  
Animations, [24](#)  
Animation\_FrameSetColorEx  
Animations, [24](#)  
Animation\_FrameSetDuration  
Animations, [24](#)  
Animation\_FrameSetSize  
Animations, [25](#)  
Animation\_FrameSetTexture  
Animations, [24](#)  
Animation\_IsAnimation  
Animations, [22](#)  
Animations, [21](#)

Animation\_AddFrame, [23](#)  
Animation\_AddFrameEx, [22](#)  
Animation\_Create, [22](#)  
Animation\_Destroy, [24](#)  
Animation\_Empty, [23](#)  
Animation\_FrameCount, [23](#)  
Animation\_FrameGetBlendMode, [26](#)  
Animation\_FrameGetColor, [25](#)  
Animation\_FrameGetColorEx, [26](#)  
Animation\_FrameGetDuration, [25](#)  
Animation\_FrameGetSize, [26](#)  
Animation\_FrameGetTexture, [25](#)  
Animation\_FrameMax, [23](#)  
Animation\_FrameSetBlank, [23](#)  
Animation\_FrameSetBlendMode, [25](#)  
Animation\_FrameSetColor, [24](#)  
Animation\_FrameSetColorEx, [24](#)  
Animation\_FrameSetDuration, [24](#)  
Animation\_FrameSetSize, [25](#)  
Animation\_FrameSetTexture, [24](#)  
Animation\_IsAnimation, [22](#)  
  
BLEND\_ALPHA  
Enumerations, [36](#)  
BLEND\_BLACK  
Enumerations, [36](#)  
BLEND\_BLENDED  
Enumerations, [36](#)  
BLEND\_GLOW  
Enumerations, [36](#)  
BLEND\_NO\_CHANGE  
Enumerations, [36](#)  
BLEND\_SOLID  
Enumerations, [36](#)  
BLEND\_TRANS  
Enumerations, [36](#)  
Bitmap fonts, [32](#)  
Bitmap text, [33](#)  
Bitmap text accessors, [50](#)  
  
CAPTURE\_BMP  
Enumerations, [36](#)  
CAPTURE\_DDS  
Enumerations, [36](#)  
CAPTURE\_TGA  
Enumerations, [36](#)  
CENTER\_BLEFT  
Enumerations, [36](#)  
CENTER\_BRIGHT  
Enumerations, [36](#)

- CENTER\_CBOTTOM
  - Enumerations, [37](#)
- CENTER\_CENTER
  - Enumerations, [36](#)
- CENTER\_CLEFT
  - Enumerations, [37](#)
- CENTER\_CRIGHT
  - Enumerations, [37](#)
- CENTER\_CUP
  - Enumerations, [37](#)
- CENTER\_ULEFT
  - Enumerations, [36](#)
- CENTER\_URIGHT
  - Enumerations, [36](#)
- Callbacks, [47](#)
  - YAGLDebugProc, [47](#)
  - YAGLMouseButtonProc, [48](#)
  - YAGLMousePosProc, [47](#)
  - YAGLWinCloseProc, [47](#)
  - YAGLWinSizeProc, [47](#)
- Collisions, [27](#)
- Colors, [43](#)
  - YAGL\_COLOR\_AQUA, [44](#)
  - YAGL\_COLOR\_AQUA\_A128, [45](#)
  - YAGL\_COLOR\_BLACK, [44](#)
  - YAGL\_COLOR\_BLACK\_A128, [44](#)
  - YAGL\_COLOR\_BLUE, [44](#)
  - YAGL\_COLOR\_BLUE\_A128, [45](#)
  - YAGL\_COLOR\_CYAN, [44](#)
  - YAGL\_COLOR\_CYAN\_A128, [45](#)
  - YAGL\_COLOR\_FUSCHIA, [44](#)
  - YAGL\_COLOR\_GRAY, [44](#)
  - YAGL\_COLOR\_GRAY\_A128, [45](#)
  - YAGL\_COLOR\_GREEN, [44](#)
  - YAGL\_COLOR\_GREEN\_A128, [44](#)
  - YAGL\_COLOR\_LIME, [44](#)
  - YAGL\_COLOR\_LIME\_A128, [45](#)
  - YAGL\_COLOR\_MAGENTA, [44](#)
  - YAGL\_COLOR\_MAROON, [44](#)
  - YAGL\_COLOR\_MAROON\_A128, [44](#)
  - YAGL\_COLOR\_NAVY, [44](#)
  - YAGL\_COLOR\_NAVY\_A128, [45](#)
  - YAGL\_COLOR\_OLIVE, [44](#)
  - YAGL\_COLOR\_OLIVE\_A128, [45](#)
  - YAGL\_COLOR\_PURPLE, [44](#)
  - YAGL\_COLOR\_PURPLE\_A128, [45](#)
  - YAGL\_COLOR\_RED, [44](#)
  - YAGL\_COLOR\_RED\_A128, [45](#)
  - YAGL\_COLOR\_SILVER, [44](#)
  - YAGL\_COLOR\_SILVER\_A128, [45](#)
  - YAGL\_COLOR\_TEAL, [44](#)
  - YAGL\_COLOR\_TEAL\_A128, [45](#)
  - YAGL\_COLOR\_WHITE, [44](#)
  - YAGL\_COLOR\_WHITE\_A128, [45](#)
  - YAGL\_COLOR\_YELLOW, [44](#)
  - YAGL\_COLOR\_YELLOW\_A128, [45](#)
  - YAGL\_RGBA, [44](#)
- Constants & Enumerations, [34](#)
- DEBUG\_OFF
  - Enumerations, [35](#)
- DEBUG\_ON\_FILE
  - Enumerations, [35](#)
- DEBUG\_ON\_STD
  - Enumerations, [35](#)
- eALIGN
  - Enumerations, [37](#)
- eBLEND\_MODE
  - Enumerations, [36](#)
- eCAPTURE\_TYPE
  - Enumerations, [36](#)
- eCENTER
  - Enumerations, [36](#)
- eDEBUG
  - Enumerations, [35](#)
- eMOUSE\_POS\_MODE
  - Enumerations, [36](#)
- eSHADER\_TYPE
  - Enumerations, [37](#)
- eSHAPE
  - Enumerations, [37](#)
- eVERSION
  - Enumerations, [35](#)
- Enumerations, [35](#)
  - ALIGN\_CENTER, [37](#)
  - ALIGN\_LEFT, [37](#)
  - ALIGN\_RIGHT, [37](#)
  - BLEND\_ALPHA, [36](#)
  - BLEND\_BLACK, [36](#)
  - BLEND\_BLENDED, [36](#)
  - BLEND\_GLOW, [36](#)
  - BLEND\_NO\_CHANGE, [36](#)
  - BLEND\_SOLID, [36](#)
  - BLEND\_TRANS, [36](#)
  - CAPTURE\_BMP, [36](#)
  - CAPTURE\_DDS, [36](#)
  - CAPTURE\_TGA, [36](#)
  - CENTER\_BLEFT, [36](#)
  - CENTER\_BRIGHT, [36](#)
  - CENTER\_CBOTTOM, [37](#)
  - CENTER\_CENTER, [36](#)
  - CENTER\_CLEFT, [37](#)
  - CENTER\_CRIGHT, [37](#)
  - CENTER\_CUP, [37](#)
  - CENTER\_ULEFT, [36](#)
  - CENTER\_URIGHT, [36](#)
  - DEBUG\_OFF, [35](#)
  - DEBUG\_ON\_FILE, [35](#)
  - DEBUG\_ON\_STD, [35](#)
  - eALIGN, [37](#)
  - eBLEND\_MODE, [36](#)
  - eCAPTURE\_TYPE, [36](#)
  - eCENTER, [36](#)
  - eDEBUG, [35](#)
  - eMOUSE\_POS\_MODE, [36](#)
  - eSHADER\_TYPE, [37](#)
  - eSHAPE, [37](#)



- eVERSION, [35](#)
- MOUSE\_POS\_WIN\_RELATIVE, [36](#)
- MOUSE\_POS\_WORLD\_RELATIVE, [36](#)
- SHADER\_FRAGMENT, [37](#)
- SHADER\_VERTEX, [37](#)
- SHAPE\_CIRCLE, [37](#)
- SHAPE\_NONE, [37](#)
- SHAPE\_POINT, [37](#)
- SHAPE\_RECT, [37](#)
- VERSION\_GLFW, [35](#)
- VERSION\_OGL, [36](#)
- VERSION\_YAGL, [35](#)
- Events, [14](#)
- Geometry, [31](#)
- Keyboard & Mouse, [38](#)
  - YAGL\_KEY\_BACKSPACE, [41](#)
  - YAGL\_KEY\_CAPS\_LOCK, [42](#)
  - YAGL\_KEY\_DEL, [41](#)
  - YAGL\_KEY\_DOWN, [40](#)
  - YAGL\_KEY\_END, [41](#)
  - YAGL\_KEY\_ENTER, [41](#)
  - YAGL\_KEY\_ESC, [39](#)
  - YAGL\_KEY\_F1, [39](#)
  - YAGL\_KEY\_F10, [40](#)
  - YAGL\_KEY\_F11, [40](#)
  - YAGL\_KEY\_F12, [40](#)
  - YAGL\_KEY\_F13, [40](#)
  - YAGL\_KEY\_F14, [40](#)
  - YAGL\_KEY\_F15, [40](#)
  - YAGL\_KEY\_F16, [40](#)
  - YAGL\_KEY\_F17, [40](#)
  - YAGL\_KEY\_F18, [40](#)
  - YAGL\_KEY\_F19, [40](#)
  - YAGL\_KEY\_F2, [39](#)
  - YAGL\_KEY\_F20, [40](#)
  - YAGL\_KEY\_F21, [40](#)
  - YAGL\_KEY\_F22, [40](#)
  - YAGL\_KEY\_F23, [40](#)
  - YAGL\_KEY\_F24, [40](#)
  - YAGL\_KEY\_F25, [40](#)
  - YAGL\_KEY\_F3, [39](#)
  - YAGL\_KEY\_F4, [39](#)
  - YAGL\_KEY\_F5, [40](#)
  - YAGL\_KEY\_F6, [40](#)
  - YAGL\_KEY\_F7, [40](#)
  - YAGL\_KEY\_F8, [40](#)
  - YAGL\_KEY\_F9, [40](#)
  - YAGL\_KEY\_HOME, [41](#)
  - YAGL\_KEY\_INSERT, [41](#)
  - YAGL\_KEY\_KP\_0, [41](#)
  - YAGL\_KEY\_KP\_1, [41](#)
  - YAGL\_KEY\_KP\_2, [41](#)
  - YAGL\_KEY\_KP\_3, [41](#)
  - YAGL\_KEY\_KP\_4, [41](#)
  - YAGL\_KEY\_KP\_5, [41](#)
  - YAGL\_KEY\_KP\_6, [41](#)
  - YAGL\_KEY\_KP\_7, [41](#)
  - YAGL\_KEY\_KP\_8, [41](#)
  - YAGL\_KEY\_KP\_9, [41](#)
  - YAGL\_KEY\_KP\_ADD, [41](#)
  - YAGL\_KEY\_KP\_DECIMAL, [41](#)
  - YAGL\_KEY\_KP\_DIVIDE, [41](#)
  - YAGL\_KEY\_KP\_ENTER, [42](#)
  - YAGL\_KEY\_KP\_EQUAL, [41](#)
  - YAGL\_KEY\_LALT, [41](#)
  - YAGL\_KEY\_LAST, [42](#)
  - YAGL\_KEY\_LCTRL, [40](#)
  - YAGL\_KEY\_LEFT, [40](#)
  - YAGL\_KEY\_LSHIFT, [40](#)
  - YAGL\_KEY\_LSUPER, [42](#)
  - YAGL\_KEY\_MENU, [42](#)
  - YAGL\_KEY\_PAGEDOWN, [41](#)
  - YAGL\_KEY\_PAGEUP, [41](#)
  - YAGL\_KEY\_PAUSE, [42](#)
  - YAGL\_KEY\_RALT, [41](#)
  - YAGL\_KEY\_RCTRL, [41](#)
  - YAGL\_KEY\_RIGHT, [40](#)
  - YAGL\_KEY\_RSHIFT, [40](#)
  - YAGL\_KEY\_RSUPER, [42](#)
  - YAGL\_KEY\_SPACE, [39](#)
  - YAGL\_KEY\_SPECIAL, [39](#)
  - YAGL\_KEY\_TAB, [41](#)
  - YAGL\_KEY\_UNKNOWN, [39](#)
  - YAGL\_KEY\_UP, [40](#)
  - YAGL\_MOUSE\_BUTTON\_1, [42](#)
  - YAGL\_MOUSE\_BUTTON\_2, [42](#)
  - YAGL\_MOUSE\_BUTTON\_3, [42](#)
  - YAGL\_MOUSE\_BUTTON\_4, [42](#)
  - YAGL\_MOUSE\_BUTTON\_5, [42](#)
  - YAGL\_MOUSE\_BUTTON\_6, [42](#)
  - YAGL\_MOUSE\_BUTTON\_7, [42](#)
  - YAGL\_MOUSE\_BUTTON\_8, [42](#)
- MOUSE\_POS\_WIN\_RELATIVE
  - Enumerations, [36](#)
- MOUSE\_POS\_WORLD\_RELATIVE
  - Enumerations, [36](#)
- Misc, [15](#)
- OpenGL Texture Parameters, [46](#)
  - YAGL\_GL\_CLAMP, [46](#)
  - YAGL\_GL\_LINEAR, [46](#)
  - YAGL\_GL\_NEAREST, [46](#)
  - YAGL\_GL\_REPEAT, [46](#)
- Particle emitter accessors, [49](#)
- Particles effects, [28](#)
- Primitives drawing, [30](#)
- Rendering, [12](#)
- SHADER\_FRAGMENT
  - Enumerations, [37](#)
- SHADER\_VERTEX
  - Enumerations, [37](#)
- SHAPE\_CIRCLE

- Enumerations, [37](#)
- SHAPE\_NONE
  - Enumerations, [37](#)
- SHAPE\_POINT
  - Enumerations, [37](#)
- SHAPE\_RECT
  - Enumerations, [37](#)
- Shaders, [29](#)
- Sprite, [19](#)
- Sprite accessors, [51](#)
- Sprite set, [20](#)
- System basics, [5](#)
  - System\_DebugOut, [6](#)
  - System\_GetDesktopMode, [7](#)
  - System\_GetStats, [7](#)
  - System\_GetVersion, [7](#)
  - System\_GetVideoMode, [6](#)
  - System\_GetVideoModesCount, [6](#)
  - System\_Init, [6](#)
  - System\_SetDebugCallback, [6](#)
- System\_DebugOut
  - System basics, [6](#)
- System\_GetDesktopMode
  - System basics, [7](#)
- System\_GetStats
  - System basics, [7](#)
- System\_GetVersion
  - System basics, [7](#)
- System\_GetVideoMode
  - System basics, [6](#)
- System\_GetVideoModesCount
  - System basics, [6](#)
- System\_Init
  - System basics, [6](#)
- System\_SetDebugCallback
  - System basics, [6](#)
- Texture map, [17](#)
- Textured Quad, [18](#)
- Textured Quad accessors, [52](#)
- Textures, [16](#)
- VERSION\_GLFW
  - Enumerations, [35](#)
- VERSION\_OGL
  - Enumerations, [36](#)
- VERSION\_YAGL
  - Enumerations, [35](#)
- View, [13](#)
- Window, [8](#)
  - Window\_Capture, [11](#)
  - Window\_Center, [9](#)
  - Window\_Close, [9](#)
  - Window\_Create, [8](#)
  - Window\_CreateEx, [9](#)
  - Window\_GetSize, [10](#)
  - Window\_IsAccelerated, [11](#)
  - Window\_IsActive, [10](#)
  - Window\_IsOpened, [9](#)
  - Window\_IsVisible, [10](#)
  - Window\_SetCloseCallback, [11](#)
  - Window\_SetCursor, [11](#)
  - Window\_SetPos, [9](#)
  - Window\_SetRefreshCallback, [11](#)
  - Window\_SetSize, [10](#)
  - Window\_SetSizeCallback, [11](#)
  - Window\_SetTitle, [10](#)
  - Window\_SetVisible, [10](#)
- YAGL\_COLOR\_AQUA
  - Colors, [44](#)
- YAGL\_COLOR\_AQUA\_A128
  - Colors, [45](#)
- YAGL\_COLOR\_BLACK
  - Colors, [44](#)
- YAGL\_COLOR\_BLACK\_A128
  - Colors, [44](#)
- YAGL\_COLOR\_BLUE
  - Colors, [44](#)
- YAGL\_COLOR\_BLUE\_A128
  - Colors, [45](#)

- YAGL\_COLOR\_CYAN
  - Colors, [44](#)
- YAGL\_COLOR\_CYAN\_A128
  - Colors, [45](#)
- YAGL\_COLOR\_FUSCHIA
  - Colors, [44](#)
- YAGL\_COLOR\_GRAY
  - Colors, [44](#)
- YAGL\_COLOR\_GRAY\_A128
  - Colors, [45](#)
- YAGL\_COLOR\_GREEN
  - Colors, [44](#)
- YAGL\_COLOR\_GREEN\_A128
  - Colors, [44](#)
- YAGL\_COLOR\_LIME
  - Colors, [44](#)
- YAGL\_COLOR\_LIME\_A128
  - Colors, [45](#)
- YAGL\_COLOR\_MAGENTA
  - Colors, [44](#)
- YAGL\_COLOR\_MAROON
  - Colors, [44](#)
- YAGL\_COLOR\_MAROON\_A128
  - Colors, [44](#)
- YAGL\_COLOR\_NAVY
  - Colors, [44](#)
- YAGL\_COLOR\_NAVY\_A128
  - Colors, [45](#)
- YAGL\_COLOR\_OLIVE
  - Colors, [44](#)
- YAGL\_COLOR\_OLIVE\_A128
  - Colors, [45](#)
- YAGL\_COLOR\_PURPLE
  - Colors, [44](#)
- YAGL\_COLOR\_PURPLE\_A128
  - Colors, [45](#)
- YAGL\_COLOR\_RED
  - Colors, [44](#)
- YAGL\_COLOR\_RED\_A128
  - Colors, [45](#)
- YAGL\_COLOR\_SILVER
  - Colors, [44](#)
- YAGL\_COLOR\_SILVER\_A128
  - Colors, [45](#)
- YAGL\_COLOR\_TEAL
  - Colors, [44](#)
- YAGL\_COLOR\_TEAL\_A128
  - Colors, [45](#)
- YAGL\_COLOR\_WHITE
  - Colors, [44](#)
- YAGL\_COLOR\_WHITE\_A128
  - Colors, [45](#)
- YAGL\_COLOR\_YELLOW
  - Colors, [44](#)
- YAGL\_COLOR\_YELLOW\_A128
  - Colors, [45](#)
- YAGL\_GL\_CLAMP
  - OpenGL Texture Parameters, [46](#)
- YAGL\_GL\_LINEAR
  - OpenGL Texture Parameters, [46](#)
- YAGL\_GL\_NEAREST
  - OpenGL Texture Parameters, [46](#)
- YAGL\_GL\_REPEAT
  - OpenGL Texture Parameters, [46](#)
- YAGL\_KEY\_BACKSPACE
  - Keyboard & Mouse, [41](#)
- YAGL\_KEY\_CAPS\_LOCK
  - Keyboard & Mouse, [42](#)
- YAGL\_KEY\_DEL
  - Keyboard & Mouse, [41](#)
- YAGL\_KEY\_DOWN
  - Keyboard & Mouse, [40](#)
- YAGL\_KEY\_END
  - Keyboard & Mouse, [41](#)
- YAGL\_KEY\_ENTER
  - Keyboard & Mouse, [41](#)
- YAGL\_KEY\_ESC
  - Keyboard & Mouse, [39](#)
- YAGL\_KEY\_F1
  - Keyboard & Mouse, [39](#)
- YAGL\_KEY\_F10
  - Keyboard & Mouse, [40](#)
- YAGL\_KEY\_F11
  - Keyboard & Mouse, [40](#)
- YAGL\_KEY\_F12
  - Keyboard & Mouse, [40](#)
- YAGL\_KEY\_F13
  - Keyboard & Mouse, [40](#)
- YAGL\_KEY\_F14
  - Keyboard & Mouse, [40](#)
- YAGL\_KEY\_F15
  - Keyboard & Mouse, [40](#)
- YAGL\_KEY\_F16
  - Keyboard & Mouse, [40](#)
- YAGL\_KEY\_F17
  - Keyboard & Mouse, [40](#)
- YAGL\_KEY\_F18
  - Keyboard & Mouse, [40](#)
- YAGL\_KEY\_F19
  - Keyboard & Mouse, [40](#)
- YAGL\_KEY\_F2
  - Keyboard & Mouse, [39](#)
- YAGL\_KEY\_F20
  - Keyboard & Mouse, [40](#)
- YAGL\_KEY\_F21
  - Keyboard & Mouse, [40](#)
- YAGL\_KEY\_F22
  - Keyboard & Mouse, [40](#)
- YAGL\_KEY\_F23
  - Keyboard & Mouse, [40](#)
- YAGL\_KEY\_F24
  - Keyboard & Mouse, [40](#)
- YAGL\_KEY\_F25
  - Keyboard & Mouse, [40](#)
- YAGL\_KEY\_F3
  - Keyboard & Mouse, [39](#)

YAGL\_KEY\_F4  
Keyboard & Mouse, [39](#)

YAGL\_KEY\_F5  
Keyboard & Mouse, [40](#)

YAGL\_KEY\_F6  
Keyboard & Mouse, [40](#)

YAGL\_KEY\_F7  
Keyboard & Mouse, [40](#)

YAGL\_KEY\_F8  
Keyboard & Mouse, [40](#)

YAGL\_KEY\_F9  
Keyboard & Mouse, [40](#)

YAGL\_KEY\_HOME  
Keyboard & Mouse, [41](#)

YAGL\_KEY\_INSERT  
Keyboard & Mouse, [41](#)

YAGL\_KEY\_KP\_0  
Keyboard & Mouse, [41](#)

YAGL\_KEY\_KP\_1  
Keyboard & Mouse, [41](#)

YAGL\_KEY\_KP\_2  
Keyboard & Mouse, [41](#)

YAGL\_KEY\_KP\_3  
Keyboard & Mouse, [41](#)

YAGL\_KEY\_KP\_4  
Keyboard & Mouse, [41](#)

YAGL\_KEY\_KP\_5  
Keyboard & Mouse, [41](#)

YAGL\_KEY\_KP\_6  
Keyboard & Mouse, [41](#)

YAGL\_KEY\_KP\_7  
Keyboard & Mouse, [41](#)

YAGL\_KEY\_KP\_8  
Keyboard & Mouse, [41](#)

YAGL\_KEY\_KP\_9  
Keyboard & Mouse, [41](#)

YAGL\_KEY\_KP\_ADD  
Keyboard & Mouse, [41](#)

YAGL\_KEY\_KP\_DECIMAL  
Keyboard & Mouse, [41](#)

YAGL\_KEY\_KP\_DIVIDE  
Keyboard & Mouse, [41](#)

YAGL\_KEY\_KP\_ENTER  
Keyboard & Mouse, [42](#)

YAGL\_KEY\_KP\_EQUAL  
Keyboard & Mouse, [41](#)

YAGL\_KEY\_LALT  
Keyboard & Mouse, [41](#)

YAGL\_KEY\_LAST  
Keyboard & Mouse, [42](#)

YAGL\_KEY\_LCTRL  
Keyboard & Mouse, [40](#)

YAGL\_KEY\_LEFT  
Keyboard & Mouse, [40](#)

YAGL\_KEY\_LSHIFT  
Keyboard & Mouse, [40](#)

YAGL\_KEY\_LSUPER  
Keyboard & Mouse, [42](#)

YAGL\_KEY\_MENU  
Keyboard & Mouse, [42](#)

YAGL\_KEY\_PAGEDOWN  
Keyboard & Mouse, [41](#)

YAGL\_KEY\_PAGEUP  
Keyboard & Mouse, [41](#)

YAGL\_KEY\_PAUSE  
Keyboard & Mouse, [42](#)

YAGL\_KEY\_RALT  
Keyboard & Mouse, [41](#)

YAGL\_KEY\_RCTRL  
Keyboard & Mouse, [41](#)

YAGL\_KEY\_RIGHT  
Keyboard & Mouse, [40](#)

YAGL\_KEY\_RSHIFT  
Keyboard & Mouse, [40](#)

YAGL\_KEY\_RSUPER  
Keyboard & Mouse, [42](#)

YAGL\_KEY\_SPACE  
Keyboard & Mouse, [39](#)

YAGL\_KEY\_SPECIAL  
Keyboard & Mouse, [39](#)

YAGL\_KEY\_TAB  
Keyboard & Mouse, [41](#)

YAGL\_KEY\_UNKNOWN  
Keyboard & Mouse, [39](#)

YAGL\_KEY\_UP  
Keyboard & Mouse, [40](#)

YAGL\_MOUSE\_BUTTON\_1  
Keyboard & Mouse, [42](#)

YAGL\_MOUSE\_BUTTON\_2  
Keyboard & Mouse, [42](#)

YAGL\_MOUSE\_BUTTON\_3  
Keyboard & Mouse, [42](#)

YAGL\_MOUSE\_BUTTON\_4  
Keyboard & Mouse, [42](#)

YAGL\_MOUSE\_BUTTON\_5  
Keyboard & Mouse, [42](#)

YAGL\_MOUSE\_BUTTON\_6  
Keyboard & Mouse, [42](#)

YAGL\_MOUSE\_BUTTON\_7  
Keyboard & Mouse, [42](#)

YAGL\_MOUSE\_BUTTON\_8  
Keyboard & Mouse, [42](#)

YAGL\_RGBA  
Colors, [44](#)

YAGLDebugProc  
Callbacks, [47](#)

YAGLMouseButtonProc  
Callbacks, [48](#)

YAGLMousePosProc  
Callbacks, [47](#)

YAGLWinCloseProc  
Callbacks, [47](#)

YAGLWinSizeProc  
Callbacks, [47](#)